

# Devonport Local Liaison Committee (LLC) 2 February 2023



# Domestics



## Purpose and Agenda

1. Chair's Opening Remarks
2. Terms of Reference
3. Minutes of Last Meeting
4. Action Updates and Matters Arising
5. Devonport Site Safety & Operational Updates
6. Questions From Committee and Public (1)
7. Coffee Break
8. Plymouth City Council (PCC) Matters
9. Regulators' Reports
10. Questions from Committee and Public (2)
11. AOB / Date Of Next Meeting
12. Chair's Closing Remarks & Review of Actions





## Reports and Documents on Table

- Agenda
- Minutes of Local Liaison Committee 6 Oct 2022
- Copy of all presentation slides for this meeting
- Office for Nuclear Regulation report (Jul – Dec 22)
- Defence Nuclear Safety Regulator report (Jul – Dec 22)
- Environment Agency LLC report (Jul – Dec 22)
- Plymouth City Council LLC report
- Devonport infographic
- Draft Terms of Reference
- Siren False Alarm Protocol



## 1. Opening Remarks

Busy & Safe – continued investment in Devonport whilst delivering operational capability to the Fleet.



## 2. Terms of Reference

- Minor Update performed.
- Aimed at increased focus on:
  - Openness
  - Two way communication
  - Nuclear Site Operations

Any Comments / Proposed Amendments?



### 3. Minutes of Last Meeting – 6 Oct 2022

Comments / amendments



# 4. Action Updates

Number	Action
MOD 01/22	To provide LLC with brief on timescales for the submarine defuel and dismantling programme. <b>Presentation to be given later in this meeting.</b>
MOD/ PCC 02/22	The false alarm protocol between the Devonport Site and PCC be made available to the committee. <b>False alarm protocol shared.</b>
EA 03/22	Naval Base’s quarterly reports for river discharge to be shared with member of the public via email. <b>Information emailed to member of the public.</b>
MOD 04/22	A letter was submitted by a member of the public to NBC with a written question. <b>Written response provided direct to the member of the public.</b>
MOD 05/22	The draft TORs will be circulated to members for comment, with a view to accepting these at the next meeting. <b>Draft TORs shared in advance of meeting.</b>





## 5. Devonport Site Safety & Operational Updates

- Operational update
- Nuclear / radiological safety
- Environmental safety



**CHART ANNEXED TO  
THE DOCKYARD PORT OF  
PLYMOUTH ORDER 2020**  
(Not to be used for Navigation)

Recommended track for deep-draught vessels  
Limit of speed restrictions  
Reporting position and direction  
Swimming area

S

Plymouth Sound

PLYMOUTH

DEVONPORT

TORPOINT

SALTASH

CATERWATER

DRAKE'S CHANNEL

WESTERN CHANNEL

EASTERN CHANNEL

PLYMOUTH CHANNEL

SALEFORD PASSAGE

CLIFF BAY

Stonehouse Pool

Whidmore Pt.

Small Craft Anchorage

Ramseye Pt.

