Op 3. Supporting Response Information

Op 3.1. Initial Incident Data Collection Sheet

To be used for data gathering in anticipation of conversation with authorities regarding release incident. Refer to **Op 3.2 Field Information**

Always retain a copy for potential investigative purposes.

Operator and Installation Information						
Date / time of call			Company			
Name of caller			Position			
Contact number			Alt. contact number			
Installation name			Licenced Operator			
Field name			Block number			
Location of release	Latitude					
	Longitude					
Date and time of incident						
What has been released to sea?	crude	diesel	condensate	chemical	Other:	
Quantity released?			tonnes		m^3	
Is release on-going?	yes	no				
Distance and direction from nearest land (e.g. 120 miles East of Aberdeen)		miles				
Distance and direction from nearest median line (e.g. 10 miles West Norwegian median)		miles				
Water depth		metres				

Incident Information			
Confirm date and time of incident		POB	
Incident details: what has happened what is current situation what initial actions have been taken			
Any casualties? (be aware of sensitive information)		Are any SAR activities on-going?	
Is caller at scene of incident? (if not, where is information sourced)			
Is there damage to installation? (if yes provide details)			
Have / will POB be down-manned? (if so, how many)			
Has asset been fully or partially shut down and / or is there an impact on other installations?			
Confirm what has been released to sea (crude, condensate, diesel etc)			
Confirm quantity currently released (how has this been determined)		tonnes	m^3
Confirm if release is on-going (if yes, what is the release rate)			

Worst case spill potential (max inventory, max flow rate)								
Pollution appearance (rainbow, sheen, etc.)								
Dimensions of visible spill (length, width and coverage)								
Shoreline impact likely (if yes, where and when)								
Is pollution likely to reach median line (if yes, where and when)								
Nearest Installations (have they been notified)								
Wind speed			Wind direction					
Sea state			Wave height					
Response Information								
OPEP been activated								
Has the operator onshore emergency response team been mobilised (if so where and when)								
Has/will aerial surveillance been mobilised (if yes, ETA to scene. If not, how is pollution being monitored)								
What other response resource has/will be mobilised to assist (ROV, DSV, etc.). Provide ETA where possible.								
Is oil spill modelling being undertaken (who is conducting modelling, when will results be available)								
Is an impact assessment being undertaken (if yes, when available)								
Has PON1 been submitted								
Have samples been taken, have reference samples been taken, where are samples being sent for analysis								
What other agencies informed	MCA	HSE	MS / MMO	JNCC	DECC	SNH	SEPA	LA
Other Information								
Agreed time to receive next update and/ or any additional information								

