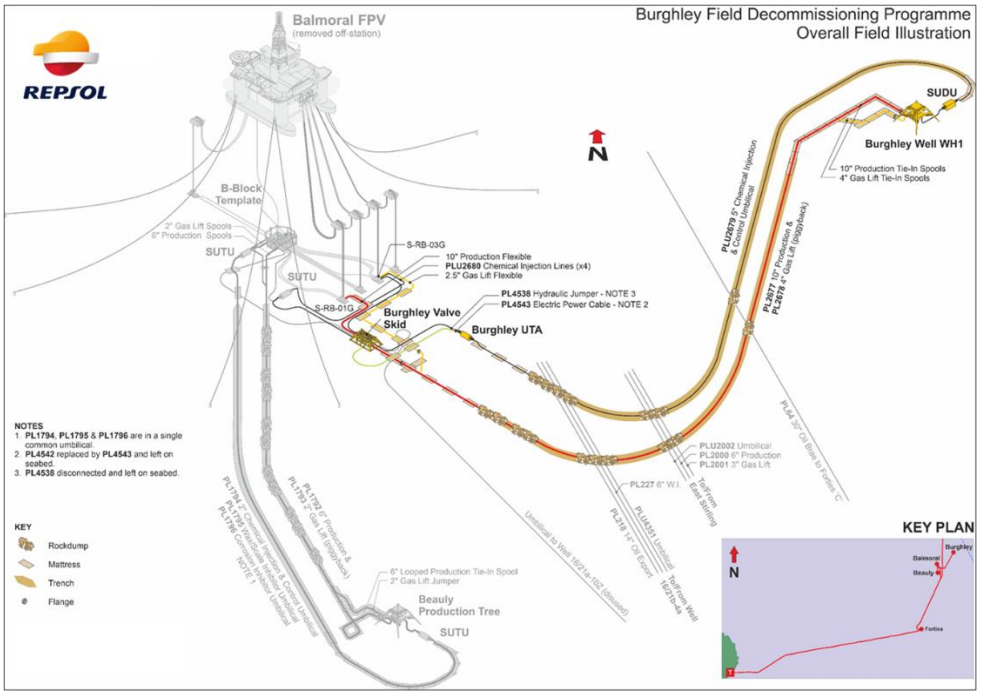

BURGHLEY
DECOMMISSIONING PROGRAMMES

Final

May 2025

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Document Control

Approvals

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Prepared by	Adam Yeats		23/05/25
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Revision Control

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1	1st pre-draft / outline programme	Initial Comments from RRUK incorporated	04-Mar-22
2	2nd pre-draft programme	First Issue CA results incorporated	09-Jun-22
3	2nd pre-draft programme	Initial comments from OPRED addressed	08-Jul-22
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6	Consultation draft programme	Minor comment correction	31-Oct-22
7	Consultation draft programme	Update to schedule in Section 6.3 (Figure 6-1)	28-Mar-23
8	Post Consultation draft programme	Additional OPRED comments addressed	15-Aug-23
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12	Post Consultation draft programme	OPRED Consultation Draft Comments incorporated	15-Jan-25
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14	Final programme	OPRED comments of 14/03/25 incorporated	20-Mar-25
15	Final Version	Letters of Support added	23-May-25

Distribution List

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	Global Marine Services	1
	NEO Energy Petroleum Limited	1
	Rockrose UKCS4 Limited	1

Contents

Holds Table

HOLD	SECTION	DESCRIPTION

Terms and Abbreviations

Abbreviation	Explanation
BAT/BEP	Best Available Technique/Best Environmental Practice
BEIS	Department for Business, Energy & Industrial Strategy
BVS	Burghley Valve Skid
CA	Comparative Assessment
C&P	Contracting and Procurement
CoP	Cessation of Production
DP	Decommissioning Programme
DCR	Design & Construction
DOL	Depth of Lowering
EA	Environmental Appraisal
ENE	East Northeast
ESE	East Southeast
FPSO	Floating Platform, Storage & Offloading (vessel)
FPV	Floating Production Vessel
HSE	Health & Safety Executive
HLV	Heavy Lift Vessel
ICES	International Council for the Exploration of the Sea
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
Km	Kilometre
LAT	Lowest Astronomical Tide
M	Metre
m^3	Cubic Metres
MARPOL	The International Convention for the Prevention of Pollution from Ships
MAT	Master Application Template
MCA	Maritime and Coastguard Agency
mg/l	Milligrams per litre
MSS	Marine Scotland Science
NORM	Naturally Occurring Radioactive Material
N/A	Not Applicable
NSTA	North Sea Transition Authority (formerly OGA)
OEUK	Offshore Energies UK (formerly OGUK)
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning

Abbreviation	Explanation
OSPAR	from Oslo/Paris, the Convention for the Protection of the Marine Environment of the Northeast Atlantic
PL	Pipeline (number)
PLU	Umbilical (number)
PMF	Priority Marine Feature
PWA	Pipeline Works Authorisations
RRUK	Repsol Resources UK Limited
S	South
S29	Section 29
SAT	Subsidiary Application Template
SCAP	Supply Chain Action Plan
SEPA	Scottish Environment Protection Agency
SFF	Scottish Fishermen's Federation
SIMOPS	Simultaneous Operations
SLV	Single Lift Vessel
SSE	South Southeast
SUDU	Subsea Umbilical Distribution Unit
SUTU	Subsea Umbilical Termination Unit
SW	Southwest
Te/ te	Tonnes
TFSW	Trans Frontier Shipment of Waste
UK	United Kingdom
UKCS	United Kingdom Continental Shelf
UKHO	The United Kingdom Hydrographic Office
UTA	Umbilical Termination Assembly
W	West
WGS84	World Geodetic System 1984
WHPS	Wellhead Protection Structure
WSW	West Southwest

Figures and Tables

Appendices

1 EXECUTIVE SUMMARY

1.1 Combined Decommissioning Programmes

This document contains two Decommissioning Programmes (DPs) associated with the Burghley field only, including the pipelines, umbilicals, and associated stabilisation features, and also the subsea structures, which include the wellhead protection structure (WHPS), all operated by Repsol North Sea Limited, who are submitting the DPs. These are linked to the current Section 29 (S29) notices for Burghley field with each notice setting out the requirement to submit a DP for the infrastructure stated on the notice. The DPs and supporting Environmental Appraisal Report (EA) and Comparative Assessment Report (CA) are prepared by Repsol Resources UK Limited on behalf of Repsol North Sea Limited. Repsol Resources UK Limited is not a Section 29 Notice Holder.

As a result of the decommissioning of the Greater Balmoral Area, including the subsequent removal of the Balmoral Floating Production Vessel (FPV), Repsol Resources UK Limited has planned for the decommissioning of its Beauly and Burghley fields, both of which were tied back to the Balmoral FPV. The wider Balmoral field DPs have already been prepared by Premier Oil including for the FPV, its associated risers, riser bases and pipelines, and the Balmoral template. The Balmoral DP was approved and issued for use in January 2021, and Repsol Resources UK Limited are now in discussions with the owners of Balmoral for timings and execution of the decommissioning of the Burghley field.

The FPV, already removed, its associated risers, now laid down on the seabed, the riser bases and the Balmoral template are outside the scope of these DPs.

The Burghley field is in the decommissioning phase, cessation of production (CoP) has been formally approved by the North Sea Transition Authority (NSTA), as of the 28 November 2020.

A summary of the pipelines, umbilicals and structures to be decommissioned are detailed in the Tables in Sections 1.4.1 and 1.4.2 below.

1.2 Requirement for Decommissioning Programmes

Installations

There are no surface installations covered by this DP, there are, however, two subsea installations as reflected in Tables 1.1 and 2.1.

In accordance with the Petroleum Act 1998, the Section 29 notice holders of the Burghley field subsea installations (see Table 1.2) are applying to the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) to obtain approval for decommissioning of the single subsea structure and the WHPS as detailed in Section 2.2 of this programme.

Pipelines

In accordance with the Petroleum Act 1998, the S29 notice holders of the two Burghley field pipelines and five umbilicals, which includes 3 jumpers, see Table 1.4, are applying to OPRED to obtain approval for the decommissioning of the pipelines and umbilical's detailed in Section 2.2 of this programme.

Section 29 Holders Letters of support including any exited third party, as applicable, are included in Section 8.

In conjunction with public, stakeholder and regulatory consultation, this DP is submitted in compliance with national and international regulations and OPRED guidelines. The schedule outlined in this document is for the decommissioning project to commence and will cover the selection and definition of options and execution.

1.3 Introduction

The Burghley field is located in Block 16/22, approximately 220km to the Northeast of Aberdeen in a water depth of around 143 meters. The field consisted of a single well tie back to the Balmoral FPV, (now off-station).

The Burghley well is approximately 10.1km from the Balmoral FPV location and was connected by a 10" multiphase production pipeline with a piggybacked 4" gas lift pipeline. Subsea controls and chemicals were provided by an electro-hydraulic umbilical from the FPV.

The subsea infrastructure boundaries comprise:

- Both 10" Production pipeline (PL2677) and 4" Gas Lift pipeline (PL2678), including tie-in spools, between the tie-ins at the Burghley Well WH1 and the tie-ins to the Balmoral Glamis Riser base (but excluding the riser base);

- The 130mm dia. Umbilical (PLU2679/ PLU2680), including jumpers between the tie-in to the Balmoral Subsea Umbilical Termination Unit (SUTU) and the tie-in at the Burghley Well WH1, including the Subsea Umbilical Distribution Unit (SUDU)[1] at Burghley and the Umbilical Termination Assembly (UTA)[2] at the Burghley Valve Skid;

- Including the Burghley Valve Skid (BVS) structure at Balmoral;

- Including the wellhead protection structure (WHPS), excluding the Burghley Wellhead WH1

Note 1 The SUDU is a small inline termination which is not deemed a structure and will be decommissioned along with the umbilical.

Note 2 The UTA is a small termination assembly which will be decommissioned along with the umbilical.

A representative schematic of the original Balmoral field and the Burghley subsea pipelines, umbilicals and subsea structures can be found in Figure 1-1. The greyed-out infrastructure is out with the scope of this DP, and is shown for reference purposes only, including the FPV, which is now removed off-station.

Following public, stakeholder engagement, and regulatory consultation, detailed in Section 5 of this document, this DP is being submitted in full compliance with OPRED guidelines. Whilst both the Beauly and the Burghley fields are in the same area and are being decommissioned at the same time, this DP explains the principles of the proposed activities for the Burghley field only. The Beauly field is captured in a separate DP.

Both fields are, however, supported by a single Comparative Assessment (CA), for the decommissioning options of the pipelines and umbilicals, and a single Environmental Appraisal (EA).