New Ground

Queen's Ground

Cawsand Bay

Rame

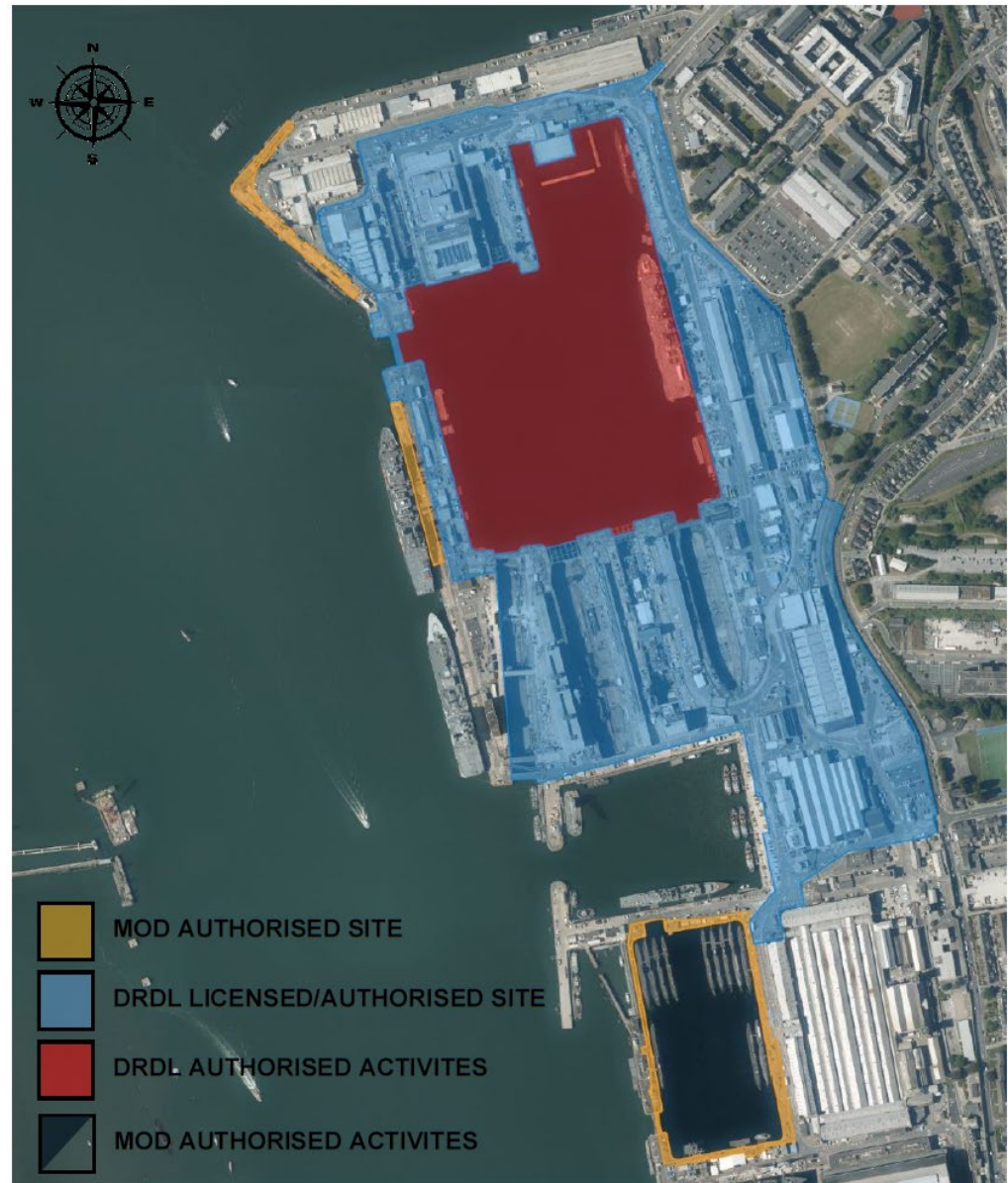
Chapel (ruins)

Rame Head

Anchoring and Fishing Prohibited

LIMIT OF DOCKYARD PORT OF PLYMOUTH

4 knot Speed Limit (Reg 6(1)(c))  
8 knot Speed Limit (Reg 6(1)(b))  
10 knot Speed Limit (Reg 6(1) & 6(2))  
Limit of "Narrow Channel" and 10 knot Speed Limit vessels over 15m (Reg 6(1))  
Limit of "Narrow Channel" and 10 knot Speed Limit vessels over 7.5m (Reg 6(1))  
7.5m draught  
Anch. for vessels under 7.5m draught  
Quarantine Anchorage  
Ramskill Pt.  
Duke Rock  
Bochand Pt.  
West Tinker  
Shapstone



# Naval Base Nuclear Operations

- T Class Submarines
  - One submarine continues long term berthing preparations following retirement from service
  - One submarine in service
- A Class Submarines
  - Preparations underway to support A class maintenance





# Babcock Update – Current Operations

- T Class Submarine – preparations for safe long-term berthing
- V Class Submarine in Deep Maintenance Period continues following successful undocking
- Multiple Surface Ship platforms in various stages of refit



# Babcock Site Events

- Babcock have reported 14 INF1 / DINF1 to the Regulator during this period
- All events were rated as INES Scale 0 (below INES scale)
- Note: Events rated as INES 0 are events without safety significance



(INES – International Nuclear and Radiological Event Scale)