Op 3.2. Field Information

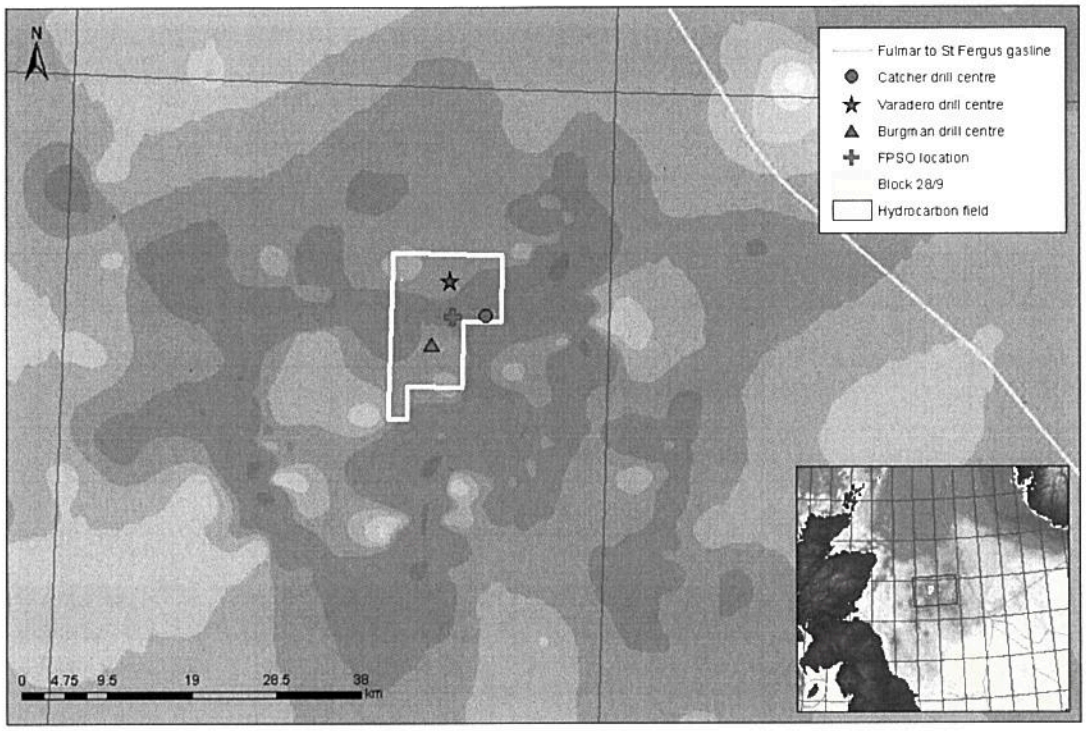
Op 3.2.1 Fast Facts

Project Information				
Project Description	Development Drilling within the Catcher Field System			
Well Operator[6]	Premier Oil UK Limited (hereinafter referred to as "Premier" or "Premier Oil")			
Non-Production Installation Operator	Ensco plc			
Non-Production Installation	Ensco 100 - Jack-Up			
Ensco 100 Contact Numbers	[redacted]	[redacted]		
	[redacted]	[redacted]		
Tier 1 Response Primacy	Ensco 100 OIM			
Tier 2 / 3 Response Primacy	Premier Onshore EMT			
Block Number	28/9a			
Drill Centres	**Catcher**	**Burgman**	**Varadero**	
Latitude (WGS84 Datum)	56° 46' 17.968" N	56° 44' 33.061" N	56° 48' 22.052" N	
Longitude (WGS84 Datum)	00° 46' 17.817" E	00° 40' 36.381" E	00° 42' 17.862" E	
Duration of Activity	July 2015 to 2019			
UK Territorial Waters	Scottish			
Anticipated Hydrocarbons	Crude - Refer to **Op 3.2.6** for specific **Oil Properties**			
Worst-case Blowout Scenario	Refer to **Op 3.2.5 Well Data**			
HP/HT Well	No			
Nearest Fixed Installations	**Asset**	**Heading**	**Distance**	
	Triton FPSO (Dana)	6°	35 km	N
	Banff FPSO (CNRI)	50°	40 km	NE
	Curlew (Shell)	97°	32 km	ESE
Nearest Points of Land	Peterhead (UK)		172 km	WNW
	Varhaug (Norway)		350 km	NE
Nearest Median Line	Norwegian, 107 km E			
Nearest UK Protected Area	East of Gannet and Montrose Fields, 40 km NNE. Refer to **Op 3.2.9** for addition information on surrounding **Marine Protected Areas**			
Water Depth	85 – 95 metres			
ERRV	Grampian Deliverance carrying 5 m^3 of Type 2/3 dispersant			
Pollution Response Contractor	Oil Spill Response Limited			

[6] As Well Operator, the responsibility for any pollution incident response resulting from Catcher field development drilling operations lies with Premier Oil

Op 3.2.2 Location Map

The diagram below shows the location of the Catcher field system.



Op 3.2.3 Ensco 100 Oil Inventories

Source	Type	Volume / Capacity
Fuel Oil	Diesel	751 m^3
Main deck heli fuel tanks	Heli fuel	5.4 m^3
Sack store	Lube oil	20 m^3
Various locations - sludge	Sludge	485 m^3

Op 3.2.4 Temporary Inventories Entering the Catcher Field System

The maximum volume of fuel oil held on-board the Ensco 100 is 751 m^3. Taking into account potentially larger diesel inventories associated with non-production installations such as MODUs, well servicing vessels and flotels which may temporarily enter into the Catcher field system, a potential worst case diesel release of 3,550 m^3 has been accounted for and modelled.

