

NOTE FOR THE RECORD

SUMMARY NOTES OF SPECIAL LOW LEVEL WASTE MEETING HELD ON 19TH OCTOBER 2011 AT 1900 HOURS IN THE PARK HOTEL, THURSO.

KEY NOTES OF MEETING

The meeting took the form of a presentation by Dounreay Site Restoration Ltd (DSRL) and was presented in two parts.

The first part concentrated on the history of the project with the second part concentrating on the planning conditions associated with the project.

The presentation is appended to these notes for ease of reference.

The following was discussed in-depth:

- The change of position of the vaults within the development area
- Land ownership
- Access to the shore
- Planning Conditions, status and mitigation measures (including noise and dust monitoring)

ACTIONS ARISING FROM DISCUSSION

- DSG to write to land registry to clarify the ownership of Dounreay land.
- DSRL to provide Buldoo residents with a copy of the report describing the translocation of the Scottish primroses.
- DSG chairman to ask for information on Government policy relating to compensation.
- DSRL to continue to provide vibration monitoring data to Buldoo Residents Group via Liaison meeting.
- DSRL to provide Buldoo with the number of lorries required to deliver 10,000 tonnes of rubble to Landfill 42.
- The subject of access to the shore for residents to be put on agenda of the next Buldoo Residents Group liaison meeting to seek resolution.
- DSRL to provide dust monitoring report to Buldoo residents via liaison meeting.

Bob Earnshaw
DSG Chairman
22nd October 2011

Enc: Presentation on low level waste project

New LLW Facilities Project Update for DSG, October 2011



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NLLWF/3/PRE/DSR/0688/E/01
Date: 04/11/2011

Contents

- Route to Planning
- Planning Conditions in Detail
- Phase 1 Project Programme & Progress



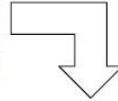
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Why needed?



Current Dounreay site layout.



View of the site in 25 years or so, when most plant and buildings will have been dismantled and demolished.



Timeline review

- Best Practicable Environmental Option Assessment - 2000-2005 (options assessment backed by detailed technical studies and stakeholder consultation)
- Selection of “at Dounreay Disposal” for Dounreay and Vulcan LLW
- Oct 2005 – Project kicked off to implement selected option
- Dec 2005 – consultation on initial proposals



2005 – Initial Proposals



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EIA Scoping Study Layout



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Stakeholder consultation – Dec 2005

3 recurring topics

- **Location** – facility should be on or close to existing site – don't spread the footprint (& not in neighbours' back gardens)
- **Visual impact** – facility should not be visually intrusive
- **Impacts** - More emphasis should be put on **effects of the facility now** rather than on negligible long-term safety impacts (construction/perception)