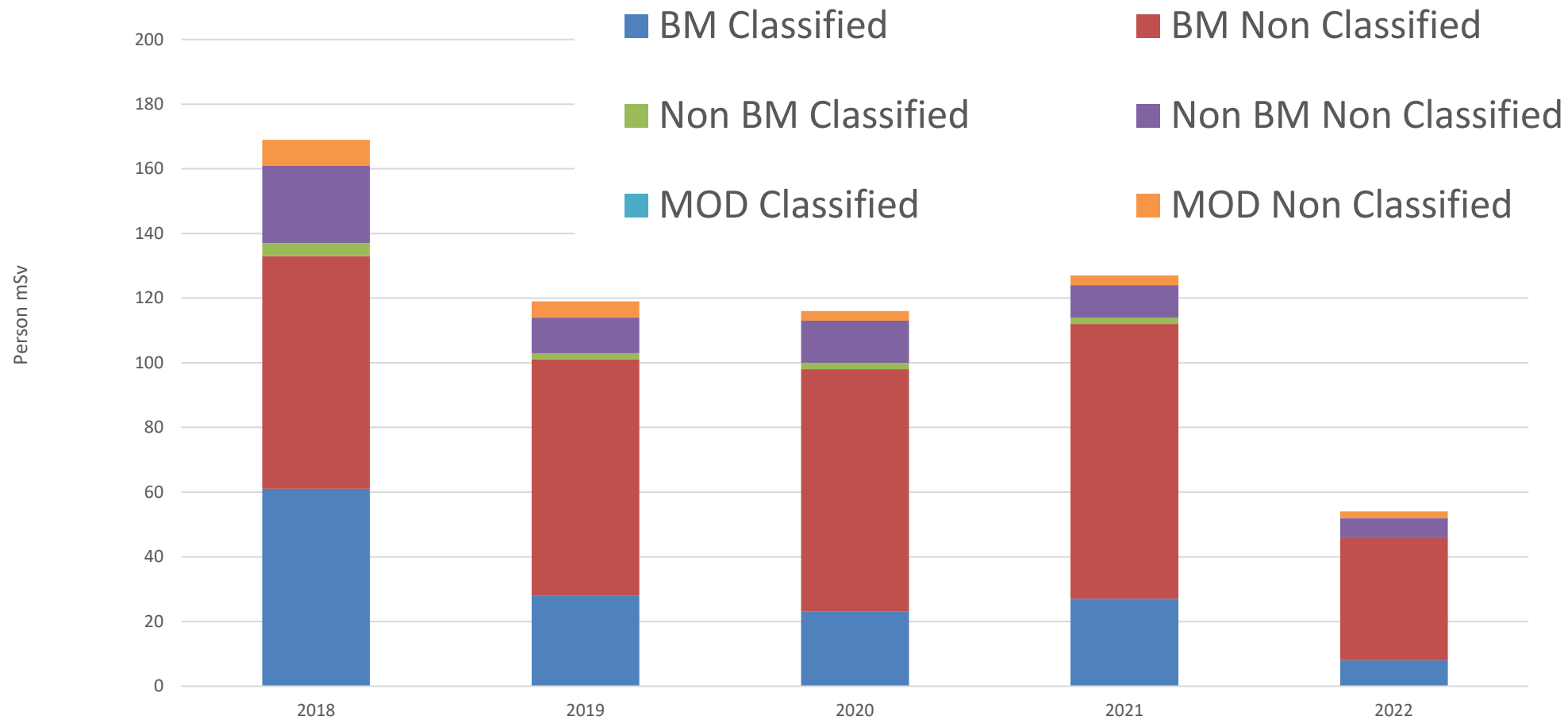


# HMNB(D) Site Events

- No INES events to report in the last 6 months,
  - 1 x DINF1 event : Categorisation @ Level 0,
  - Ex-HMS TURBULENT Pressure Control.