Op 3.2.5 Well Data

Field Name	Well Name (Slot Number)	Platform / Subsea	Well Type	Latitude	Longitude	Unconstrained Flow rate (m^3/day) – Oil	Drilling Schedule
Catcher	CTI1	Subsea	Injector	56° 46' 19.197" N	00° 46' 23.521" E	Initially 2,436 thereafter declining to 1,083 by day 81.	2015
Catcher	CCI2	Subsea	Injector	56° 46' 19.064" N	00° 46' 23.296" E	0 (no oil contact expected)	2015
Catcher	CCP3	Subsea	Producer	56° 46' 18.904" N	00° 46' 23.605" E	Initially 8,788 thereafter declining to 4,006 by day 81.	2015
Catcher	CTP1	Subsea	Producer	56° 46' 19.037" N	00° 46' 23.831" E	Initially 7,429 thereafter declining to 2,414 by day 81.	2015
Catcher	CCP5-B	Subsea	Producer	56° 46' 21.713" N	00° 46' 23.08" E	TBC	2018
Catcher	CTP7-A	Subsea	Producer	56° 46' 21.686" N	00° 46' 23.615" E	TBC	2018
Catcher	CCP6-B	Subsea	Producer	56° 46' 21.553" N	00° 46' 23.389" E	TBC	2018
Burgman	BI2-C	Subsea	Injector	56° 44' 34.977" N	00° 40' 43.761" E	TBC	2016
Burgman	BP3-B	Subsea	Producer	56° 44' 35.110" N	00° 40' 43.985" E	TBC	2016
Burgman	BP4-E	Subsea	Producer	56° 44' 34.950" N	00° 40' 44.295" E	TBC	2016
Burgman	BP5-A	Subsea	Producer	56° 44' 34.817" N	00° 40' 44.070" E	TBC	2016
Burgman	BI1-B	Subsea	Injector	56° 44' 36.400" N	00° 40' 40.258" E	TBC	2017
Burgman	BP2-B	Subsea	Producer	56° 44' 36.533" N	00° 40' 40.482" E	TBC	2017
Burgman	BI3-B	Subsea	Injector	56° 44' 36.373" N	00° 40' 40.793" E	TBC	2018
Burgman	BP1-D	Subsea	Producer	56° 44' 36.239" N	00° 40' 40.568" E	TBC	2017
Varadero	VP3-C	Subsea	Producer	56° 48' 24.427" N	00° 42' 20.859" E	5,769.17	2016
Varadero	VI3-C	Subsea	Injector	56° 48' 24.56" N	00° 42' 21.084" E	TBC	2017
Varadero	VP2-D	Subsea	Producer	56° 48' 24.400" N	00° 42' 21.394" E	3,826.50	2017
Varadero	VP4-C	Subsea	Producer	56° 48' 24.267" N	00° 42' 21.169" E	4,862.15	2017
Varadero	VP1-E	Subsea	Producer	56° 48' 24.578" N	00° 42' 25.567" E	3,011.22	2018
Varadero	VI1-E	Subsea	Injector	56° 48' 24.552" N	00° 42' 26.103" E	TBC	2019
Varadero	VI2-C	Subsea	Injector	56° 48' 24.418" N	00° 42' 25.877" E	TBC	2019

Op 3.2.6 Oil Properties

Catcher oils have been specified in the table below in accordance with ITOPF category groupings.