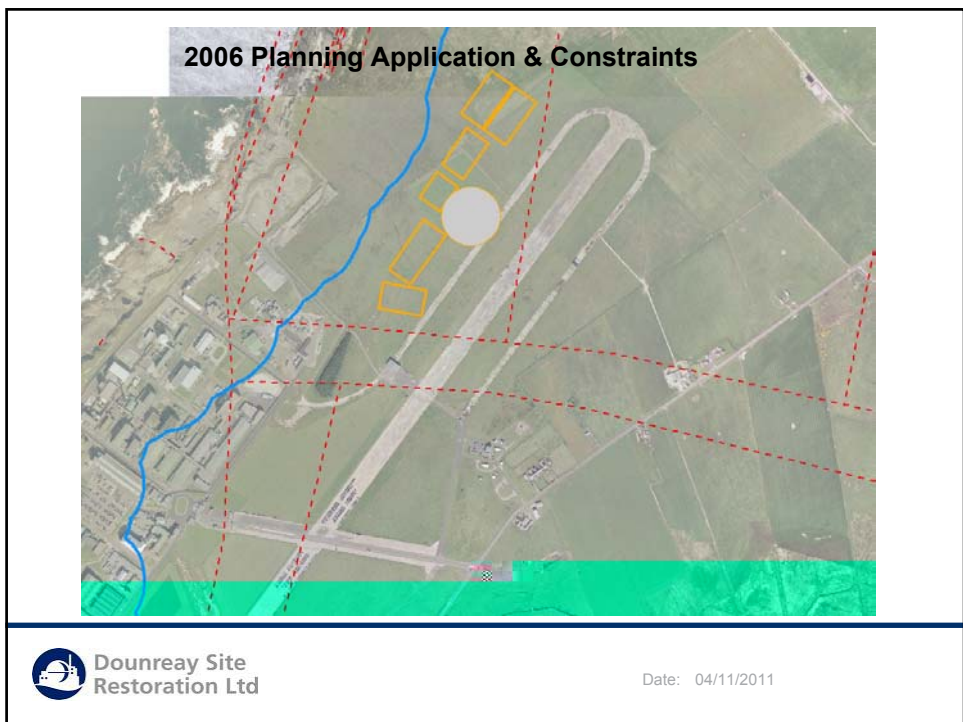
2006 Planning Application Layout



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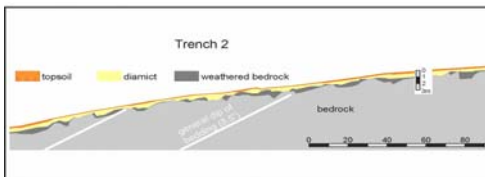
[illegible]

- Submitted Planning Application June 2006
- Progressed Radioactive Substances Act Disposal Authorisation work
 - Site Investigation Activities
 - Hydrogeological Interpretation
 - Performance Assessment Update (long-term radiological risk assessment)
 - Environmental Safety Case Update
 - Best Practical Means studies/Design review
 - Liaising with SEPA on ongoing Radioactive Substances Act Disposal review

2006-07 Develop existing site understanding

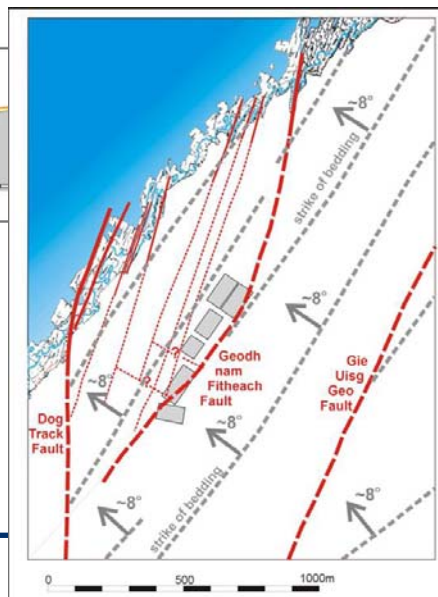


Key Findings – Site Investigations



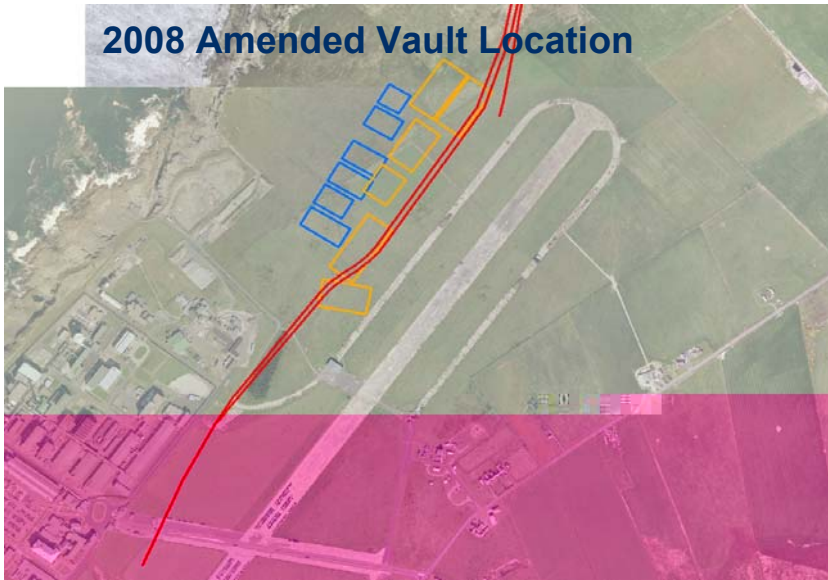
Majority of water flow in near surface, in and above weathered zone in the bedrock