# Devonport Site – Collective Dose (person mSv)



# Emergency Arrangements

- HMS Raleigh Siren
- Various dates from May–Sept - support to PCC's Off-Site Emergency Plan
- Annual demonstration exercise October 2022
- Annual communications exercise December 2022
- Transport emergency plan exercise – September 2022



# Radioactive Waste Discharge Summary

		2018	2019	2020	2021	2022	Limit
Aqueous Discharges to Tamar	Tritium (GBq)	12	5	8	11	2.39	<b>700</b>
	Co-60 (GBq)	0.01	0.002	0.002	0.001	0.001	<b>0.8</b>
	C-14 (GBq)	0.03	0.03	0.02	0.03	0.008	<b>1.7</b>
	Others (GBq)	0.03	0.003	0.005	0.003	0.001	<b>0.3</b>
Aqueous to Sewer	Tritium (GBq)	0.047	0.040	0.014	0.008	0.006	<b>2</b>
	Co-60 (GBq)	0.003	0.002	0.002	0.001	0.001	<b>0.35</b>
	Others (GBq)	0.076	0.062	0.043	0.032	0.002	<b>0.65</b>
Gaseous	Tritium (GBq)	0.367	1.73	0.842	0.100	Not yet available	<b>4</b>
	C-14 (GBq)	0.315	0.250	0.200	0.170		<b>66</b>
	Ar-41(GBq)	0.009	0.005	0.009	0.002		<b>15</b>
	Beta Particulate (GBq)	0.00002	0.00002	0.00002	0.00001		<b>0.0003</b>



## Disposal of trace contaminated water

- New disposal route for trace contaminated water implemented by Naval Base in Oct 2022
- Reported discharge radioactivity levels based on Minimum Detectable Activity (MDA) values
  - MDA = the lowest level of radioactivity that can reliably be detected
  - No radioactivity above MDA values measured in 2022 discharge samples
- 2022 Discharge Data:
  - 15.75 m<sup>3</sup> water discharged
  - 0.02 MBq <sup>60</sup>Co (2.43% of annual limit)
  - 0.17 MBq <sup>3</sup>H (0.17% of annual limit)
  - 0.26 MBq other radionuclides (2.56% of annual limit)



## Discharge Assurance Activities

- Permission to implement river discharge granted by Facility Operator following an extensive Operational Readiness Review.
- First river discharge witnessed by representatives from both Nuclear Safety Assurance and Facility Operator teams.
- Independent review of process and records conducted by Naval Base Radioactive Waste Adviser.
- Environment Agency inspection in November 2022.



## Marine Environmental Monitoring Sampling Results - 2022

- Samples taken regularly from numerous sites in the local area.
- Analysis of 2022 samples shows:
  - No cobalt-60
  - Low levels of tritium and carbon-14
  - Low levels of other nuclides
- No significant radiological hazard.



## Devonport Site Update – Summary

- The health and safety of our workforce and the general public remains the highest priority for both MOD and Babcock.
- Nuclear submarine activities continue to be undertaken safely as planned.
- The independent site Regulators continue to maintain a strong presence.
- Environmental monitoring continues to show no significant radiological hazard as a result of activities on the site.







Submarine  
Delivery Agency

# Submarine Disposal & Devonport Infrastructure Team Mission and Vision Statements

## Vision

Coherently delivering Defence major projects to maintain and dispose of nuclear submarines now and in the future.

## Mission

Collaboratively working with our Industrial Partners, to successfully develop and sustain a high performing team, trusted to deliver Defence major projects to maintain and dispose of nuclear submarines