Specific Gravity at 15°C					
Light <0.8	0.8 – 0.85	Medium 0.85 - 0.95			Heavy >0.95
	Diesel 0.82	Catcher 0.875	Varadero 0.894	Burgman 0.905	
ITOPF Group I	ITOPF Group II	ITOPF Group III			ITOPF Group IV

Viscosity (cSt) 20°C					
Thin <0.5	27.5	66.1	115.7	Medium 5,000	Thick 10,000
	Catcher	Varadero	Burgman		

Pour Point at °C		
-45	-42	-3
Varadero	Burgman	Catcher

Asphaltene Content					
0.05 unlikely to emulsify	0.3	0.5 may form an emulsion	0.55	0.6 Stable emulsion	0.85
	Catcher		Varadero		Burgman

Wax Content		
2.1	2.3	5.3
Varadero	Burgman	Catcher

Op 3.2.7 Fate of Oils

A key contributing factor influencing the ultimate fate of released oil is the various weathering processes that may be experienced. Oils weather differently, depending on their type, so an understanding of this relationship and the impact weathering may have on the oil's characteristics is important, when determining an appropriate response strategy.

The oils associated with the Catcher field system have been analysed and a description of their anticipated behaviour detailed in the following table. Refer to **Op 3.2.6 - Oil Properties** for a breakdown of the anticipated oil properties.

Catcher Field System Crudes
The specific gravity of an oil is its density in relation to pure water. Most oils are lighter than water, which has a specific gravity of 1. The specific gravity of oils associated with the Catcher field system are anticipated be range between 0.87 - 0.90, indicating that they are likely remain afloat on the sea surface.
Diesel
Diesel has very high levels of light ends, evaporating quickly on release. The low asphaltene content prevents emulsification, reducing its persistence in the marine environment. Due to its characteristics and subsequent behaviour when released, diesel oil is not considered to offer a significant threat to the environment.

Op 3.2.8 Environmental & Commercial Sensitivities

This section contains a summary of the environmental sensitivities, on a seasonal basis, in the immediate vicinity of the Catcher field system. This information will be supported by actual observations from the site and used by the onshore support team when determining response strategies with the relevant external agencies[7].

Environmental & Commercial Sensitivities Matrix

Seabirds[8]

A number of seabird species likely to be present in the Catcher and surrounding fields. JNCC seabird vulnerability indicates the following sensitivities within the immediate area. The Catcher field system lies in UKCS Block 28/9

Key:	1 – Very High	2 - High	3 - Moderate	4 - Low	Blank - No Data

Receptor	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Block 28/1	4	3	3	1	1		2	2	1	3	2	
Block 28/3	3	3	3	1	1		2	2	1	3	2	3
Block 28/4	3	3	4	3	2	4	2	3	2	4	2	3
Block 28/5	2	3	4	3	2	4	2	3	2	3	2	3
Block 28/9	4	4	4		3	4	2	3	3	3	2	
Block 28/10	2	4	4	4	3	4	2	3	3	3	2	3
Block 28/13	4	3	4		3	4	2	3	2	3	2	
Block 28/14	4	4	4		3	4	2	3	3	3	3	
Block 28/15	3	4	4	4	3	4	2	3	3	3	3	4

Fisheries[9]

Commercial Fishing Effort: The Catcher field system lies in ICES rectangle 42 F0. The overall relative commercial fish value in the area surrounding the Catcher field system is considered to be moderate.
The annual value for of trawling for the following species in this area is describes as:

- Demersal (bottom dwelling) species - Moderate
- Pelagic species – Lowest
- *Nephrops* / shrimp – Moderate
- Shellfish (exc *Nephrops*/Shrimp) – Lowest

Nursery: The area is a nursery area for Haddock and Norway Pout.

Key:	S	Spawning	PS	Peak Spawning	N	Nursery

Receptor	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Norway Pout (shelf)	S	PS	PS	S								
Norway Pout (deep)			S	S	S							
Mackerel					PS	PS	PS	S				
Cod	S	PS	PS	S								
Lemon Sole				S	S	S	S	S	S			

[7] In the event of a release, actual sensitivities will be advised on the day via relevant statutory authorities.
[8] Seabird vulnerability data taken from JNCC Seabird Oil Vulnerability Index, (1999)
[9] Fisheries data taken from Coull, K.A., Johnstone, R., and S.I. Rogers. (1998) '*Fisheries Sensitivity Maps in British Waters*' UKOOA Ltd.