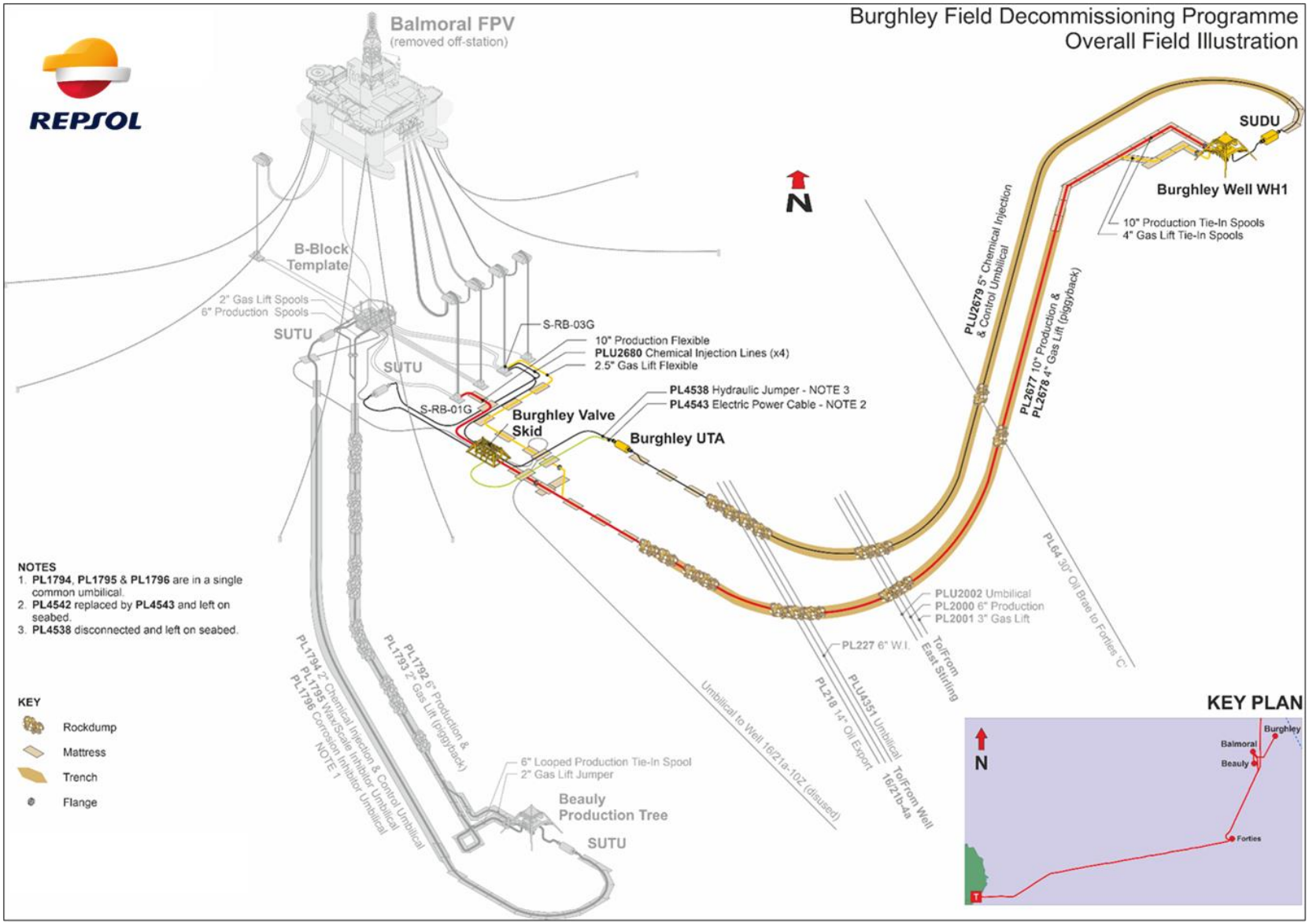

Figure 1-1: Burghley Field showing pipelines & structures captured in this DP

1.4 Overview of Installations/Pipelines Being Decommissioned

1.4.1 Installations

Table 1-1: Installations Being Decommissioned			
Field	Burghley	**Production Type (Oil/Gas/Condensate)**	Oil / Gas
Water Depth (m)	143.00 ±0.1m LAT	**UKCS block**	16/22
Distance to median (km)	Median line UK/Norway is 19km East	**Distance from nearest UK coastline (km)**	220km Northeast (Aberdeen, Scotland)
Subsea Installations		**Number of Wells**	
Number	Type	Subsea	
1	Burghley Valve Skid (BVS)	N/A	
1	Burghley Wellhead & integrated WHPS	1	
The integrated Burghley Wellhead and WHPS will be removed as part of the well P&A scope.			

Table 1-2: Installations Section 29 Notice Holders Details		
Section 29 Notice Holders	**Registration Number**	**Equity Interest (%)**
NEO Energy Petroleum Limited	03288689	21.9203%
Repsol Beta Limited	04796282	7.0841%
Repsol North Sea Limited	01061863	29.895%
Rockrose UKCS4 Limited	02552901	41.1006%

1.4.2 Pipelines

Table 1-3: Pipelines Being Decommissioned	
Number of Pipelines Details given in Table 2.2	2
Number of Umbilicals Details given in Table 2.2	1
Number of Jumper Details given in Table 2.2	12

Table 1-4: Pipelines Section 29 Notice Holders Details		
Section 29 Notice Holders	**Registration Number**	**Equity Interest (%)**
NEO Energy Petroleum Limited	03288689	21.9203%
Repsol Beta Limited	04796282	7.0841%
Repsol North Sea Limited	01061863	29.895%
Rockrose UKCS4 Limited	02552901	41.1006%

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		
Subsea installations - to be fully removed and recycled onshore.	To comply with OSPAR requirements and leaving unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials.	WHPS is integrated with the tree which is connected to the conductor. The conductor will be cut -3m below the seabed once the well has been P&A. The wellhead and WHPS will be removed as one unit on completion of the well P&A scope. Returned to shore for recycling or appropriate treatment and disposal.
2. Pipelines, Flowlines & Umbilicals		
Trenched and buried pipelines will be decommissioned in situ, with remediation of any exposed sections. (See Table 3-3 Notes 1 and 2)	Those lines to be decommissioned in situ are trenched and buried to approx. 99% of their lengths and will not affect other users of the sea.	The trenched and buried pipelines will be decommissioned in situ. The exposed sections at each line end will be remediated either by cutting and removing to shore: by trenching and burying; or by covering with rock. (See Table 3-3 Notes 1 and 2). The cut will be made at the bottom of the trench or at the edge of the rock dump. The cut will be within the boundary of the rock dump. The recovered sections of the lines will be transferred to shore and the exposed ends will be removed to shore for re-use / recycling or disposal.
Surface Laid Spools & Jumpers	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials	All surface laid spools/jumpers will be recovered to shore, and the exposed ends will be removed to shore for re-use / recycling or disposal.

Table 1-5: Summary of Decommissioning Programmes		
Trenched and buried umbilicals will be decommissioned in situ (excluding ends), with remediation of any exposed sections. It should be noted however that the above (base case) may vary depending on the outcome of the C&P engagement and tendering exercise. All 4 options, including full removal, as detailed in Comparative Assessment will be considered during the market engagement. These are: • Remediate in situ by cutting and lifting exposed sections, • Total removal by reverse reeling, • Remediate in situ by trenched and buried, • Remediate in situ by rock cover placement. OPRED will be advised of any changes to the base case once the decommissioning solution has been finalised.	Those lines to be decommissioned in situ are trenched and buried to approx. 95% of their lengths and will not affect other users of the sea.	The trenched and buried umbilicals will be decommissioned in situ. The exposed sections at each line end will be remediated either by cutting and removing to shore: by trenching and burying; or by covering with rock. (See Table 3-3 Notes 1 and 2). The cut will be made at the bottom of the trench or at the edge of the rock dump. The cut will be within the boundary of the rock dump. The recovered sections of the lines will be transferred to shore and the exposed ends will be removed to shore for re-use / recycling or disposal. All surface laid spools/jumpers will be recovered to shore for treatment in accordance with the waste management hierarchy.
Subsea Umbilical Distribution Unit (SUDU) is a small inline termination of the umbilical and will be decommissioned along with the exposed umbilical sections.	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials	The exposed sections of umbilical will be removed. As a small inline umbilical termination, the SUDU will be removed together with the exposed umbilical sections.
Umbilical Termination Assembly (UTA) is a small termination assembly of the umbilical and will be decommissioned along with the exposed umbilical sections.	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials	The exposed sections of umbilical will be removed. As a small umbilical termination assembly, the UTA will be removed together with the exposed umbilical sections.

Table 1-5: Summary of Decommissioning Programmes		
Complete removal mattresses exposed or buried less than 0.6m, where possible and recycled onshore. Mattresses under pipeline crossing sections for support will be decommissioned in situ.	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials. All mattresses exposed or buried less than 0.6m will be removed and only mattresses sufficiently buried to -0.6m or rock dumped will be considered for leave in situ.	Mattresses in Burghley exposed or buried less than 0.6m are located in 500m radius zone from the previous position of Balmoral FPV and Burghley approaches and will be recovered. Mattresses under pipeline crossings are located in Crossings within the 500m radius zone from the previous position of Balmoral FPV, Southeast Stirling Crossing and Brae Forties Crossing and will be decommissioned in situ. In the event that a group or series of mattresses are identified that cannot be recovered, Repsol Resources UK Limited will consult with OPRED regarding an alternative approach.
Complete removal of exposed and non-buried to -0.6m grout bags, where possible and recycled onshore.	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials. All grout bags exposed or buried less than 0.6m will be removed and only grout bags sufficiently buried to -0.6m or rock dumped will be considered for leave in situ.	All grout bags in Burghley are exposed or buried less than 0.6m. These grout bags are located in 500m radius zone from the previous position of Balmoral FPV, crossings within the 500m radius zone from the previous position of Balmoral FPV, Southeast Stirling Crossing, Brae Forties Crossing and Burghley Approaches and will be recovered. In the event that a group or series of grout bags are identified that cannot be recovered, Repsol Resources UK Limited will consult with OPRED regarding an alternative approach.
Rock cover will be decommissioned in situ	The rock cover to be decommissioned in situ will not affect other users of the sea.	The rock cover will be left in place.
Jumpers (four numbered and 8 un-numbered) – surface laid	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials.	All surface laid jumpers will be recovered to shore for treatment in accordance with the waste management hierarchy.

Table 1-5: Summary of Decommissioning Programmes		
Pipeline Crossing between RNSL PL2677 & PL2678 and TAQA Bratani Limited PL64 at KP6.275 will be decommissioned in situ along with the buried pipeline sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried pipeline sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PLU2679 and TAQA Bratani Limited PL64 at KP6.475 will be decommissioned in situ along with the buried umbilical sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried umbilical sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PL2677 & PL2678 and Harbour Energy PLU2002 at KP2.535 will be decommissioned in situ along with the buried pipeline sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried pipeline sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PLU2679 and Harbour Energy PLU2002 at KP2.69 will be decommissioned in situ along with the buried umbilical sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried umbilical sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PL2677 & PL2678 and Harbour Energy PL2000 at KP2.755 will be decommissioned in situ along with the buried pipeline sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried pipeline sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PLU2679 and Harbour Energy PL2000 at KP2.71 will be decommissioned in situ along with the buried umbilical sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried umbilical sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PL2677 & PL2678 and Harbour Energy PL2001 at KP2.575 will be decommissioned in situ along with the buried pipeline sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried pipeline sections. Mattresses buried under rock in the crossings will be left in situ.