Main Fault in the area not where it was understood to be



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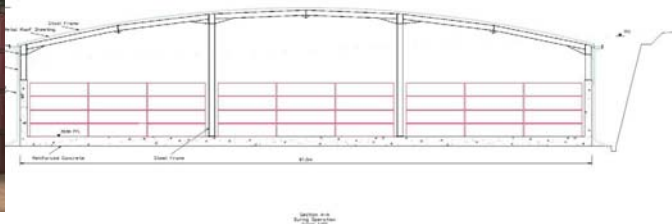
2008 Amended Vault Location



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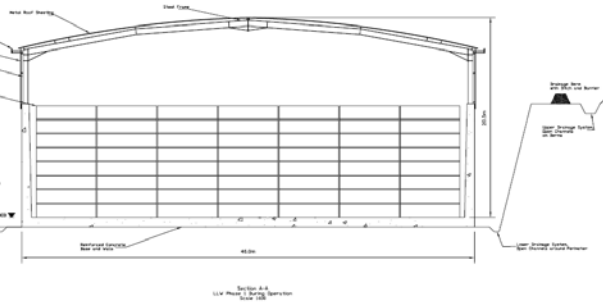
Original Vault Design



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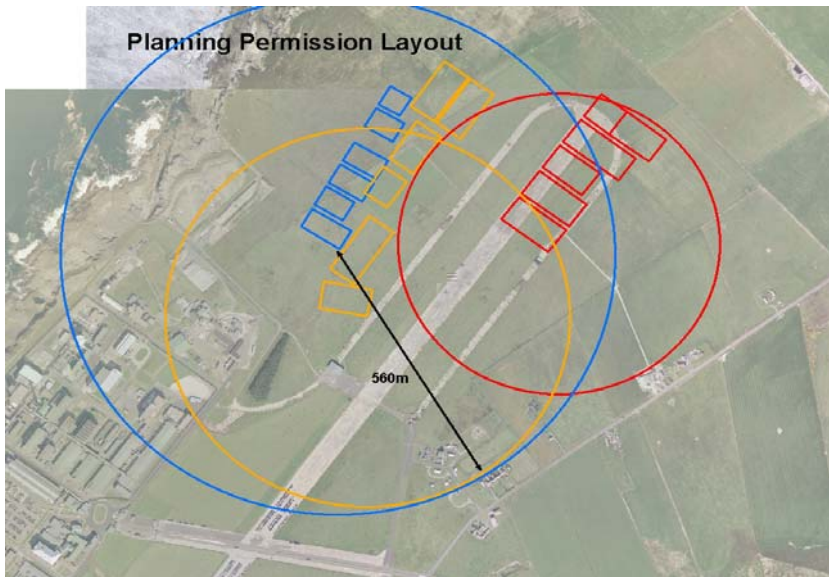
Amended Vault Design



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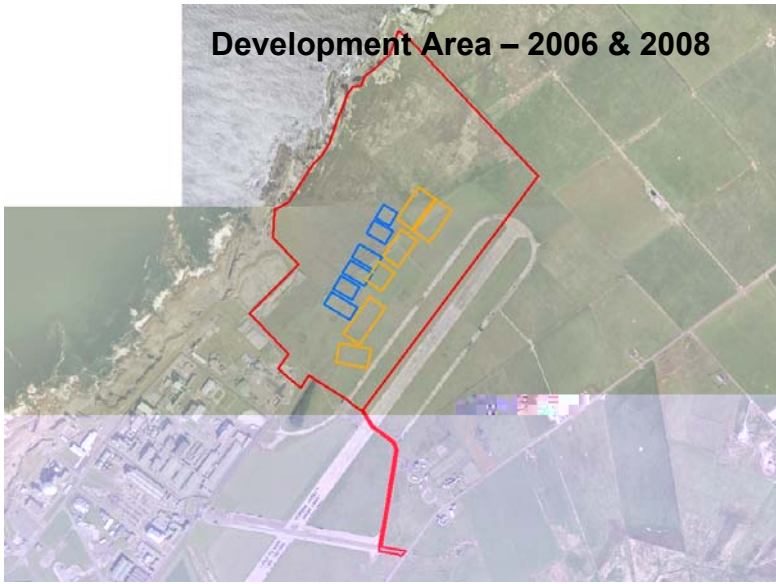
Planning Permission Layout



