

## Minutes of the 38<sup>th</sup> AWE Local Liaison Committee Meeting Thursday 2<sup>nd</sup> September 2004

### Present:

Malcolm Hutchinson	Executive Chairman, AWE	Chairman LLC
Jonathan Brown	Director Infrastructure, AWE	
Angela Jenkins	Director Assurance, AWE	
Alan Price	Corporate Communications, AWE	
Avril Burdett	Corporate Communications, AWE	Secretary LLC
Lindsey Appleton	Corporate Communications, AWE	
Gareth Beard	Head of Environment, AWE	
Cllr P Beard	Reading BC	
Cllr M Broad	Tadley Town Council	
Cllr M J Bryant	Wokingham Unitary	
Mr A Campbell	Chairman Wasing PM	
Cllr W Cane	Mortimer West End PC	LLC Community Liaison Rep.
Cllr Mrs M E A Dadswell	Aldermaston PC	
Cllr D Dymond	Reading BC	
Mr G Eddy	Hampshire County Council	
Cllr TAJ Faulkner	Tadley Town Council	
Cllr P Garrett	Baughurst PC	
Cllr P J Hobbs	Sulhamstead PC	
Cllr Dr R Longton	West Berkshire Council	
Cllr M Maynard	Pangbourne PC	
Cllr J Moss	Swallowfield PC	
Cllr D Mundy	Burghfield PC	
Cllr Mrs I Neill	West Berkshire Council	
Cllr Dr A M Roberts	Padworth PC	
Cllr DG Shirt	Aldermaston PC	
Cllr A E Sumner	Wokefield PC	
Cllr W Taylor	Stratfield Mortimer PC	
Mr C Thomson	Basingstoke & Deane BC	
Cllr GN Ward	Woolhampton PC	
Cllr T M Whitaker	Mapledurham PC	
Cllr Mrs P Williams	Purley-on-Thames PC	

### Observers:

Darren Baker	Environment Agency
Mike Jeal	Nuclear Installations Inspectorate
Stephen Lewis	Nuclear Installations Inspectorate
Martin Sayers	Nuclear Installations Inspectorate

### 1. Welcome and Apologies

Cllr David Shirt (representing Aldermaston Parish Council), Cllr William Taylor (representing Stratfield Mortimer Parish Council) and Cllr Pat Garrett were welcomed as new LLC members. Cllr Sheila Allen was thanked for her many years of service to the committee.

**Apologies from:** Ms Baxter; Cllr Charlesworth; Mr Gowan; Cllr Lochrie; Cllr Leeks, Mr Payne and Cllr Wood.

### 2. Actions from the last Meeting

There were no actions from the last meeting.

### 3. Minutes of the last meeting

The minutes were accepted as a true record.

### 4. Chairman's Remarks – Malcolm Hutchinson, Executive Chairman

**Induction Course.** An induction course was held for new members to give a background briefing and explain some of the technical terms used at LLC meetings.

**Martin Salter MP.** Local MP Martin Salter visited on Friday 9<sup>th</sup> July to discuss issues relating to safety, health, employment, the environment and AWE's proposed new laser facility. The meeting with some of AWE's directors was very positive.

**New members of MoD.** There are two staff changes in the Ministry of Defence which affect AWE. A new Chief Scientific Adviser, Professor Roy Anderson of Imperial College, has been appointed, replacing Sir Keith O'nyions and Martin Jenkins takes on the role of head of the Nuclear Weapons Integrated Project Team (NWIPT). This is the team which oversees AWE's contract with the MoD to manage the AWE sites.

**Anti-nuclear protests.** Anti-nuclear groups have held several non-violent protests at AWE sites this year. The latest demonstration was over the August Bank Holiday weekend.

**Childcare Survey** A Partnership team had been set up to investigate the issue of childcare for children of AWE staff. A survey is being carried out to gather information and make recommendations to the Executive Board.

**Major Roadworks A340 through Tadley.** With help from Hampshire County Council staff have been kept up to date on the progress of the roadworks on the A340 through Tadley. There had been an increase in numbers of staff walking or cycling to work, especially during good weather.

**Communications Charter Launch.** The Company has launched a charter for better communications as part of an on-going campaign to embed good communications in all aspects of our work. The Plain English Campaign awarded it a Crystal mark for clear communication.

**Corporate Social Responsibility.** AWE is now finalising a policy on Corporate Social Responsibility to bring together all the activities currently undertaken. AWE already offers a high level of support to the local community and plans to bring that support into a consistent framework, which will enable staff to evaluate performance year on year.