Table 1-5: Summary of Decommissioning Programmes		
Pipeline Crossing between RNSL PLU2679 and Harbour Energy PL2001 at KP2.725 will be decommissioned in situ along with the buried umbilical sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried umbilical sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PL2677 & PL2678 and Harbour Energy PLU4351 at KP0.525 will be decommissioned in situ along with the buried pipeline sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried pipeline sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PLU2679 and Harbour Energy PLU4351 at KP0.425 will be decommissioned in situ along with the buried umbilical sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried umbilical sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PL2677 & PL2678 and Harbour Energy PL227 at KP0.525 will be decommissioned in situ along with the buried pipeline sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried pipeline sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PLU2679 and Harbour Energy PL227 at KP0.425 will be decommissioned in situ along with the buried umbilical sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried umbilical sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PL2677 & PL2678 and Harbour Energy PL218 at KP0.425 will be decommissioned in situ along with the buried pipeline sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried pipeline sections. Mattresses buried under rock in the crossings will be left in situ.
Pipeline Crossing between RNSL PLU2679 and Harbour Energy PL218 at KP0.225 will be decommissioned in situ along with the buried umbilical sections.	This pipeline crossing to be decommissioned in situ will not affect other users of the sea.	The rock dumped pipeline crossing will be decommissioned in situ along with buried umbilical sections. Mattresses buried under rock in the crossings will be left in situ.

Table 1-5: Summary of Decommissioning Programmes		
2 Pipeline Crossings between RNSL PL2677 and Harbour Energy PLU4352 near the Subsea Valve Skid will be fully removed with the exposed pipeline sections	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials.	These 2 pipeline crossings are surface laid. They will be fully removed with the exposed pipeline sections. Mattresses on the pipeline crossings will be removed.
2 Pipeline Crossings between RNSL PL2678 and Harbour Energy PLU4352 near the Subsea Valve Skid will be fully removed with the exposed pipeline sections	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials.	These 2 pipeline crossings are surface laid. They will be fully removed with the exposed pipeline sections. Mattresses on the pipeline crossings will be removed.
Pipeline Crossing between RNSL PL4543 and Harbour Energy PLU4352 near the Subsea Valve Skid will be fully removed with the exposed umbilical sections	To leave unobstructed seabed, if possible. Removes a potential obstruction to fishing operations and maximises recycling of materials.	This pipeline crossing is surface laid. It will be fully removed with the exposed umbilical sections. Mattresses on the pipeline crossing will be removed.
3. Wells		
The single well will be plugged and abandoned to Repsol Resources UK Limited standards which comply with "Offshore Installations and Wells (Design and Construction, etc.) Regulations 1996" and align with Offshore Energies UK (OEUK) Well Decommissioning Guidelines (Issue 7, Nov 2022).	Meets HSE regulatory requirements in accordance with OEUK and NSTA guidelines.	A Master Application Template (MAT) and the supporting Subsidiary Application Template (SAT) will be submitted in support of activities carried out. The required well consents will also be obtained. Additionally, planned work will be reviewed by a well examiner to Repsol Resources UK Limited standards, then submitted to the HSE for review.
4. Interdependencies		
Subsea infrastructure has been flushed and cleaned with filtered seawater prior to removal of the Balmoral FPV, and prior to commencement of subsea decommissioning operations. Decommissioning activities to be coordinated to minimise simultaneous operations (SIMOPS).		

1.6 Field Location Including Field Layout and Adjacent Facilities

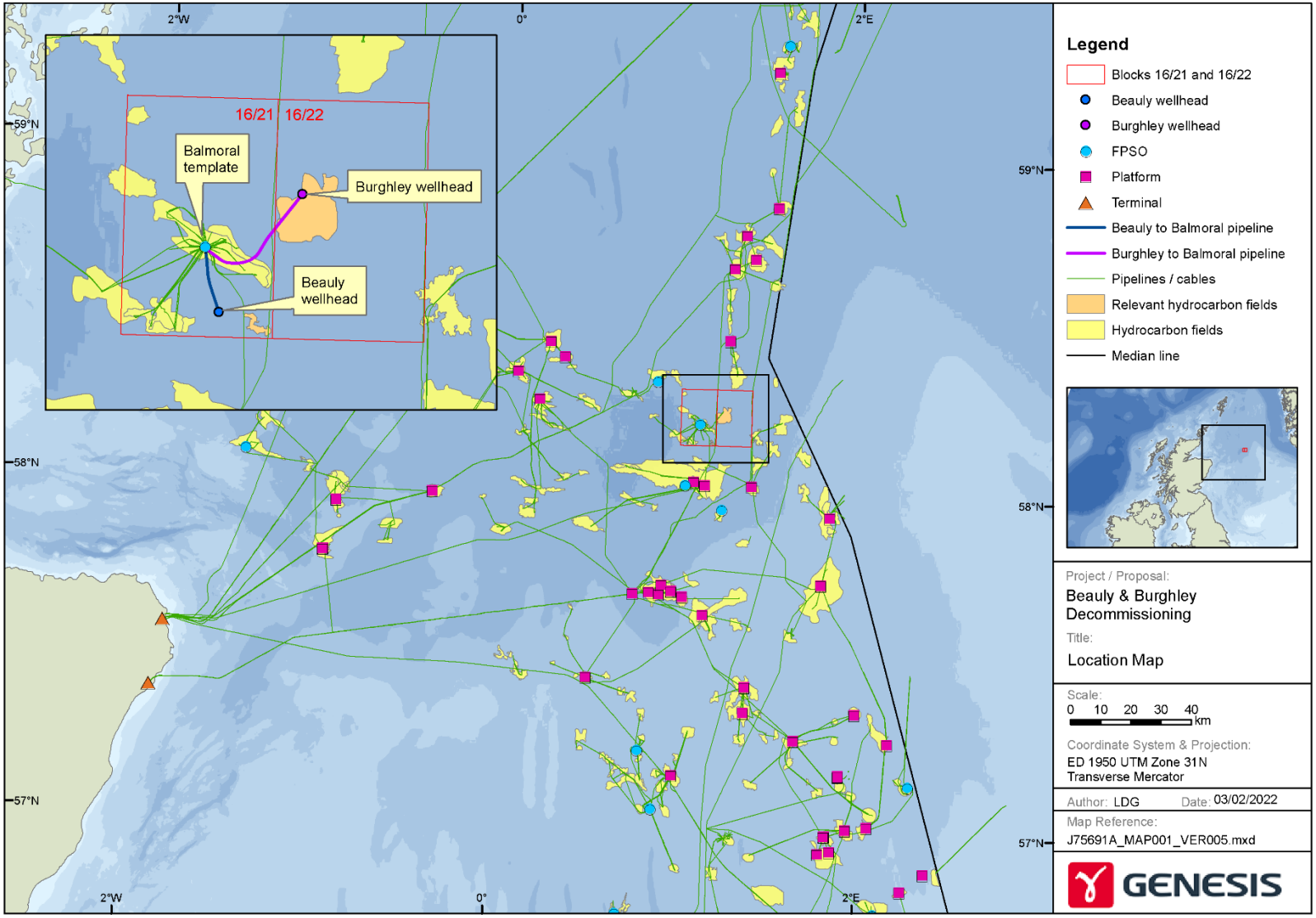

Figure 1-2: Field Location in UKCS (incl. inset showing relation to the Balmoral field)

Table 1-6: Adjacent Facilities					
Owner	**Name**	**Type**	**Distance/ Direction**	**Information**	**Status**
Harbour Energy	Stirling	Subsea field	2.8 km, ESE 108°	Oil & gas production tied back to Balmoral FPV	Inactive - field under CoP
Repsol North Sea Limited	Beauly	Subsea field	5.2 km, SSE 168°	Oil & gas production tied back to Balmoral FPV	Inactive - field under CoP
Harbour Energy	Glamis	Subsea field	7.5 km, SW 214°	Oil & gas production tied back to Balmoral FPV	Inactive – Shut-in
Harbour Energy	Brenda	Subsea field	8.8 km, WSW 247°	Oil & gas production tied back to Balmoral FPV	Inactive - field under CoP
Harbour Energy	Caledonia	Subsea field	14.3 km, S 173°	Oil & gas production tied back to Balmoral FPV	Inactive - field under CoP
Harbour Energy	Nicol	Subsea field	15.5 km, W 280°	Oil & gas production tied back to Balmoral FPV	Inactive - field under CoP
Harbour Energy	Balmoral	FPV	0 km	Oil and gas production	Off-station
Harbour Energy	Tap Valve 3 (Forties Pipeline System)	Subsea	13.8 km, SSE 179°	Oil export pipeline from the Forties Charlie platform to Cruden Bay	Operational
TAQA Bratani Limited	PL64 to Forties ‘C’ from Brae	Pipeline	PL2677/78 (KP6.275) & PLU2679 (KP6.4750)	Crosses Under PL2677/78 & PLU2679	Operational
Harbour Energy	PLU2002 to East Stirling	Umbilical	PL2677/78 (KP2.535) & PLU2679 (KP2.69)	Crosses Under PL2677/78 & PLU2679	Disused
Harbour Energy	PL2000 to East Stirling	Pipeline	PL2677/78 (KP2.755) & PLU2679 (KP2.71)	Crosses Under PL2677/78 & PLU2679	Disused

Table 1-6: Adjacent Facilities					
Owner	**Name**	**Type**	**Distance/ Direction**	**Information**	**Status**
Harbour Energy	PL2001 to East Stirling	Pipeline	PL2677 & PL2678 (KP2.575) & PLU2679 (KP2.725)	Crosses Under PL2677/78 & PLU2679	Disused
Harbour Energy	PLU4351 to Well 16/12b-4A	Umbilical	PL2677 & PL2678 (KP0.525) & PLU2679 (KP0.425)	Crosses Under PL2677/78 & PLU2679	Disused
Harbour Energy	PL227 to Well 16/12b-4A	Pipeline	PL2677 & PL2678 (KP0.525) & PLU2679 (KP0.425)	Crosses Under PL2677/78 & PLU2679	Disused
Harbour Energy	PL218 to Well 16/12b-4A	Pipeline	PL2677 & PL2678 (KP0.425) PLU2679 (KP0.225)	Crosses Under PL2677/78 & PLU2679	Disused
Harbour Energy	Umbilical PLU4352 to Well 16/21a-10z	Umbilical	PL2677 & PL2678 & PL4543	Crosses Under PL2677/78 & Jumpers PL4543	Disused

Impacts of Decommissioning Proposals

The Burghley field is planned to be decommissioned in a programme of activities comprising both the Beauly and Burghley fields. None of the other adjacent facilities listed above are understood to be affected by these DPs, however, the operators will be contacted to investigate any benefits and cost savings available through co-operation and alignment of decommissioning activities.

