



# **An Update on the Progress of ANSTO's New Molybdenum Processing Facility**

**Mo-99 Topical Meeting | Washington DC | June 2014**

Doug Cubbin & Michael Druce



# Upside down World Map

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## LEGEND

Capital = City, Town =

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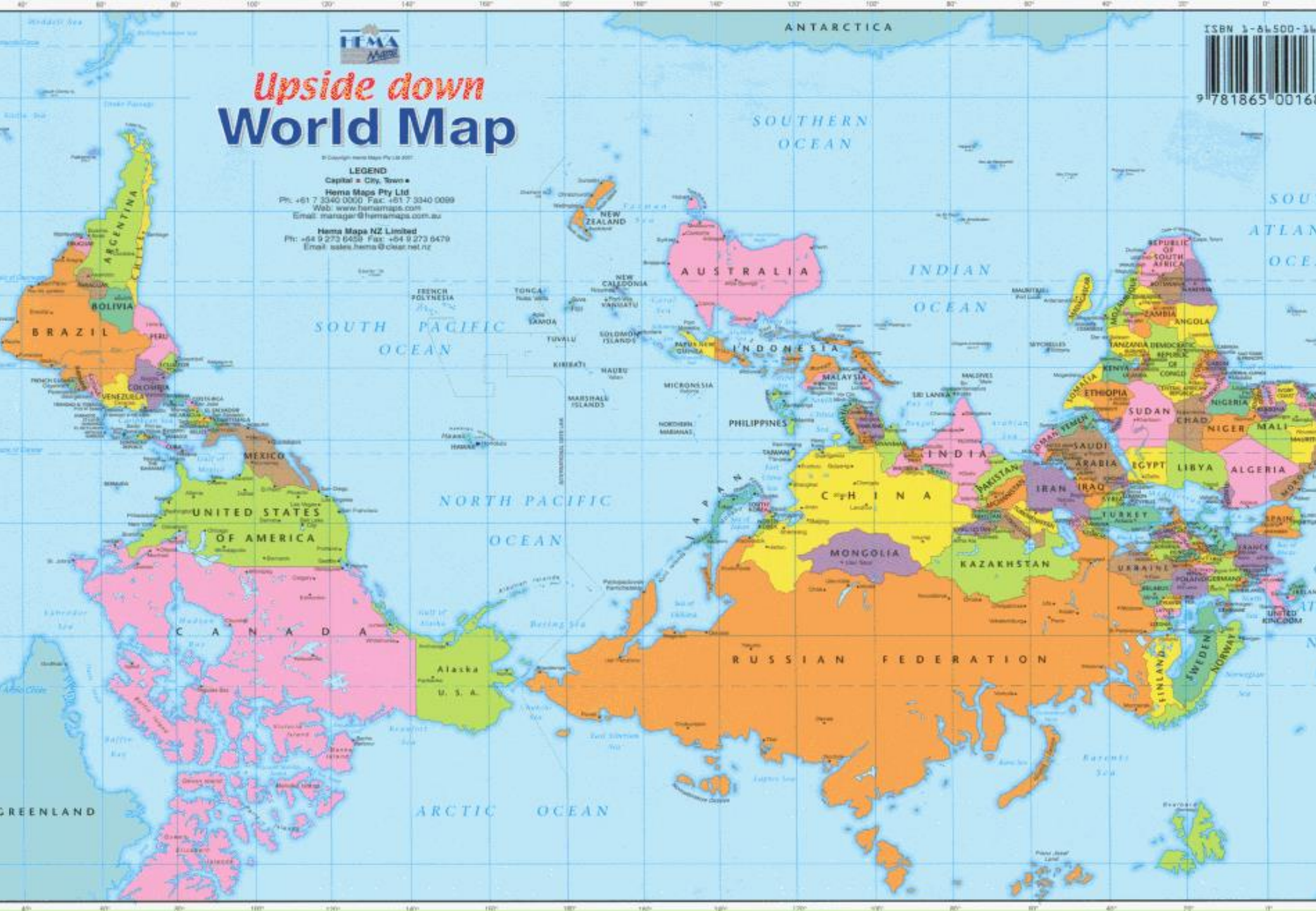
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# ANSTO Overview

- Formed in 1954; HIFAR critical 1958
- \$1.2 billion assets under management
- Annual turnover > \$250 million
- 1200 employees; 250 Ph.D.'s
- OPAL Critical 2007