**Share Scheme.** In June last year AWE launched a share scheme for staff which gave employees a stake in the long-term financial success of AWE plc. This year staff will get extra shares and the value of the shares will be higher. The issue of shares depends on the company meeting its strategic imperative of achieving a world-class assurance performance.

**Visit of Prince Andrew.** AWE was pleased to host a visit by Prince Andrew, the Duke of York in July. During his private visit he was given a tour of the HELEN laser facility. Unfortunately, due to security constraints, AWE was not allowed to brief even staff in advance of the visit.

**HELEN Laser 25<sup>th</sup> Anniversary.** In July AWE celebrated the twenty-fifth anniversary of the HELEN laser facility which some LLC members visited recently. The anniversary was marked with a reunion of employees who have developed the laser's potential over the years.

**Orion progress.** In June, West Berkshire Council's Planning Committee passed a Notice of Proposed Development for the Orion laser research project without objection. The next phase relies on a decision from the Ministry of Defence on taking the project forwards.

**ATIF – AWE Research Fund.** AWE ML is adding additional financial support to the AWE Discretionary Research Fund (ADRF) which promotes cutting edge research by AWE scientists. This decision reflects the commitment of AWE's parent companies' (BNFL, Lockheed Martin and Serco) to stimulating innovation and demonstrating management excellence. It also builds

on the Partnership Agreement with the Ministry of Defence. It has been re-named the AWE Technical Innovation Fund (ATIF)

**Employee Opinion Survey.** A second company wide Employee Opinion Survey will be carried out during September and all employees will be invited to participate. This will enable the management team to gauge employees' reaction to the changes made throughout the company since the first survey and help identify what issues still need to be addressed.

**Graduate Projects.** This year the graduates have successfully planned and held the annual AWE School's Engineering Challenge. First Prize of £1000 was won by Robert May's School in Hook. Kendrick School in Reading came second winning £500 and Abbey School Reading finished third and collected £250. Another graduate team is developing software to help children with special needs and learning difficulties to catch up with their studies. Children from five local primary schools took up AWE's Chain Reaction Challenge in July – a competition designed to encourage interest in science and engineering at a young age. Overton Primary School won the first prize of £500; The Cedars Primary School, Aldermaston, came second winning £250; and in third place was Aldermaston Primary School winning £100. Runners-up were The Priory Primary School, Tadley, and Ashford Hill Primary School, Thatcham – both received cheques for £100.

**Investor in People (IIP).** AWE has been re-accredited to the Investor in People (IIP) standard. Retaining the standard is a reflection of a great deal of hard work and commitment by many people at AWE. Investor in People is the national standard which sets a level of good practice for training and development to achieve business goals and improve an organisation's performance through its people.

**Three Peaks Challenge.** Three AWE teams raised more than £3,000 for local charities, by completing the Three Peaks Challenge. The teams were the AWE Apprentices, a group of scientists and a team of AWE Fire fighters. Charities supported were Reading's Duchess of Kent House Hospice, Thames Valley Air Ambulance and the Fire Service National Benevolent Fund.

## 5. Health, Safety and Environmental Report – Dr Angela Jenkins, Director Assurance

Dr Jenkins explained that at AWE assurance covered matters relating to Safety, Quality, Environment, Security and Health (sometimes referred to as SQESH issues).

Almost two years ago AWE applied to the Environment Agency (EA) for revisions to the authorisations to dispose of radioactive waste under the Radioactive Substances Act (RSA). The applications relate to additional and increased disposal of oil and waste to other premises. The EA has given its approval to the authorisations which will be valid from 1<sup>st</sup> October this year. AWE did not ask for changes to the aqueous or gaseous authorisations. The Company has also improved the system for managing the paper trail associated with the RSA authorisation, this means that we can push ahead with the decommissioning programme more efficiently.

During a routine facility audit, Poly Chlorinated Biphenyls (PCBs) were found in some old equipment. Since 2000, the holding of these substances must be registered with the EA and plans for their disposal or decontamination developed. A major audit was carried out several years ago in compliance with the new regulations. Following this discovery, a further check is to be carried out to make sure that there are no more unregistered PCBs on the AWE sites. An EA inspector came to site and was satisfied that AWE was doing everything possible, many other companies are having similar problems.

Under advice from the EA, the Company is applying for revised consents for the discharge of trace elements to local streams and ditches at both sites. These small amounts are

occasionally found in run off water and are not in any quantity which could cause harm to the public or the environment. It is anticipated that the EA will consult the public by advertising the applications in the local press, inviting comment.