Discussion has been held with adjacent facility operators with regards the crossings identified above; timing of decommissioning specifically at these crossings may be affected. As these crossings are overlaid with rock, no further work is expected at these locations.

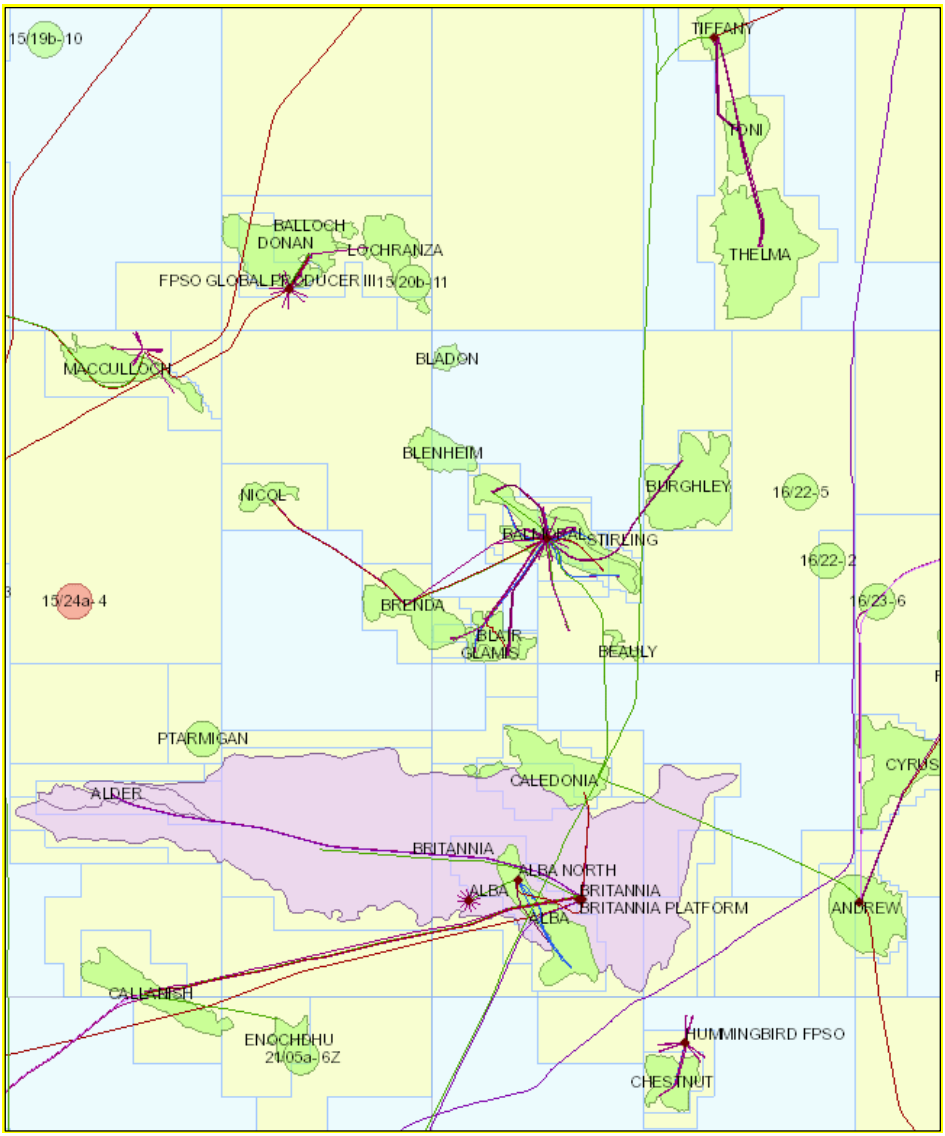

Figure 1-3: Burghley Field showing Adjacent Facilities

1.7 Industrial Implications

It is Repsol Resources UK Limited intention to develop a contract strategy that will result in an efficient and cost-effective execution of the decommissioning works. Repsol Resources UK Limited will also try to combine Burghley decommissioning activities with other developments or decommissioning activities, such as the Repsol Resources UK Limited operated Beauly field (also part of the Balmoral area) to reduce mobilisation and demobilisation costs should the opportunity arise. The decommissioning schedule is intended to allow flexibility for when decommissioning operations are carried out and completed.

Repsol Resources UK Limited will demonstrate this intention by:

- Publishing information on the decommissioning project and timelines on its decommissioning website;
- Working closely with NSTA and other industry bodies in engagement sessions with the decommissioning supply chain on issues relating to the DP and timelines, including engaging directly with disposal yards, where applicable, that serve the North Sea;
- Utilising the Achilles/SEQual databases, along with known industry companies, as a source for establishing tender lists for contracts/purchases;
- Competitively tendering all removal scopes, including the onshore disposal scope;
- Aligning supply chain and decommissioning activity, wherever possible, with Operators of adjacent infrastructure to optimise efficiencies and cost reduction;
- Development and submission of the Supply Chain Action Plan (SCAP) to the NSTA.

2 DESCRIPTION OF ITEMS TO BE DECOMMISSIONED

2.1 Installations: Subsea including Stabilisation Features

Table 2-1: Subsea Installations and Stabilisation Features					
Subsea installations including Stabilisation Features	**Number**	**Size(m)/Weight (Te)**	**Location**		**Comments/Status**
Burghley Valve Skid (BVS)	1	9.2m (L) x 7.7m (W) x 4.1m (H) 48.15te	WGS84 Decimal	58.227639 1.108278	Valve skid – Not in use
			WGS84 Degrees Minute	58° 13' 39.50" N 01° 06' 29.80" E	
Burghley Wellhead and integrated WHPS	1	9.2m (L) x 9.2m (W) x 6.2m (H) 51.51te	WGS84 Decimal	58.26844 1.234471	Tree valves closed and the associated pipelines disconnected.
			WGS84 Degrees Minute	58° 16' 6.385" N 01° 14' 4.094" E	

2.2 Pipelines Including Stabilisation Features

Table 2-2: Pipeline/Flowline/Umbilical Information									
Description	**Pipeline Number**	**Diameter (mm)**	**Length (m)**	**Description of Component Parts**	**Product Conveyed**	**From – To End Points**	**Burial Status**	**Pipeline Status**	**Current Content**
10" Main Production Pipeline	PL2677	273.1	10511	Carbon steel/ stainless steel/ plastics/ misc. coatings & aluminium alloy	Oil	Burghley Wellhead WH1 (disconnected) To Balmoral Glamis Riser Base (disconnected).	Trenched and buried to an average depth of burial of 1.31m, with rock cover on to protect crossings and upheaval buckling	Out of Use	Filtered seawater
4" Gas Lift Pipeline (piggy-backed onto PL2677)	PL2678	114.3	10506	Carbon steel/ stainless steel/ plastics/ misc. coatings & aluminium alloy	Gas	Balmoral Riser Base (disconnected) To Burghley Production Well WH1 (disconnected).	Trenched and buried to an average depth of burial of 1.31m, with rock cover on to protect crossings and upheaval buckling	Out of Use	Filtered seawater
Control / Chemical Injection Umbilical	PLU2679	130.3	10480	Stainless steel / plastics/ misc. coatings & copper	Hydraulic Fluid / Chemicals	Balmoral SUTU (disconnected) To Burghley Wellhead WH1 (disconnected).	Trenched and buried to an average depth of burial of 0.57m, with rock cover on to protect crossings	Out of Use	Aqualink 300/ Filtered seawater

Table 2-2: Pipeline/Flowline/Umbilical Information									
Description	**Pipeline Number**	**Diameter (mm)**	**Length (m)**	**Description of Component Parts**	**Product Conveyed**	**From – To End Points**	**Burial Status**	**Pipeline Status**	**Current Content**
Chemical Injection Jumper Bundle	PLU2680	130.3	101	Stainless steel / plastics & misc. coatings	Chemicals	Balmoral SUTU To Balmoral Riser Base (disconnected).	Surface laid	Out of Use	Filtered seawater
Hydraulic Jumper (Disconnected)	PL4538	30.0	55	Stainless steel / plastics & misc. coatings	Hydraulic Fluid	Disconnection Adjacent to Burghley Valve Skid To Disconnection Adjacent to Burghley UTA	Surface laid	Out of Use	Filtered seawater
Electric Power Cable (Disconnected)	PL4542	30.0	57.00	Copper/ plastics & misc. coatings	N/A	Burghley Valve Skid (disconnected) To Burghley UTA (disconnected).	Surface laid	Out of Use	N/A
Electric Power Cable	PL4543	30.0	57.00	Copper/ plastics & misc. coatings	N/A	Burghley Valve Skid To Burghley UTA	Surface laid	Out of Use	N/A

Table 2-2: Pipeline/Flowline/Umbilical Information									
Description	**Pipeline Number**	**Diameter (mm)**	**Length (m)**	**Description of Component Parts**	**Product Conveyed**	**From – To End Points**	**Burial Status**	**Pipeline Status**	**Current Content**
Misc. Jumpers Associated with Burghley Wellhead WH1 (Not numbered or included in PWA and these will be removed as per EA / CA)	Bundle A		47	Stainless steel / plastics & misc. coatings	2 Core Power Signals A+B	Balmoral SUTU to Burghley Valve Skid (BVS)	Surface Laid	Out of Use	N/A
	Bundle B		85	Stainless steel / plastics & misc. coatings	Chemicals	Balmoral SUTU to Burghley UTA	Surface Laid	Out of Use	Aqualink 300/ Filtered seawater
	Bundle C		43	Stainless steel / plastics & misc. coatings	Hydraulic Fluid	Balmoral SUTU to BVS	Surface Laid	Out of Use	Aqualink 300/ Filtered seawater
	Bundle D		78	Stainless steel / plastics & misc. coatings	Chemicals	Balmoral SUTU to Balmoral Riser Base (S-RB-03G)	Surface Laid	Out of Use	Aqualink 300/ Filtered seawater
	Bundle E		46	Stainless steel / plastics & misc. coatings	Hydraulic Fluid	Balmoral SUTU to BVS	Surface Laid	Out of Use	Aqualink 300/ Filtered seawater
	Bundle F		49	Stainless steel / plastics & misc. coatings	4 Core Power and Signals	BVS to Burghley UTA	Surface Laid	Out of Use	N/A

Table 2-2: Pipeline/Flowline/Umbilical Information									
Description	**Pipeline Number**	**Diameter (mm)**	**Length (m)**	**Description of Component Parts**	**Product Conveyed**	**From – To End Points**	**Burial Status**	**Pipeline Status**	**Current Content**
	Bundle G		46	Stainless steel / plastics & misc. coatings	Hydraulic Fluid	BVS to Burghley UTA	Surface Laid	Out of Use	Aqualink 300/ Filtered seawater
	Bundle H		57	Stainless steel / plastics & misc. coatings	Hydraulic Fluid and Signal	BVS to Balmoral Riser Base (S-RB-03G)	Surface Laid	Out of Use	Aqualink 300/ Filtered seawater

