



Environment, Safety & Health Quarterly Performance Report



Reporting period: 1 October to 30 December 2015

Welcome to AWE's fourth quarterly performance report for 2015. This document is designed to inform you – the local and wider public – of our management of the environment, safety and health at our sites in Aldermaston and Burghfield. The safety of our employees, our community and the protection of our environment is and will always be our highest priority.

News this quarter

AWE's demolition activities continue as part of our ongoing decommissioning work at both Aldermaston and Burghfield from 2014 to 2025. To support this programme and as part of the site modernisation plans, work to demolish the Burghfield boilerhouse started in June 2015.

The boilerhouse presented a number of challenges involving legacy contamination. Nearly 4,000 tonnes of waste was removed during the demolition, with over 97% of the waste diverted from landfill (82% recycled and 15% reused on site). This included 166 tonnes of heavy fuel oil which was all sent for recycling. Non-hazardous concrete from the demolition was crushed and reused on site for ground reinstatement.

AWE Head of Environment, Peter Caddock, said:
"I am very pleased to see how well this project was managed from an environmental point of view. This demonstrates how, by competent AWE staff working closely with our contractors, we can not only manage our environmental risks responsibly but also deliver a positive outcome with mutual cost and environmental benefits."

Demolition of the building was successfully completed on schedule with no environmental impact, and the site returned to a brownfield site.



Public dose data

AWE monitors discharges of radioactive material from its sites and assesses the impact these could have on the local environment and the public.

The table below shows the rolling annual dose to members of the public from Aldermaston and Burghfield discharges. The calculated doses represent minute fractions of the dose constraint set by the Environment Agency of 500 µSv per year for a nuclear site. The assessment concludes that there is no hazard to the public.

Public Dose Assessment					
Discharge	Aldermaston		Burghfield		Guidance Levels
	Q4 2015	Jan 2015 to Dec 2015	Q4 2015	Jan 2015 to Dec 2015	
Atmosphere	0.04 µSv	0.12 µSv	Less than 0.0001 µSv	Less than 0.0001 µSv	500 µSv
Trade Effluent	0.003 µSv	0.011 µSv	N/A	N/A	500 µSv
Aldermaston Stream	0.0001 µSv	0.0004 µSv	N/A	N/A	500 µSv

Refer to list of definitions of units of measurement at the end of this report.

Putting doses into context	Dose in microsieverts
135g bag of Brazil nuts if eaten	5 µSv
Chest x-ray	20 µSv
Transatlantic flight	70 µSv
CT scan of the head	1400 µSv
UK average annual radiation dose	2700 µSv
AWE Key Performance Indicator for Maximum Individual Dose	4000 µSv
CT scan of the chest	6600 µSv
Average annual radon dose living in Cornwall	7800 µSv
AWE Company Annual Dose Limit	10000 µSv
Whole body CT scan	10000 µSv
UK Annual Dose Limit for Nuclear Workers	20000 µSv

How we report incidents on our sites

It is important that we know when things do not go to plan so that we can investigate and put things right. Anyone working on AWE sites or carrying out company business off site are required to capture incidents on a dedicated reporting system. These incidents are referred to as 'Abnormal Events.'

We believe that lessons can be learnt from even the most minor incidents and those lessons can help prevent more occurrences from happening in the future. With this in mind, we also have a system called Assurance Observation Reports which allow people to engage and capture conversations around safety on a daily basis.