## **Performance against Key Performance Indicators**

### **KPI 1 Total Injuries**

**AWE Staff:** The total number of recorded injury events to AWE staff for the 2nd Quarter was 89 (26% of the 2004 target of 340). Hand/finger injuries (37 events) accounted for the largest proportion; approximately one third could have been avoided if suitable gloves had been used. However, in general, the majority of hand/finger injuries appeared to arise from inattention or minor error. There were 6 slips/trips/falls events and 6 manual handling injuries. Newly introduced soap caused 2 cases of dermatitis.

**Contractors:** The total number of recorded contractor injury events was 38 (25% of the 2004 target of a maximum of 151). The largest proportion (9) were hand/finger injuries, a third of which might have been avoided if suitable gloves had been worn. There were 5 slips/trips/falls events, 5 manual handling events.

**MDP:** The total number of recorded MDP injury events was 4 (20% of the 2004 target of 20). Three injury events arose during training courses; a manual handling injury to the back, a dog bite and a case of extreme breathing difficulties.

Members asked whether staff were given manual handling training. They were assured that the training was mandatory and that other considerations like pre-existing medical conditions were also considered.

### **KPI 2 Lost Time Accidents**

Each time a lost time accident occurs, the local manager is asked to speak to the AWE Executive about the circumstances and the measures he/she intends to put in place to prevent a reoccurrence.

**AWE Staff:** Six lost time accidents (LTAs) were recorded resulting in an LTA record of 0.29 against a target of 0.25. Three events fell into the category of reportable occupational disease (2 from a newly introduced soap and one from wearing household 'rubber' gloves), two were manual handling incidents and one was a slip/trip/fall.

**Contractors:** There were 3 lost time accidents recorded, resulting in an LTA record of 0.52 against a target of 0.50. Two LTAs were due to manual handling and the other was a back injury arising while using a ride-on mower.

**MDP:** There were no lost time accidents, resulting in an annual LTA record of 0.32 against a target of 0.20.

### **KPI 3 Environment, Safety and Health (ESH) Event Index**

The event index for quarter 1 was 217. In Qtr 2 the index was 181 giving a year to date performance of 398 compared to an annual target of 650, (average 162.5 per quarter). The score reflects the fact that, although we have improved on the Qtr 1 figure, we have not yet achieved the improvements anticipated in the areas of injury and LTA reduction.

Improvement activity is taking place across the Company to address this performance, this includes Injury Reduction Workshops, a future Team Listening topic on Accident Prevention and work to address repeat events.

### **KPI 4 Non Attendance**

Sick Absence continues to improve on 2003 and currently stands at 2.8% at the end of Qtr 2 compared to 3.2% this time last year. The average number of days lost per employee over the last 12 months remains at 8. This compares favourably to external organisations of similar size

and business, whose average days range from 8.6 to 10.3. (CIPD "Employee Absence 2004 - A Survey of Management Policy and Practice" July 2004).

#### **KPI 5 Maximum Individual Dose**

The maximum individual dose for Jan to Jun 2004 is 2.2 mSv. This dose was investigated and was caused by the individual's dosimeter going through an airport security system. The next highest individual dose is 1.3 mSv and is not predicted to lead to a dose greater than the target of 2.8 mSv.

#### **KPI 6 Collective Dose**

The collective dose for Jan-June 2004 is 131 manmSv. The predicted collective dose for 2004 will be very close to the target of 250 manmSv.

#### **KPI 7 Security Index**

No serious or major Security Abnormal Event (AE) has occurred during the period. There were 130 AEs, an increase of 27 compared to the last period (103). This is mainly due to the increase in the seizure of prohibited items following a marked increase in the number of entry and exit searches by security guards. The number of AEs raised in comparison with last year's figures in the same period, (158) shows a reduction of 28. The end of year figure remains on target.

#### **KPI 8 Waste Recycling**

Site Tidy Week in June did not produce as much recyclable waste as anticipated. The expected increase in non-recyclable waste resulted in a noticeable decrease in the recycling figures. The increase in assets recycling is due to the disposal of a 50 tonne press in May and the sale of over 25 redundant vehicles during the quarter.

#### **KPI 9 Liquid Discharges**

Liquid discharges remain within target.

#### **KPI 10 Airborne Discharges**

The alpha discharges are as expected, do not exceed the company targets and are well below regulatory concern. Beta discharges just exceeded the company monthly target at 15.37 kBq in May. However the discharges are as expected and are well below regulatory concern. The Company monthly tritium discharge target was just exceeded in June due to programmed decommissioning activities, but again the results are well below any regulatory concern.