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Development Area – 2006 & 2008



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Overall Project Timeline

- Planning Application Submitted - **June 2006**
- Radioactive Substances Act Disposal Authorisation
Application Submitted - **April 2008**
- **Planning Permission received - April 2009**



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Planning Permission granted for

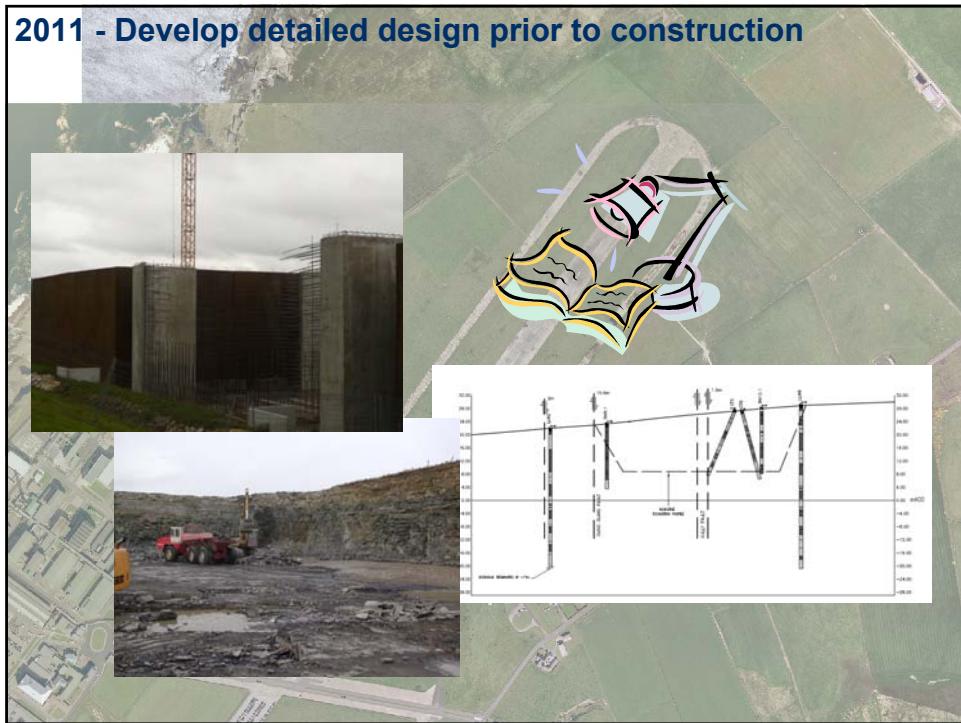
- 6 Vaults
- Below ground
- Concrete boxes
- Barrel roofed
- Grouting Plant
- Defined development area
- LLW from Dounreay and Vulcan sites only



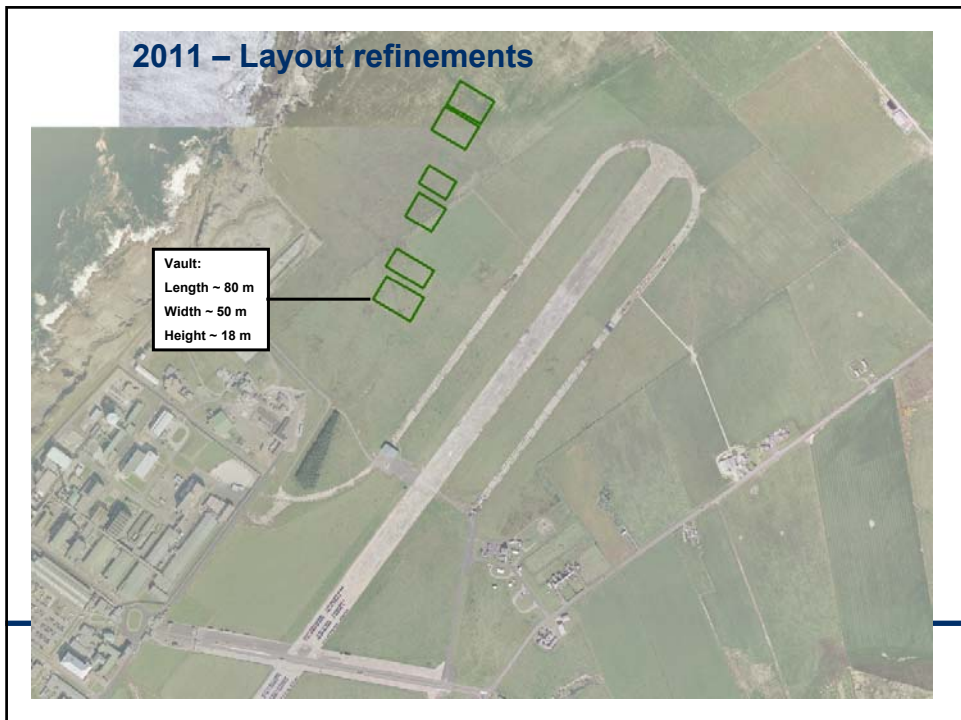
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2011 - Develop detailed design prior to construction



