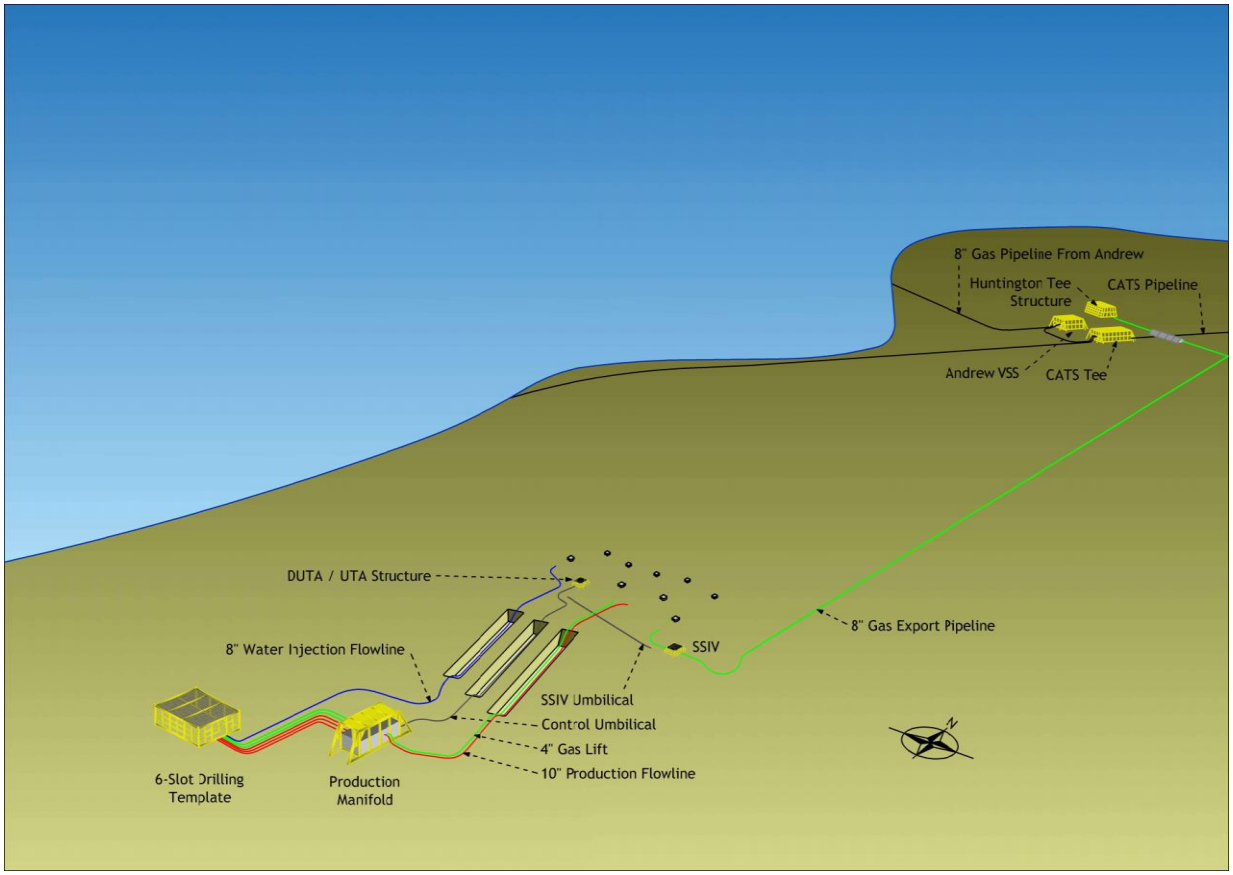

HUNTINGTON

Decommissioning Programmes

FINAL VERSION – 29 January 2021

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B03	Issued for Use (Final)		Jan 2021

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Contents

Terms and Abbreviations

Abbreviation	Explanation
CA	Comparative Assessment
CATS	Central Area Transmission System
Chem	Chemical
CNS	Central North Sea
CoP	Cessation of Production
CPF	Central Processing Facility
Dia	Diameter
DUTA	Dynamic Umbilical Termination Assembly
EA	Environment Appraisal
Elec	Electric
EMS	Environmental Management System
EMT	Environmental Management Team
ENVID	Environmental Impact Identification
ES	Environmental Statement
ETAP	Eastern Trough Area Project
FPSO	Floating Production Storage and Offloading Vessel
HSES	Health, Safety, Environment & Security
Hyd	Hydraulic
in	Inch
ICES	International Council for the Exploration of the Seas
Km	Kilometer
KP	Kilometre Point
LSA	Low Specific Activity Scale
m	Metre
mm	Millimetre
MPA	Marine Protected Area
N/A	Not Applicable
NE	Northeast
NORM	Naturally Occurring Radioactive Material
NUI	Normally Unattended Installation
NW	Northwest
ODU	Offshore Decommissioning Unit
OGA	Oil & Gas Authority
OGUK	Oil & Gas UK
OPRED	Offshore Petroleum Regulator for Environment & Decommissioning
P&A	Plug and Abandon (Wells)
PL	Pipeline
PLU	Pipeline Umbilical

Abbreviation	Explanation
Premier Oil	Premier Oil E&P UK Limited
PWA	Pipeline Works Authorisation
ROV	Remotely Operated Vehicle
S	South
SE	Southeast
SEPA	Scottish Environmental Protection Agency
SIMOPS	Simultaneous Operations
SMRU	Sea Mammal Research Unit (University of St. Andrews)
SOSI	Seabird Oil Sensitivity Index
SSIV	Subsea Isolation Valve
TBC	To Be Confirmed
Te	Tonne
UK/NOR	United Kingdom / Norway (median)
UKCS	United Kingdom Continental Shelf
UTA	Umbilical Termination Assembly
WNW	West-Northwest
WONS	Well Operations Notification System

Figures and Tables

Appendices

1 EXECUTIVE SUMMARY

1.1 Decommissioning Programmes

This document contains the Decommissioning Programmes for the Huntington Field subsea installations and pipelines.

The Huntington Field has been producing via a Floating Production Storage and Offloading Vessel (FPSO); Altera's Voyageur Spirit. The FPSO and associated riser system are decommissioned under a separate Decommissioning Programme.

1.2 Requirement for Decommissioning Programmes

Installations:
In accordance with the Petroleum Act 1998, the Section 29 notice holders of the Huntington Field subsea installations (see Table 1.2) are applying to the Offshore Petroleum Regulator for Environment & Decommissioning (OPRED) to obtain approval for decommissioning the installations detailed in Section 2.2 of this programme.

Pipelines:
In accordance with the Petroleum Act 1998, the Section 29 notice holders of the Huntington pipelines (see Table 1.4) are applying to the OPRED to obtain approval for decommissioning the pipelines detailed in Section 2.3 of this programme.

In conjunction with public, stakeholder and regulatory consultation, the Decommissioning Programmes are submitted in compliance with national and international regulations and OPRED guidelines. The base case schedule outlined in this document (Section 6.3) is for a seven year decommissioning project plan, with offshore activities due to begin in 2021.

1.3 Introduction

The Decommissioning Programmes have been prepared to support the decommissioning of the Huntington Field.

The licensee has submitted to the Oil & Gas Authority (OGA) for consideration a Cessation of Production (CoP) document which demonstrates that all economic development opportunities have been pursued for; the field and associated infrastructure, current and future development opportunities, and consideration of access to current infrastructure.

Cessation of Production from Huntington was approved on the 26th November 2019, and occurred on the 5th April 2020.

The Huntington Field is a subsea development located in block 22/14b in the Central North Sea, 230km east-northeast of Aberdeen, in a water depth of approximately 89 metres. The Field was tied back to Altera's Voyageur Spirit FPSO, where produced fluids were processed. Gas was used for gas lift, fuel and exported to the Central Area Transmission System (CATS). Stabilised crude oil was exported via shuttle tankers. Production came online during 2013. The FPSO associated with the Huntington Field has been removed from station under the Huntington FPSO Float Off approved Decommissioning Programme.

The main components of the Huntington subsea field consists of: three production wells, three water injection wells, all located in a single drilling template, a production manifold, several pipelines and an umbilical.

Following public, stakeholder and regulatory consultation, the Decommissioning Programmes are submitted without derogation and in full compliance with OPRED and Oil & Gas UK guidelines. The Decommissioning Programmes explain the principles of the decommissioning activities and are supported by a Comparative Assessment (CA) of decommissioning options and an Environmental Appraisal (EA).