How we report on our industrial safety performance

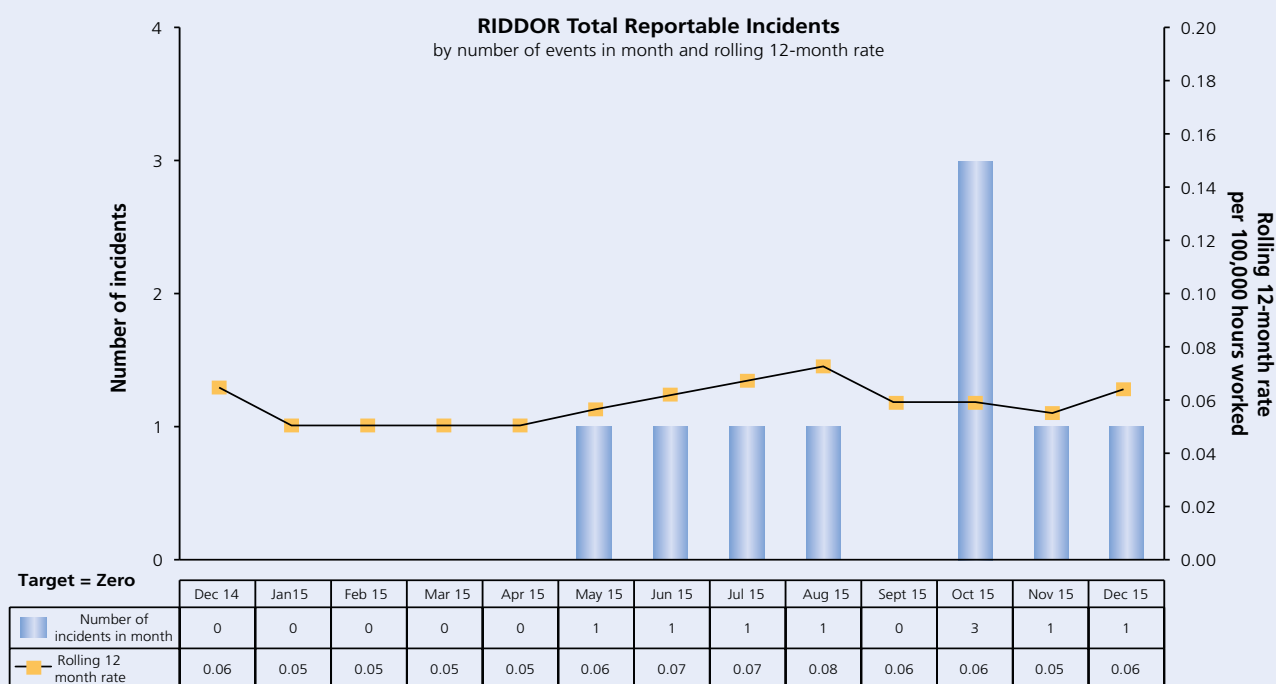
Certain Abnormal Events are automatically reported to the Health and Safety Executive (HSE) under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

RIDDOR is the statutory legislation that requires employers, and other people who are in control of work premises, to keep records of certain Abnormal Events.

The table under shows the breakdown of RIDDOR reportable events that have occurred on AWE sites during this quarter. The number of RIDDOR events reported during the preceding 12-month period appears in the chart below.

October 2015
A colleague slipped on a manhole cover sustaining a fractured ankle. Reportable as an absence greater than seven days
A contractor sustained a fracture to the ankle exiting a works vehicle. Reportable by their employer as an absence greater than seven days
A colleague suffered an electric shock. Reportable as an absence greater than seven days
November 2015
A colleague moving access steps experienced back pain. Reportable as an absence greater than seven days
December 2015
A security officer tripped and fell sustaining a fractured elbow. Reportable by their employer as a major injury

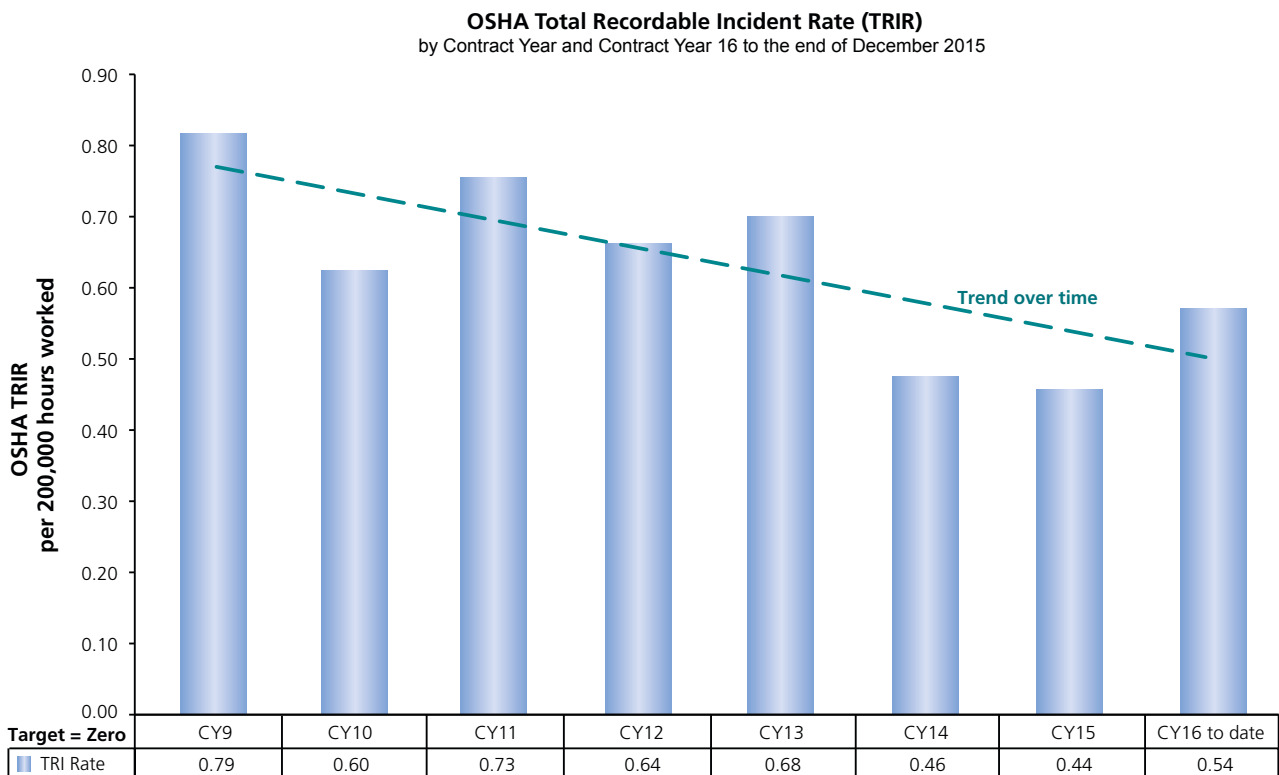
These events have been fully investigated and actions taken to help prevent recurrence.