2011 – Layout refinements



2011 vault layout (green) compared to planning application vault layout (blue)

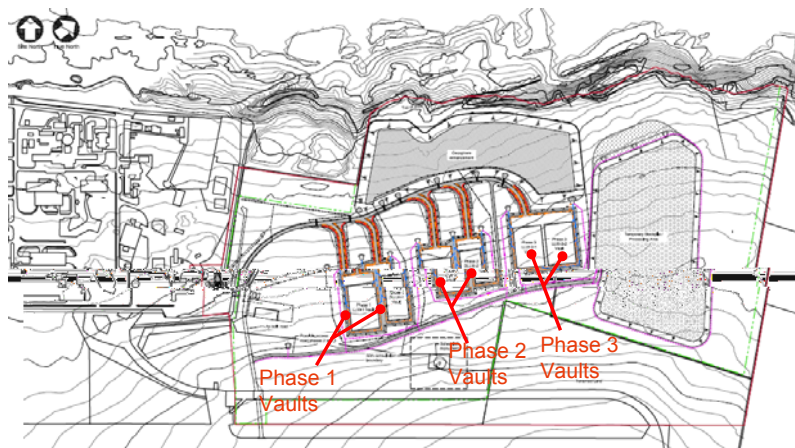


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**2011 Phase 1 vault layout (green) compared to
planning application Phase 1 vault layout (blue)**





Refined layout plan for the New LLW Facilities currently being considered for the scheme design. Red line shows site development boundary. Note that the drawing is orientated to Dounreay site grid north.



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Date: 04/11/2011

Update on Planning Conditions

- Planning permission granted in April 2009.
- 26 separate planning conditions.
- Many of these require to be completed and agreed with Highland Council (discharged) prior to construction of the facilities commencing.
- During this presentation reference should be made to the handout for fuller details of the conditions.



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Date: 04/11/2011

Planning Condition 1 – Construct and operate in accordance with approved plans and Environmental Statement

- Amended Plans
 - Are within the current planning permission
 - Highland Council have written to DSRL agreeing that the proposed refinements are a non-material variation to the planning permission.
- Environmental Statement requirements are contained within the Graham Construction contract.
- Environmental Management Plan (EMP) will flow from these commitments as per Planning Condition 3.



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Date: 04/11/2011

Planning Condition 2 – Disposed waste will come from Dounreay and Vulcan only. On completion vaults to be closed to the satisfaction of the Council.

- This is consistent with the lifetime plan for the decommissioning of the Dounreay site.



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Planning Condition 3 – Environmental Management Plan to be agreed with Highland Council prior to commencement of work.

- The first draft of the EMP has been produced.
- This document will remain 'live', with Position Statements being produced for key activities.
- Document will be agreed with Highland Council.
- Initial activities such translocation of Scottish primroses have been completed.
- Formal discharge of condition being sought.



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Date: 04/11/2011

Planning Condition 4 – Waste Management Plan to be agreed with Highland Council prior to commencement of work.

- The first draft of the Waste Management Plan has been produced.
- This document will remain 'live' and will develop with the design.
- Document will be agreed with Highland Council.
- Formal discharge of condition being sought.



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Planning Condition 5 - Type & colour of walling and roofing material to be agreed with Highland Council prior to commencement of work.

- This detail will be developed during detailed design of the vaults.



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Planning Condition 6 – Arrangements for Community Liaison to be agreed with Highland Council prior to commencement of work.