Environmental & Commercial Sensitivities Matrix
Cetaceans[10]
Existing data on the distribution of whales and dolphins in the vicinity of the Catcher field system indicate that population density overall appear relatively low. The following species have been recorded passing through the Catcher field system area either on an occasional or regular occurrence: • Minke Whale, • Harbour Porpoise, • Pilot Whale, • Sperm Whale, • White-Beaked Dolphin, • Atlantic White-Sided Dolphin. • Sightings tend to be more frequent during the summer months.
Commercial Shipping
• Low shipping activities throughout the year. • Fishing vessels are also present in the area.

[10] Cetaceans data taken from JNCC, (2003) 'Atlas of Cetacean distribution in north-west European waters' *available from* < http://jncc.defra.gov.uk/page-2713 >

Op 3.2.9 Marine Protected Areas

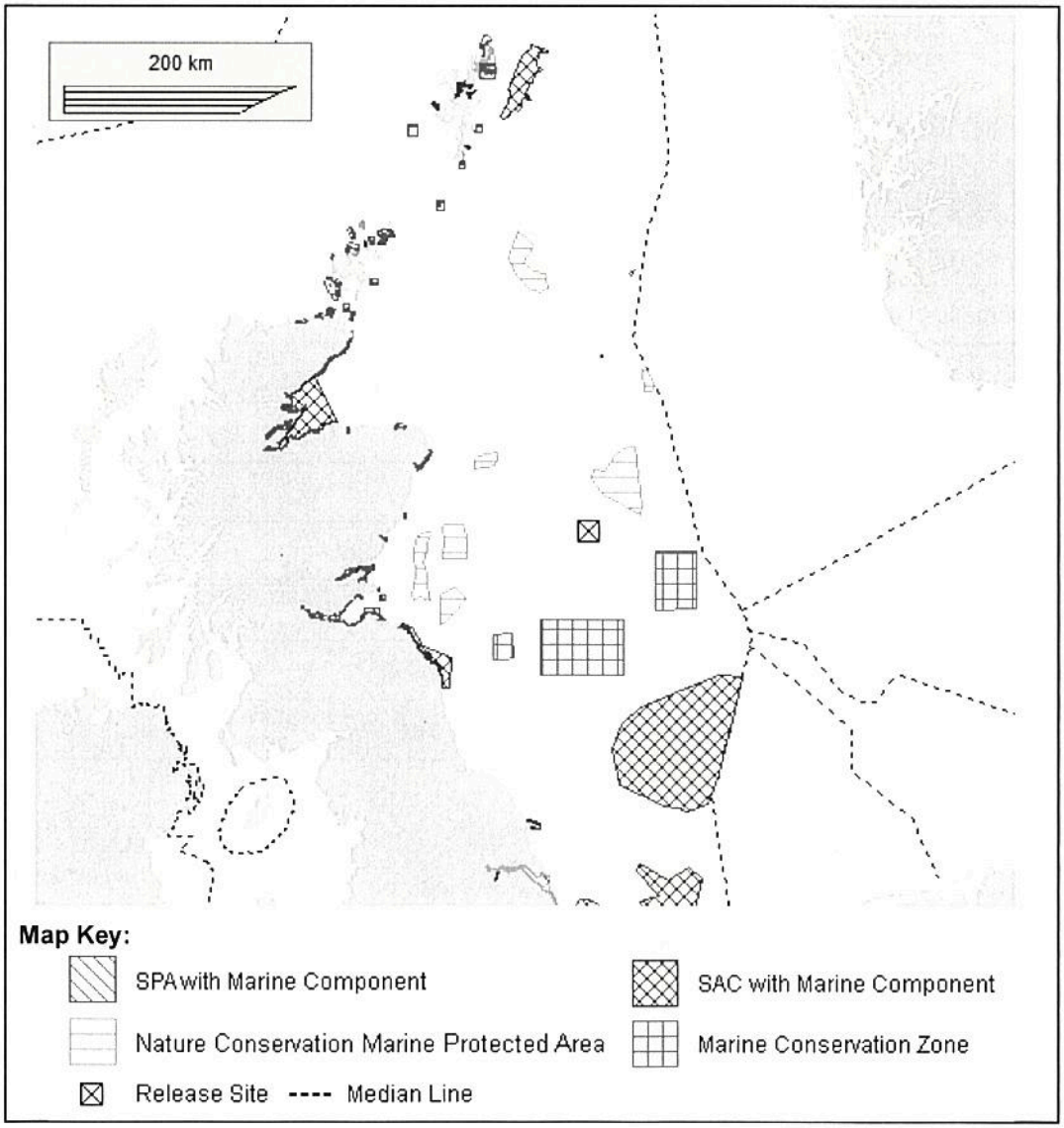
A number of marine protected areas have been identified that have the potential to be impacted as a result of an oil release to sea from Catcher drilling operations. These include:

Nature Conservation Marine Protected Areas (NCMPAs) Nature Conservation MPAs are a statutory Marine Protected Area designated under the UK Marine and Coastal Access Act (2009) and the Marine Scotland Act (2010).

Special Area of Conservation (SAC) with marine components: SACs are sites that are identified for habitats and species listed on the EC Habitats Directive.

Special Protection Area (SPA) with marine components: SPAs are sites that are identified for birds listed on Annex I of the EC Birds Directive and regularly occurring migratory species.

Marine Conservation Zones (MCZs) MCZs are a statutory Marine Protected Area designated under UK's Marine and Coastal Access Act (2009).



More information can be accessed from the JNCC website at http://jncc.defra.gov.uk/default.aspx?page=5201&LAYERS=TwelveTS,UKCS,BFL,InSAC,OFFcSAC

Op 3.3. Tier Selection Guide

The Tier Selection Guide below assists the decision-making process in determining the appropriate tier response level for an oil release to sea. The method of response will be dependent upon several factors including, but not limited to, the incident in question, volume of oil, oil type, time of year, weather, sea state and resource availability.

See **Op 3.4 Tiered Response Resources** for information on available resources.

To select the Tier size:

1. Conduct the assessment below by ticking the relevant boxes against each criteria and referring to the general guidance
2. Add up the total number of ticks per category.
3. Report the Tier size as the one with the most ticks, being mindful of the general guidance.
4. If equal number of ticks select the highest Tier.

Categorising the spill into a Tier size alerts onshore responders and regulators to the type of incident and its possible impact. It is an internationally agreed reference terminology and would trigger understood levels of response activity.

Tier Selection Guide			
Criteria	**Tier 1**	**Tier 2**	**Tier 3**
Potential spill size	☐ Small	☐ Medium	☐ Large / On-going
Environmental impact	☐ Negligible	☐ Minor / Moderate	☐ Major
On-going	☐ No	☐ No	☐ Yes
Part of wider emergency	☐ No	☐ No	☐ Yes
Shoreline impact likely	☐ No	☐ No	☐ Yes
Working conditions	☐ Good	☐ Moderate	☐ Poor
Business impact	☐ Low	☐ Moderate	☐ Major
Potential for change	☐ Low	☐ Likely	☐ Probable
Oil is very persistent	☐ No	☐ Yes	☐ Yes

General Guidance

Tier 1:
Operational type spills which can be controlled by on-site resources.

Tier 2:
A larger spill that can be handled by personnel offshore and the company support organisation; will require additional resources e.g. surveillance aircraft.

Tier 3:
A major incident that will require mobilisation of clean-up resources and potentially national resources / resources from outside of the region.

Op 3.4. Tiered Response Resources

Op 3.4.1 Tier 1 Resources

Mobilised & co-ordinated by the On-Scene Commander				
Resource	**Response Location**	**Strategy & Capability**	**Response Time**	**Authority to Mobilise**
Surveillance				
Ensco 100	On site	Drilling rig & ERRV	Immediate	On-Scene Commander
Dispersant Spraying				
ERRV	On site	5 m^3 of Type 2 / 3* (MMO approved)	Immediate	On-Scene Commander

* Comparison with a Catcher fluid analogue oil confirms that a type 2/3 dispersant is suitable for application. Catcher field system crudes are potentially amendable to dispersant all year round. The time window for effective dispersant application may vary depending on various factors such as exposure times, water temperature, wind speed and sea state. Dispersant is more likely to be effective on fresh crude, and is unlikely to be effective once the oil starts to form an emulsion.

