

## 100 NUCLEAR INCIDENTS AT ALDERMASTON

Press release from CND, Sunday 24 October

Documents leaked to CND this week reveal a horrific catalogue of disasters at the Atomic Weapons Establishments, Aldermaston and Burghfield which have occurred over the last nine months.

The documents reveal that Britain's nuclear bomb factories have an endemic and serious health and safety problem and that it is only through luck not good practice that there has not yet been a serious nuclear accident at Aldermaston or Burghfield

CND can now reveal that in the last nine months there have been:

Eight serious breaches of criticality safety procedures aimed to prevent a Tokaimura type nuclear accident occurring in Berkshire;

Eight incidents where materials were incorrectly packaged or labelled including high explosives being moved around in a container originally thought to be empty and a recurring problem with incorrect labelling and packaging of plutonium waste;

Nineteen highly serious health and safety incidents including continuous defects being found with essential safety equipment, all fire fighting appliances on-site being declared unfit for service, failure to change filters on chimneys designed to stop radiation escaping from the plant and workers downing tools at Burghfield because the site alarm system collapsed;

Two new cases of off site contamination, one involving highly enriched uranium;

Two unauthorised discharges of nuclear material into the local environment;

Three incidences where power supplies and the site emergency power supply failed;

Eleven other incidences of electrical problems including one loss of essential supplies in A90, the Aldermaston plutonium processing plant;

Seven incidences where ventilation and extraction systems have failed including one where potential nuclear contaminated air started flowing from the radioactive to the clean part of a building;

Six incidences of nuclear contamination of workers;

Nineteen miscellaneous accidents ranging from a live round of ammunition being found on a road on-site to high explosives being found where they should not have been and a worker using unsafe electrical equipment whilst standing in high explosive powder. Dave Knight, Chair of CND said after reading the catalogue of disasters, "This is horrendous. There is clearly a serious health and safety problem at Aldermaston and Burghfield which is continuously threatening the workers, the local populace and the environment."

He went on to say "The Government should now listen to what CND and many others have been saying for years, nuclear warhead production on-site must stop immediately and there must be a full and independent public inquiry into health and safety at these two sites."

**Notes**

The Atomic Weapons Establishments are currently managed by Hunting BRAE on behalf of the Ministry of Defence. This contract is currently up for renewal with the key contender being a consortium of BNFL, Lockheed and SERCO.

CND released a report on the health, safety and environmental record of AWE Aldermaston a few weeks ago. The report "Aldermaston Behind Closed Doors" accused Aldermaston's managers of illegally discharging nuclear waste, poor health and safety management causing contamination of workers and of lying to the local community representatives, Parliament and the media.

The CND Report called for AWE Aldermaston to cease producing nuclear weapons and turn its energies to decommissioning UK nuclear nuclear weapons and to cleaning up the Aldermaston site.

It also called for:

The government, through the Department of Environment, Transport and the Regions to take back control of AWE and have direct responsibility for environment and health and safety matters.

A full and open independent public enquiry.

Genuine openness and accountability by the managers of AWE Aldermaston.

The implementation of recommendations made by previous reports into health and safety and radioactive waste management.

Closure of Pangbourne pipeline.

Produce a five year plan to clean up the radioactive and toxic contamination on site.

Immediate start to construction of a size reduction facility and solid waste treatment facility.

Production of a realistic nuclear waste storage strategy within the next twelve months for public consultation

## **One hundred secret safety-related incidents at Aldermaston and Burghfield between December 1998 and September 1999**

	<b>Environmental contamination</b>
29/09/98	Elevated levels of Polyaromatic hydrocarbons identified off-site.
09/02/99	Elevated levels of plutonium found during analysis of sediments in North Ponds.
22/03/99	Internal water sample result identifies elevated levels of copper. Off-site, Falcon Fields
29/03/99	Abnormal plutonium results obtained from passive airshades after being analysed by contractors
04/05/99	High levels of radioactive contamination found in the compound area outside of A45
09/08/99	Unsentenced water was released off-site during a severe storm (North Ponds area) i.e. an unauthorised

