



Studsvik

Berkeley Boilers Removal and Treatment Project
17th September 2013
Simon Bedford
Project Manager – Magnox Ltd.

Background

- Each reactor had 8 boilers (heat exchangers) housed externally to the reactor buildings
- Boilers de-lagged and disconnected during decommissioning preps
- Stored horizontally around each reactor (15 in total)
- One boiler sized reduced on site in the 1990's



Background

- Each boiler is 21 meters long and 5 meters in diameter
- Each weighs approx. 310 tonnes
- 15 boilers originally planned to be left in situ until final site clearance 2074
- Very low levels of internal contamination present



3

Why now?

- Business case aligns with overall national Low Level Waste (LLW) strategy (published Summer 2010)
- For LLW metals – BPEO / BAT is to treat/recycle
- Early solutions found now, rather than at final site clearance
- Provides base load for supply chain
- Noticeable change to the site skyline
- Remains LLW if stored to final site clearance on site, so why not do it now!



4

Project initiation and definition

- Graduate Project – background work
- Early collaboration with Low Level Waste Repository (LLWR)
- Optioneering undertaken to determine Best Available Technique (BAT)
- LLWR framework used to engage supply chain
- Transportation feasibility studies completed (Studsvik & Energy Solutions)



5

Programme

- | | |
|---|--|
| • Project initiation (graduate project) | April 2010 |
| • Feasibility study: | Feb/March 2011 |
| • Ph 1 Contract award: | 4 th November 2011 |
| • Transport 5 boilers: | 16 th – 22 nd March 2012 |
| • Arrival in Sweden: | 6 th April 2012 |
| • Ph 2 Contract award: | 5 th November 2012 |
| • Transport 10 boilers: | 22 nd Feb – 15 th Mar 2013 |
| • Arrival in Sweden: | 31 st March 2013 |



6

Stakeholder Identification



7

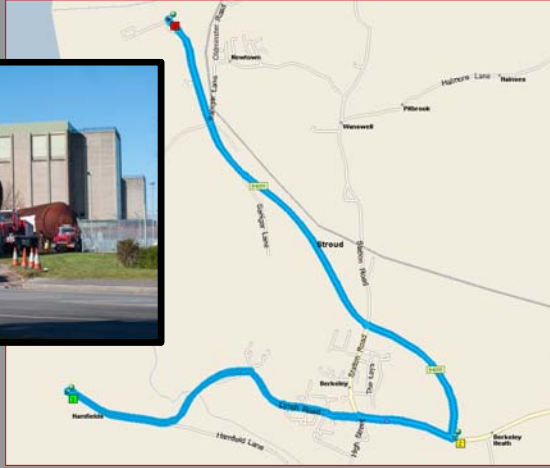
Berkeley Site



8

Transport to Sharpness Docks

Approved Route

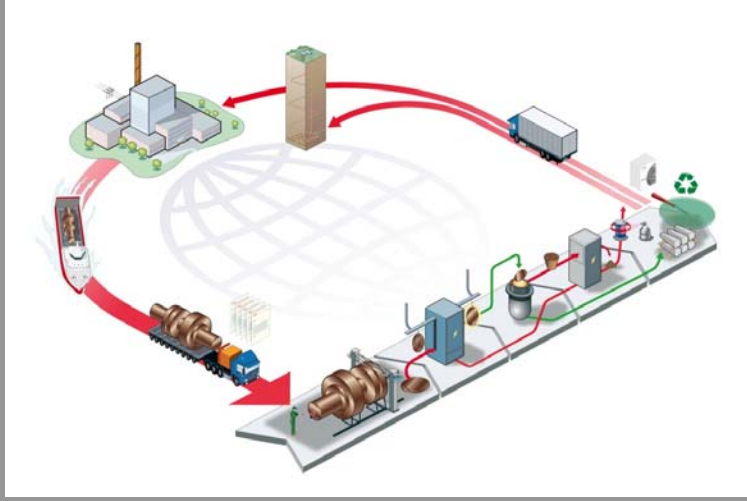


Shipping operations



10

Treatment



11

Secondary Waste



Stakeholder Engagement Plan

ID	Stakeholder	Their Objectives	Stakeholder Analysis						Our Strategy	Owner
			Impact	Influence	Attitude	Knowledge	Commitment Level			
							Now	Target		
Low; Medium; High	Low; Medium; High	Negative; Neutral; Positive	Aware; Ignorant	Ignorance; Awareness; Understanding; Support; Involvement	Ignorance; Awareness; Understanding; Support; Involvement					
1	NDA	Delivery of project	High	High	Positive	Aware	Support	Support	Manage inline with contract	Site Director
2	Local Member of Parliament	Support to local constituents	High	High	Neutral	Ignorant	Ignorance	Understanding/Support	Letters/Telephone/Email/SSG's	Site Director/Comms
3	T&PC	Support to local community	High	High	Neutral	Ignorant	Ignorance	Understanding/Support	Letters/Telephone/Email/SSG's	Comms
4	Local Businesses	Protect trade/customer base	Med	Med	Mixed	Ignorant	Ignorance	Awareness/Support	Telephone/face to face	Comms
5	Local farmers	Min disruption to operations	Low	Low	Mixed	Ignorant	Ignorance	Understanding	Face to face/letter	Comms
6	National Waterways / Harbour Authorities	To understand how movements will effect estuary/docks To ensure access to local medical facilities	High	High	Neutral	Ignorant	Ignorance	Involvement	Face to face/telephone/email	Project Managers
7	NHS / Ambulance Services	To ensure fit for purpose transport routes/Transfer Shipment Order requirements	Med	Med	Neutral	Ignorant	Ignorance	Awareness	Letter	Comms
8	ONR (RMT)	To ensure fit for purpose transport routes/Transfer Shipment Order requirements	High	High	Neutral	Aware	Awareness	Understanding/Involvement	Full engagement	Project Managers/Comms
9	ONR (Site Inspector)	To maintain nuclear safety	High	High	Neutral	Aware	Aware	Understanding/Support	Face to face/Letters	Site Director
10	EA	To ensure compliance with authorisations	High	High	Neutral	Aware	Aware	Involvement	Face to face/Letters	Site Director/Project Managers/Waste
11	National Grid	To ensure over head cables are managed appropriately	Low	Low	Neutral	Ignorant	Aware	Involvement	Face to face/letters	Project Managers



13

Stakeholder Engagement

- Introduction to Site Stakeholder Group (SSG) and regular updates
- Early liaison with E.A. Site Inspector and ONR Site Inspector.
- Attendance at various public events in and around Berkeley (Berkeley Christmas Fair, Business Forum breakfast)
- Holding Stakeholder visits to site
- Regular presentations giving updates for Site personnel
- Project updates to key stakeholders: Magnox exec, LLWR and NDA
- Production and distribution of promotional material
- Proactive use of local and national media



14

Lessons Learned - Do

- Identify and work closely with key stakeholders
- Engage early, regularly and imaginatively
- Listen to concerns and be prepared to make changes
- Manage expectations on what can be influenced and why
- Use concise, consistent messages



15

Lessons Learned – Don't

- Underestimate the task
- Be afraid of opposition
- Assume it's impossible



16

Questions



Magnox



LLW Repository Ltd



17