1.4 Overview of Installations/Pipelines Being Decommissioned

1.4.1 Installations

Table 1.1: Installation(s) Being Decommissioned			
Field:	Huntington	**Production Type (Oil/Gas/Condensate)**	Oil/Gas
Water Depth (m)	89	**UKCS block**	22/14b
Surface Installation(s)			
Number	**Type**	**Topsides Weight (Te)**	**Jacket Weight (Te)**
N/A	N/A	N/A	N/A
Subsea Installations		**Number of Wells**	
Number	**Type**	**Platform**	**Subsea**
14	1 x Drilling Template 1 x Production Manifold 1 x SSIV 1 x DUTA/UTA Structure 1 x Huntington Tee Structure 5 x Riser Tether Bases 4 x Riser Hold Back Clump Weights	N/A	8
Drill Cuttings pile(s)		**Distance to median**	**Distance from nearest UK coastline**
Number of Piles	**Total Estimated volume (m^3)**	**km**	**km**
N/A		27.5 (UK/NOR median)	205

Table 1.2: Installations Section 29 Notice Holders Details		
Section 29 Notice Holders	**Registration Number**	**Equity Interest (%)**
Premier Oil E&P UK Limited	02761032	100.00
Premier Oil PLC	SC234781	0%
Noreco Oil (UK) Limited	03629582	Exited
Premier Oil UK Limited	SC048705	Exited

1.4.2 Pipeline(s)

Table 1.3: Pipelines Being Decommissioned		
Number of Pipelines	**12**	(See Table 2.2)
Number of Umbilicals	**8**	(See Table 2.2)

Table 1.4: Pipelines Section 29 Notice Holders Details		
Section 29 Notice Holders	**Registration Number**	**Equity Interest (%)**
Premier Oil E&P UK Limited	02761032	100.00
Premier Oil PLC	SC234781	0%
Noreco Oil (UK) Limited	03629582	Exited
Premier Oil UK Limited	SC048705	Exited

1.5 Summary of Proposed Decommissioning Programmes

Table 1.5: Summary of Decommissioning Programmes		
Selected Option	**Reason for Selection**	**Proposed Decommissioning Solution**
1. Subsea Installations		
Group 7*: Structures - Drilling template, production manifold, SSIV, Tee structure, UTA/DUTA structure, riser bases and riser clump weights Complete removal and recycling.	Leaves a clear seabed and meets regulations.	Full Removal. Returned to shore for reuse, recycling or appropriate treatment and disposal.
2. Pipelines, Flowlines & Umbilicals		
Group 1*: Trenched & Buried Rigid Flowlines Leave in-situ.	Comparatively assessed as the preferred option. The rigid flowline is sufficiently trenched and buried and stable, posing no risk to marine users. Minimal seabed disturbance, lower energy use, reduced risk to personnel engaged in the activity.	Leave in-situ. Exposed ends & areas of exposure to be removed & returned to shore for disposal. Local rock placement to mitigate snag hazard from cut ends.
Group 3*: Trenched & Buried Flexible Flowlines & Umbilicals Full Removal.	Leaves a clear seabed and meets regulations.	Full Removal. Returned to shore for recycling or appropriate treatment and disposal.
Group 6*: Spools & Jumpers Full Removal.	Leaves a clear seabed and meets regulations.	Full Removal. Returned to shore for recycling or appropriate treatment and disposal.
Group 8*: Protection / Stabilisation (Subsea Mattresses, Grout bags) Full Removal.	Leaves a clear seabed and meets regulations.	Full Removal. Returned to shore for recycling or appropriate treatment and disposal.
3. Wells		
Wells will be plugged and abandoned to Premier Oil E&P UK Limited standards which comply with "Offshore Installations and Wells (Design and Construction, etc.) Regulations 1996" and align with Oil & Gas UK Guidelines for the Suspension and Abandonment of Wells (Issue 6, June 2018).	Meets HSE regulatory requirements in accordance with O&G UK and OGA guidelines.	A Master Application Template (MAT) and the supporting Subsidiary Application Template (SAT) will be submitted in support of activities carried out. Applications to abandon the wells will be submitted through the Well Operations Notification System (WONS). Additionally, planned work will be reviewed by a well examiner to Premier Oil E&P UK Limited standards, then submitted to the HSE for review.

* Refers to the Inventory Group Categories as defined in the Comparative Assessment Report

1.6 Field Location Including Field Layout and Adjacent Facilities

Figure 1.1: Field Location in UKCS

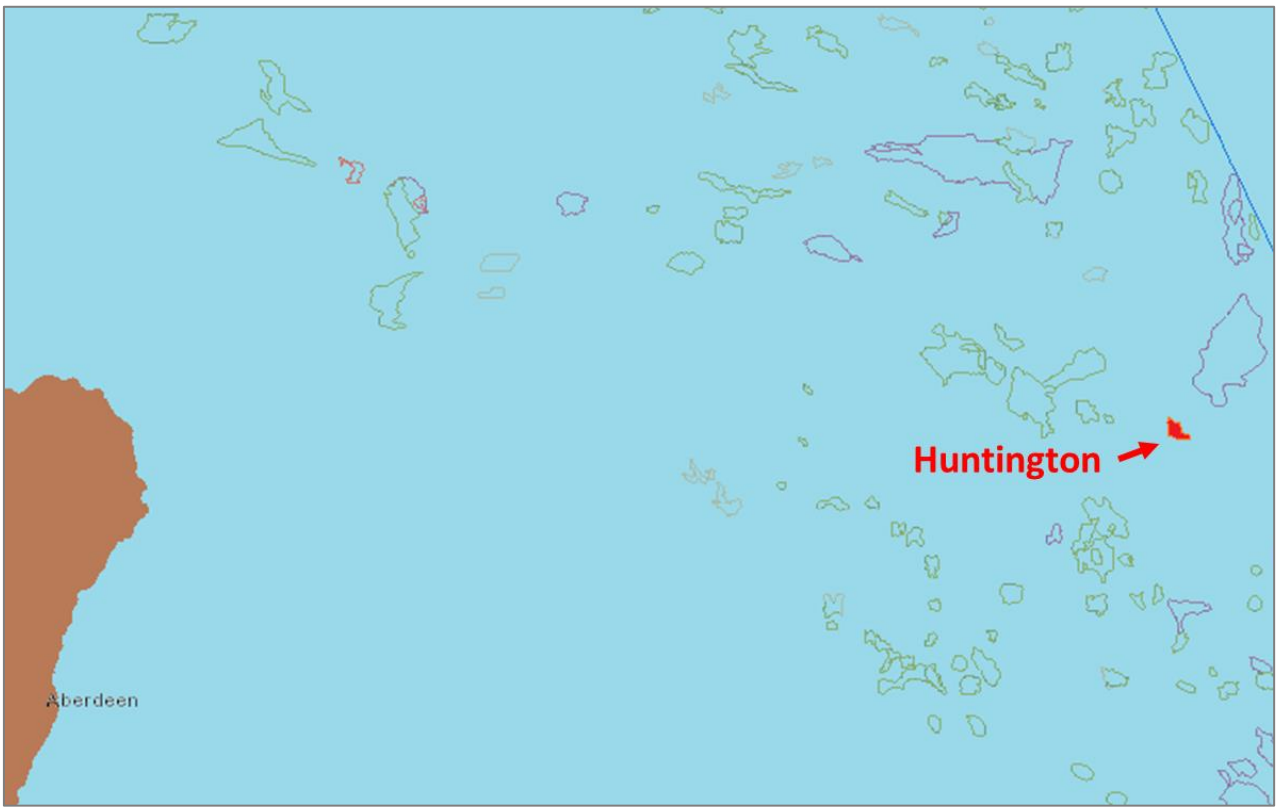
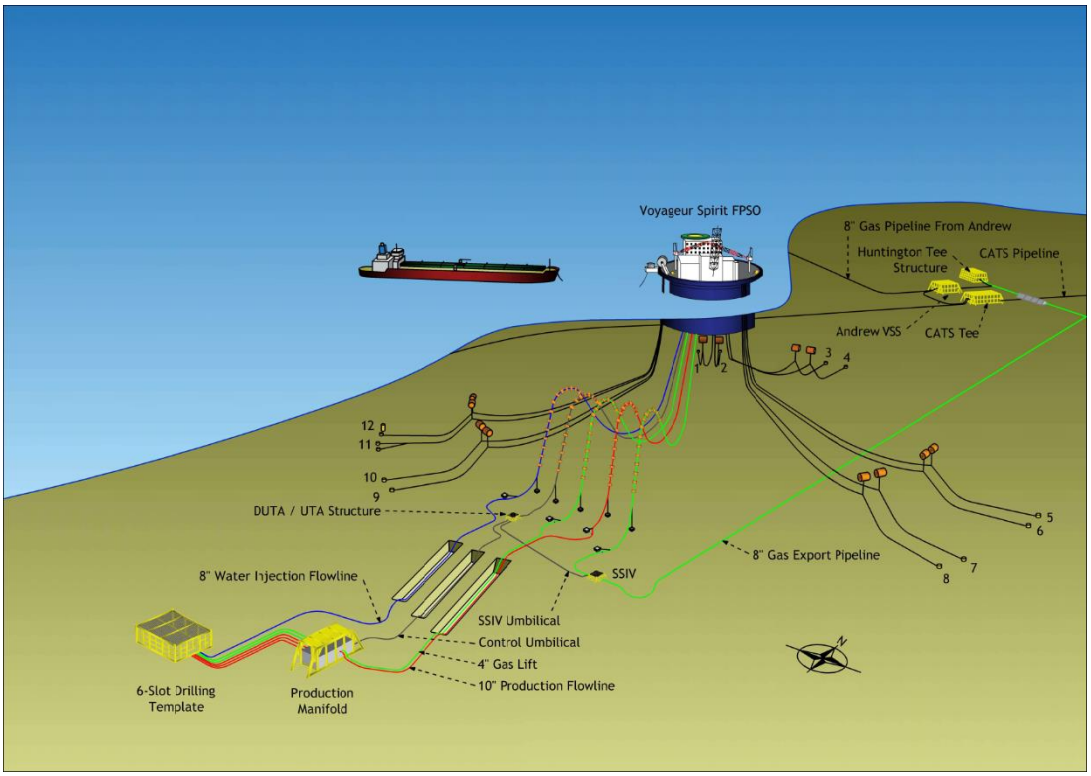
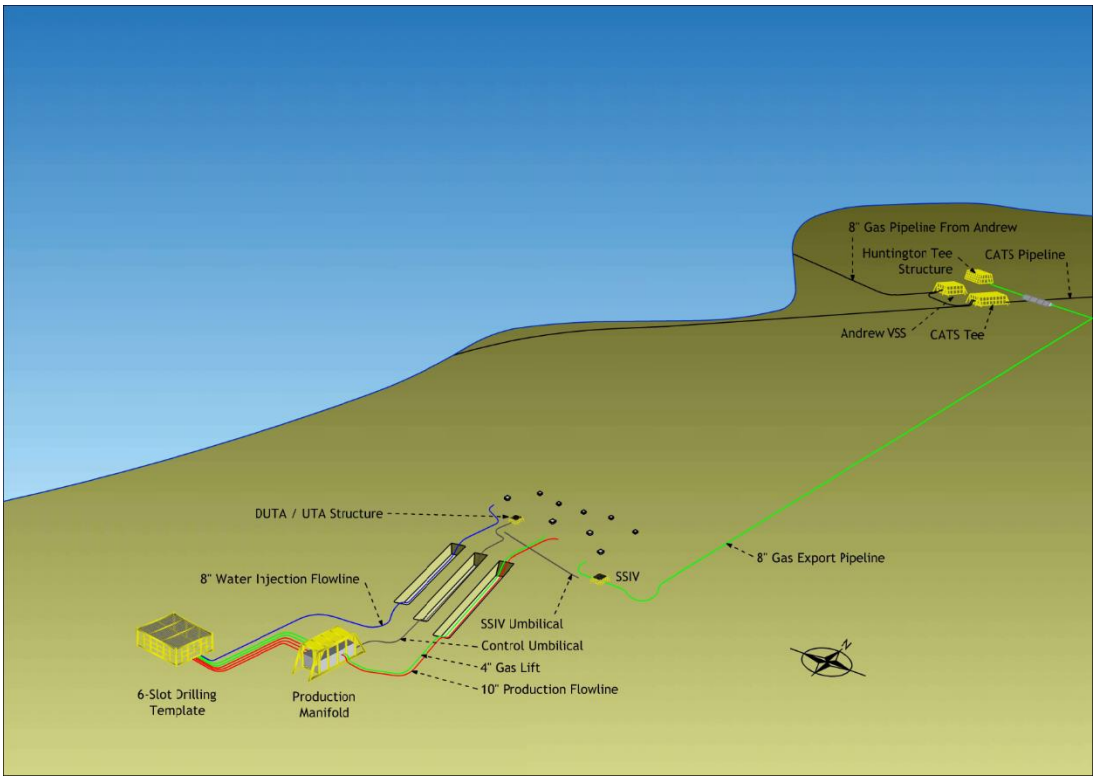


