

Lillyhall Very Low Level Waste Project

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Waste Recycling Group



Overview



Development of the Lillyhall Landfill Site to accept High Volume Very Low Level Waste (HV-VLLW)

- Introduction
- Background
- The proposal
- Site selection
- Site features
- Planned waste
- Licensing exercise
- Waste acceptance
- Local community engagement
- Local media interest

Introduction



The need for change

- Planned disposal capacity at the Low Level Waste Repository (LLWR) is insufficient
- The move to decommissioning – more high volume, very low activity wastes
- Modern landfill containment provides a high degree of environmental protection for such wastes



Better, more cost effective disposal routes are needed for low activity wastes that pose a very low risk

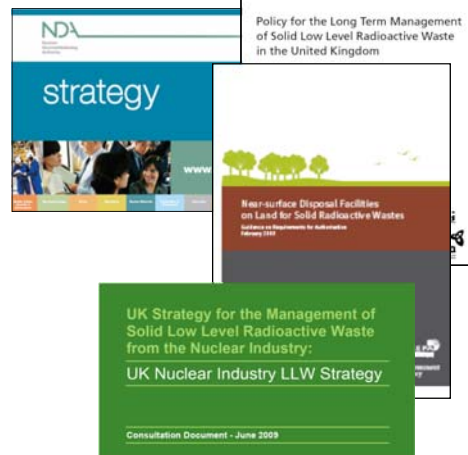
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Background



UK policy, strategy and regulatory framework

- NDA Strategy
- UK Government LLW Policy
- Environment Agency guidance
- UK Nuclear Industry LLW Strategy



UK LLW Strategy encourages the use of conventional landfill capacity for the disposal of lower activity radioactive wastes

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The proposal



Waste Recycling Group and EnergySolutions have formed a unique partnership to develop a disposal route for high volume, very low level radioactive waste to the Lillyhall Landfill Site, located in Workington, West Cumbria.

Waste Recycling Group is a leading UK waste management and energy recovery company, part of Fomento de Construcciones y Contratas, the international construction and services group. It operates waste facilities throughout the UK.

EnergySolutions is an international nuclear services provider, a world leader in the safe recycling, processing and disposal of radioactive waste. It has an established track record of managing similar wastes in the US, having safely consigned large volumes of very low activity wastes to conventional landfill for over a decade. It has a long term commitment to the nuclear sector in the UK.

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Site selection



Why the Lillyhall Landfill Site?

- An operating landfill, 16 miles from Sellafield and 25 miles from LLWR
- Underlain by Quarternary clays
- At elevation - not prone to coastal erosion or sea level rise
- Adequate capacity for significant proportion of Sellafield arisings
- Site experience in disposal of exempt and NORM wastes



We considered the Lillyhall Landfill an *appropriate site* to develop and that the merits of the site and its location would be important considerations for stakeholders

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Site features



- WRG owned
- Operational landfill since 1972
- PPC permit for current operational area since 2004 – GP3037SJ



Remaining permitted void 1.0 million cubic meters, with additional void available in the future

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Site features



- Good road access, close proximity to rail and port terminals for alternative delivery routes
- The only operational and permitted asbestos cell in Cumbria
- Currently accepting industrial, commercial and construction demolition waste from Nuclear Sites



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Site features



- Onsite radiological contamination & dose monitoring equipment
- Safely handled and disposed of exempt radioactive waste since 1995
- Handled one of the UK's largest consignments of NORM waste (3,000 tonnes in 2004)



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Planned waste



Definition of HV VLLW

“Radioactive waste with maximum concentrations of four megabecquerels per tonne (MBq/te) of total activity which can be disposed of to specified landfill sites. For waste containing hydrogen-3 (tritium), the concentration limit for tritium is 40MBq/te. Controls on disposal of this material, after removal from the premises where the wastes arose, will be necessary in a manner specified by the environmental regulators”

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Planned waste



Examples of VLLW from decommissioning

- **Building Rubble**
 - Concrete, including steel;
 - Tiles and ceramics;
 - Glass;
 - Stone;
- **Plant and equipment**
 - Pumps;
 - Pipe work, etc.



which have been drained of all oils, fuel and liquids and stripped of all items that are non-compliant.

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Licensing exercise



Disposal Authorisation

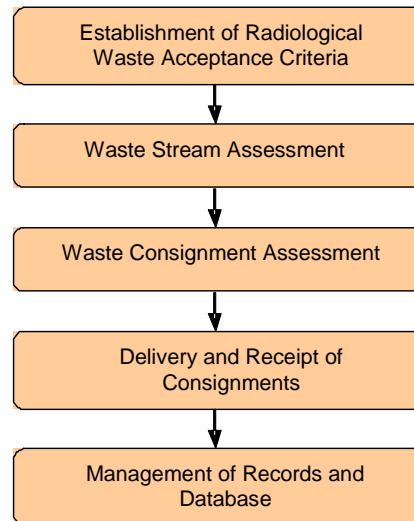
- Preparation of environmental safety case for disposal commenced December 2008
- Demonstrated landfill design protective of the environment and estimated doses less than 20 microsieverts per year
- Application under RSA93 submitted to the Environment Agency May 2009, consultation completed
- Article 37 submitted to EC August 2010
- **Environmental Permit issued 6th April 2011 – Lillyhall gates are open for business**

Planning permission

- The Planning Authority has taken legal advice, indicating a change to the current permission is not required
 - Current permission does not preclude disposal of radioactive waste
 - Disposal of HV-VLLW will not give rise to a material change of use from current landfill operations

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Key Components of Waste Control System



Building trust

- Pro-active approach, led by a spokesperson who is a long term local resident
- Focus on the local community in the immediate vicinity
- One to one briefings; presentations to councils and stakeholder groups; site visits; media briefings; written correspondence and phone calls
- Public exhibition in the local community centre



Lillyhall Landfill Site Exhibition

Friday, 18 September 2009
12 noon - 8pm

Distington Community Centre, Church Road,
Distington, Workington CA14 5TE

We are committed to open and effective stakeholder engagement, promoting understanding and building confidence and trust with the local community

Local media interest



Mainly balanced and accurate reporting



There is a level of support for the proposal within the local community

Summary - contact details and further information



If you would like further information, please contact:

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Waste Recycling Group is a leading UK waste management company, part of Fomento de Construcciones y Contratas, the international construction and services group (see www.wrg.co.uk and www.fcc.es)

EnergySolutions is an international nuclear services provider (see www.energysolutions.com)

Lillyhall stakeholder engagement programme case study

A case study has been prepared at the request of the Executive Director, NuLeAF. This is due to be published in a paper on pointers to good practice in stakeholder engagement on the NDA National LLW Strategy Group homepage (see link on www.llwrsite.com)