Table 2-3: Subsea Pipeline Stabilisation Features				
Stabilisation Feature	**Total Number**	**Weight (Te)**	**Locations**	**Exposed/Buried/Condition**
Concrete Mattresses	138	1,266.0	500m radius zone from the previous position of Balmoral FPV Burghley Approaches	Exposed, partially covered in sediment, condition varies
			Crossings within the 500m radius zone from the previous position of Balmoral FPV Southeast Stirling Crossing Brae Forties Crossing	Buried under rock dump at pipeline crossings
Grout Bags	250	6.3	500m radius zone from the previous position of Balmoral FPV Crossings within the 500m radius zone from the previous position of Balmoral FPV Southeast Stirling Crossing Brae Forties Crossing Burghley Approaches	Exposed, often covered in sediment, condition varies
Rock Cover	1	24,815.0	Solely on pipeline crossings that were within the old 500m radius zone position of the Balmoral FPV. • Southeast Stirling Crossing • Brae Forties Crossing	Exposed

2.3 Wells

Table 2-4: Well Information			
Subsea Wells			
Burghley 16/22-9w	Producer	Completed Tree valves closed and the associated pipelines disconnected	SS 3/0/3

2.4 Inventory Estimates

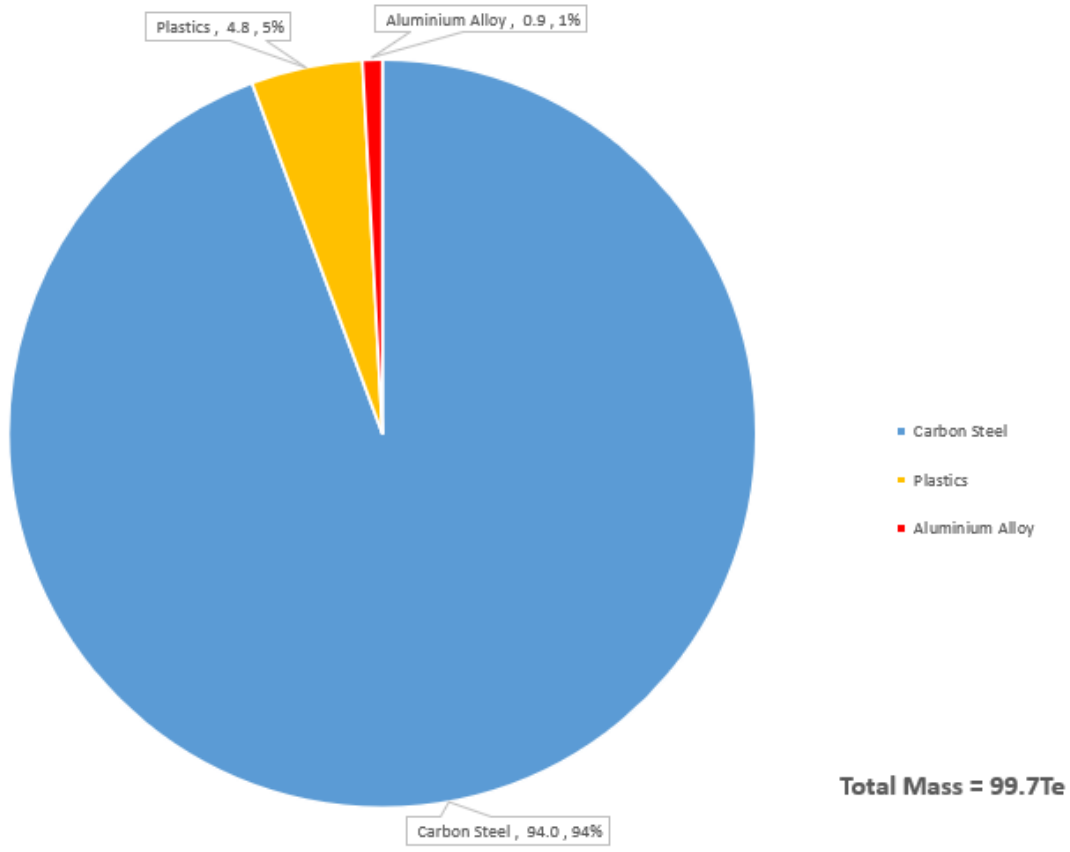

Figure 2-1: Estimated Inventory – Installations

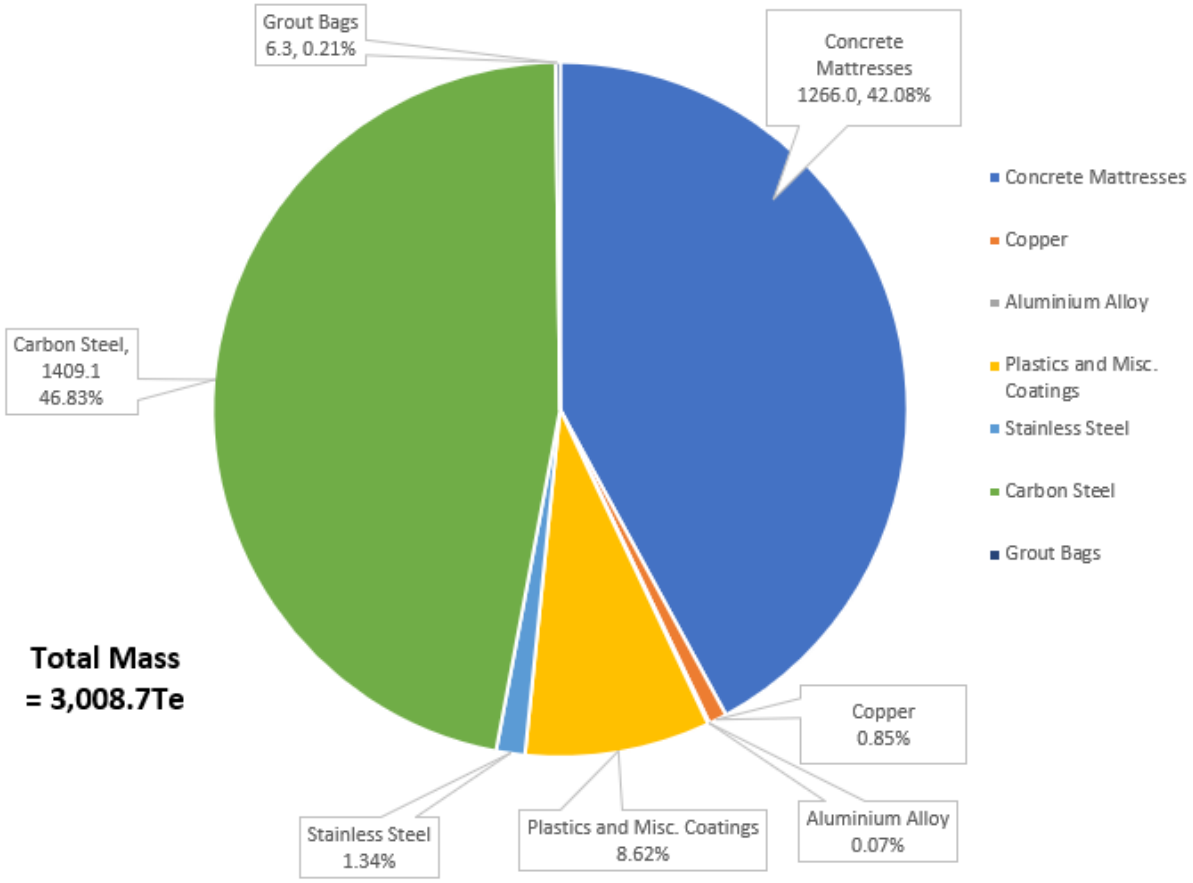

Figure 2-2: Estimated Inventory - Pipelines, Umbilicals, Jumpers & Spools

3 REMOVAL AND DISPOSAL METHODS

In line with the waste management hierarchy, the re-use of an installation (or parts thereof) is first in the order of decommissioning options. Repsol Resources UK Limited considered other potential reuse options, however, none yielded a viable commercial opportunity.

On removal and where practicable, Repsol Resources UK Limited will ensure the principles of the waste management hierarchy will be met in the handling of materials from the Burghley decommissioning to maximise the amount of material which can be reused or recovered/ recycled.

Repsol Resources UK Limited and the selected contractor(s) will monitor and review the disposal route of all materials and waste to the point of final reuse, recycling or disposal. As the decommissioning is not scheduled to be completed imminently, Repsol Resources UK Limited propose to take advantage of any future advances in technology to aid waste management, including the further reuse, recycle or scrapping of parts of the pipelines and structure as appropriate.

More details of the Burghley waste strategy are reported in the EA**.**

3.1 Subsea Installations and Stabilisation Features

Table 3-1: Subsea Installations and Stabilisation Features Decommissioning Options			
Subsea installations and stabilisation features	**Number**	**Option**	**Disposal Route (if applicable)**
Burghley Valve Skid (BVS)	1	Full removal	Return to shore for reuse/ recycling/ disposal
Burghley Well WH1 and integrated WHPS	1	Full Removal	Return to shore for reuse/ recycling/ disposal
The integrated Burghley Wellhead and WHPS will be removed as part of the well P&A scope. The single Burghley well was tied back to the Balmoral FPV before it was taken off-station in 2021. The remaining subsea infrastructure supported the production of this well to Balmoral and will be recycled as appropriate once recovered. No reuse options have been identified for these structures. There is potential for CCUS in the field and the appropriate steps will be taken to ensure this opportunity is still available post decommissioning.			

3.2 Pipelines

Decommissioning Options:

*Key to Options:

1a) Total removal - by reverse reeling	1b) Total removal – by reverse S-lay	1c) Total removal – cut and lift
2a) Remediation in-situ – exposed sections rock covered	2b) Remediation in-situ – exposed sections trenched and buried	2c) Remediation in-situ – exposed sections cut and lift

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 A PL2677/ PL2678	Rigid Pipelines, Piggy-backed, Trenched and Buried	All	1a, 2a, 2b & 2c
Group B PLU2679	Umbilical, Trenched and Buried	All	1a, 2a, 2b & 2c
Pipelines & Umbilicals for Full Removal PLU2680 / PL4538 / PL4542 / PL4543 / 8 Off Un-numbered Umbilical	Surface Laid	All	Not subject to CA due to base case of full removal

Comparative Assessment Method:

A CA was carried out for all pipelines in line with the recommendations of the OPRED Guidance Notes in The Department for Business, Energy and Industrial Strategy (BEIS). The CA considered Technical, Safety and Environmental Risks and Societal and Economic Impacts. The assessments closely followed the Guidelines on CA's in DPs published by Offshore Energies UK (OEUK).

A combined CA Workshop covering all pipelines and umbilicals in the Beauly and Burghley fields was held by Repsol Resources UK Limited (representatives from the safety, environmental and subsea teams present) using established terms of reference, detailed data on field facilities, results were recorded and approved by participants.