In partnership with

**babcock**™





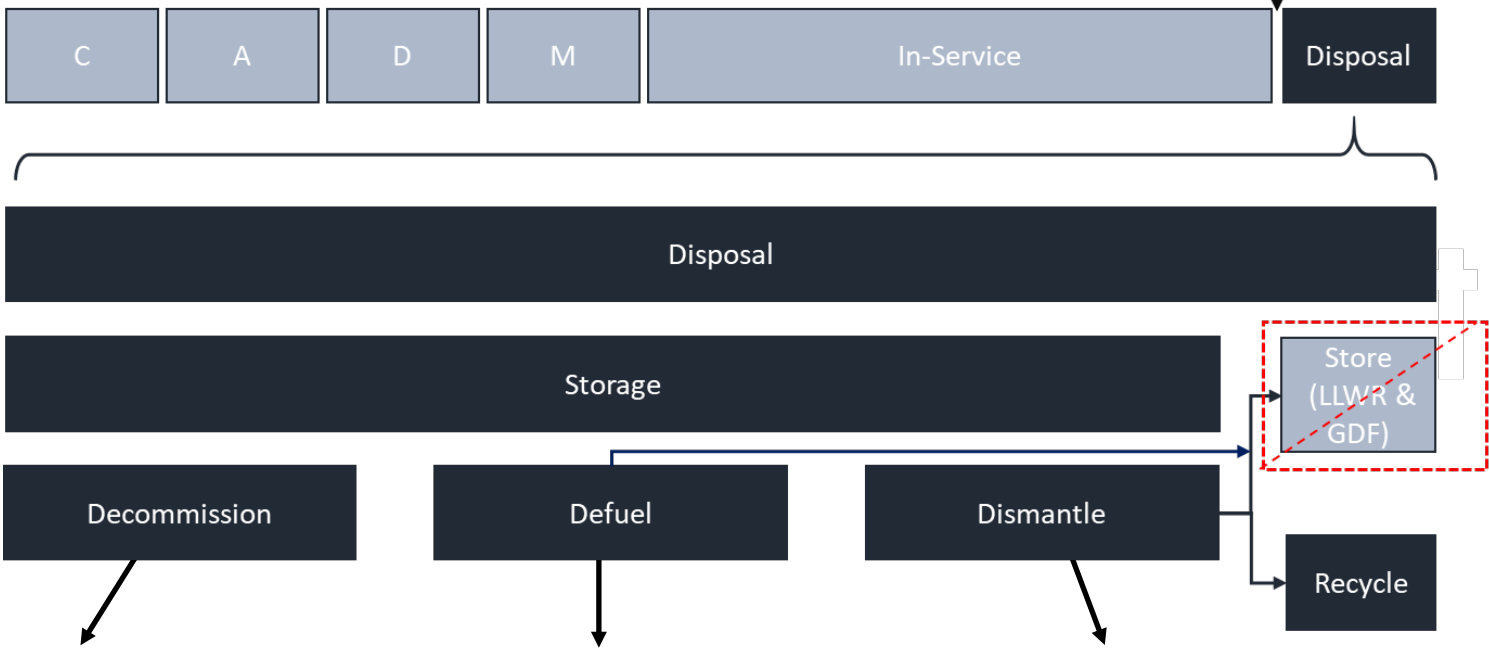
The aim of the Submarine Disposal Programme is to deliver a safe, environmentally responsible, secure and cost effective solution for disposing the UK's ex service nuclear powered submarines