- The Buldoo Liaison Group has been established, with quarterly meetings held.
- Graham Construction attended the last meeting and will also attend future meetings.
- Meetings are fairly robust
 - Mostly focussed on NLLWF
 - Some frustrations from the past
- Eleanor Scott has been appointed as the independent chairperson for this group.
- Weekly newsletter now issued.
- Formal discharge of condition being sought.



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Planning Condition 7 – Scheme of Assessment of Groundwater & Surface Water to be agreed with Highland Council, prior to commencement of work.

- Site Characterisation and Monitoring Plans have been developed and are being implemented.
- Detailed understanding of the site has been and will continue to be developed during excavation.
- Modelling of ground water flows during operations and post closure undertaken.
- This information is being used to inform the design.
- Formal discharge of condition being sought.



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Planning Condition 8 – Contaminated Land Assessment to be agreed with Highland Council prior to commencement of work.

- A Contaminated Land Assessment has been completed to the satisfaction of SEPA and Highland Council.
- No remedial strategy is required.
- Formal discharge of condition being sought.



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Planning Condition 9 - Community benefit package to be established prior to commencement of work.

- The Caithness & North Sutherland Fund has been established.
- Official launch in October 2011.
- Formal discharge of condition being sought



Caithness & North Sutherland Fund



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Planning Condition 10 – Archaeological mitigation to be undertaken prior to commencement of work.

- Archaeological investigation completed in September/October 2010.
- Exclusion zone around Scheduled Ancient Monument established.
- Report submitted to HC.
- HC curator happy for associated planning condition to be discharged.
- Formal discharge of condition being sought



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Planning Condition 11 – Waste Management Strategy for material to be disposed of within the facilities to be agreed with Highland Council, prior to commencement of Phase 1.

- The DSRL Waste Management Manual details the principles and requirements for the minimisation, characterisation, generation and sentencing of solid radioactive waste, including LLW destined for the facilities.
- Formal discharge of condition being sought.

Manual	MAN 2007
	Issue:9
	Date: October 2010
Dounreay Waste Manual	Owner: Site Decommissioning Waste & Characterisation Unit Manager

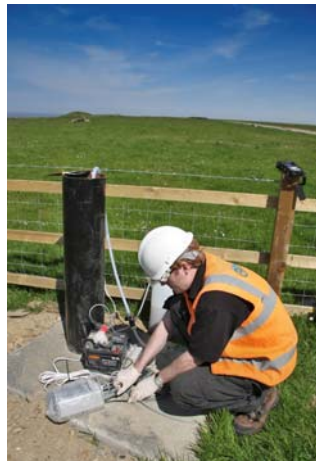


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Planning Condition 12 – Within 6 months of permission a revised groundwater monitoring network to be established.

- Revised monitoring arrangements agreed with SEPA
- New monitoring network installed in 2009
- 11th sampling round under revised arrangements currently being undertaken.
- Formal discharge of condition being sought



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Date: 04/11/2011

Planning Condition 13 – No blasting operations to be undertaken, without prior agreement of Highland Council

- Highland Council have indicated that they will grant permission to undertake blasting during the excavation work.
- Vibration limits at residential properties of 2mm/s have been defined.
- These limits are low and will help minimise nuisance to neighbours.
- Independent vibration monitoring will be undertaken at Buldoo and also within Dounreay.
- Neighbours will be kept fully informed of the blasting programme.



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Benefits of blasting

- Video clip – Rock breaker
- Video clip – Panel blast



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Benefits of blasting

- Reduction in the duration of impacts associated with the excavation, e.g. traffic
- Reduction in the use of rock-breaking equipment and associated noise.
- Reduction in the costs associated with excavation
- Reduction in the likelihood of unforeseen ground conditions impacting on the project; further increasing excavation timescales and costs



Blasting & Livestock

- DSRL recognise that there are concerns relating to the impact of blasting on livestock.
- Discussions with the Royal Veterinary College have not identified any relevant studies.
- Discussions with a variety of companies involved in blasting have not identified any relevant studies.
- Industry experience suggests that livestock are more likely to acknowledge the warning klaxon than the blast itself. This is supported by observations during the recent trial blast.



Planning Condition 14 – Changes to construction hours require written approval from Highland Council.