Op 3.4.2 Tier 2 / 3 Resources

To be confirmed and mobilised by the onshore EMT on the day.

Oil Spill Response Limited Capability	Authority to Mobilise
Tier 2 & 3 response services such as the UKCS aerial surveillance service and aerial dispersant capability is provided by Oil Spill Response Limited. For more details on these services including specific response times follow the link below. http://www.oilspillresponse.com/index.php/activate-us/ukcs-capability-statement To mobilise these services call +44 (0) 2380 331551 and ask for the Duty Manager.	EMT Duty Manager

Tier	Resource	Supplier	Response Time	Authority to Mobilise	Notes
Surveillance Capability					
2 / 3	Contracted aerial surveillance	OSRL	As per OSRL web link	EMT Duty Manager	Refer to **Op 2.2.4** for **OSRL Notification and Mobilisation**
2 / 3	MCA - Air surveillance	MCA	If available	MCA	With remote sensing equipment. Can request service from MCA
Dispersant Capability					
2 / 3	Aerial dispersant capability	OSRL	As per OSRL web link	EMT Duty Manager	Refer to **Op 2.2.4** for **OSRL Notification and Mobilisation**
2 / 3	Aerial dispersant capability	MCA	As available	MCA	Can request service from MCA (CPSO) directly. DECC to be kept informed

Offshore Mechanical Containment and Recovery Equipment					
2 / 3	Vessel containment and recovery	OSRL	Confirmed on day	EMT Duty Manager	Refer to **Op 2.2.4** for **OSRL Notification and Mobilisation**
Shoreline Protection and Clean Up Capability					
3	Shoreline response	OSRL	Confirmed on day	EMT Duty Manager	Refer to **Op 2.2.4** for **OSRL Notification and Mobilisation**
Management and Expertise					
2 / 3	Technical Support	OSRL	24/7 Target 1 hr for advisor on site	EMT Duty Manager	Trained personnel to assist in managing spill. Based in Southampton or Aberdeen but will travel promptly to response centre. Refer to **Op 2.2.4** for **OSRL Notification and Mobilisation**
3	Well control specialist support	WWCI	Confirmed on day	EMT Duty Manager	-
Source Control Equipment					
3	OSPRAG Cap	OSRL	Confirmed on day	EMT Duty Manager	Refer to **Op 2.2.4** for **OSRL Notification and Mobilisation**

Op 3.4.3 Aerial Surveillance and Dispersant Spraying Response Times

Response time for OSRL's aerial surveillance and dispersant spraying within UKCS Blocks 28/9 is within 4 hours (including 1 hour mobilisation time).

Response time for OSRL's large scale aerial dispersant spraying platform within UKCS is within 8 hours (including 6 hours mobilisation time).

Op 3.4.4 Inventory of Response Equipment

Up to date equipment lists from OSRL Global Stockpile can be accessed at OSRL Equipment Status Report:

http://www.oilspillresponse.com/activate-us/equipment-stockpile-status-report

Op 3.4.5 The Oil Spill Response Effectiveness in UK Waters Guidelines

The guidelines (O&G UK publication code EN031) are intended to be used as an Annex to an OPEP to meet the requirement of the EU Safety Directive 2013/30/EU to indicate oil spill response effectiveness. The guidelines provide generic response effectiveness based on regional weather data and oil type for seven common response systems.

http://www.oilandgasuk.co.uk/publications/publications.cfm

Op 3.4.6 Shoreline Response Times

Modelling results indicate potential UK shoreline contamination in 5 days. OSRL's shoreline equipment mobilisation is within 24 hours.

Op 3.5. Record of Dispersant Usage[11]

Use the table below to record the use and effectiveness of dispersant. All information should be retained and submitted to DECC accordingly if requested.