# What is ANM?

**ANSTO Nuclear Medicine (ANM) Pty Limited**  
Commercial subsidiary of ANSTO

Design, build & operate



## **Mo-99 Plant**

- Fully operational mid 2016
- Mo-99 facility; 3,000 6 day Ci per week
- Use of LEU fuel & targets
- Proven, reliable technology



## **Synroc Waste Plant**

- Fully operational 2017
- 100-150 HIP cans per year



**Irradiated LEU Targets**

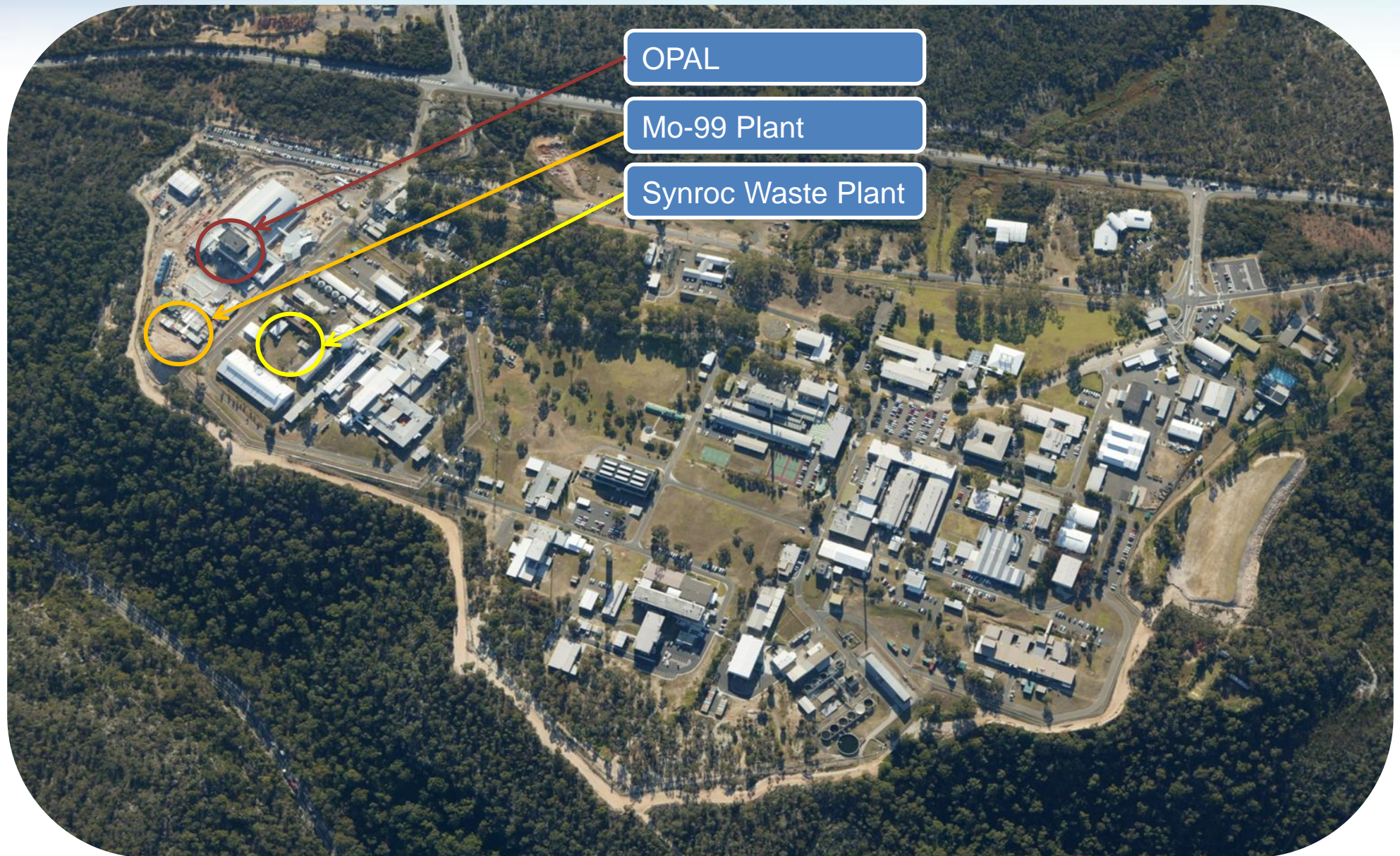


**ANM ILLW Transfer**





# Location





# Commencement of Construction

- Preparation of the site is complete
- Construction commenced in June 2014
- The Hon Ian Macfarlane MP, Minister for Industry, officiated at a commencement of construction ceremony in May