Figure 1.2: Field Layout



Huntington Field Layout during production

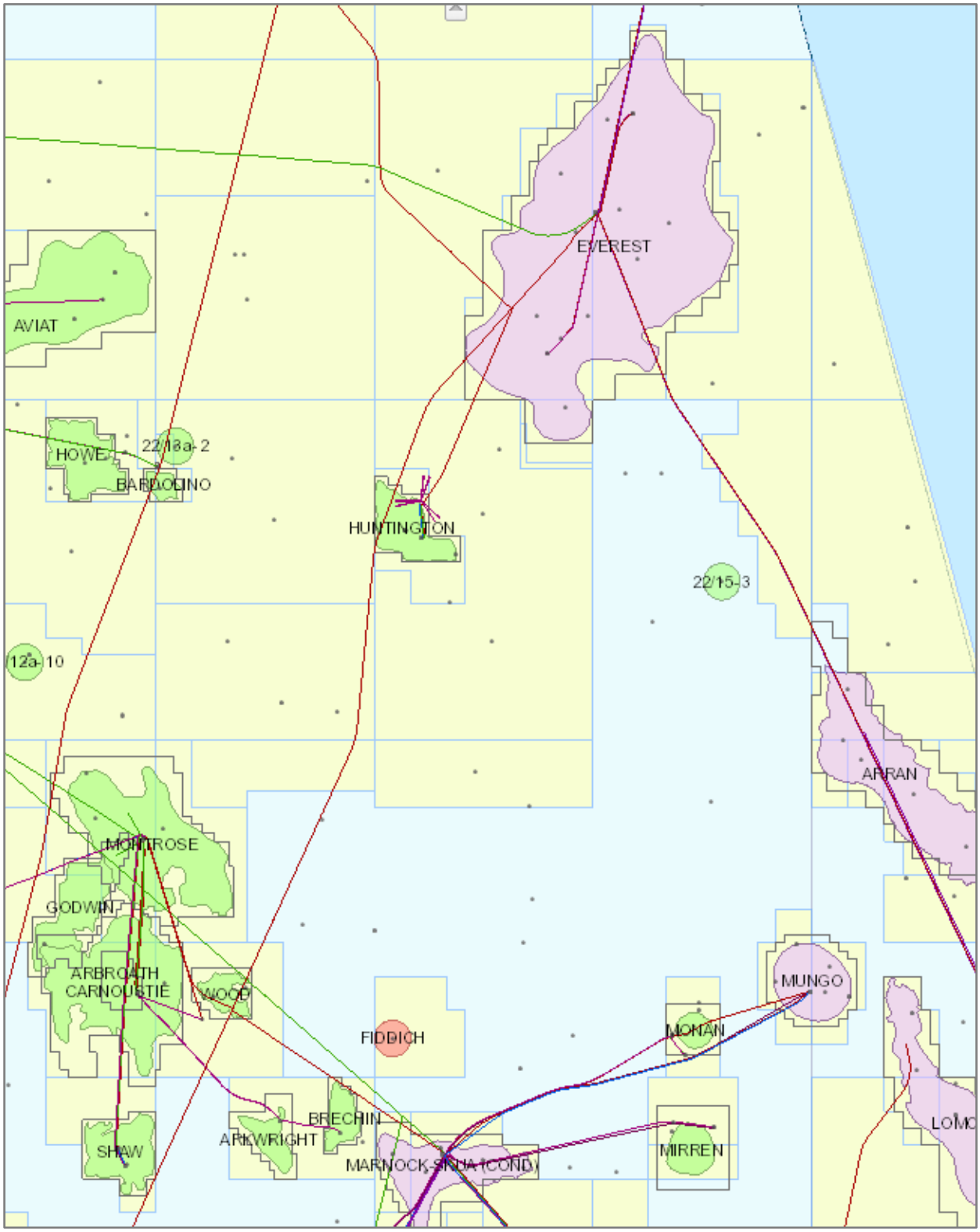


Huntington Field Layout post FPSO departure and riser removal
(Infrastructure covered in this Decommissioning Programmes)

Table 1.6 Adjacent Facilities					
Operator	**Name**	**Type**	**Distance/ Direction**	**Information**	**Status**
Chrysaor Limited/ CATS North Sea Limited	North Everest/ CATS Riser Platform	Bridge linked Production Platforms	18.4 km NE	Condensate is exported to Cruden Bay, gas is exported to the CATS Terminal at Teesside.	Operational
Shell U.K. Limited	Arran Field	Subsea	31 km SE	To be tied back to Shearwater platform	Development
BP Exploration Operating Company Limited	Mungo	NUI Platform	34.5 km SE	Oil & gas production tied back to ETAP CPF	Operational
BP Exploration Operating Company Limited	ETAP CPF (Marnock)	Production Platforms	36 km S	Liquids are exported to Grangemouth through the Forties pipeline system. Gas is exported by the CATS to Teesside	Operational
Repsol Sinopec Resources UK Limited	Brechin	Subsea	35.2 km S	Oil & gas production tied back to Montrose platform through Arkwright	Operational
Repsol Sinopec Resources UK Limited	Wood	Subsea	29.8 Km SSW	Oil & gas production tied back to Montrose platform	Operational
Repsol Sinopec Resources UK Limited	Montrose	Bridge linked Production Platforms	24.1 km SW	Oil is exported to Cruden Bay	Operational
Enterprise Oil Limited	Bardolino	Subsea	14.5 km WNW	Oil & gas production tied back to Nelson platform	Operational
Apache Beryl I Limited	Aviat	Subsea	20.6 km NW	Gas production tied back to Forties Alpha	Operational
Impacts of Decommissioning Proposals					
The Huntington Field decommissioning activities are planned so they will not affect the decommissioning of other fields or the operation of other developments in the area. The environmental appraisal considers the potential cumulative implications of decommissioning activities in context of other oil and gas / other industry activities in the area.					

Note: Adjacent facilities refer to those potentially impacted by this programme.

Figure 1.3: Adjacent Facilities



1.7 Industrial Implications

The Huntington Field decommissioning activities will be managed by Premier Oil in Aberdeen. All decommissioning activities will be planned to realise synergies and efficiencies in offshore execution.

A Supply Chain Action Plan (SCAP) has been produced for the Decommissioning Programmes in accordance with OGA guidance. The SCAP has been submitted to and approved by the OGA. Premier Oil have some pre-existing Master Service agreements with specialist contractors, which were the result of previous tender exercises. These contractors will be asked to quote for services to support the decommissioning activity in the first instance. Other specialist services will be competitively tendered or novated. Suppliers' offers will be assessed along many criterions, among which are capacity to execute the work safely; the commercial offer and experience of carrying out this type of operation on the UKCS.

2 DESCRIPTION OF ITEMS TO BE DECOMMISSIONED

2.1 Installation(s): Surface Facilities (Topsides/Jacket(s)/FPSO etc.)

The Huntington Field has been producing via Altera's Voyageur Spirit FPSO. The FPSO and associated riser system is decommissioned under a separate Decommissioning Programme.