Installation Information	
Name of operator:	
Name / identifier of field(s) / installation(s):	
Location(s) – Quadrant(s) / block(s):	
Dispersant Use Information	
Date:	
Dispersant proprietary name(s):	
Quantity / quantities used:	
Method(s) of application:	
Location(s) of application – Quadrant(s) / block(s):	
Prevailing weather conditions at time of use: Wind speed, Wind direction, Wave height	
Reason for use:	
Was approval or advice obtained prior to use?	
Estimate quantity of oil treated:	
Comments on effectiveness of treatment:	
Other relevant observations / comments on use:	
Name and contact details for person reporting use:	
Date and time report was completed:	

[11] It is advised you make copies of this sheet for populating during an incident.

Op 3.6. PON1 Reporting

Note: Any PON1 submission made should detail the correct responding organisation / company.

PON1s should be submitted within 6 hours of initial sighting and should be updated every 24 hours after initial submission, responsibility for these submissions should be agreed between the on and offshore teams.

ePON1

Log into UK Oil Portal to access electronic PON1s:

https://itportal.decc.gov.uk/eng/fox/live/PORTAL_LOGIN/login

The ePON1 is automatically received by DECC, JNCC, Marine Scotland and HMCG (Aberdeen) when submitted.

PON1

If the UK Oil Portal is unavailable, revert to submission of PON1 via fax (see **Op 3.6.1** for example PON1 form) or, liaise with onshore EMT who can submit on behalf of the On-Scene Commander.

Op 3.6.1 Example PON1 Fax Form

Petroleum Operations Notice No.1

Pro-forma for reporting Oil and Chemical Releases/discharges from Offshore Installations and Pipelines

Fax To:

Aberdeen Coastguard Stn Fax : 01224 575920 (Alternative Fax No: 01224 212862)(Telephone Nearest MRCC Station)
DECC Aberdeen Fax: 01224 254100 (Emergency Only - Tel 01224 254058/Out of hours – 0207 215 3505/3234)
JNCC Fax: 01224 896170 (and other SNCA's as per PON1 Guidance and/or Oil Pollution Emergency Plan)

Identity of Observer/Reporter		
Full Name:	**Organisation/Company:**	
Contact Telephone No:	**Contact E-Mail:**	
Incident Details		
Operator/Organisation/Company Responsible for Incident:		
Date of Incident:	**Time of Incident:**	
Installation/Facility:	**Fixed / Mobile** (delete as applicable)	**Field Name:**
Latitude:	**Longitude:**	**Quad & Block No.:**

Oil Release / Chemical Release or Permitted Discharge Notification (tick below and complete column details as applicable)

Oil Release Notification: ☐	**Chemical Release Notification:☐**	**Permitted Discharge Notification: ☐**
Max Released (tonnes):	**Quantity Released (kg):**	**Max oil discharged (tonnes):**
Min Released (tonnes):	**Chemical Name:**	**Min oil discharged (tonnes):**
Type of Oil:	**Chemical Use:**	**Type of Oil:**
Tier of Response (1,2 or 3): (As per Oil Pollution Emergency Plan)	**% oil if OBM or base oil:**	**Oil Conc. in discharge:**
	Warning label:	**Discharge rate m^3/hr:**
Appearance:	**Appearance:**	**Appearance:**
Approx. release area on sea surface (m^2or km^2):	**Approx. release area on sea surface (m^2or km^2):**	**Approx. sheen area on sea surface (m^2or km^2):**

Is Release Ongoing? YES / NO **(If YES PON1 must be updated & reported each 24 hr period unless otherwise directed by DECC/MCA)**
Release since last report (tonnes): Total Release to date (tonnes):

Source of pollution:

Cause of pollution:

Steps taken to prevent re-occurrence/respond to incident:

Release likely to reach Median line YES / NO : **Shore** YES / NO **If YES approx location/time:**

Photographs taken: YES / NO	**Samples taken for Analysis:** YES / NO

Weather Conditions	
Wind Speed (knots):	**Wind Direction (0-360^0):**
Beaufort Scale (1-12):	**Wave Height (metres):**

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