# Disposal within the Submarine Life Cycle

Fleet Non  
Operational  
Date



INDUSTRIAL  
CAPABILITY

SQEP

Infrastructure

Technology

Processes

Information

Organisation

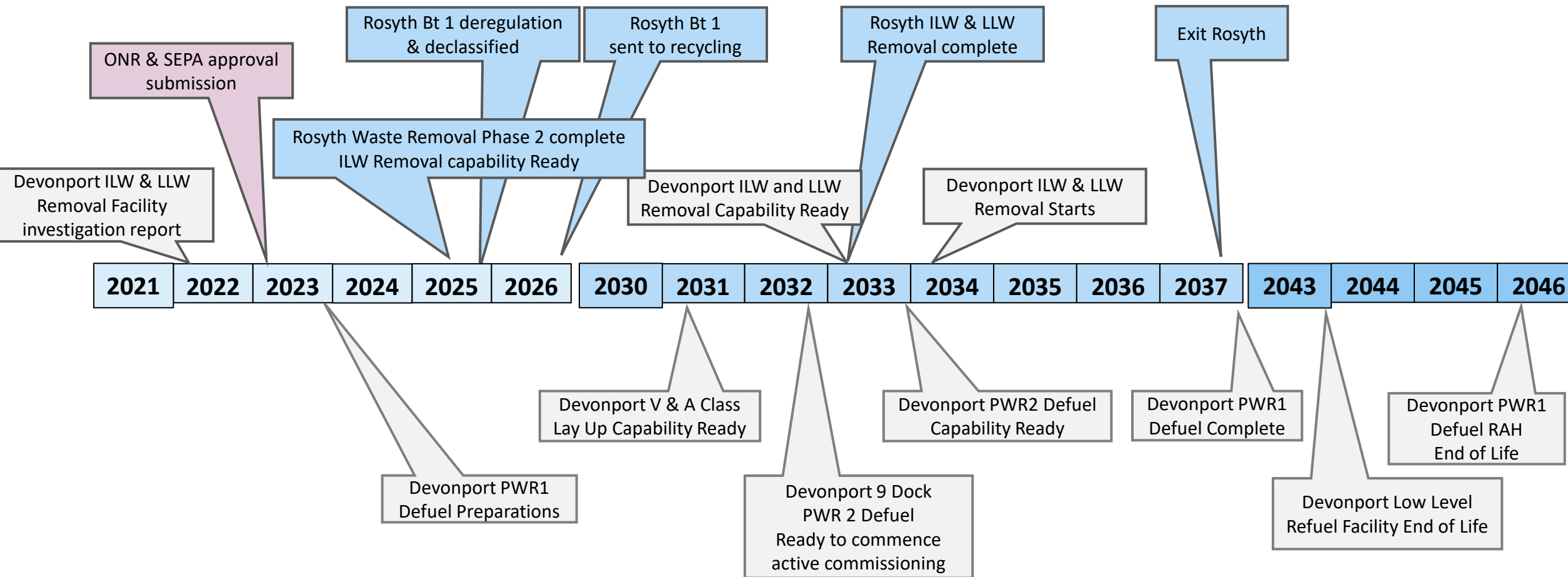


## So, what is going on?

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1. We have 7 ex-service nuclear submarines decommissioned and stored afloat in Rosyth
2. We have 13 ex service nuclear submarines decommissioned and stored afloat in Devonport
3. We have 2 ex-service submarines undertaking decommissioning activities in Devonport
4. We are finalising dismantling capabilities in Rosyth and plan to complete the dismantling of the first PWR1 submarine at Rosyth dockyard by 2026
5. We are finalising defuel capabilities in Devonport and plan to complete defuel of a PWR1 submarine by 2027

# Submarine Disposal Programme – Indicative Plan to 2046





# Storing/Maintaining ex-service submarines



**Before**



**During**



**After**

- Submarine integrity, safety and security:
  - Is achieved through annual afloat maintenance and periodic Survey and Docking Periods
  - Long term berthing at Authorised facilities in Devonport and Rosyth
  - Hull preservation in nuclear Licensed dock facilities in Devonport and Rosyth



# Low-level Radioactive Waste (LLW) removal continuous improvement

## SWIFTSURE

- December 2016-August 2018
- 52 tonnes potential LLW removed
- Majority of metals recycled

## RESOLUTION

- November 2018-March 2020
- 77 tonnes potential LLW removed
- 50% increase in LLW removed
- 25% reduction in time

## REVENGE

- March 2020 start
- 120 tonnes potential LLW to be removed
- Further 50% increase in LLW removed



- Great HSE track record for LLW removal with over 1 million hours worked since last RIDDOR
- No environmental incidents reported to SEPA since work started Dec 2016



## 6. Questions & Answer Session 1

Questions from the Local Liaison Committee  
members

then

Questions from members of the public  
attending the Local Liaison Committee.



## 7. Break



## 8. Plymouth City Council



Julian Settrington  
Civil Protection Officer

## 9. External Nuclear Regulators

- Office for Nuclear Regulation (ONR)
- Defence Nuclear Safety Regulator (DNSR)
- Environment Agency (EA)





Office for  
Nuclear Regulation

# **Devonport Local Liaison Committee Meeting – February 2023**

Vik Winspear-Roberts – ONR Principal Inspector



Office for  
Nuclear Regulation





Defence  
Safety Authority

# **Devonport Local Liaison Committee Meeting – February 2023**

## **Verbal Update**

Mark Carter – DNSR Inspector Reactor Maintenance



Ministry  
of Defence

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Defence Nuclear Safety Regulator  
An Independent Regulator in Defence

# **Devonport Local Liaison Committee Meeting – February 2023**

## **Verbal Update**

Richard Lee – EA Nuclear Regulator

## 10. Questions & Answer Session 2

Questions from the Local Liaison Committee  
members

then

Questions from members of the public  
attending the Local Liaison Committee.



# 11. Any Other Business

Date of next meeting tbc – July 2023



## 12. Review of Actions & Chair's Closing Remarks

