

# Minutes of the 33<sup>rd</sup> AWE Local Liaison Committee Meeting

Held Thursday 5<sup>th</sup> June 2003

## Present:

Malcolm Hutchinson	Executive Chairman, AWE	Chairman LLC
Bill Haight	Managing Director, AWE	
Alan Brandwood	Assurance Director, AWE	
Alan Price	Corporate Communications, AWE	
Jonathan Brown	Environmental Planning, AWE	
George Sallit	Radiation Protection, AWE	
Graeme Hammond	AWE	
Avril Burdett	Community Relations Manager, AWE	Secretary LLC
Mike Broad	Tadley Town Council	
Malcolm Bryant	Wokingham Unitary Authority	
Bill Cane	Mortimer West End Parish Council	Community Liaison Rep.
Margaret Dadswell	Aldermaston Parish Council	
David Dymond	Reading Borough Council	
Maurice Eden	Holybrook Parish Council	
Terry Faulkner	Tadley Town Council	
Peter Hobbs	Ufton Nervet Parish Council	
David Leeks	Tadley Parish Council	
Martin Maynard	Pangbourne Parish Council	
John Mazillius	Stratfield Mortimer Parish Council	
Jeff Moss	Swallowfield Parish Council	
Murray Roberts	Padworth Parish Council	
John Southall	Purley-on-Thames Parish Council	
Alan Sumner	Wokefield Parish Council	

## Observers:

Darren Baker	Environment Agency
Martin Sayers	Nuclear Installations Inspectorate
Mike Jeal	Nuclear Installations Inspectorate
Chris Kemp	Nuclear Installations Inspectorate
Bryan Kelly	Nuclear Installations Inspectorate

## 1. Apologies & Introductions

Cllr Sheila Allen; Cllr Peter Beard; Cllr Chris Bridges; Cllr Roger Brown; Cllr Angus Campbell; Cllr Dr Glyn Charlesworth; Cllr Geoff Eddy; Sabine Furlong; Cllr Doug Mundy; Tom Payne; Colin Thomson; Cllr Graham Ward; Cllr Tim Whitaker.

The Chairman welcomed new member Councillor Martin Maynard to the LLC and thanked Councillors Pam Bale, Chrissie Clemson, Tony Ferguson, Des Hoad and Peter Taylor for their input to the LLC during their membership. He congratulated members who had been re-elected to their councils.

He then introduced Alan Price, AWE's new Head of Corporate Communications who had taken over from Graeme Hammond.

Bill Cane introduced himself as the Local Liaison Co-ordinator for the LLC. Cllr Cane is also Chairman of Mortimer West End Parish Council. He welcomed new members to the committee

and spoke about its functions. He said that the committee was made up of representatives from Parish, Town, Borough, Unitary and County councils. He also pointed out representatives from the Environment Agency and the Nuclear Installations Inspectorate of the Health and Safety Executive. He introduced Malcolm Hutchinson, Executive Chairman of AWE and members of AWE senior management. He said that this showed the importance attached to the local community by AWE and its regulators.

Bill Cane said that meetings were held four times the year to discuss issues which could affect the local community. He told members that they would hear reports by AWE staff on issues covering the work carried out at the Aldermaston and Burghfield sites. He assured them that they were free to question or clarify those reports and to raise matters of concern from their own councils and communities.

He said that AWE had recently had an independent survey carried out on their behalf (PASCALEA). This was a vehicle to discuss the environmental aims of AWE. It had been advertised in the press, on local radio, in AWE Community Link and on Council noticeboards. Public meetings had been held in Tadley, Reading and Newbury, a meeting planned for Basingstoke had been abandoned because no members of the public had turned up. Apart from the public, AWE's regulatory bodies, Friends of the Earth, AWE employees, local MPs (who did not attend) and local focus groups had been invited to take part in workshop sessions. He reported that AWE had responded to this report. One of the criticisms of the report was that members of the public did not know what the LLC did. In fact a well-known MP had stated to a local newspaper that the LLC was more or less only attended for wine and canapés. Bill Cane pointed out that AWE was an alcohol-free zone.