The results specific to the pipelines and umbilicals associated with the Burghley field only are described in this DP.

Outcome of Comparative Assessment:

Table 3-3: Outcome of Comparative Assessment		
Pipeline or Group (as per PWA)	**Recommended Option**	**Justification**
Group A PL2677 & PL2678	Decommission by leaving the trenched and buried sections in-situ and remediation of the non-trenched end-sections by cutting and lifting the exposed sections [Note 1] (Option 2c in Table 3-5)	The pipelines are fully trenched and buried to significantly greater than 0.6m depth of cover along their entire route with exposures at the pipeline ends and the trench transitions only. This group of pipelines have also been substantially rock covered to mitigate upheaval buckling during operation and as protection for crossings. There is no evidence of spans or exposures along the route and there is no evidence of snagging on the line over its history. Based on the review of the historical inspection data available, all lines are expected to remain fully trenched and buried over time. Total removal options were discounted for the trenched and buried section of these pipelines as full removal of the line would be technically challenging compared to the remediate in-situ options, whilst the increased safety risk exposure time to project personnel both offshore and

Table 3-3: Outcome of Comparative Assessment		
Pipeline or Group (as per PWA)	**Recommended Option**	**Justification**
		onshore in having to handle greater pipeline lengths was a concern. In addition, recovery of the pipeline would result in excessive seabed disturbance compared to the remediate in-situ options. There will be minimum legacy risk, to other users of the sea in leaving the pipelines in-situ as historical inspection surveys have demonstrated that the trenched and buried sections of the pipeline will remain so whilst the area is actively fished with no incidents having been reported. The three remediate in-situ decommissioning options considered by CA will be taken forward Note 1
Group B PLU2679	Decommission by leaving the trenched section in-situ and remediation of the non-trenched end-sections by cutting and lifting the exposed sections Note 2 (Option 2c in Table 3-5)	The umbilicals are trenched and buried to an average depth of burial of 0.64m depth of cover along their entire route with exposures at the pipeline ends and the trench transitions only. There is no evidence of exposures along the route and there is no evidence of snagging on the line over its history. Based on the review of the historical inspection data available, all lines are expected to remain fully trenched and buried over time. The total removal option was not discounted during the CA as it is considered that the umbilical could be withdrawn through the seabed cover without excavation during reverse reeling and therefore: – Seabed disturbance would be significantly less than that considered for rigid pipeline Group A; – Much less material is recovered than in rigid pipeline Group A and the umbilical is a flexible line which is much easier to handle on both the vessel deck and onshore in the yard than Group A and hence there is less safety concerns. All four decommissioning options considered by CA will be taken forward Note 2

Note 1 The conclusion of the CA was that there is no significant differentiator on each of the remediation options for the exposed sections of pipelines. However, the slight differences have resulted in the remediate in situ options being prioritised for Group A as follows:

- Priority 1 - Cut and lift (Option 2c in Table 3-5 above);
- Priority 2 (equal) - Trenched and buried (Option 2b in Table 3-5 above);
- Priority 2 (equal) - Rock covered (Option 2a in Table 3-5 above).

Given that there is no significant differentiator Repsol Resources UK Limited intend to carry out a Contracting and Procurement (C&P) engagement exercise and tendering process on all three options and will consult with OPRED should this exercise result in a change in preference of the remediation option.

Table 3-3: Outcome of Comparative Assessment		
Pipeline or Group (as per PWA)	**Recommended Option**	**Justification**
Note 2 The conclusion of the CA was that there is no significant differentiator on each of the four decommissioning options considered for the umbilicals. However, the slight differences have resulted in the decommissioning options being prioritised for Group B as follows: • Priority 1 (equal) - Remediate in-situ by cut and lifting exposed sections (Option 2c in Table 3-5 above); • Priority 1 (equal) - Total removal by reverse reeling (Option 1a in Table 3-5 above); • Priority 3 (equal) - Remediate in-situ by trenched and buried (Option 2b in Table 3-5 above); • Priority 3 (equal) - Remediate in-situ by rock cover placement (Option 2a in Table 3-5 above). Repsol Resources UK Limited preferred option is Option 2c based on sensitivity analysis in CA. The cut will be made at the bottom of the trench or at the edge of the rock dump. The cut will be within the boundary of the rock dump. Given that there is no significant differentiator Repsol Resources UK Limited intend to carry out a C&P engagement exercise and tendering process on all four options and will consult with OPRED should this exercise result in a change in preference of the remediation option.		

3.3 Pipeline Stabilisation Features

It is not proposed, at this stage, to carry out a CA on any pipeline stabilisation features, as in accordance with the recommendations of the OPRED Guidance Notes, all exposed mattresses will be recovered on shore for treatment, recycle and/or disposal, and any pipeline stabilisation features that are rock covered will remain in place. If it is found that the exposed stabilisation features cannot be safely and/or efficiently recovered Repsol Resources UK Limited will revert to OPRED and discuss further potential remediation options.

Table 3-4: Pipeline Stabilisation Features			
Stabilisation features	**Number**	**Option**	**Disposal Route (if applicable)**
Concrete Mattresses	138	Sufficiently buried to -0.6m or rock covered mattresses will remain in place. It is intended that the mattresses exposed or buried less than 0.6m will be recovered to shore, however in the event of practical difficulties during the removal execution, OPRED will be consulted, and an alternative method of decommissioning will be examined through a comparative assessment.	Where mattresses are recovered, they will be returned onshore for reuse/ recycle/ disposal
Grout bags	250	Sufficiently buried to -0.6m or rock covered grout bags will be decommissioned in-situ. It is intended that the grout bags exposed or buried less than 0.6m will be recovered to shore	Where grout bags are recovered, they will be returned onshore for treatment and recycle/ disposal
Rock cover (Te)	24,815	To remain in place.	N/A

3.4 Wells

Table 3-5: Well Plug and Abandonment
The single well in the Burghley field, and as listed in Table 2.4, will be plugged and abandoned in compliance with the requirements of the Offshore Installations and Wells (Design and Construction, etc.) Regulations 1996 (DCR) and abandoned in accordance with the latest OEUK Guidelines; Well Decommissioning Guidelines (Issue 7, Nov 2022).

3.5 Waste Streams

Table 3-6: Waste Stream Management Methods	
Waste Stream	**Removal and Disposal method**
Bulk liquids	All pipelines have been flushed and cleaned with filtered seawater, with returns to a sampling point confirmed as <30mg/l oil in water. The chemical cores within the umbilicals have either been flushed and cleaned with seawater or contain a water based hydraulic fluids. Pipework will be shipped in accordance with maritime transportation guidelines. Further cleaning and decontamination will take place onshore prior to recycling/re-use.
Marine growth	Where necessary and practicable to allow access, if found marine growth will be dealt with in full compliance with all relevant regulations and applicable marine licenses. The remainder will be brought ashore and disposed of in accordance with health, safety, and environmental legislation.
NORM	Tests for NORM will be undertaken offshore, and work will be carried out in full compliance with all relevant regulations.
Asbestos	N/A
Other hazardous wastes	If found will be recovered to shore and disposed of in full compliance with all relevant regulations.
Onshore Dismantling sites	Once appropriate licensed sites are selected OPRED will be advised. Dismantling sites must demonstrate waste stream management throughout the deconstruction process and the ability to deliver innovative reuse and recycling options. Existing sites would need a proven track record.

As part of the Contracting Strategy, Repsol Resources UK Limited will ensure the selection of waste competent contractor(s), experienced in the handling of all wastes associated with the Decommissioning of Oil and Gas infrastructure.

The waste management provider's/disposal yards shall follow the waste management hierarchy in the handling of materials from the Burghley field decommissioning project to maximize the amount of material from the project which is reused or recovered/recycled.

Repsol Resources UK Limited and the selected removal contractor(s) will, monitor and review the disposal route of all materials and waste to the point of final reuse, recycling or disposal and reserves the right to audit to fulfil any Duty of Care responsibilities. 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 relevant waste regulatory authorities will ensure that any issues with TFSW are addressed.

Table 3-7: Inventory Disposition			
	Total Inventory Tonnage	Planned tonnage to shore	Planned left *in situ*
Installations	99.7	99.7	0
Pipelines [Note 1]	3,008.7	394.7 [Note 2]	2,614.0

Note 1 Total weights include umbilicals, jumpers, spools, concrete mattresses and grout bags

Note 2 Based on recommendation to remediate in-situ with exposed sections cut and removed, total planned return also includes concrete mattresses and grout bags.

4 ENVIRONMENTAL APPRAISAL OVERVIEW

4.1 Environmental Sensitivities (Summary)

Table 4-1: Environmental Sensitivities	
Environmental Receptor	**Main Features**
Conservation interests	The nearest protected areas to the Burghley field are the Scanner Pockmark Special Area of Conservation and the Norwegian Boundary Sediment Plain Nature Conservation Marine Protected Area, located *c*. 12 km north-west and *c*. 23 km to the south-east respectively.
Seabed	Repsol Resources UK Limited commissioned a pre-decommissioning environmental survey which was completed in August 2017. As part of the survey, video and still photography and seabed samples were collected to assess the existing environmental conditions. The sediments across the area comprise mud and sandy mud. They are classed as European Nature Information System habitat types 'circalittoral fine mud' (A5.36) and 'circalittoral sandy mud' (A5.35). Benthic fauna were sparse with the most frequently occurring species being sea pens, sea urchins, starfish, shrimp and hermit crabs. Burrows were common, including mounds with conspicuous burrows therefore the OSPAR listed threatened and/ or declining habitat 'sea pens and burrowing megafauna communities' may occur in the area. Juvenile specimens of *Arctica islandica* which is an OSPAR listed threatened and/ or declining species and a Scottish priority marine feature (PMF) occurred in about half the samples in the nearby Beauly survey area. No adult specimens were identified either in grab samples or in seabed video/ photography. Drill cuttings were identified in samples around the Burghley wellhead, however as the field only comprises one well, the deposits do not constitute a cuttings pile. There is a drill cuttings pile which occurs beneath and immediately adjacent to the Balmoral template, however sediment contamination spreads beyond the template. The Burghley pipelines and surface laid items extend into the area of contamination in the vicinity of the Balmoral template.
Fish	A number of fish species use the area as spawning and nursery grounds. Of these species, anglerfish, blue whiting, cod, herring, ling, mackerel, sandeels, spurdog and whiting are Scottish PMFs. Cod and haddock are listed as Vulnerable on the International Union for Conservation of Nature (IUCN) Red List. The population of spurdog is decreasing and this species is listed as Vulnerable on a global scale but is Endangered in Europe. Cod, spotted ray and spurdog are on the OSPAR list of threatened and/or declining species.
Fisheries	The Burghley field occurs in International Council for the Exploration of the Sea (ICES) rectangle 45F1. The shellfish and demersal species are the most important in this rectangle, with anglerfish, cod, haddock, herring, mackerel, *Nephrops* saithe and whiting being targeted. The area is considered moderately important for the UK fishing industry.