2.2 Installations: Subsea including Stabilisation Features

Table 2.1: Subsea Installations and Stabilisation Features

Subsea installations incl. Stabilisation Features	Number	Size (m)/ Weight (Te)	Location		Comments/Status
Subsea Drilling Template	1	L15.3xW13.4xH7.75 246.8 Te	WGS84 Decimal	57.59888° N	Piled structure
				1.64187° E	
			WGS84 Decimal Minute	57° 35.933' N	
				1° 38.512' E	
SSIV Structure	1	L9.0xW4.5xH3.05 35.5 Te	WGS84 Decimal	57.61447° N	Gravity Based structure
				1.64208° E	
			WGS84 Decimal Minute	57° 36.868' N	
				1° 38.525' E	
Subsea Production Manifold	1	L27.4xW10.0xH5.65 201.5 Te	WGS84 Decimal	57.59895° N	Piled structure
				1.64267° E	
			WGS84 Decimal Minute	57° 35.937' N	
				1° 38.560' E	
Huntington Tee Protection Structure	1	L15.74xW11.94xH4.53 126.5 Te	WGS84 Decimal	57.71145° N	Gravity based structure
				1.72438° E	
			WGS84 Decimal Minute	57° 42.687' N	
				1° 43.463' E	

Table 2.1: Subsea Installations and Stabilisation Features					
Subsea installations incl. Stabilisation Features	**Number**	**Size (m)/ Weight (Te)**	**Location**		**Comments/Status**
UTA/DUTA Structure	1	L7xW6xH3.63 70.7 Te	WGS84 Decimal	57.61475° N	Gravity based structure
				1.64017° E	
			WGS84 Decimal Minute	57° 36.885' N	
				1° 38.410' E	
Gas Export Riser Tether Base	1	L5xW5xH1.25 78.5 Te	WGS84 Decimal	57.60658° N	Gravity based
				1.64194° E	
			WGS84 Decimal Minute	57° 36.395' N	
				1° 38.516' E	
Production Riser Tether Base	1	L5xW5xH1.25 78.5 Te	WGS84 Decimal	57.61556° N	Gravity based
				1.64129° E	
			WGS84 Decimal Minute	57° 36.933' N	
				1° 38.477' E	
Gas Lift Riser Tether Base	1	L5xW5xH1.25 78.5 Te	WGS84 Decimal	57.61556° N	Gravity based
				1.64105° E	
			WGS84 Decimal Minute	57° 36.933' N	
				1° 38.463' E	
Water Injection Riser Tether Base	1	L5xW5xH1.25 78.5 Te	WGS84 Decimal	57.61566° N	Gravity based
				1.64025° E	
			WGS84 Decimal Minute	57° 36.939' N	
				1° 38.415' E	
Control Umbilical Riser Tether Base	1	L5xW5xH1.25 78.5 Te	WGS84 Decimal	57.61560° N	Gravity based
				1.64062° E	
			WGS84 Decimal Minute	57° 36.936' N	
				1° 38.437' E	
Gas Export Riser Hold-Back Clump Weight	1	L6xW6xH1.9 79 Te	WGS84 Decimal	57.61523° N	Gravity based
				1.64155° E	
			WGS84 Decimal Minute	57° 36.914' N	
				1° 38.493' E	
Production Riser Hold-Back Clump Weight	1	L6xW6xH1.9 79 Te	WGS84 Decimal	57.61523° N	Gravity based
				1.64115° E	
			WGS84 Decimal Minute	57° 36.914' N	
				1° 38.469' E	
Gas Lift Riser Hold-Back Clump Weight	1	L6xW6xH1.9 79 Te	WGS84 Decimal	57.61524° N	Gravity based
				1.64085° E	
			WGS84 Decimal Minute	57° 36.914' N	
				1° 38.451' E	
Water Injection Riser Hold-Back Clump Weight	1	L6xW6xH1.9 79 Te	WGS84 Decimal	57.61540° N	Gravity based
				1.63987° E	
			WGS84 Decimal Minute	57° 36.924' N	
				1° 38.393' E	

2.3 Pipelines Including Stabilisation Features

Table 2.2: Pipelines / Flowlines / Umbilical Information										
Description	Pipeline No. (as per PWA)	Dia. (in)	Length (km)	Description of component parts	Product Conveyed	End Points From	End Points To	Burial Status	Pipeline Status	Current Contents
Gas Export/ Import Pipeline	PL2805	8.63	11.99	Steel	Gas	Gas Export/ Import SSIV	Huntington Tee Structure	Trenched & Buried	Out of Use	Seawater
Production Flowline	PL2806	10.58	1.830	Flexible	Multiphase Fluids	Production Manifold	Flexible Production Riser connector	Trenched & Buried	Out of Use	Seawater
Production Jumper	PL2806JP1	6.62	0.0635	Steel	Multiphase Fluids	Drill Template	Production Manifold	Surface laid	Out of Use	Seawater
Production Jumper	PL2806JP2	6.62	0.0635	Steel	Multiphase Fluids	Drill Template	Production Manifold	Surface laid	Out of Use	Seawater
Production Jumper	PL2806JP3	6.62	0.0635	Steel	Multiphase Fluids	Drill Template	Production Manifold	Surface laid	Out of Use	Seawater
Production Jumper	PL2806JP4	6.62	0.0635	Steel	Multiphase Fluids	Drill Template	Production Manifold	Surface laid	Out of Use	Seawater
Gas Lift Flowline	PL2807	4.39	1.835	Flexible	Gas	Gas Lift Riser connector	Production Manifold	Trenched & Buried	Out of Use	Seawater
Gas Lift Jumper	PL2807JP1	2.37	0.0641	Steel	Gas	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater
Gas Lift Jumper	PL2807JP2	2.37	0.0657	Steel	Gas	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater
Gas Lift Jumper	PL2807JP3	2.37	0.0668	Steel	Gas	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater
Gas Lift Jumper	PL2807JP4	2.37	0.0673	Steel	Gas	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater

Table 2.2: Pipelines / Flowlines / Umbilical Information										
Description	Pipeline No. (as per PWA)	Dia. (in)	Length (km)	Description of component parts	Product Conveyed	End Points From	To	Burial Status	Pipeline Status	Current Contents
Water Injection	PL2808	8.47	1.833	Flexible	Water	Flexible Water Injection Riser connector	Drill Template	Trenched & Buried	Out of Use	Seawater
Control Umbilical	PLU2809	5.95	1,832	Flexible	Elec/Chem/ Hyd Fluid	Huntington FPSO	Production Manifold	Trenched & Buried	Out of Use	Seawater/ Hyd Fluid
Control Umbilical	PLU2809JSSIV	1.97	0.13	Flexible	Elec/Chem/ Hyd Fluid	UTA/DUTA	SSIV	Surface laid	Out of Use	Seawater/ Hyd Fluid
Control Umbilical	PLU2809JP1	4.075	0.11	Flexible	Elec/Chem/ Hyd Fluid	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater/ Hyd Fluid
Control Umbilical	PLU2809JP2	4.075	0.11	Flexible	Elec/Chem/ Hyd Fluid	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater/ Hyd Fluid
Control Umbilical	PLU2809JP3	4.075	0.11	Flexible	Elec/Chem/ Hyd Fluid	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater/ Hyd Fluid
Control Umbilical	PLU2809JP4	4.075	0.11	Flexible	Elec/Chem/ Hyd Fluid	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater/ Hyd Fluid
Control Umbilical	PLU2809JW1	4.075	0.11	Flexible	Elec/Chem/ Hyd Fluid	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater/ Hyd Fluid
Control Umbilical	PLU2809JW2	4.075	0.11	Flexible	Elec/Chem/ Hyd Fluid	Production Manifold	Drill Template	Surface laid	Out of Use	Seawater/ Hyd Fluid

Table 2.3: Subsea Pipelines Stabilisation Features				
Stabilisation Feature	**Total Number**	**Weight (Te)**	**Locations**	**Exposed/Buried/Condition**
Concrete mattresses (6 x 3 x 0.15m)	175	825	Various locations across field infrastructure	Exposed, in good condition
Concrete mattresses (6 x 2 x 0.15m)	61	192	Over EHC umbilical and its jumpers	Exposed, in good condition
Grout bags	1000 (estimated)	25	Various location across field infrastructure	Exposed or under mattresses, in good condition
Rock Dump	N/A	39,300	38 locations on PL2805, PL2806/PL2807, PL2808	Exposed
CATS crossing bridge (two ramps)	N/A	52	Over CATS pipeline at the export line crossing (at Huntington Tee)	Covered in rock and mattresses

2.4 Wells

Table 2.4 Well Information					
Platform Wells		**Designation**	**License**	**Status**	**Category of Well**
n/a		n/a	n/a	n/a	n/a
Subsea Wells					
WONS Name Current bore	**Premier Oil Well Name**				
22/14b-H2	22/14b-H2(PC)	Water Injection	P1114	Shut-in	TBC
22/14b-H3	22/14b-H3(PE)	Producer	P1114	Shut-in	TBC
22/14b-H4	22/14b-H4(PB)	Producer	P1114	Shut-in	TBC
22/14b-H5	22/14b-H5(PA)	Producer	P1114	Shut-in	TBC
22/14b-H1	22/14b-H1(IS)	Water Injector	P1114	Shut-in	TBC
22/14b-H6	22/14b-H6(IN)	Water Injector	P1114	Shut-in	TBC
22/14b-5	22/14b-5	Appraisal	P1114	Suspended	TBC
22/14b-6q	22/14b-6q	Appraisal	P1114	Suspended	TBC

The well categories require to be evaluated in accordance with the OGUK Well Decommissioning Guidelines, Issue 6, June 2018. This work is ongoing at the time of submission.

2.5 Drill Cuttings

Table 2.5: Drill Cuttings Pile(s) Information		
Location of Pile Centre (Latitude/Longitude)	**Seabed Area (m^2)**	**Estimated volume of cuttings (m^3)**
These wells were drilled after changes to legislation, so no drill cuttings piles exist at Huntington	N/A	N/A

2.6 Inventory Estimates

Tables 2.6 and 2.7 provide an estimate of the total weight of materials associated with the Huntington installations and pipelines.

A further breakdown of the inventory estimates for the subsea installations and pipelines is provided in Figure 2.1 and Figure 2.2 respectively.