Nevertheless, it raised the question of what the public knows about the LLC. The minutes of AWE LLC meetings are in the public domain and can be found in local public libraries, and are also available on the AWE website and in the House of Commons. He asked all local council representatives to report back to their own councils with a summary of the LLC meetings so that the local public would be able to hear or read about what happened. He understood that the minutes were too long to go into Council minutes, but merely to state that the minutes were available on the website would go some way to stemming criticism. ([www.awe.co.uk](http://www.awe.co.uk)).

He ended by talking about media coverage of the meetings. He pointed out that LLC members had decided that the media should not attend the meetings. That the purpose of this Committee was to ask questions of AWE and report back to local councils. He said that he would not like to see the very good relationship between the LLC and AWE hijacked by members of the media. He pointed out that this did not mean that members could not speak to the press but he emphasised that they would be speaking as an individual, not on behalf of the committee. The reason for this was that the committee rarely voted on any issue, its function was to report back to councils, and therefore any comment could not be a view of the committee as a whole. He said that members were welcome to raise questions outside meetings through the secretary Avril Burdett, or through Bill Cane.

**Action 33/1:** Avril Burdett to circulate Bill Cane's contact details to members.

## **2. Current & Outstanding Actions**

**Action 31/3: Provide copies of the traffic studies to neighbouring councils.** The Report was now in draft format and details would be given to the relevant councils when the report was completed.

**Action 31/4: Look at the requirement for signs at the Burghfield entrance.**

Signs requested were 'Beware Lorries Turning Right'. AWE staff had looked at this suggestion and discussed the matter with West Berkshire Council. They had concluded that the signs were not necessary.

**Action 32/1:** To add the 2002/2001/2002 KPIs which had been dropped to tables presented at 32<sup>nd</sup> meeting. **Action complete.**

**Action 32/2:** Explain the performance and targets for re-cycled office waste. **Action complete.** George Wall's response was circulated to LLC members.

**Action 32/3:** Copy Peter Taylor's letter to LLC members. **Action complete.** A copy of AWE's response to Cllr Taylor had also been circulated.

**Action 32/4: Darren Baker (EA)** to supply details of monitoring around the PPL discharge point. **Action complete.** Details were contained in the Environment Agency's Quarterly report, Qtr 1 - 2003.

**Action 32/5:** To give more information on the operating arrangements covering discharges via the Pangbourne Pipeline at the next meeting. **Jonathan Brown gave a presentation at agenda item 6.**

**Action 32/6:** To ensure that all LLC members receive a copy of the PASCALEA Report. **Action complete – AWE's response to PASCALEA was also sent.**

### 3. Chairman's Remarks

Malcolm Hutchinson introduced Peter Heffer from BNFL. Peter was present to observe the LLC meeting, this followed a visit from Peter and a group of his colleagues to look at how AWE managed community affairs and the contractorisation process.

#### Pangbourne Pipeline

AWE had received endorsement for a notice of proposed development for the new low level waste treatment plant (the technology to replace the Pangbourne Pipeline). Malcolm Hutchinson was very pleased to note that the planning committee had complimented the AWE on providing comprehensive information which dealt with the concerns raised at the previous meeting.

#### Trident Ploughshares Demonstration

The chairman informed LLC members that a Trident Ploughshares anti-nuclear demonstration was due to begin on 6th June and would last until Monday 9th June. Later the same week a visit from a group called 'Yorkshire against war' was expected but this was likely to be a low profile event. He assured members that AWE staff and the local police would be working together to ensure the safety of AWE staff, the public and the site.

#### Media Issues

Following an AWE recruitment advert for graduate scientists, the New Scientist magazine had recently carried an article entitled "Britain boosts nuke research."

The article said that hundreds of extra scientists were being sought to work on Britain's nuclear bomb programme. It claimed that the recruitment drive had raised fears that Britain risked being sucked into fresh US research on low yield nuclear weapons.