	discharge.
16/08/99	Unauthorised discharge of tritium via a High Pressure Extract (HPE) system.
01/09/99	Non routine groundwater samples indicate HEU contamination on Blacks Land adjacent to A18 manhole.
	<b>Criticality cock-ups</b>
12/02/99	Review of criticality certificates in A37.1 identified that conditions had been breached.
01/03/99	Criticality Clearance Certificate suspended before physical relocation of material had taken place in A45
03/03/99	Criticality rule breach during breakdown of a casting operation in A90
09/03/99	No Criticality Certificate covering payloads from fissile material transport containers in various facilities.
02/06/99	Liquids found in safe in A45.1 that were not covered by criticality certificates.
13/08/99	All operations in A45 using the Fissile Material Movement Control System suspended after errors identified with recently updated criticality rules.
08/09/99	Criticality rules for a number of safes and a work station breached in A90
14/09/99	Building A45, super "A" grade highly enriched uranium being stored breaching criticality certificate
	<b>Incorrect labelling/packaging</b>
30/09/98	Building A5.1 incorrectly packaged plutonium waste found
18/01/99	Chemicals transported on public highways after failing to be identified as hazardous material
26/02/99	In building A90 deficiencies were found with labelling of fissile material tins during a waste segregation operation
03/03/99	At Burghfield "unexpected contents" were found in an explosive container resulting in area being evacuated
08/04/99	Fissile material can lid found to have detached from can body during an inventory operation
16/04/99	At Burghfield high explosives were found in a container which was marked as empty and had been moved on-site.
06/05/99	Uncertainty expressed regarding the radioactive content of waste drums
03/09/99	In building A90 a can containing plutonium was wrongly identified
	<b>Power supply problems</b>
06/02/99	Electrical fault at telephone exchange resulted in loss of emergency 222 number and other phone extensions
19/05/99	Power failure offsite caused widespread disruption to electrical supplies on site

11/08/99	Loss of essential supplies to various facilities whilst gas turbines were in 'Island Mode'.
	<b>Radiation contamination</b>
05/03/99	At AWE Cardiff, undergoing decommissioning, elevated readings from contractors personal air sampler had exceeded the Maximum Exposure Limit for Beryllium
19/04/99	Building 8F8 at Burghfield evacuated due to a potential release of radioactive material after a glovebox became overpressurised
07/06/99	Building A82 evacuated when a flexi-pipe was noticed to have fallen away from a glove port, breaking containment
09/08/99	Unusually high radiation reading found on a contractors film badge
22/09/99	Low levels of radioactive contamination found on a box worker's hand in A90 after glove became torn
28/09/99	Criticality system alarmed, facility staff evacuated to the local evacuation centre, site placed under cover
	<b>Oh my god</b>
24/12/98	Nine facilities over Christmas period allowed regulatory stack filters to exceed deployment times
03/02/99	Radioactive material has not been inspected as defined within Company Safety Procedures
04/02/99	Inadequate response to glove failure by staff and contractor
08/02/99	At Burghfield a fault with the site alarm system resulted in high hazard work being embargoed
11/02/99	Technical problems in the main Boilerhouse were exacerbated by poor housekeeping and lack of technical support
03/03/99	Defects were continually found with pressurised air suits after operations in radioactive areas
22/03/99	All fire fighting pumping appliances at Aldermaston unfit for service
09/04/99	The A91 Control Centre lost communications with an extensive amount of process plant during a maintenance operation
22/04/99	In building A90 a Personal fissile material data key was found to have been used without authorisation
27/04/99	In building A1.1 a glove box was noted to be full of smoke during an oxidisation operation
27/04/99	Communication failure during an Ministry of defence police armed response to a potential security breach
27/04/99	Not all affected facilities informed of non-operational fire hydrants
29/04/99	Automatic valves failed to shut after product hold tank was discharged into Pangbourne pipeline
06/05/99	Communication breakdown led to shift engineer cover not being provided
19/05/99	At Burghfield an explosive component was damaged during a machining operation