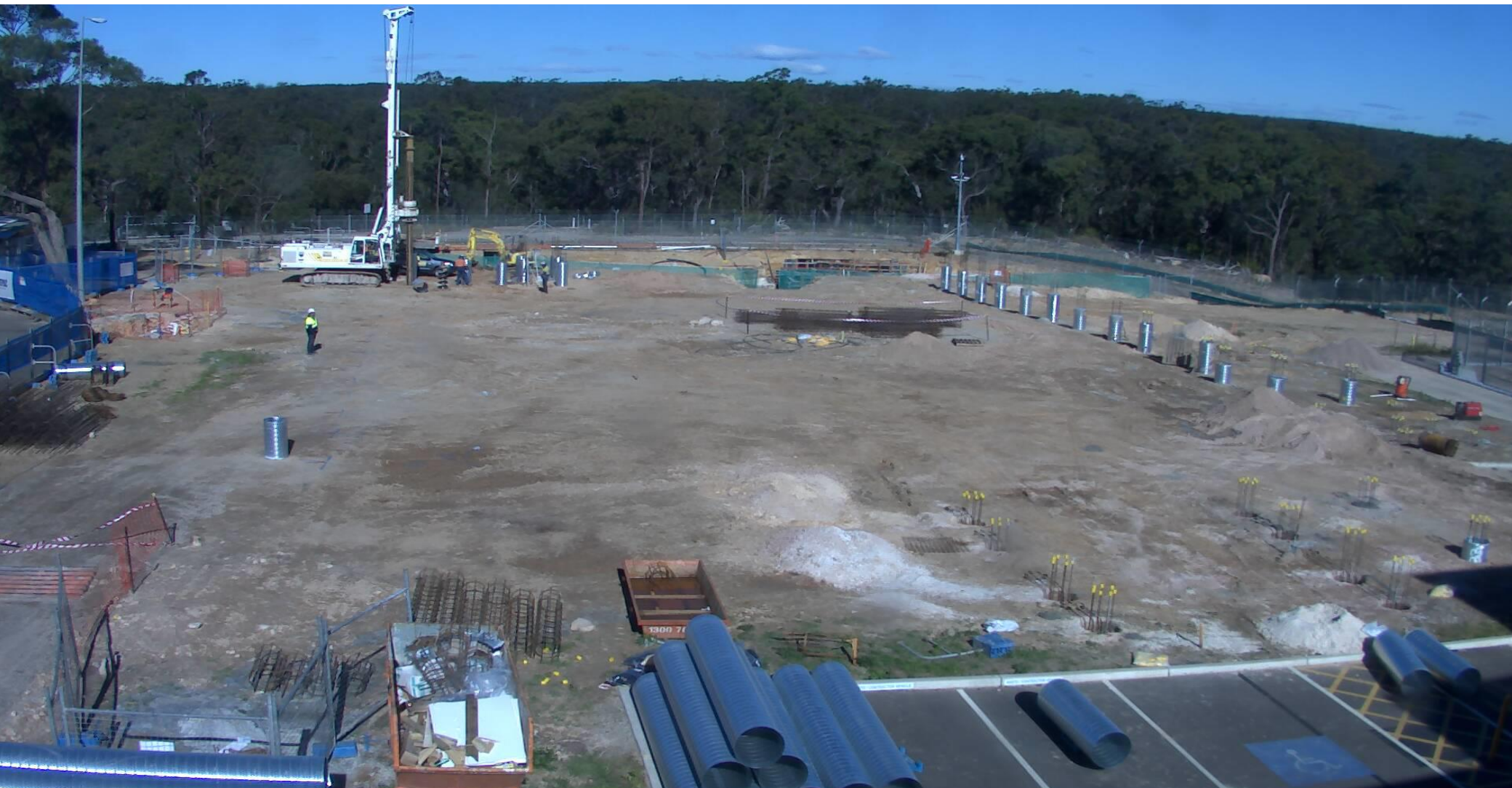


# Construction Site





# Construction Site





# Construction Site





# Current Status ANM

## Mo-99

### Preliminary Design

Complete

### Regulatory

Siting licence  
approved

### Contracts

Detailed  
Design & Construct  
contract signed

### Construction

Site preparation  
work undertaken

**Construction  
commenced  
June 2014**

# Mo-99 Plant Architectural Perspective





# Mo-99 Plant Architectural Perspectives



# Mo-99 Plant Schedule

[illegible]