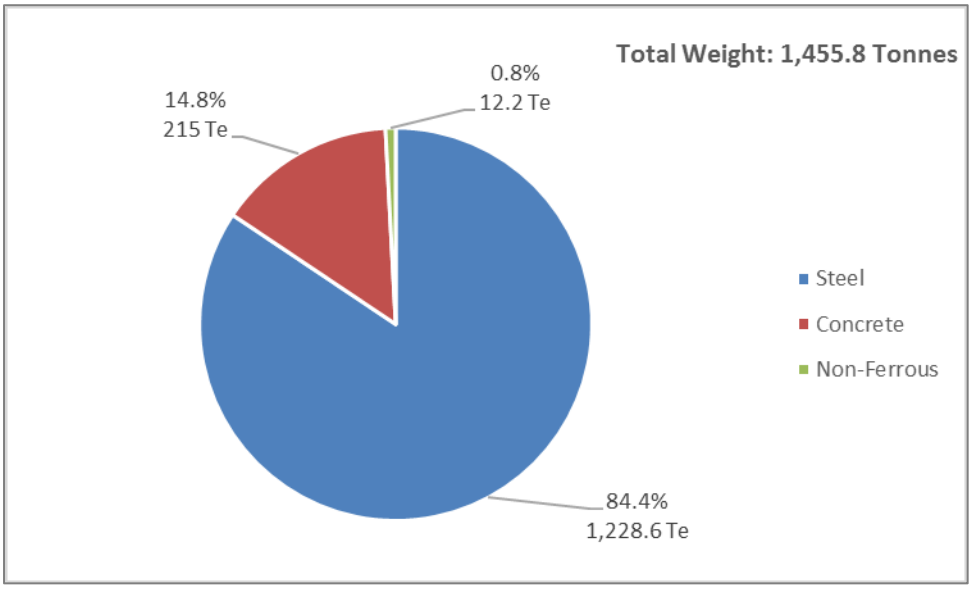
Table 2.6: Inventory of material associated with Huntington Installations

Item	Description	Weight Te
Metals	Steel (all grades)	1,228.6
	Non-Ferrous (copper, aluminium)	12.2
Concrete	Aggregates (concrete ballast)	215
Plastic	Rubbers, polymers	0
Hazardous	Residual fluids (hydrocarbons, chemicals)	Trace
	NORM scale	Trace
Other		0
	Total (Tonnes)	1,445.8

Table 2.7: Inventory of material associated with Huntington Pipelines

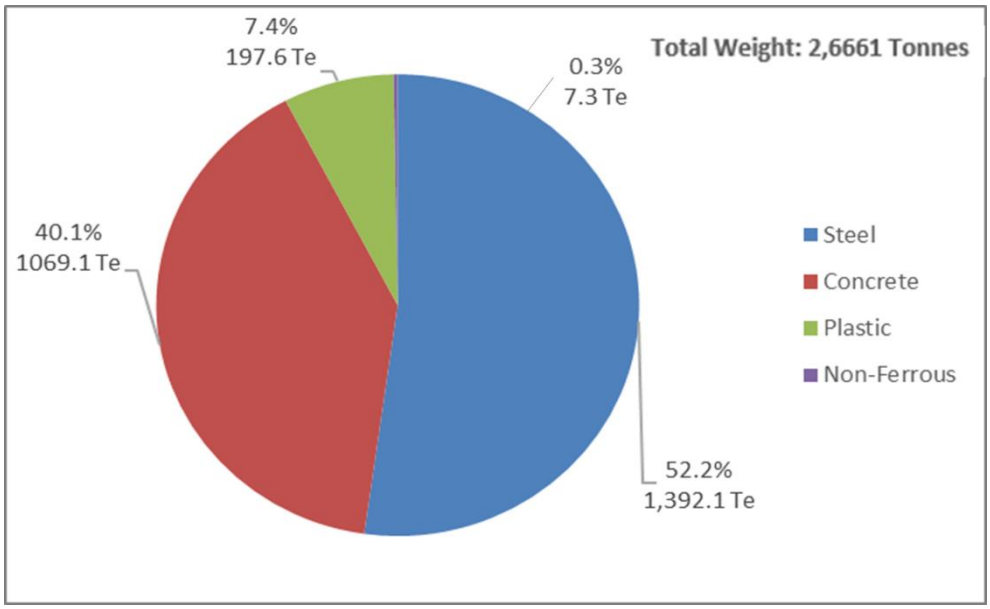
Item	Description	Weight Te
Metals	Steel (all grades)	1,392.1
	Non-Ferrous (copper, aluminium)	7.3
Concrete	Aggregates (mattresses, crossing bridge)	1069.1
Plastic	Rubbers, polymers	197.6
Hazardous	Residual fluids (hydrocarbons, chemicals)	Trace
	NORM scale	Trace
Other	(Glass filament, Silica)	Trace
	Total (Tonnes)	2,666.1

Figure 2.1: Pie Chart of Estimated Inventories (Installations)



Please refer to section 2.4 of the Huntington Decommissioning Environmental Appraisal for further details.

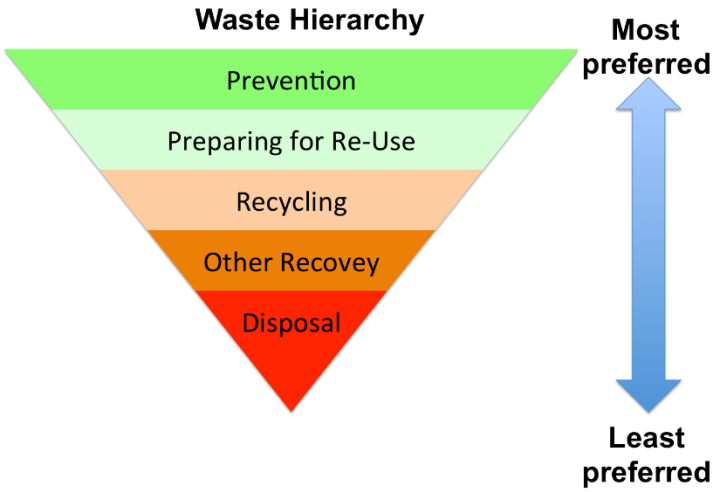
Figure 2.2: Pie Chart of Estimated Inventory (Pipelines)



Please refer to section 2.4 of the Huntington Decommissioning Environmental Appraisal for further details.

3. REMOVAL AND DISPOSAL METHODS

Decommissioning of the Huntington Field will generate a quantity of waste. Premier Oil is committed to establishing and maintaining environmentally acceptable methods for managing wastes in line with the principles of the waste hierarchy:



Recovered infrastructure will be returned to shore and transferred to a suitably licenced decommissioning facility. It is expected that the recovered infrastructure, i.e. manifold, flowlines, umbilicals and jumpers will be cleaned before being largely recycled.

Concrete mattresses and grout bags that are recovered, will be cleaned of marine growth if required, and either reused, recovered as aggregate for infrastructure projects or disposed of in landfill sites.

An appropriately licensed disposal company and yard will be identified through a selection process that will ensure that the chosen facility demonstrates a proven track record of waste stream management throughout the deconstruction process, the ability to deliver innovative reuse / recycling options, and ensure the aims of the waste hierarchy are achieved.

Geographic locations of potential disposal yard options may require the consideration of Trans Frontier Shipment of Waste (TFSW), including hazardous materials. Early engagement with the regulatory authorities will ensure that any issues with TFSW are addressed.

Premier Oil will engage with other companies and industries to identify potential reuse opportunities. However, Premier Oil believes that such opportunities are best achieved through the tendering and selection of a waste management contractor with the expert knowledge and experience in this area.

3.1 Floating Production Storage and Offloading Vessel (FPSO)

The Huntington Field was tied back to Altera's Voyageur Spirit FPSO, which was removed from the field under a separate Decommissioning Programme.

3.2 Jacket(s)

Not applicable to Huntington subsea field decommissioning.

3.3 Subsea Installations and Stabilisation Features

Table 3.1: Subsea Installations and Stabilisation Features

Subsea Installations and Stabilisation Features	Number	Option	Disposal Route (if Applicable)
Subsea Drilling Template	1	Full recovery as part of decommissioning campaign.	Return to shore for reuse, recycling or disposal.
Subsea Production Manifold	1	Full recovery as part of decommissioning campaign.	Return to shore for reuse, recycling or disposal.
Huntington Tee Protection Structure	1	Full recovery as part of decommissioning campaign.	Return to shore for reuse, recycling or disposal.
SSIV Structure	1	Full recovery as part of decommissioning campaign.	Return to shore for reuse, recycling or disposal.
UTA/DUTA Protection Structure	1	Full recovery as part of decommissioning campaign.	Return to shore for reuse, recycling or disposal.
Riser Tether Base	5	Full recovery as part of decommissioning campaign.	Return to shore for reuse, recycling or disposal.
Riser Hold Back Clump Weight	4	Full recovery as part of decommissioning campaign.	Return to shore for reuse, recycling or disposal.
Concrete Mattresses	0	N/A	N/A
Grout Bags	0	N/A	N/A
Rock Dump	0	N/A	N/A

3.4 Pipelines

Decommissioning Options:

Key to Options:

1) Re-Use
2a) Cut and Lift with Deburial
2b) Reverse Reel without Deburial
2c) Reverse Reel with Deburial
2d) Lift and Cut without Deburial
2e) Lift and Cut with Deburial
3a) Retrench and Bury Entire Line
3b) Rock Placement over Entire Line
4a) Rock Placement over Exposures
4b) Trench & Bury Exposures
4c) Remove Exposures
4d) Accelerated Decomposition
5) Remove Ends & Remediate Snag Risk
6) Leave As-is

Table 3.2: Pipeline or Pipeline Groups Decommissioning Options

Pipeline or Group (as per PWA)	Condition of line/group (Surface laid/ Trenched/ Buried/Spanning)	Whole or part of pipeline/group	Decommissioning options considered
Group 1: Trenched & Buried Rigid Flowlines PL2805	Trenched & Buried (See burial profile in Appendix II)	Whole	2a, 2b, 2c, 2d, 2e, 4d, 5
Group 3: Trenched & Buried Flexible Flowlines & Umbilicals PL2806, PL2807, PL2808, PLU2809	Trenched & Buried	Whole	2a, 2b, 2c, 2d, 2e, 5
Group 6: Spools & Jumpers PL2806JP1, PL2806JP2, PL2806JP3, PL2806JP4, PL2807JP1, PL2807JP2, PL2807JP3, PL2807JP4, PLU2809JP1, PLU2809JP2, PLU2809JP3, PLU2809JP4, PLU2809WI1, PLU2809JWI & PLU2809JSSIV	Surface Laid	Whole	Full Removal

Comparative Assessment Method:
Comparative Assessment is integral to the overall planning and approval of decommissioning options. Premier Oil's strategy for the CA process is aligned with the Oil & Gas UK Guidelines for Comparative Assessment in Decommissioning Programmes and OPRED Guidance Notes for the Decommissioning of Offshore Oil and Gas Installations and Pipelines.