- Working hours restricted to:
 - 0700 to 1700 Monday to Friday, and
 - 0700 to 1200 Saturday.
- Graham Construction have requested extended working hours for 6 months during the excavation phase:
 - 0700 to 1900 Monday to Friday, and
 - 0700 to 1700 Saturday & Sunday (2 out of 3 weekends).
- Highland Council have rejected this request, but have permitted the working hours to be extended to 1800 Monday to Friday during excavation works.



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Planning Condition 15 – During construction hours noise levels at sensitive properties shall not exceed defined limits.

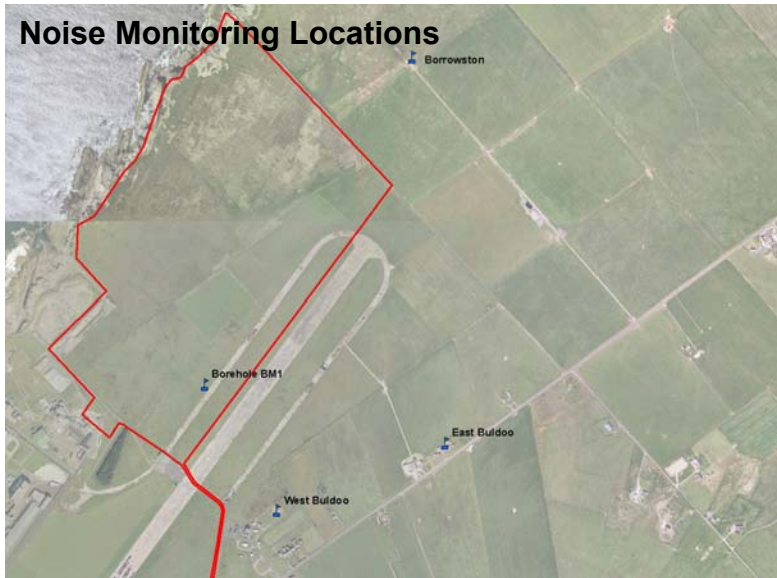
- Baseline noise monitoring has been ongoing since June 2010 at three locations:
 - West Buldoo
 - East Buldoo
 - NLLWF site
- Baseline noise levels exceed the defined planning limits.
- Primary source of noise is traffic on A836.
- Further discussion with HC have led to installation of a proxy monitoring location (Borrowston).



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Noise Monitoring Locations



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Planning Condition 16 – All plant and machinery to be appropriately maintained and use effective silencers.

- It is a contract requirement that Graham Construction ensure that all plant and machinery are appropriately maintained and use effective silencers.
- This is highlighted within the Environmental Management Plan.



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Planning Condition 17 – Perimeter of site to be enclosed by a stock proof perimeter fence

- Perimeter fencing has been upgraded.
- Fencing will be maintained for duration of construction and operation of the facilities.



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The Works Area fence will be extended around the stockpile area prior to its construction in early 2012 (orange line). This section of fencing will remain in place until the permit for the stockpile area is surrendered. The timing for this will be confirmed during discussions with SEPA.

A permanent security fence will be installed around the Phase 1 vaults (green line shows indicative fence line).

Stock proof fencing has been installed, or existing fencing upgraded (where necessary) around the wider construction site (blue dashed line). This will be maintained during the operational lifetime of the facilities. Post closure a similar fence will be maintained, although it may enclose a slightly smaller area.

The Works Area is currently being fenced with a temporary 2.4m chain link fence. (red line). This will be removed on completion of the construction work.



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Planning Condition 18 – Management of Excavated Soil

- These conditions are a contract requirement and will be incorporated into Graham Construction's Method Statements.
- All top soils will be stripped from operational areas and stored for re-instatement.