# Current Status ANM

Synroc Waste Plant		
Preliminary Design	Regulatory	Construction
Complete	Siting licence approved (Facility will be a prescribed radiation facility)  Construction licence approved	Project due for completion approx. 12 months after Mo-99 facility

# Synroc Waste Plant Architectural Perspectives

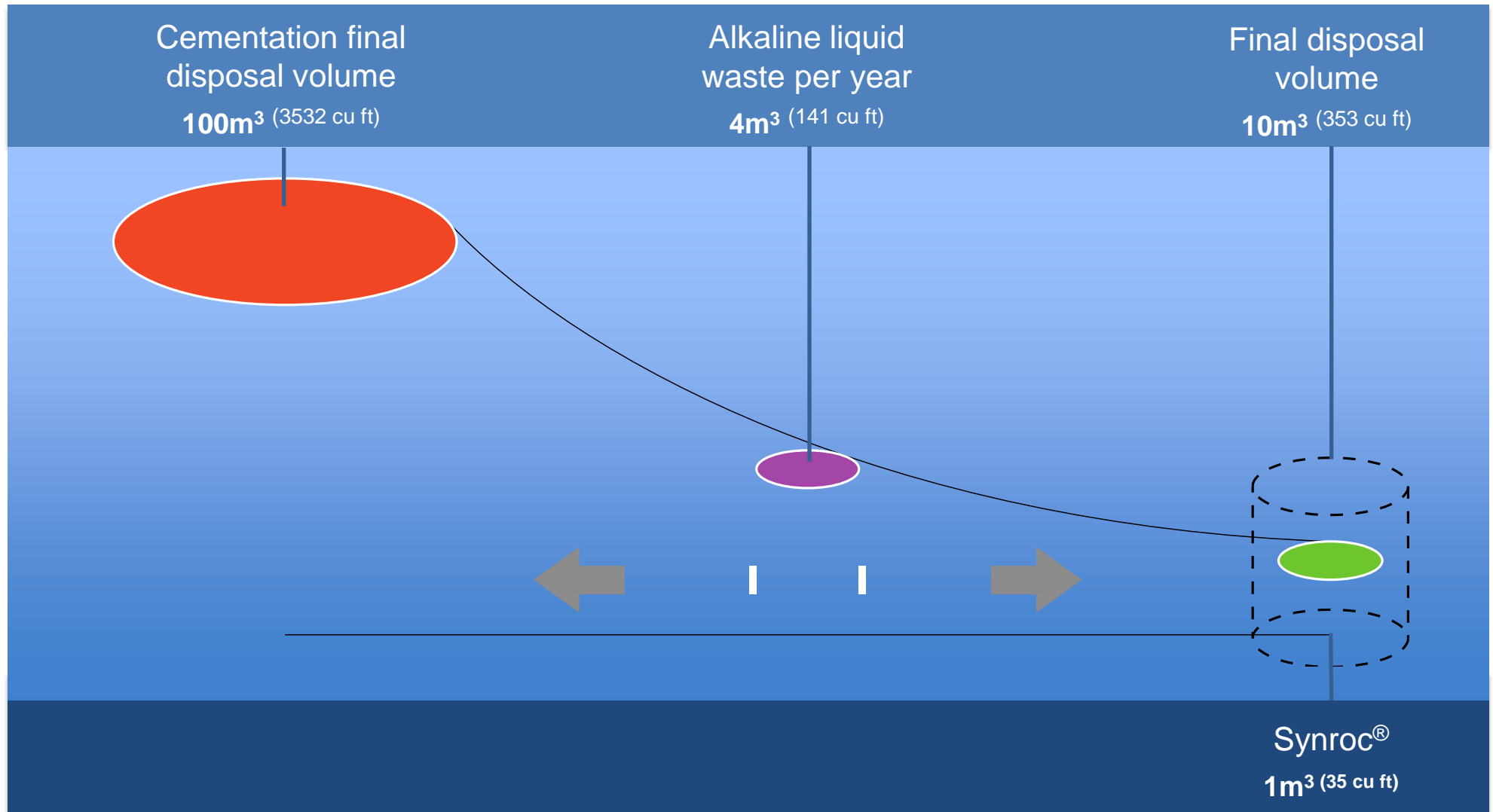




# Why Synroc?

- Synroc is the safest and most economic method for dealing with waste on an international scale
- Solution to legacy waste challenge and on-going waste
- Synroc is ANSTO developed technology
- Plant will be used to demonstrate technology which is transferable to other applications