**KPI 12 Senior Management Visits:** Performance in the period was 100%.

#### **KPI 13 Adherence to Company Requirements**

**Audits Undertaken to Programme:** Performance in the period was 100%

**Level 2 AE Investigations Closed on Time:** The measured performance across the whole company for quarters 1 and 2 is 64%. This is a significant improvement on the last quarter when the performance was 53%.

**Serious and Major Actions Closed on Time:** Concerted efforts have been made this year to improve the close out response to significant non-conformances raised on Assurance. This has resulted in the improvement in the percentage of actions closed out on time. However, the percentage still remains at a consistent 65% due to a number of pre 2004 actions that still need to be closed out and are a key area of focus. Eight authorities to operate (ATOs) were renewed to planned timescales. Three extensions were granted in April due to special circumstances.

#### **KPI 14 Level 2 Repeat Events**

The target is 40% and current performance 41%. This is a significant improvement on Qtr 1 performance but is still outside the target. It is recognised that repeat event performance has not been fully utilised as an improvement tool to date and we are working to address this. The first step has been to make repeat event information available on the Company Action Tracking System, and it now discussed routinely at the Assurance Screening Meeting.

### **Public Dose Evaluation**

The National Radiological Protection Board (NRPB) model has been used to make an assessment of doses that could have been received by hypothetical "worst-case" groups or individuals. The calculations have used AWE's known discharges of radioactive materials during the quarter and the last 12 months.

All the doses are very small fractions of the guidance level given by NRPB for doses arising from a single installation, which is set at 0.3 mSv/year, and the equivalent figure for a nuclear site, which is set at 0.5 mSv/year. These results confirm the findings of independent studies such as Southampton University that there is no significant hazard to members of the public from AWE's radioactive discharges.

### **6. Stack Flow Monitoring and Measurement. Presentation by Gareth Beard, Head of Environment.**

AWE has 74 stacks related to discharges under the Radioactive Substances Act (RSA), some are minor, and some are more significant. Mr Beard explained that there was a complex sequence of measurement and technology associated with the measurement of discharges.

The measurements have to be carried out to calculate AWE's discharges to air. This is one of the requirements under RSA and part of AWE's duty of care to the community and the environment. AWE has to be confident that what is being released is as low as reasonably practicable, within the EA's authorisation limits and that we are minimising discharges. The best practicable means (BPM) is used to do the measuring and monitoring and this enables AWE to look at the potential impact on the community.

Many measurement systems have recently been upgraded. Independent contractors calibrate these stack measurement systems. EA and our own inspectors found that some of the flow data used to calculate releases might not be correct. The EA asked for a review of data supplied over the past four years to be carried out. A full report was sent to the Environment Agency which noted that since 2000, alpha discharges had been under reported by 1%, tritium under reported by 6% and uranium at Burghfield over reported by 34%. The under reported results are within the tolerances allowed. The Company and the EA agree that this needs to be tightened up so that accurate information is given to the EA, the LLC and the public.

Cllr Dymond asked whether AWE should be replacing the older stacks with better measurement devices and more accurate information. Mr Beard replied that some of these stacks were on buildings scheduled for decommissioning but that all new stacks would meet with modern standards. Jonathan Brown added that there was a 2-3 year programme to replace the systems in many of the key facilities with the greatest potential impact.

### **Action 38/1: Jonathan Brown to show details of upgrade programme at the next meeting.**

Councillor Roberts expressed concern that the Environment Agency felt that AWE's system was out of date and poorly used. Mr Beard pointed out that the amounts were rarely detectable on a filter paper, AWE was not like other nuclear plants where discharges were higher and more readily measured. He said that AWE was looking again at the best practical means with the intention of improving standards and technology.

Cllr Taylor asked whether the discharge rates varied and if this was reflected in the sampling. He was told that there could be considerable variations but that the best systems tracked the actual flow. Air had to be pumped through the sampling system at the same rate as the discharge flow, but not all systems operate in that way. This did not mean that AWE did not know what it was discharging as staff are fully aware of the uncertainties. Decisions would be made on whether to upgrade stacks on old facilities with a short life span. Mr Beard said that he had a high degree of confidence in the current sampling systems.

Cllr Maynard asked whether AWE chose where to place a stack. He was told that it was current practice to give this careful consideration but that had not always been the case in the past. In

answer to the question of why discharges to air were made, members were told that for safety reasons, procedures were often carried out in a partial vacuum to prevent dust escaping into the workplace and contaminating staff and the facility. The air drawn out of the facility is abated with high efficiency filtration and the sampling systems check what was being discharged. The filters are monitored to indicate at an early stage if they are beginning to fail. If air was not extracted in this way staff would be at risk and contamination of the facilities would create greater environmental legacies during decommissioning.