03/06/99	At Aldermaston an explosive component was damaged during a machining operation
06/07/99	Inspection of multi flue stack attached to A45 has revealed evidence of corrosion, stack integrity is now suspect
06/08/99	Safety critical engineering, maintenance and inspection task for fissile desludge of sump tanks not achieved as tanker is waiting for RAMTAP (Radioactive Material Transport Package) approval.
27/08/99	At Burghfield a statutory fume cupboard check identified that only limited protection would have been provided to users of isocyanates
	<b>Other electrical problems</b>
13/01/99	Electrical isolation not carried out as specified in the Safe System of Work
19/01/99	Buildings 8F4, 8F5 and 8F6 embargoed after an electrical inspection identified a possible risk of fire/electrocution
06/02/99	Loss of electrical circuits in A90 during functional testing of uninterruptible power supply distribution system
16/02/99	Electrical work was being undertaken without written authorisation
25/02/99	Inadequate temporary electrical installation carried out without authorisation in building A50
08/03/99	Contractors conducted electrical live working without authorisation
27/04/99	Surge protectors (part of lightning protection system) found to have been locked off and the fuses removed at Building 8F14, Burghfield
14/05/99	Electrical power failure resulted in loss of emergency phone extensions
08/09/99	Authorisation given for maintenance to start on a work station in A90.1 that had not been electrically isolated
09/09/99	Electrical fault discovered on chlorine gas alarm system, EMIT (Engineering, Maintenance and Inspection Task) item, when alarm light was activated
15/09/99	Electrical maintenance task started in A90.2 without full earthing procedures being implemented
	<b>Inadequate 'Safe Systems of Work' ~(SSOW)</b>
27/01/99	Unauthorised service of compressor after facility B12 had rejected SSOW
07/05/99	No SSOW prepared for a mobile crane operation
17/05/99	SSOW not being followed by contract staff in C5.3 working in sump area
09/06/99	At Burghfield discrepancies found with SSOW packages, including incomplete records and missing files
15/09/99	Task carried out by contractor in Waste Management Area of site without SSOW or authorisation being granted
20/09/99	Roof work suspended in D29.1 after Internal Regulator raised concern over robustness of SSOW package

21/09/99	In building A1.1 roof work suspended after Internal Regulator raised concern over working practices
	<b>Ventilation problems</b>
28/09/98	In building A90.1 the purge fan system was lost initiating an emergency ventilation shutdown
21/01/99	In building B7C2.1 the extract system shut down after it failed to react to a fault, preventing emergency exit doors from opening
27/01/99	In A19.1 the ventilation system shutdown after room pressures went out of balance trapping staff in the laboratory
28/02/99	Ventilation was shutdown in several areas of A45 without prior notification during routine maintenance
24/03/99	Building A5.1 over pressurised resulting in potentially contaminated air flowing from red to white area
24/03/99	In the plutonium area of A45 fan belts failed on the duty fan resulting in glove boxes switching to high pressure extract. The standby fan had not been fitted with belts.
07/05/99	At Burghfield a potential design fault was identified with extract fan during re-commissioning
	<b>Keystone Cops cock-ups</b>
15/01/99	Insulating material within the roof found to comprise of compressed straw and brown paper
09/02/99	Employee entered exclusion area in nuclear waste management area of site without appropriate protection
15/04/99	Laser countdown procedure initiated with two staff members locked into an adjacent void
20/04/99	Live round of ammunition discovered in the road in the Central Site
04/05/99	Contractor failed to inform A90 facility staff of work being done within its boundary
17/05/99	Failure of safety interlock system
20/09/99	In building C1.5 an overhead crane was serviced by a contractor without gaining Facility authorisation
23/09/99	Serious back injury sustained after employee slipped over in the plutonium part of A90
23/09/99	Compatibility tested epoxy resin, applied to an explosive specimen, reacted turning the applied area a vibrant red colour
28/09/99	During a workplace safety visit at Burghfield, in the presence of an HSE explosives inspector, an electrician was found to be using equipment that was not intrinsically safe in close proximity to explosive powder. All work in the building was subsequently stopped and Facility Staff informed.
29/09/99	As a result of the above a photographer, taking pictures of the scene, had to be warned about the safety risk of the metal tripod feet in relation to the explosive powder on the floor. This trail of powder led to a hopper containing a large amount of additional explosive which no one present knew about
	<b>Fires</b>

28/01/99	In the A90 complex fire was discovered underneath an occupied portacabin
12/05/99	Floor caught fire during commissioning of a vapour degreaser in C8.1
	<b>Miscellaneous</b>
05/02/99	Employee received nitric acid burns during a decanting operation in N60
23/02/99	Contractors competency could not be verified and defects found with zip-up scaffolding
25/02/99	In building C8.1 an unguarded fan motor was found which had not been electrically isolated
22/03/99	Liquid nitrogen spill after plastic adaptor shattered during dewar filling operation
24/03/99	Scaffolding material being lowered unsafely by contractors from the roof of F6.2
22/04/99	In A70.1 safety blocks failed to drop after safety lines did not de-energise as expected during a functional test
05/05/99	Annual safety tests had expired on earth wands used in power conditioning room
11/08/99	Contractor lost control of tractor on South Road mounting the kerb and sheared both front wheels from the axle
	<b>Inexplicable</b>
09/03/99	In building A70.1 High impedance connector resulted in 'setting up' operations being attempted at incorrect power setting. Subsequent investigation has led to this incidents severity level to be Level 1 not Level 2
18/04/99	In A90.2 deficiency identified during a Ramscap surveillance activity