Table 4-1: Environmental Sensitivities	
Environmental Receptor	**Main Features**
Marine Mammals	Due to the distance offshore, seals are very unlikely to occur. Minke whale, harbour porpoise, killer whale, Atlantic white-sided dolphin and white-beaked dolphin have been observed in the area. Of these species, all except killer whale are Scottish PMFs. Harbour porpoise are on the OSPAR list of threatened and/ or declining species.
Birds	The European Seabirds at Sea data indicate the presence of a range of seabirds. Of the birds known to occur in the area, northern fulmar, black-legged kittiwake and Atlantic puffin are classed as Vulnerable on the IUCN red list. Arctic skua are Endangered and decreasing in Europe. Common guillemot and European storm-petrel are listed on Annex I of the Birds Directive and black-legged kittiwake are on the OSPAR list of threatened and/ or declining species.
Onshore Communities	At this stage of the project, the onshore dismantling and disposal yards are not yet chosen and therefore it is not possible to describe the specific locations where activities will take place. Repsol Resources UK Limited intends to engage approved dismantling contractors to handle the recovered materials. In addition, approved waste management contractors will be selected to handle, store and dispose of any materials that cannot be recycled or reused.
Other Users of the Sea	Based on available data, shipping activity in the area is low. The nearest wreck site is 3.5 km northwest of the Burghley wellhead. The field is located in a well-developed oil and gas area with a number of surface installations in the vicinity. The closest of these is the Britannia platform, *c*. 15 km south of the Burghley wellhead. There are no offshore wind farm developments, telecommunications cables or military exercise/ practice areas in the vicinity.
Atmosphere	Offshore, emissions to the atmosphere will arise from the vessels used to decommission the Burghley infrastructure. Onshore emissions will result from the yard activities including recycling of the steel associated with the material returned to shore. Repsol Resources UK Limited acknowledge that these emissions will contribute to the cumulative effect of emissions on climate change, though the impact will be minimised via the application of the mitigation measures identified in Table 4-2.

4.2 Potential Environmental Impacts and their Management

Environmental Impact Assessment Summary:

Table 4-2: Environmental Impact Management		
Activity	**Main Impacts**	**Management**
Topsides Removal	N/A	N/A
Jackets/Floating Facility Removal	N/A	N/A
Subsea Installations Removal	When assessing the impacts associated with recovery of the subsea installations identified in Table 3-4 the aspects considered as part of the EA process included: • The physical presence of vessels; • Energy use and atmospheric emissions; • Underwater noise from vessels; • Discharges to sea from vessels; • Temporary disturbance to the seabed, including contaminated sediments, from activities, including cutting and recovery; • Production of waste materials.	During decommissioning of the subsea installations, a number of mitigation measures will be adhered to, in order to minimise the marine environmental and socio-economic impacts. These are identified in the EA Report and summarised here: • Repsol Resources UK Limited will carry out a detailed assurance process on all vessels prior to contract award and all contractors will originate from countries signed up to the International Maritime Organisation and will adhere to their guidelines. • Vessel use will be optimised. • Flushing and cleaning have been completed in line with BAT/BEP (Best Available Technique/Best Environmental Practice) requirements. • Work procedures will be in place to minimise duration of activities and minimise likelihood of dropped objects. • Any potential SIMOPS (simultaneous operations) will be managed through bridging documents and communications. • Cutting/dredging/jetting work plans will be in place. • A clear seabed will be confirmed by an independent third party using either non-intrusive survey techniques or over trawl trials. This decision will be taken in liaison with OPRED. • Post decommissioning survey strategy. • Repsol Resources UK Limited will ensure their Duty of Care obligations are fulfilled. Assurance processes will be in place, for example pre-contract review of the vessels' Waste Management

Table 4-2: Environmental Impact Management		
Activity	**Main Impacts**	**Management**
		Plans; adherence to the Waste Duty of Care Code of Practice; vessels' compliance with MARPOL; selection of dismantling, treatment and disposal sites with appropriate Pollution Prevention and Control permits/ environmental permits.
Decommissioning Pipelines	Trenched and buried pipelines and umbilicals where DOL is > 0.6 m will be decommissioned *in situ* with remediation of the exposed ends. Surface laid lines and trenched and buried lines where DOL is < 0.6 m will be recovered. All surface laid items e.g., spools and umbilical jumpers will be recovered. Aspects considered for the decommissioning of the pipelines and umbilical include those considered for 'Subsea Installation Removal'. In addition, they include: • Legacy impacts.	During decommissioning of the pipelines and umbilicals the relevant mitigation measures identified for 'Subsea Installation Removal' (see above) will be applied. In addition: • With respect to remediating the exposed sections of those lines to be decommissioned *in situ*, trench and bury or cut and recover will be prioritised over the use of rock cover. • If rock cover is used it will be minimised and will be laid in profiles aligned with industry standards. • A clear seabed will be confirmed by an independent third party using either non-intrusive survey techniques or over trawl trials. This decision will be taken in liaison with OPRED. • A post decommissioning survey strategy be agreed with OPRED for monitoring any pipelines decommissioned *in situ*.
Decommissioning Stabilisation Features	The base case is to decommission the existing rock cover *in situ* and recover the exposed mattresses and grout bags. Aspects considered for the decommissioning of the stabilisation materials include those considered for 'Subsea Installation Removal'. In addition, as for 'Decommissioning of Pipelines' legacy impacts were also considered.	During decommissioning of the 'Stabilisation Features' the relevant mitigation measures identified for 'Subsea Installation Removal' (see above) will be applied. In addition: • In the event that any exposed mattresses or grout bags cannot be recovered Repsol Resources UK Limited will consult with OPRED to discuss alternative approaches. • A survey strategy will be agreed with OPRED for monitoring any stabilisation features that will be decommissioned *in situ*.
Decommissioning Drill Cuttings	N/A	N/A

5 INTERESTED PARTY CONSULTATIONS

Consultations Summary:

As part of the decommissioning Programmes development, an informal stakeholder engagement process will be followed and views sought from stakeholders, these will be documented below in Table 5-1.

Repsol Resources UK Limited issued a Scoping Report to a number of stakeholders, which provided an overview of the Burghley field, the proposed decommissioning activities and an overview of the impacts to be assessed in the EA. Recipients of the Scoping Report were invited to comment on the Scoping Report with respect to any concerns they may have.

Table 5.1 summarises the main concerns that the stakeholders have identified following receipt of the Scoping Report and after review of the Consultation Draft. Full details of comments received are/will be provided in Chapter 2 of the EA.

Table 5-1: Summary of Stakeholder Comments		
Who	**Comment**	**Response**
Informal Stakeholder Consultations		
Marine & Coastguard Agency (MCA)	In response to the Scoping Report, MCA provided guidance to be included in the EA and advised on reporting requirements on the commencement of works.	MCA's guidance with respect to the EA has been noted and applied where relevant.
Joint Nature Conservation Committee (JNCC)	The JNCC acknowledged receipt of the Scoping Report but did not have any comments.	N/A
Marine Scotland Science (MSS)	MSS acknowledged receipt of the Scoping Report but did not have any comments.	N/A
United Kingdom Hydrographic Office (UKHO)	The UKHO acknowledged receipt of the Scoping Report but did not have any comments.	N/A
Health & Safety Executive (HSE)	No response was received from the HSE on the Scoping Report.	N/A
Scottish Environment Protection Agency (SEPA)	No response was received from SEPA on the Scoping Report.	N/A

Statutory Consultations		
The Scottish Fishermen's Federation (SFF)	11 comments received.	All comments addressed.
The National Federation of Fishermen's Organisations (NFFO)	No comments received.	N/A
Northern Irish Fish Producers Organisation Limited (NIFPO)	No comments received.	N/A
Global Marine Services	No comments received.	N/A
North Sea Transition Authority (NSTA)	Regular communication as part of the wider Repsol portfolio of decommissioning activities with the most recent being 08/01/25.	N/A

Public Consultations		
Public	No comments received.	N/A

6 PROGRAMME MANAGEMENT

6.1 Project Management and Verification

Repsol Resources UK Limited has established a multi-disciplinary team led by a Project Manager responsible for the implementation of activities and co-ordination of all services. An execution plan has been put in place which will align with established Repsol Resources UK Limited Health, Safety and Environment policies and meet all relevant legislative requirements.

The contracting strategy will be based on Repsol Resources UK Limited procurement and contracts policies, including competitive tendering for all contractor services. Where possible, activities will be co-ordinated with other decommissioning operations and take account of any initiatives promoted by the NSTA.

Repsol Resources UK Limited will report regularly on the execution of the DP to OPRED and discuss any changes in plans as they advance.

Repsol will ensure all pipelines will be monitored until decommissioning activities commence. The nature and frequency of pipeline surveys will be discussed and agreed with OPRED.

6.2 Post-Decommissioning Debris Clearance and Verification

A post-decommissioning environmental and pipeline survey will be completed to identify debris within the 100m pipeline corridors (50m either side) and around the 500m installation site will be conducted. Any seabed debris related to offshore oil and gas activities will be recovered for onshore recycling or disposal in line with existing waste management policies.

A minimum of one further post-decommissioning pipeline survey will be carried out.

The seabed conditions at the installation sites and pipeline corridors will be independently validated through non-intrusive methods. Overtrawl will also be conducted in areas of risk or where non-intrusive survey results are inconclusive.

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. Post decommissioning it is anticipated that fishing activity will not be disrupted by the presence of pipelines.

After the post-decommissioning survey reports have been sent to OPRED and reviewed, a post-decommissioning monitoring survey regime, scope and frequency, will be discussed and agreed with OPRED.

6.3 Schedule

The high-level schedule for the Burghley DP is outlined in Figure 6.1.