# Volume of Waste at Disposal





# Industry Status

- In recent years there have been many proposals for new Mo-99 plants using new and existing technology.
  - If they all manufacture to their claimed capacity there will be an oversupply of Mo-99 which could affect long term viability of producers.
- For the benefit of the entire Nuclear Medicine industry it is time to accurately assess future manufacturing potential.

# Project Validity

Has funding been secured?

YES

Is technology proven?

YES

Have you produced at commercial scale?

YES

Is the project commercially viable?

YES

Do you have experience as a GMP manufacturer?

YES

Do you have back-up supply?

YES



# The BIG Question

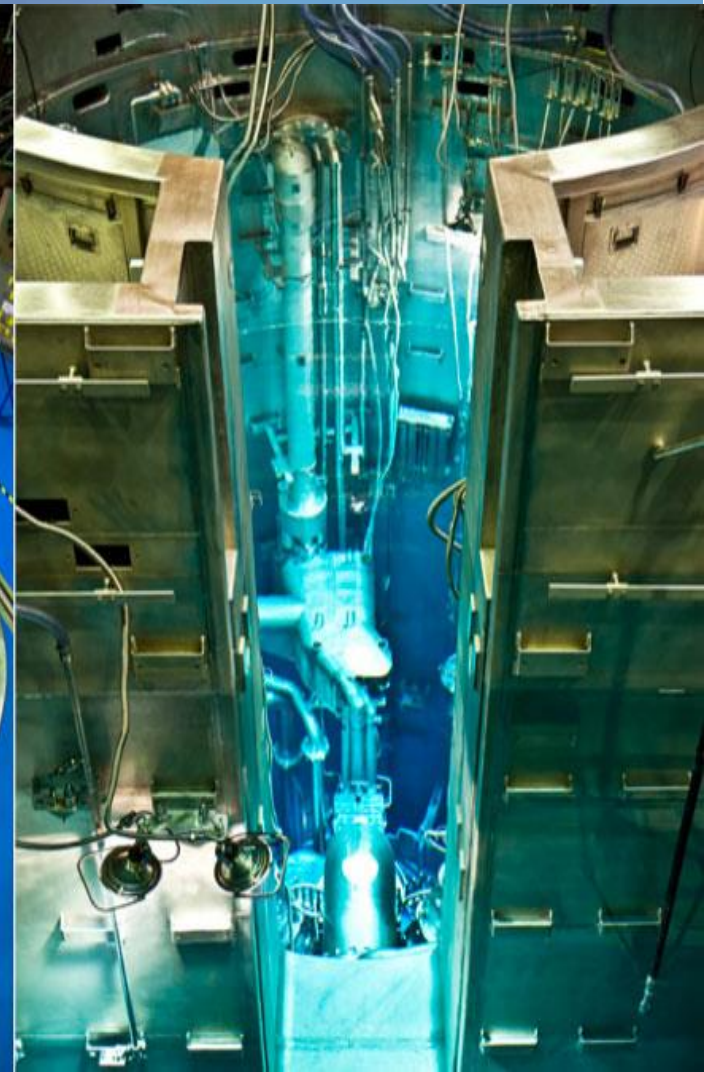
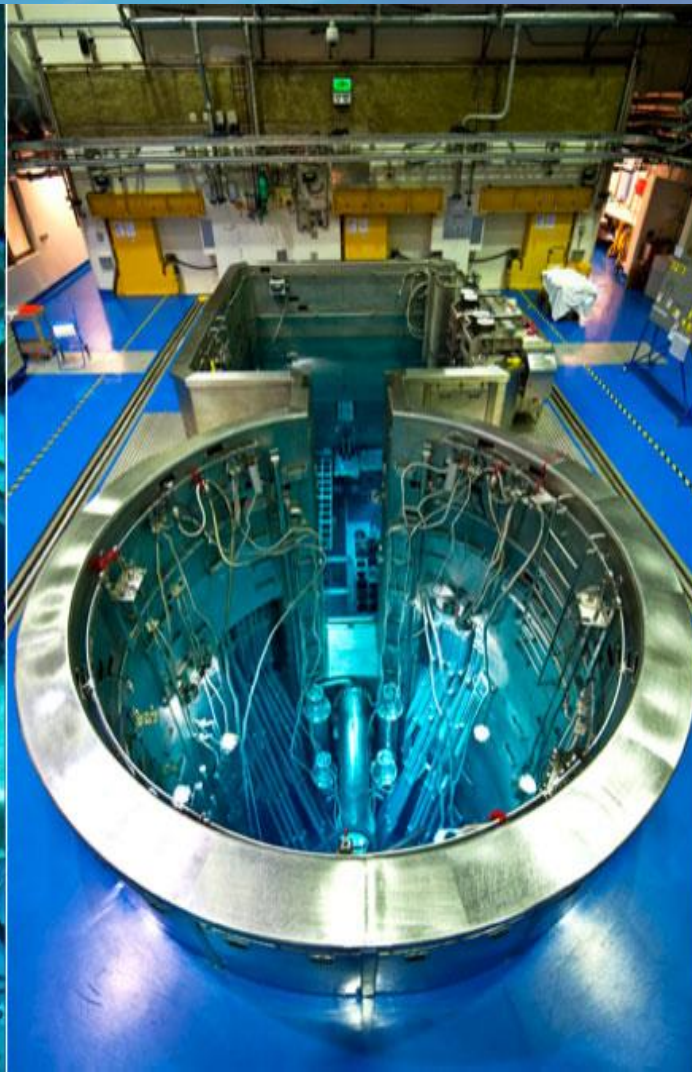
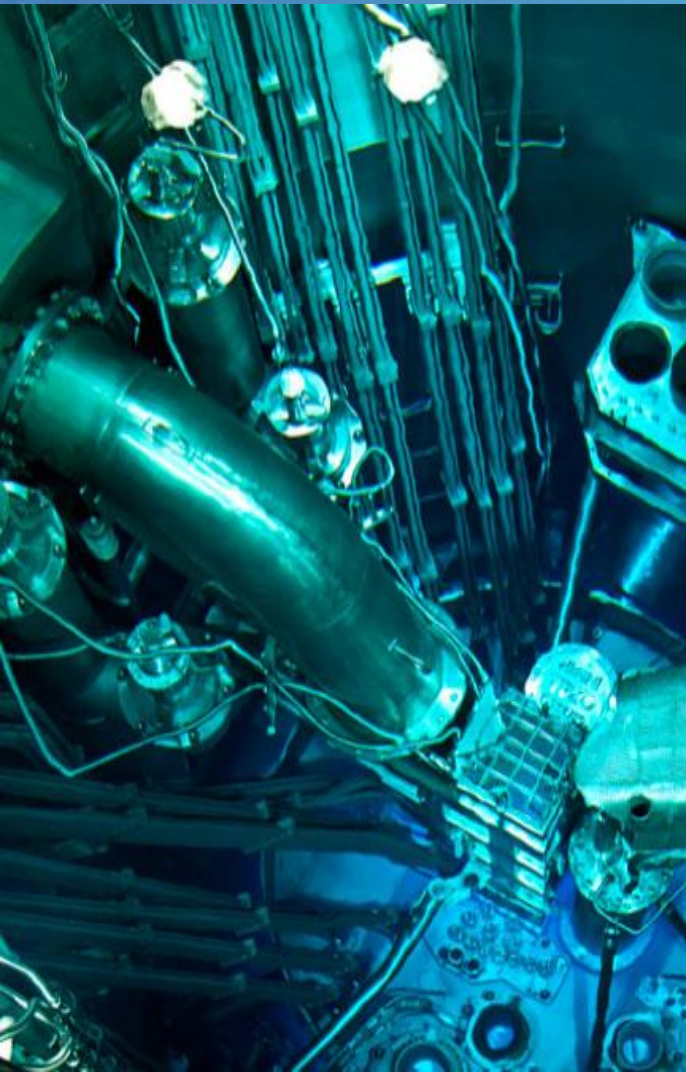
Will ANM Mo-99 be ready when NRU ceases operations?

YES





# Leading the world in LEU medicine







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**Thank you**

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