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Planning Condition 19 – Management of soil storage mounds

- This condition is a contract requirement and will be incorporated into the scheme design and Graham Construction's Method Statements.
- It is highlighted that all storage mounds will be less than 5m in height, in order to minimise the visual impact.
- Mounds will be seeded with a low maintenance grass mix as soon as possible; this will help mitigate any dust

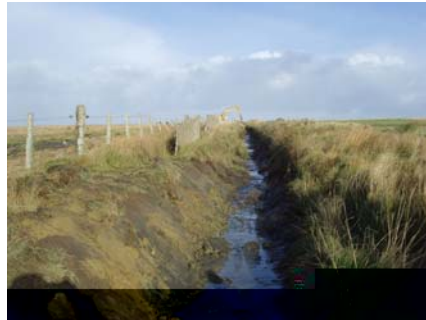


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Planning Condition 20 – Protection and maintenance of water courses and drainage

- Initial cleaning and maintenance of drains has been undertaken by DSRL.
- This condition is a contract requirement and during construction will be implemented by Grahams as part of their management of the site.



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Planning Condition 21 – Use of additional infill material

- No requirement for additional infill material has been identified – the project philosophy is to re-use excavated material as much as possible.
- Additional clay may be required as part of the final capping of the facilities.



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Planning Condition 22- Dust management strategy to be agreed with Highland Council, prior to commencement of the development

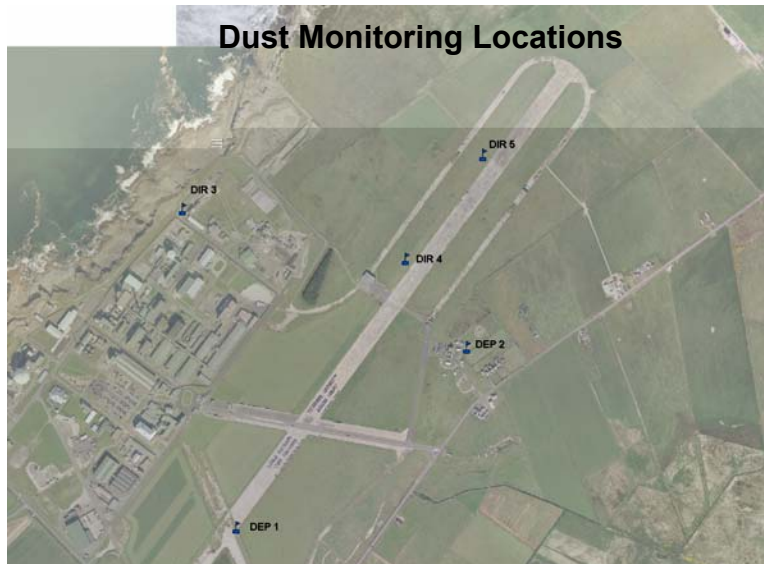
- Graham Construction have developed a first draft of a dust management strategy as an integral component of the Environmental Management Plan.
- DSRL have installed 5 dust monitors around the Dounreay Site.
- Formal discharge of condition being sought.



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Dust Monitoring Locations



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Planning Condition 23 – 12 months prior to closure a habitat restoration plan is to be agreed with Highland Council

- This planning condition will be addressed on closure of the facilities.



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Planning Condition 24 – Following restoration a monitoring and aftercare scheme is to be agreed with HC.

- This planning condition will be addressed on closure of the facilities.
- It is noted that initial consideration of the post closure monitoring requirements for the facilities are detailed in the Monitoring Plan 2010.



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Planning Condition 25 – Excavated material to meet waste licensing requirements

- The temporary excavated material storage areas will be subject to a Pollution Prevention and Control (PPC) permit.
- An application for this permit has been submitted to SEPA.
- SEPA are currently consulting on this application (FSA, NHS, HC and Buldoo Residents Group).



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Planning Condition 26 – All works to be undertaken within the terms of SEPA guidelines for construction

- These guidelines are incorporated into the Environmental Management Plan and will flow down into Construction Method Statements.



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Status of Planning Conditions - Summary

- 26 conditions – DSRL has undertaken considerable effort to satisfy pre-construction conditions.
- 10 pre-construction conditions - discharge currently being sought.
- 14 additional conditions will control activities during construction and operation.
- 2 conditions apply to the closure phase



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Date: 04/11/2011

Phase 1 Project Programme

- Gained Approval in Principle from NDA – March 2010
- Submitted Environmental Safety Case 2010 – October 2010
- Awarded Design and Build Contract to Graham Construction – March 2011
- Commenced design work – April 2011
- Commenced Site Mobilisation work – May 2011
- Commence construction – **November 2011**
- Commence blasting - **January 2011**
- Operation of LLW Vault 1 – **April 2014**



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