How we drive improvement in our performance

AWE is committed to a continuous programme of improvement, and as part of further learning we also use the United States Occupational Safety and Health Administration (OSHA) system when applying a classification code to injury and illness related Abnormal Events.

The chart below shows AWE’s performance for all OSHA recordable events by Contract Year.



How we report on our nuclear safety performance

In addition to reporting events to the HSE under the RIDDOR regulations, as a nuclear licensed site, AWE has also set criteria for which incidents must be reported to its nuclear regulator, the Office for Nuclear Regulation (ONR). Events reported to the ONR during the current reporting period are listed in the table on page 5. Where applicable, an indication of the International Nuclear and Radiological Events Scale (INES) rating, given to the event, is also listed.

The INES scale is used by nuclear operators to give a common international standard for comparison of nuclear events; these events are rated on a scale of one to seven. Those coded as ‘zero’ are deemed below the scale and to have had no safety significance. Those coded ‘TBC’ are subject to findings of ongoing investigations.

ABNORMAL EVENT All events occurred at AWE Aldermaston unless specified otherwise	Initial/ Provisional INES Rating	Final INES Rating
October 2015		
Source became separated from its container	0	N/A
December 2015		
Following a review, the configuration of a bank of filters was found to be outside operational requirements	0	TBC

Protecting our environment

In order for AWE to operate our sites and perform our role in national defence, we are required to hold a number of permits, authorisations, registrations, licences and consents. We have to apply to the appropriate regulators in order to be granted these permits, authorisations, registrations, licences and consents (jointly termed permits).

Environmental events notified to the Environment Agency

All events occurred at AWE Aldermaston unless specified otherwise.

October 2015
A plutonium result (200 nBq/m ³) for a High Volume Air Sampler was recorded between 1 October and 15 October 2015 from AWE Aldermaston. It exceeded the notification level of 100 nBq/m ³ . It should be noted that whilst the level required us to investigate the event and notify the Environment Agency and the MOD, the estimated dose was very small and not at a level that would pose any harm to the public or the environment. The findings from the investigation concerning the source of the plutonium were inconclusive on this occasion.

November 2015
No events notified to the Environment Agency.

December 2015
On 16 December 2015, AWE received a 'Sample Notification Letter' from the Environment Agency relating to a routine regulatory sample taken at AWE Burghfield on 8 December 2015. The letter stated that the suspended solids permit limit had been exceeded (245mg/l) against the permit limit of 100mg/l. We have responded to the Environment Agency stating that we have investigated the exceeded limit and believe it was caused by heavy rainfall washing solids through the network, and the samplers not being able to collect a representative sample. We are awaiting a response from the Environment Agency.

Waste minimisation

As part of AWE's commitment to protecting the environment, we have a long-term vision to become a zero-controlled waste-to-landfill organisation, details of which are given in AWE's Annual Review of Sustainability 2011-12 (available on AWE's website). To that end, there is a drive towards minimising waste and avoiding landfill wherever possible. AWE monitors diversion from landfill, for which a target of 80% has been set for Controlled, and Construction and Demolition waste.