Premier Oil has scoped all of the infrastructure into logical groupings. All feasible decommissioning options for each of the infrastructure groups have been identified, assessed, ranked and screened, utilising the OPRED Guidance Notes: Decommissioning of Offshore Oil and Gas Installations and Pipelines to carry forward credible decommissioning options to be assessed through the Comparative Assessment process.

The Comparative Assessment process uses five assessment criteria, which are; Safety, Environment, Technical, Societal and Economic to compare the relative merits of each credible decommissioning option for each group of infrastructure. The assessment criteria are equally weighted to balance and represent the views of the each of the stakeholders.

An independent consultancy utilising its bespoke Multi Criteria Decision Analysis (MCDA) process was employed to facilitate Comparative Assessment workshops. The workshops were attended by specialists from the Operator, Field Partners and representatives from key stakeholders namely:

- Scottish Fishermen's Federation
- National Federation of Fishermen's Organisations
- Joint Nature Conservation Committee
- Health and Safety Executive
- OPRED EMT
- OPRED ODU (observers)
- Premier Oil E&P UK Limited
- Neptune E&P UKCS Limited

At each workshop, each decommissioning option for each infrastructure grouping was assessed against each of the assessment criteria utilising a pairwise comparison system. The relative importance of each of the criteria was assessed in a qualitative way, supported by quantification where appropriate.
The process provides for differentiation between decommissioning options in each infrastructure group taking account of stakeholder views.

Outcome of Comparative Assessment:

Table 3.3: Outcomes of Comparative Assessment

Pipeline or Group	Recommended Option	Justification
Group 1: Trenched & Buried Rigid Flowlines PL2805	Option 5 - Remove ends and remediate snag hazards	Option 5 was clearly preferred against the Safety, Environment and Technical criteria. Once the Economics criterion was considered, this strengthens the preference for Option 5. Given that this option eliminates exposures and exposed ends, this will be the recommended choice.
Group 3: Trenched & Buried Flexible Flowlines & Umbilicals PL2806, PL2807, PL2808, PLU2809	Option 2b - Reverse Reel without Deburial	Option 2b was preferred against the Safety criterion and equally preferred against the Environmental and Societal criteria. Option 5 was preferred from a Technical perspective. Without including economics, there is a small preference for Option 5. Once the Economics criterion is included, this preference changes to a small preference for Option 2b.
Group 6: Spools & Jumpers PL2806JP1, PL2806JP2, PL2806JP3, PL2806JP4, PL2807JP1, PL2807JP2, PL2807JP3, PL2807JP4, PLU2809JP1, PLU2809JP2, PLU2809JP3, PLU2809JP4, PLU2809WI1, PLU2809JWI & PLU2809JSSIV	Full Removal	Items are surface laid and recoverable.

3.5 Pipeline Stabilisation Features

Table 3.4: Pipeline Stabilisation Features			
Stabilisation Features	**Number**	**Option**	**Disposal Route (if Applicable)**
Concrete Mattresses (6 x 3 x 0.15 m)	175	Full Removal - It is intended that the mattresses be recovered to shore, however, in the event of practical difficulties OPRED will be consulted.	Recover and transport ashore for recycling or other waste treatment as appropriate.
Concrete Mattresses (6 x 2 x 0.15 m)	61	Full Removal - It is intended that the mattresses be recovered to shore, however, in the event of practical difficulties OPRED will be consulted.	Recover and transport ashore for recycling or other waste treatment as appropriate.
CATS crossing bridge (two ramps)	1	Full Removal - It is intended that the crossing bridge be recovered to shore, however, in the event of practical difficulties OPRED will be consulted.	Recover and transport ashore for recycling or other waste treatment as appropriate.
Grout bags	1000 (estimated)	Full removal is intended with an option to reuse on location.*	Recover and transport ashore for recycling or other waste treatment as appropriate.
Rockdump	39,300 (Te)	To remain in place.	N/A

*A number of grout bags may be redeployed/repurposed locally as snagging hazard mitigation.

3.6 Wells

Table 3.5: Well Plug and Abandonment
The wells for the Field covered by this Decommissioning Programme will be plugged and abandoned, as listed in Section 2.4 (Table 2.4), in accordance with the Oil & Gas UK Well Decommissioning Guidelines, Issue 6, June 2018. A WONS application update will be submitted along with an appropriate suite of permit applications, via the UK Energy Portal, in support of each well abandonment.

3.7 Waste Streams

The Premier Oil Waste Management Strategy specifies the requirements for the contractor waste management plan. The waste management plan will be developed once the contract has been awarded during the project execution phase. The plans shall adhere to the waste stream licensee conditions and controlled accordingly. Discussion with the regulator will ensure that all relevant permits and consents are in place.

Table 3.6: Waste Stream Management Methods	
Waste Stream	**Removal and Disposal method**
Bulk liquids	N/A (Bulk flushing/de-oiling of Huntington pipelines is covered under the Huntington Decommissioning Programme for FPSO Float-off.)
Marine growth	Some marine growth may be removed offshore. Onshore disposal will be managed by the selected waste management contractor.
NORM/LSA Scale	Any NORM contaminated material will be returned to shore to be disposed of by the selected onshore waste management contractor.
Asbestos	N/A
Other hazardous wastes	Will be recovered onshore and will be managed by the selected waste management contractor and disposed of under appropriate permit. The inventory of hazardous materials will identify hazardous materials present and Premier Oil's risk management process will be used to prevent spills offshore.
Onshore Dismantling sites	Appropriate licenced contractor and sites will be selected. Facility selected must demonstrate competence and proven disposal track record and waste stream management & traceability throughout the deconstruction process and (preferably) demonstrate their ability to deliver innovative recycling options.

Table 3.7: Inventory Disposition			
	Total Inventory Tonnage (Te)	**Planned tonnage to shore(Te)**	**Planned left *in situ* (Te)**
Pipelines	1478.5	678.5	800
Umbilical	88	88	0
Subsea Installations	1,389.8	1,389.8	0

All recovered material will be brought onshore for re-use, recycling or disposal. It is not possible to predict the market for reusable materials with any confidence; so, the figures in Table 3.8 are disposal aspirations.

Table 3.8: Recovered Inventory Reuse, Recycle, Disposal Aspirations			
	Reuse	**Recycle**	**Disposal**
Pipelines	<5%	>95%	<5%
Subsea Umbilical	<5%	>95%	<5%
Subsea Installations	<5%	>95%	<5%

Refer to the Huntington Decommissioning Environmental Impact Appraisal for further details.

4 ENVIRONMENTAL APPRAISAL

4.1 Environmental Sensitivities (Summary)

Table 4.1: Environmental Sensitivities	
Environmental Receptor	**Main Features**
Conservation interests	Huntington is located outside of any conservation sites, the nearest site is the East of Gannet and Montrose Fields NCMPA (14 km). All other protected sites are located more than 40 km from the project area. This conservation site has been designated for the protection of ocean quahog aggregations. No living specimens of *A. islandica*, or infaunal siphons were observed during site specific environmental survey data at the Huntington Field. There was no evidence of any Annex I protected features in the area.
Seabed Habitats and Fauna	The water depths across Huntington fall between 88m to 91 m. The seabed generally comprises slightly silty shelly sand with some minor clay outcrops and coarse sediment accumulations (Gardline,2008a, 2009 and 2010). Hydrocarbon level showed a similar distribution across the survey area and was considered typical of undisturbed sediment in the CNS, with the exception of one site which was thought to be contaminated with lubricating oil (Gardline, 2008a; 2009a). The majority of the Huntington Field was characterised as the European Nature Information Systems (EUNIS) biotype complex, 'Deep circalittoral coarse sediment (A5.15)' and 'Deep circalittoral sand' (A5.27) (BGS, 2019). The occurrence of habitats A5.15 and A5.27 also indicates the potential presence of Scottish Priority Marine Feature (PMF) 'offshore subtidal sand and gravels'. The marine flora and fauna in the field are typical of areas of the CNS. Site specific surveys showed faunal density to be low (Gardline 2008a; Gardline 2008b). Fauna observed included crustaceans (*Pagurus Bernhardus*), echinoderms (starfish, possibly juvenile *Asterias rubens*), annelids (possible polychaete tube worm), molluscs (possibly *Dentalium vulgare*), cnidarians (*Sagartia elegans*, possible *Calliactis sp.*, hydroids, mainly *Tubularia indivisa,* and *Alcyonium digitatum*), and chordates (*Agonus cataphractus*). Bioturbation was observed through presence of faunal burrows and worm casts (Gardline, 2010).
Fish	Huntington is located within the spawning grounds of cod (*Gadus morhua*), lemon sole (*Microstomus kitt*), mackerel (*Scomber scombrus*), Norway lobster (*Nephrops norvegicus*), Norway pout (*Trisopterus esmarkii*) and sandeel (*Ammodytidae spp.*) (Coull et al., 1998; Ellis et al., 2012). Additionally, the following species have nursery grounds in the vicinity of the project: anglerfish (*Lophius piscatorius*), blue whiting (*Micromesistius poutassou*), cod, European hake (*Merluccius merluccius*), herring (*Clupea harengus*), ling (*Molva molva*), mackerel, Norway lobster, Norway pout, sandeel, spotted ray (*Raja montagui*), spurdog (*Squalus acanthias*), and whiting (*Merlangius merlangus*) (Coull et al., 1998; Ellis et al., 2012). However, fisheries sensitivity maps indicate that the probability of significant aggregations of juveniles of three commercial species (herring, mackerel and anglerfish) in the offshore Project area is low (Ellis et al., 2012).

