Introductory Document

To accompany:

(i) Application for registration of premises for open sources, and

(ii) Application for authorisation to accumulate and dispose of radioactive waste from non-nuclear premises

by Studsvik UK Limited, for premises at Lillyhall Industrial Estate, Workington, Cumbria

Introduction

We have received an application from Studsvik UK Limited for the registration of premises at Workington, Cumbria for the keeping and use of radioactive material under section 7 of the Radioactive Substances Act 1993 (RSA93). The company has also applied for an authorisation to accumulate and dispose of radioactive waste from the same premises under sections 13 & 14 of RSA93. We are obliged to consult relevant local authorities on these applications prior to issuing a registration or authorisation and we also wish to consult other relevant organisations. This document summarises the applications made and accompanies copies of the applications provided to consultees.

Scope of applications

Application for registration under s.7 RSA93

Type and Use of Radioactive Material:	Metallic items with radioactive contamination will be received from nuclear, non-nuclear and Ministry of Defence (MoD) sites for treatment involving size reduction and decontamination.
Radionuclides:	Any associated with waste management and decommissioning activities at those sites.
Max radioactivity to be held on premises at any one time:	1 Terabecquerel (TBq)

Application for authorisation under s.13&14 RSA93

How waste is to be produced:	From application of treatment techniques such as size reduction and decontamination of metallic items/components from nuclear/non-nuclear/MoD sites.
Types of waste for accumulation:	Very low level solid waste (VLLW) Solid low level waste (LLW)
Types of waste for disposal	Gaseous waste Aqueous waste Very low level solid waste (VLLW) Solid low level waste (LLW)

Waste disposal routes:	Gaseous waste via 12m stack Aqueous waste to sewer VLLW with normal refuse LLW to Low Level Waste Repository at Drigg
Limits of authorisation application:	See table 1

Radiological assessment

Studsvik UK Ltd have provided an assessment of the radiological impact on members of the public and sewage treatment workers as a result of the proposed discharges to atmosphere and the proposed discharges to sewer. In all cases the predicted radiation exposure is <1μSv/year. We have confirmed this assessment using our own radiological screening assessment.

Consultees

Allerdale Borough Council and Cumbria County Council are being consulted through this process as the premises are within their areas. Copeland Borough Council is being consulted since the authorisation application includes disposals to the LLW Repository at Drigg.

The Nuclear Safety Directorate of the Health and Safety Executive (HSE), the Food Standards Agency (FSA) and the Office for Civil Nuclear Security (OCNS), are being consulted through this process since materials and waste being handled and disposed of from the premises may have arisen from nuclear licensed sites.

Our plans

We consider the radiological impact of the disposals to atmosphere and to sewer to be very low, in line with the radiological assessment provided with the applications. We consider the volume of disposals of VLLW to be insignificant. We support the intention to reduce the overall volume of wastes to be transferred to the LLWR at Drigg.

Subject to comments from consultees, we will plan for the issue of a registration and an authorisation to Studsvik UK Limited, containing limits as set out in the applications and table 1. The authorisation will also require the use of 'best practicable means' to minimise disposals of radioactive waste.

Summary

Studsvik UK Ltd have applied for the registration of premises at Workington for the keeping and use of open radioactive sources in the form of contaminated metallic items. These items will originate from nuclear, non-nuclear and MoD sites and are to be size reduced and/or decontaminated. The company has also applied for an authorisation to dispose of the resultant wastes that are subject to authorisation under RSA93. We are inviting consultees to comment on the applications. Please provide responses by Friday 14th July 2006.

Please send acknowledgement of receipt of these applications using the reply slip overleaf.

Mike Scott
Nuclear Regulation Group (North)
Environment Agency
14th June 2006

Table 1 – Summary of limits in authorisation application

Type of waste	Gaseous waste to atmosphere	Aqueous waste to sewer	VLLW	LLW
Max volume to be accumulated at any one time	-	-	$0.2m^3$	$2000m^3$
Max radioactivity to be accumulated at any one time	-	-	-	1 TBq
Max time for accumulation	-	-	2 weeks	12 months
Max volume for disposal	-	$5m^3$ per month	$0.4m^3$ per month	$100m^3$ per year
Max radioactivity for disposal	Am241 - 5kBq/year Cs137 - 10kBq/year Our plans are to limit 'total alpha'–5kBq/year and 'total beta'–10kBq/year	Am241 - 25kBq/month Cs137 - 25kBq/month Our plans are to limit 'total alpha'–25kBq/month and 'total beta'–25kBq/month	-	U - 20GBq Ra226/Th232 – 10GBq Other alpha – 20GBq C14 – 1GBq I129 – 1GBq Tritium – 100GBq Co60 – 100GBq Other beta/gamma – 100GBq