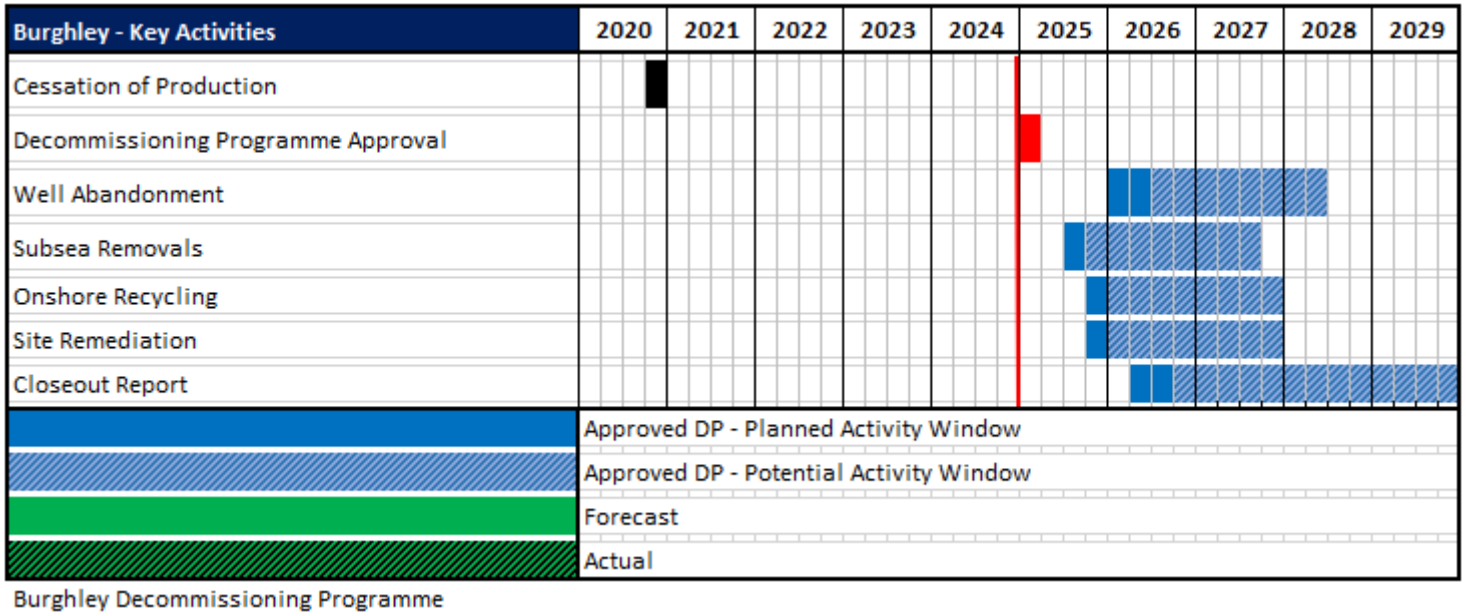

Figure 6-1: Gantt Chart of Project Plan

6.4 Costs

Repsol Resources UK Limited has used the OEUK Work Breakdown Structure (WBS) to develop cost estimates for the Burghley DP. The provisional cost estimate will be provided separately to OPRED, in confidence.

6.5 Close Out

A close out report will be submitted to OPRED within 12 months of the completion of decommissioning, including debris clearance and post-decommissioning surveys. The close out report will notify OPRED of any variances to outcomes that have been detailed in this DP.

6.6 Post-Decommissioning Monitoring and Evaluation

A post decommissioning environmental seabed survey, covering pipeline routes and sites of the wellhead and subsea installation, will be carried out when all decommissioning activity has been concluded. The survey will focus on chemical and physical disturbances due to the decommissioning and be compared with the pre-decommissioning survey.

Results of the survey will be forwarded to OPRED to enable a post decommissioning survey regime to be agreed by both parties.

7 SUPPORTING DOCUMENTS

Table 7-1: Supporting Documents	
Document Number	**Title**
RP-DTABAB001-GE-0015	Beauly & Burghley Comparative Assessment Report Genesis Document No. 203271C-000-RT-0800
RP-DTABAB001-GE-0018	Beauly & Burghley Decommissioning Environmental Appraisal Genesis Document No. 203271C-000-RT-6200-0001

Web link for all stakeholder / interested parties –

https://www.repsolresourcesuk.com/decommissioning/beauly-burghley

8 SECTION 29 HOLDERS LETTERS OF SUPPORT

Docusign Envelope ID: 764BA43E-36FB-4A0D-B4FB-310735B572C8

Offshore Petroleum Regulator for Environment and Decommissioning
Department for Energy Security and Net Zero
3rd Floor, Wing C
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

27 May 2025

Dear Sir or Madam

Burghley Decommissioning Programme
PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 8th May 2025.

We, NEO Energy Petroleum Limited confirm that we authorise Repsol North Sea Limited to submit on our behalf abandonment programmes relating to the Burghley installations and pipelines as directed by the Secretary of State on 8th May 2025.

We confirm that we support the proposals detailed in Burghley Decommissioning Programme dated 23rd May 2025, which is to be submitted by Repsol North Sea Limited, in so far as it relates to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

For and on behalf of NEO Energy Petroleum Limited

DocuSigned by:
6B3B13F9B82E48E...

Andrew McIntosh
Director

Level 32, The Gherkin
30 St Mary Axe
London EC3A 8BF

9th Floor, The Silver Fin Building
455 Union Street
Aberdeen AB11 6DB

+44 (0)203 357 9700
info@neweuropeanoffshore.com
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Docusign Envelope ID: 4D29E414-C392-4041-B0D3-5DCA9B91721E

RockRose Energy UKCS4 Ltd
Viaro House, 5th Floor,
20-23 Holborn,
London EC1N 2JD
+44 203 826 4800
info@rockroseenergy.com
rockroseenergy.com

Offshore Petroleum Regulator for Environment and
Decommissioning
Department for Energy Security and Net Zero
3rd Floor, Wing C
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

28 May 2025

Dear Sir or Madam

Burghley Decommissioning Programme
PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 8th May 2025.

We, RockRose UKCS4 Limited, confirm that we authorise Repsol North Sea Limited to submit on our behalf abandonment programmes relating to the Burghley installations and pipelines as directed by the Secretary of State on 8th May 2025.

We confirm that we support the proposals detailed in Burghley Decommissioning Programme dated 23rd May 2025, which is to be submitted by Repsol North Sea Limited, in so far as it relates to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

Firmato da:
Francesco Mazzagatti
C56265239FC0466...

Francesco Mazzagatti
Director
For and on behalf of RockRose UKCS4 Limited

REPSOL NORTH SEA LIMITED

163 Holburn Street
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AB10 6BZ

VAT Number: GB394805910

T +44 (0)1224 352500
W www.repsolresourcesuk.com

6 June 2025
Our Ref: 25GEN001/GB

Offshore Petroleum Regulator for Environment and Decommissioning
Department for Energy Security and Net Zero
3rd Floor, Wing C
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Dear Sir or Madam

Burghley Decommissioning Programme
PETROLEUM ACT 1998

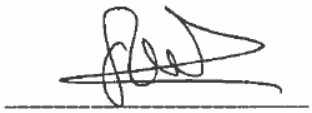
We acknowledge receipt of your letter dated 8th May 2025.

We, Repsol North Sea Limited, as Burghley operator on behalf of ourselves, Repsol Beta Limited, RockRose UKCS4 Limited and NEO Energy Petroleum Limited hereby submit the Burghley Decommissioning Programme dated 23rd May 2025 as directed by the Secretary of State on 8th May 2025.

The Burghley Decommissioning Programme dated 23rd May 2025 is submitted by Repsol North Sea Limited on behalf of the Section 29 Notice Holders under section 29 of the Petroleum Act 1998.

Yours faithfully

For and on behalf of **Repsol North Sea Limited**



Director

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6 June 2025
Our Ref: 25GEN001/GB

Offshore Petroleum Regulator for Environment and Decommissioning
Department for Energy Security and Net Zero
3rd Floor, Wing C
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Dear Sir or Madam

Burghley Decommissioning Programme
PETROLEUM ACT 1998

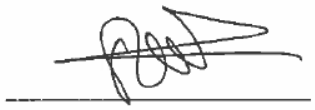
We acknowledge receipt of your letter dated 8th May 2025.

We, Repsol Beta Limited confirm that we authorise Repsol North Sea Limited to submit on our behalf abandonment programmes relating to the Burghley installations and pipelines as directed by the Secretary of State on 8th May 2025.

We confirm that we support the proposals detailed in Burghley Decommissioning Programme dated 23rd May 2025, which is to be submitted by Repsol North Sea Limited, in so far as it relates to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

For and on behalf of **Repsol Beta Limited**



Director

APPENDIX A PUBLIC NOTICES

Public Notice – The Press and Journal, 21st April 2023

PUBLIC NOTICE

The Petroleum Act 1998

Beauly & Burghley fields Decommissioning

Repsol Sinopec Resources UK Limited has submitted, for the consideration of the Secretary of State for Business, Energy and Industrial Strategy, a number of draft Decommissioning Programmes (DPs) for the installations and pipelines associated with the Beauly & Burghley field infrastructure 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 items/facilities covered by the Decommissioning Programme(s) are:

- Wellheads & Integrated Wellhead Protection Structures; and
- Associated Pipelines, Flowlines, Umbilicals and any associated apparatus.

Wells: all wells will be plugged and abandoned to Repsol Sinopec Resources UK Limited standards which comply with "Offshore Installations and Wells (Design and Construction, etc.) Regulations 1996" and align with Offshore Energies UK Well Decommissioning Guidelines.

Repsol Sinopec Resources UK Limited hereby gives notice that a summary of the Beauly & Burghley Decommissioning Programmes can be viewed at the Internet website address: **www.repsolsinopecuk.com**

Alternatively, a hard copy of the respective Beauly & Burghley Decommissioning Programmes can be requested via email or phone call:

Phone: 01224 352973

Email: BABREADDECOM@repsolsinopecuk.com

Representations regarding the Beauly & Burghley Decommissioning Programmes should be submitted in writing to Repsol Sinopec Resources UK Limited, 163 Holburn Street, Aberdeen AB10 6BZ where they should be received by 22nd May 2023 and should state the grounds upon which any representations are being made.

Date: 21st April 2023

Repsol Sinopec Resources UK Limited
Company Address
163 Holburn Street
Aberdeen
AB10 6BZ

Teresa Munro
Decommissioning Manager

Public Notice – The Daily Telegraph, 21st April 2023

PUBLIC NOTICE

The Petroleum Act 1998

Beauly & Burghley fields Decommissioning

Repsol Sinopec Resources UK Limited has submitted, for the consideration of the Secretary of State for Business, Energy and Industrial Strategy, a number of draft Decommissioning Programmes (DPs) for the installations and pipelines associated with the Beauly & Burghley field infrastructure 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 items/facilities covered by the Decommissioning Programme(s) are:

- Wellheads & Integrated Wellhead Protection Structures; and
- Associated Pipelines, Flowlines, Umbilicals and any associated apparatus.

Wells: all wells will be plugged and abandoned to Repsol Sinopec Resources UK Limited standards which comply with "Offshore Installations and Wells (Design and Construction, etc.) Regulations 1996" and align with Offshore Energies UK Well Decommissioning Guidelines.

Repsol Sinopec Resources UK Limited hereby gives notice that a summary of the Beauly & Burghley Decommissioning Programmes can be viewed at the Internet website address: **www.repsolsinopecuk.com**

Alternatively, a hard copy of the respective Beauly & Burghley Decommissioning Programmes can be requested via email or phone call:

Phone: 01224 352973

Email: BABREADDECOM@repsolsinopecuk.com

Representations regarding the Beauly & Burghley Decommissioning Programmes should be submitted in writing to Repsol Sinopec Resources UK Limited, 163 Holburn Street, Aberdeen AB10 6BZ where they should be received by 22nd May 2023 and should state the grounds upon which any representations are being made.

Date: 21st April 2023

Repsol Sinopec Resources UK Limited
Company Address
163 Holburn Street
Aberdeen
AB10 6BZ

Teresa Munro
Decommissioning Manager