Marine Mammals	Harbour porpoise (*Phocoena phocoena*), bottlenose dolphin (*Tursiops truncatus*), white-beaked dolphin (*Lagenorhynchus albirostris*), Atlantic white-sided dolphin (*Lagenorhynchus acutus*), killer whale (*Orcinus orca*) and minke whale (*Balaenoptera acutorostrata*) are known to be visitors to the waters surrounding the project area (Reid *et al*., 2003; Hammond *et al*., 2017). Seal densities are very low across the Huntington area due to its distance from shore (SMRU and Marine Scotland, 2017).
Seabirds	According to the density maps provided in Kober et al. (2010), the following species could be found within the Huntington Field area: Northern fulmar (*Fulmarus glacialis*), northern gannet (*Morus bassanus*), common gull (*Larus canus*), great black-backed gull (*Larus marinus*), black-legged kittiwake (*Rissa tridactyla*), common guillemot (*Uria aalge*), little auk (*Alle alle*) and Atlantic puffin (*Fratercula arctica*). These are amongst the species commonly encountered in the CNS survey area (Gardline, 2010). In Block 22/14a and 22/09 the sensitivity of seabirds to oil pollution, reflected by the SOSI, is medium in January, March and April and then low for all other months of the year, although there is limited data available between November and December (Webb et al., 2016). No SOSI data is available during the months of November or December for this region.
Commercial Fisheries	Huntington is located in International Council for the Exploration of the Seas (ICES) rectangle 44F1 (Scottish Government, 2019a). Between 2014 and 2018, demersal species comprised the greatest total and average live weight and value of landings within 44F1 (Scottish Government, 2019). Average annual fishing effort was lower in the rectangle than the UK average across the data years (2014-2018). The majority of fishing vessel activity in the area consisted of transiting fishing vessels. Trawls were the most utilised gear in rectangle 44F1 and seine nets were used to a lesser extent (Scottish Government, 2019). The prevalence of Nephrops trawling in the area is largely responsible for this.
Other Users of the Sea	Across the Huntington area, sea users other than commercial fisheries mainly relate to offshore oil and gas. The closest oil and gas installation is the Chrysaor operated North Everest platform located 19 km north east of the FPSO. Shipping activity across the project area is very low with an average of 1 to 2 vessel passes per day. Transiting vessels included cargo, passenger and operations vessels. There is one named wreck (Theresa Boyle) in the vicinity of the project area, approximately 23 km south west of the project area; it is classified as a non-dangerous wreck (NMPi, 2019).
Atmosphere	The majority of atmospheric emissions for the decommissioning of Huntington relate to vessel use or are associated with the recycling of material returned to shore. The estimated CO_2 emissions to be generated by the selected decommissioning options will be approximately 14,850 Te. This equates to 0.19% of the total UKCS vessel emissions, excluding fishing vessels, in 2017 (7,800,000 Te; BEIS, 2019).
Onshore Communities	Waste generated during decommissioning will be transported to shore in an auditable manner through licensed waste contractors, as managed under Huntington's waste management plan (WMP). Wastes will be treated using the principles of the waste hierarchy, as defined in the WMP, focusing on the reuse and recycling of wastes where possible. Raw materials will be returned to shore with the expectation to recycle the majority of the returned material. There may be instances where infrastructure returned to shore is contaminated (e.g. by NORM, hazardous, and/or special wastes) and cannot be recycled. In these instances, the materials will require disposal. However, the weight and/or volume of such material is not expected to result in substantial landfill use.

4.2 Potential Environmental Impacts and their Management

Environmental Appraisal Summary:

The EA addresses potential environmental and societal impacts by characterising the likelihood and significance of interactions between the proposed decommissioning activities and the local environment, whilst considering stakeholder response. The EA also details mitigation measures designed to abate potential impacts in accordance with Premier's Environmental Management System (EMS) and Health, Safety, Environment and Security (HSES) Policy.

Key potential environmental and societal impacts which were considered to be 'potentially significant', and thus requiring further assessment, were identified through an environmental issues identification (ENVID) workshop; they include: seabed impacts and impacts to commercial fisheries. These potential impacts have undergone detailed assessment within the EA. The following environmental and societal impacts were screened out from further assessment due to existing controls limiting the likelihood of potential significant impacts: impacts to water quality; emissions to air; vessel presence; underwater noise emissions; resource use; onshore activities; waste; and unplanned events. The justifications for screening out these impact pathways are detailed in the accompanying EA.

The EA concludes that the recommended options to decommission the Huntington Field subsea installations and pipelines can be completed without causing significant impact to environmental or societal receptors.

Overview:

Table 4.2: Environmental Impact Management

Activity	Main Impacts	Management
Subsea Installations Removal	Seabed impacts from: • excavation of buried infrastructure and stabilisation materials; • cutting of piles below the seabed; • removal of grout bags and stabilisation materials; and • recovery of infrastructure. Impacts to commercial fisheries from project activities excluding access to fishing grounds.	Vessel use will be optimised/minimised for the decommissioning activities and managed per Premier's existing vessel management procedures, including a vessel work programme. The 500 m safety exclusion zone will remain in operation during the decommissioning activities reducing risk of non-project related vessels entering into the area where decommissioning activities are taking place. This safety exclusion zone will be removed following the completion of the relevant decommissioning activities enabling fisheries to regain access to grounds. Fishing activities have the potential to increase in the area once the 500 m safety zones surrounding the existing substructures are re-assessed. Use of established contractors with appropriate capability, licences and maintenance procedures will be selected and audited. Other sea users will be notified in advance of activities occurring and Premier keeps manned bridges.

		The infrastructure is currently shown on Admiralty Charts and the FishSafe system. When decommissioning activity has been competed, updated information will be made available to update Admiralty Charts and FishSafe system. All pipeline routes and installation sites will be the subject of oilfield debris clearance and as-left verification surveys when decommissioning activity has concluded.
Decommissioning Rigid Flowlines (incl. Stabilisation Features)	Seabed impacts from decommissioning of rigid flowlines *in situ*: • cutting ends and recovery of lengths of flowlines • deposition of new rock armour to protect ends and previously cut exposures (where required); and • overtrawling (if required). Snagging risk associated with pipelines decommissioned *in situ*.	Operations will be conducted as carefully as possible to minimise sediment disturbance, avoiding dragging of items on the seabed where possible. Rock dumping will be carefully managed, e.g. through use of an ROV to limit the areas covered (reducing unnecessary spreading) and depth of coverage to that required to ensure no snagging hazards remain. The infrastructure is currently shown on Admiralty Charts and the FishSafe system. When decommissioning activity has been competed, updated information will be made available to update Admiralty Charts and FishSafe system. Any snagging risk to other sea users will be minimised by continual monitoring of degrading structures or free spans (type and frequency to be determined through a risk-based approach but will be agreed with OPRED). All pipeline routes and installation sites will be the subject of oilfield debris clearance and as-left verification surveys when decommissioning activity has concluded.
Decommissioning Surface-laid and Buried Flexible Flowlines (incl. Stabilisation Features)	Seabed impacts from: • cutting ends and recovery of lengths of flowlines • reverse-reeling of surface-laid and buried flexible flowlines; • removal of stabilisation features; and • overtrawling (if required). Impacts to commercial fisheries from project activities excluding access to fishing grounds.	Operations will be conducted as carefully as possible to minimise sediment disturbance, avoiding dragging of items on the seabed where possible. Excavated areas remediated and any berms created profiled to mitigate snagging risks to other sea users. Vessel use will be optimised/minimised for the decommissioning activities and managed per Premier's existing vessel management procedures, including a vessel work programme. The 500 m safety exclusion zone will remain in operation during the decommissioning activities reducing risk of non-project related vessels entering into the area where decommissioning activities are taking place. This safety exclusion zone will be removed following the completion of the relevant decommissioning activities enabling fisheries to regain access to grounds. Use of established contractors with appropriate capability, licences and maintenance procedures will be selected and audited. Other sea users will be notified in advance of activities occurring and Premier keeps manned bridges. The infrastructure is currently shown on Admiralty Charts and the FishSafe system. When decommissioning activity has been competed, updated information will be made available to update Admiralty Charts and FishSafe system. All pipeline routes and installation sites will be the subject of oilfield debris clearance and as-left verification surveys when decommissioning activity has concluded.

5 INTERESTED PARTY CONSULTATIONS

Consultations Summary:

Table 5.1 Summary of Stakeholder Comments		
Who	**Comment**	**Response**
Informal Consultations		
Scottish Fishermen's Federation **National Federation of Fishermen's Organisations** **Joint Nature Conservation Committee** **Health and Safety Executive** **OPRED EMT** **OPRED ODU (observers)** **Premier Oil E&P UK Limited** **Neptune E&P UKCS Limited**	Premier Oil has engaged with interested parties and stakeholders who participated in Comparative Assessment workshops, as detailed in the column on the left. Furthermore, CA workshop invites were issued to the Environment Agency, the Scottish Environment Protection Agency, Marine Scotland and the Oil and Gas Authority, but these organisations were unable to attend.	N/A
Statutory Consultations		
Various Statutory Consultees	Following statutory consultation (31st August – 29th September 2020) Premier received a number of guidance notes, questions and actions relating to the Huntington Decommissioning Programmes and supporting documents from the consultees.	All consultee comments have been satisfactorily addressed throughout OPRED's process and minor updates to the Decommissioning Programmes and supporting documents have been implemented where appropriate.
Public	No comments received	N/A

6 PROGRAMME MANAGEMENT

6.1 Project Management and Verification

A Project Management team will be appointed to manage suitable contractors for the decommissioning of the Huntington subsea infrastructure. Standard procedures for operational control and hazard identification and management will be used. The Project Management team will monitor and track the process of consents and the consultations required as part of this process. Any changes in detail to the offshore removal programme will be controlled by the Premier Oil Management of Change processes and discussed and agreed with OPRED.