During further debate members were told that emissions from the most significant facilities were monitored continuously where possible. However, some discharges were so low that that the Environment Agency agree that they should be estimated. The systems in the most significant facilities are continually monitored, some periodically and others assessed. The reports submitted cover groups of stacks; the discharge limits are set on an annual discharge, allowing for fluctuations in the workload. In addition, the Authorisations carry notification levels which are reported quarterly and remedial actions are put in place to ensure that the limits are not breached.

From the measurements and assessments, the maximum possible public dose limit from AWE discharges is calculated and it has been shown that the dose is very, very low. Cllr Ward asked what would happen if a short burst of highly toxic material was released. Mr Beard explained that this would be picked up in the filtration system, showing a high concentration, the filters would capture the particles and safety systems would alarm. The amount actually released would be very small. Peaks picked up on the monitoring system are investigated; these are normally an idiosyncrasy of the measurement system.

Alan Sumner queried the level at which AWE's authorisations were set especially for uranium discharges at Burghfield, since even with a 30 percent over-reporting the limits had not been breached. He was told that these limits were currently under review as it had been four years since the authorisations had been issued. Four years ago there had been a greater uncertainty on what the long-term discharges would be and so authorisations needed to be set at a level which would allow for decommissioning of older facilities. It is possible that in future these levels may be reduced. However it is the application of BPM in minimising releases which drive discharges down rather than the limits themselves.

Jonathan Brown added that this was true in respect of routine work, but if non-routine operations were being carried out within a facility, new filters would be put in place along with additional monitoring.

Bill Cane asked what effect there would be from the reduction in number of sites authorised to accept hazardous waste to landfill. Jonathan Brown confirmed that the decrease from 200 to 12 sites would increase transport costs by three to four times, although a lower volume of waste was being sent for disposal. Staff were looking at better practise, such as more segregation and more innovative processes to produce less waste. AWE ensures that contractors are dealing with waste in the appropriate and legal manner.

## **7. Infrastructure Report – Jonathan Brown, Director Infrastructure**

**Sitex (A)** Every year AWE holds a major site exercise at each site which allows the Company to both demonstrate to the Nuclear Installations Inspectorate (NII) and other regulators that staff are fully capable of dealing with an emergency. The demonstration also allows the Company to build on the experience year on year. The NII were satisfied that AWE had fulfilled its requirements and learning points will be shared with facility managers across the sites so that they can review their own emergency procedures. A similar exercise (Sitex B) will be held at Burghfield in the near future.

Cllr Maynard asked if LLC members could observe an exercise. He was told that there were so many observers who had to be there, space was at a premium. Exercise co-ordinators had to

ensure the safety of all those present and so extra observers were discouraged. It would be possible to give a presentation on Emergency Exercises. Bill Cane asked for a presentation.

**Action 38/2: To arrange a presentation on Emergency Exercises at the next meeting.**

**Safety Record On Construction of the New Wastewater Treatment Plant.** The new wastewater treatment plant at Aldermaston is on course for completion to allow closure of the Pangbourne Pipeline in April 2005, and a 100% safety record has also been maintained by the construction workers.

AWE has been working together with RWE NuKem to create a safe working environment, and to date, some 600 contractors have clocked-up over 100,000 hours on site without any reportable injuries or accidents. Construction sites are statistically very dangerous places to work, so to achieve a flawless safety record on a major project such as this is a fantastic achievement for AWE and all the contract staff involved. This sets the standard for future projects at AWE.

When up and running, wastewater will be collected from processing facilities by tanker and transported to the new plant where it will be treated using evaporation and filtration processes. AWE is committed to closing the Pangbourne Pipeline as part of the continuing environmental improvement programme. This wastewater treatment plant, using modern technology to significantly reduce discharges, will allow disposal via the local sewage treatment works.

#### **8. Any Other Business**

Doug Mundy asked whether it was necessary to watch the safety video prior to every visit. He was told that members would watch the video within the LLC meetings once each year which was every 4<sup>th</sup> visit.

#### **9. Date of next meetings**

Thursday 2<sup>nd</sup> December 2004  
Thursday 10<sup>th</sup> March 2005  
Thursday 9<sup>th</sup> June 2005  
Thursday 15<sup>th</sup> September 2005  
Thursday 1<sup>st</sup> December 2005

Avril Burdett  
Secretary to the AWE Local Liaison Committee