Controlled Waste

Normal operational waste but excluding radioactive (RA), Explosive, and Construction and Demolition

Construction and Demolition Waste

Commonly rubble and soil but excludes Controlled, RA and Explosive waste

Reused

An item to be reused on site, or resold to be reused in its original condition

Recycled

An item that can be broken down and made into something else

Recovered

Where waste is burnt and energy recovered, or waste is used in land remediation

Disposed

Where waste is not reused, recycled or recovered

Below are the performance statistics for this quarter.

	Diverted from Landfill			% Total diverted from landfill	% Disposed
	% Reused	% Recycled	% Recovered		
Controlled	2.9%	48.9%	28%	79.8%	20.2%
Construction	0%	97.2%	0.2%	97.4%	2.6%

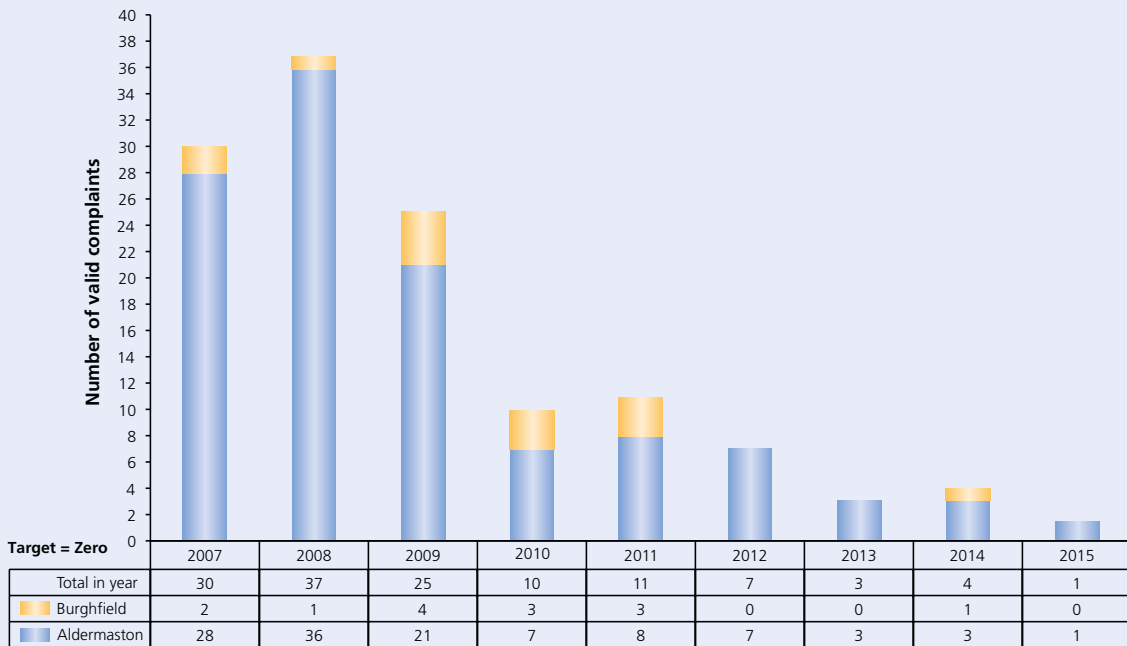
Community concerns

At AWE, we believe in being a good neighbour. It is important to us that people living near our sites have the utmost trust in our organisation.

AWE’s process for handling community concerns requires us to respond to them effectively and appropriately on a 24/7 basis. Any concerns raised broadly fall into six main categories: noise, traffic, light, water, pollution and other. A community concern is initially assessed in terms of criteria such as severity, safety implication, complexity, impact, and the need and possibility of immediate action. This includes an assessment to determine whether the concern is a complaint and whether it is associated with AWE operations or not. A community complaint is defined as an expression of dissatisfaction with AWE, however expressed, whether justified or not.

We are proud of the strong relationships we continue to build with the community, and are currently supporting a number of local projects including the Tadley First Responders, and Basingstoke’s Shop-mobility. The majority of our circa 6,000 staff and contractors, who are themselves part of the local community, live within a 10-mile radius of AWE.

Community Complaints by Calendar Year



For more information, contact: enquiries@awe.co.uk

List of acronyms and definitions of scientific terms:

- AWE: Atomic Weapons Establishment
- Sievert: A measure of radiation dose received by a person
- millisievert (mSv): One thousandth of a Sievert
- microsievert (µSv): One millionth of a Sievert
- CY16 (Contract Year 16): The period from 1 April 2015 to 31 March 2016



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