6.2 Post-Decommissioning Debris Clearance and Verification

During site clearance activities, reasonable endeavours will be made to recover any dropped objects and items subject to any outstanding Petroleum Operations Notices. All recovered seabed debris related to offshore oil and gas activities will be returned for onshore disposal or recycling in line with existing disposal arrangements. A post decommissioning site survey, to verify decommissioning activities have been completed, will be carried out across the designated 500m safety zones of installation sites and 100m corridor (50m either side) along each pipeline over its length.

The clear seabed will be validated by an independent verification trawl over the installation sites and pipeline corridors, non over-trawl techniques such as Side Scan Sonar (SSS) / ROV or by the post decommissioning survey. A dialogue will be opened with OPRED at the appropriate time to establish the most suitable method for completing this task.

6.3 Schedule

The high-level Gantt chart presented in Figure 6.1 provides the overall schedule for the Huntington programme of decommissioning activities.
The current plan is for the Huntington wells to be plugged and abandoned as part of a wider well abandonment campaign with other Premier Oil assets; hereby maximising synergies and efficiencies, and minimising costs. It should be noted though that, if a suitable opportunity should arise, the Huntington P&A activities could come forward. Additionally, the six Christmas trees sit within the drilling template and the wells must be fully abandoned and trees removed, before the drilling template can be removed.

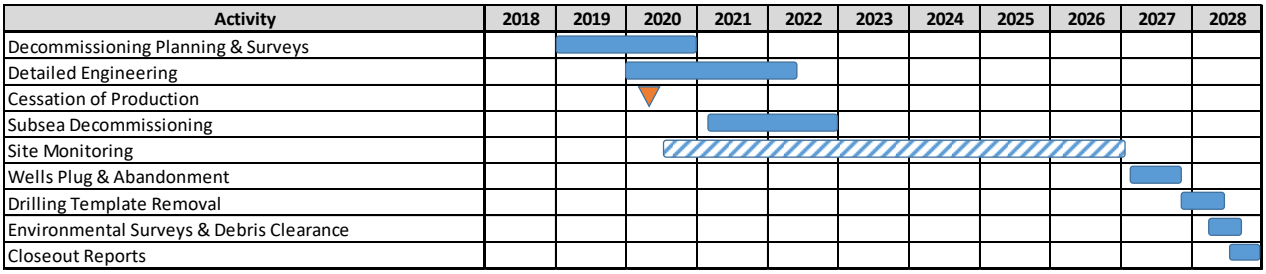


Figure 6.1: Gantt chart of Project Plan

6.4 Costs

An overall cost estimate following UK Oil & Gas Guidelines on Decommissioning Cost Estimation (Issue 3, October 2013) will be provided to OPRED.

6.5 Close Out

In accordance with the OPRED Guideline Notes, a close out report will be submitted to OPRED and posted on the Premier Oil website, reconciling any variations from the Decommissioning Programmes, within one year of the completion of the offshore decommissioning scope. This will include debris removal and, where applicable, independent verification of seabed clearance, and the first post-decommissioning environmental survey.

6.6 Post-Decommissioning Monitoring and Evaluation

A post-decommissioning environmental seabed survey, centred around the well locations, will be carried out. The survey will focus on chemical, physical and biological changes, disturbances and be compared with the pre decommissioning survey. Results of this survey will be available once the work is complete, with a copy forwarded to OPRED.

All pipeline routes and installation sites will be the subject of oilfield debris clearance and as-left verification surveys when decommissioning activity has concluded. All snag hazards created by drilling and/or production related activities will be removed or mitigated as part of the execution of the decommissioning programmes.

The main risk from infrastructure remaining in situ is the potential for interaction with other users of the sea, specifically from fishing related activities. Where the infrastructure is trenched below seabed level or trenched & buried below, the effect of interaction with other users of the sea is considered to be negligible.

The infrastructure is currently shown on Admiralty Charts and the FishSafe system. When decommissioning activity has been competed, updated information will be made available to update Admiralty Charts and FishSafe system.

When decommissioning activities have been completed, and where applicable, the safety zones around offshore infrastructure will be removed.

The licence holders recognise their commitment to undertake post-decommissioning monitoring of infrastructure left in situ. After the post-decommissioning survey reports have been submitted to OPRED and reviewed, a post-decommissioning monitoring survey regime, scope and frequency, will be agreed with OPRED.

7 SUPPORTING DOCUMENTS

Table 7.1: Supporting Documents	
Document Number	**Title**
AB-HU-XGL-LL-SU-RP-0003	Huntington Decommissioning Environmental Appraisal
AB-HU-XGL-LL-SU-RP-0002	Comparative Assessment Report – Huntington

8 PARTNER LETTERS OF SUPPORT

Premier Oil PLC

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Offshore Petroleum Regulator for Environment and Decommissioning
Department for Business, Energy and Industrial Strategy
Crimon Place
Aberdeen
AB10 1BJ

FAO: Mrs. Debbie Taylor

22 February 2021

Dear Sirs,

Letter of Support: Huntington Decommissioning Programmes

Premier Oil PLC hereby confirm that Premier Oil E&P UK Limited ("Premier") is authorised to submit, on our behalf, the abandonment programmes relating to the Huntington Field subsea installations and pipelines, as detailed in document no. AB-HU-PMO-LL-PM-PG-0001 revision B03, dated January 2021 and titled "Huntington Decommissioning Programmes", as directed by the Secretary of State in your letters of 28 January 2021.

We confirm our agreement to the proposals detailed in the Huntington Decommissioning Programmes dated 29 January 2021, which is to be submitted by Premier, insofar as they relate to those facilities in respect of which we are instructed to submit a programme under Section 29 of the Petroleum Act 1998.

Yours faithfully

DocuSigned by:
Richard Rose
BAD7772600CC479...

Richard Rose
Director
Premier Oil PLC

Premier Oil UK Limited

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Crimon Place
Aberdeen
AB10 1BJ

FAO: Mrs. Debbie Taylor

22 February 2021

Dear Sirs,

Letter of Support: Huntington Decommissioning Programmes

Premier Oil UK Limited hereby confirm that Premier Oil E&P UK Limited ("Premier") is authorised to submit, on our behalf, the abandonment programmes relating to the Huntington Field subsea installations and pipelines, as detailed in document no. AB-HU-PMO-LL-PM-PG-0001 revision B03, dated January 2021 and titled "Huntington Decommissioning Programmes", as directed by the Secretary of State in your letters of 28 January 2021.

We confirm our agreement to the proposals detailed in the Huntington Decommissioning Programmes dated 29 January 2021, which is to be submitted by Premier, insofar as they relate to those facilities in respect of which we are instructed to submit a programme under Section 29 of the Petroleum Act 1998.

Yours faithfully

DocuSigned by:
2DB602C4676144B...

Gareth Webster
Director
Premier Oil UK Limited

Noreco Oil (UK) Limited

From: Frederik Rustad [...]
Sent: 14 January 2021 13:54
To: Pieter voor de Poorte [...]
Cc: Euan Shirlaw [...]
Subject: [EXTERNAL] RE: Huntington Field Decommissioning Programmes

Dear Pieter,

Thank you for your email.

On behalf of Noreco Oil (UK) Ltd., in capacity as a Section 29 Notice holder for the Huntington Field, I can hereby confirm that we agree to Premier Oils submission of the Huntington Field Decommissioning Programmes.

Please feel free to contract me if you would like to discuss.

Best regards

Frederik Rustad

NORECO

Mobile +47 [...]
Phone +47 [...]
E-mail
Web noreco.com

APPENDIX I – COPIES OF THE PUBLIC NOTICES

The Press and Journal:

Public Notices

The Petroleum Act 1998

Decommissioning Programmes for the Huntington Field subsea installations and pipelines

Premier Oil E&P UK Limited (Premier) has submitted, for the consideration of the Secretary of State for Business, Energy & Industrial Strategy, the draft Decommissioning Programmes for the Huntington Field subsea installations and pipelines, in accordance with the provisions of the Petroleum Act 1998. It is a requirement of the Act that interested parties be consulted on such decommissioning proposals.

The Huntington Field is located in block 22/14b of the Central North Sea, approximately 230km from Aberdeen and 28km from the UK/NOR median line. The Huntington Field was developed using a Floating Production Storage and Offloading Vessel (FPSO), Altera's Voyageur Spirit. The FPSO and associated riser system are decommissioned under a separate Decommissioning Programme.

The facilities covered by the Huntington Field Decommissioning Programmes are:
- All remaining subsea installations, and
- All remaining subsea pipelines associated with the Huntington Field.

Premier hereby gives notice that the Decommissioning Programmes for the Huntington Field subsea installations and pipelines is available on its website at www.premier-oil.com, or alternatively a hard copy of the document may be requested by contacting Premier during office hours on 01224 618900.

Representations regarding the Decommissioning Programmes for the Huntington Field subsea installations and pipelines should be submitted in writing to the person named at the address below, or via email to abzdecommissioning@premier-oil.com, by the consultation closing date of 29th September 2020. Submissions should state the grounds upon which any representations are being made.

Date: 31st August 2020

Pieter voor de Poorte
Premier Oil,
Upper Denburn House,
Prime Four Business Park,
Kingswells Causeway, Kingswells,
Aberdeen, AB15 8PU

The Daily Telegraph:

PUBLIC NOTICE

The Petroleum Act 1998

Decommissioning Programmes for the Huntington Field subsea installations and pipelines

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Date: 31st August 2020
Pieter voor de Poorte
Premier Oil,
Upper Denburn House, Prime Four Business Park,
Kingswells Causeway, Kingswells,
Aberdeen, AB15 8PU

APPENDIX II – DEPTH OF BURIAL PROFILE