The Chairman said that what the Company had actually said to the New Scientist, which they failed to report, was:

“There are a number of factors that determine our recruitment campaign. First, it is always necessary to recruit new blood to replace those retiring from the organisation. We regularly recruit graduates each year and we have a comprehensive graduate training programme. This year our graduate recruitment programme is particularly important to us since we anticipate a tranche of experienced specialists retiring between 2006 and 2008.

“Second, we have to ensure that we have the right balance of skills in place to meet our mission. That mission was spelled out in the 1998 Strategic Defence Review. The “Nature” magazine article, published some 18 months ago, described in detail the scientific programme necessary to meet that mission in the absence of nuclear testing. This will require a different set of scientific and technical skills. This year’s graduate recruitment programme specifically addresses that requirement. We are looking for between 50 and 60 graduates, particularly in the field of physics, materials science, computing and systems engineering. If we can get 70 or 80, we would be delighted. We do anticipate the workforce increasing from the present 3,500 to 3,700 or 3,800, or even higher, as a spike before we lose a generation of retirees.

“We are able to undertake this scale of recruitment and forward planning at this stage largely as a result of the recent contract extension to 25 years, which enables us to take a long term view of our business needs.

“We have not been asked by the Government to produce a successor weapon and it would be wrong to suggest that we are recruiting in order to produce a successor. We are not working with the US to produce any kind of nuclear weapon. Our work with the US is conducted under the 1958 Mutual Defence Agreement. It is of a generic nature, covering safety, science and engineering, which is not weapon specific. For example, we have collaborated with the US in a dynamic experiment designed to explore the properties of plutonium.”

### **Community Support**

The Chairman told members that AWE had a committee which advised the Executive Board on where AWE should offer support to the local community.

The committee was made up of 20 members representing a cross section of ages and disciplines across the Company, together with Cllr Dadswell and Cllr Leeks. Committee funds had recently purchased a four-wheeled scooter for Shopmobility in Basingstoke and funded a year’s petrol for Maple Ridge’s minibus. (Maple Ridge is a school for children with special needs).

AWE offered support to 60 local schools through the Schools Liaison Group. Each school had its own personal AWE representative. Each year the Company offered £200 of books to every school and had now introduced three annual prizes: £500 each for a secondary and a primary school for an environmental project and a £10,000 prize for a major project.

The winner of the Secondary School Environmental prize was Kennet School in Thatcham for a conservation garden. Bramley Primary School had won the junior prize for their conservation area. However, the judges had been so impressed with runners-up Francis Baily School’s plan for a butterfly garden that they had awarded £250 to help get the project under way.

Winners of the 2003 £10,000 award were Kendrick School in Reading. The money would go towards the cost of an imaginative project to equip a Science Room which would also feature the latest communications equipment to share knowledge and projects with neighbouring primary and secondary schools.

The Schools Liaison Group also offered lectures from AWE specialists and their most recent project was to provide a pool of teaching kits for primary schools. Topics ranged from human biology to sound and magnetism. Each kit came complete with teaching notes, suggested

experiments and projects as well as the equipment. The company hoped that this would help primary school teachers to make science an interesting subject for young people.

### **Atomic Kittens**

A team of walkers from the Atomic Weapons Establishment (AWE) had raised over £10,000 for breast cancer research and care. Twenty-eight women and men had taken part in the 2003 Playtex Moonwalk around the streets of London, beginning at midnight on May 10.

The AWE team, nicknamed 'Atomic Kittens', had joined around 15,000 other walkers along the 26.2-mile course for the annual event organised by Walk the Walk Worldwide. The charity aimed to raise £4 million to help fund the research done by Breakthrough Breast Cancer and the care given by Bristol Cancer Help Centre.

The total amount raised by the AWE team so far was £10,813, including a £2,000 donation from the Company.

### **Schools Engineering Challenge**

AWE was to hold the annual engineering and technology challenge for year 10 pupils from 20 local schools on 1 July at Basingstoke College of Technology. The prizes were £250 for third place, £500 for second place and £1000 for the winners. The event had been organised by a team of AWE graduate trainees. Members were invited to attend.

### **Beagle II**

Malcolm Hutchinson told members that AWE had excellent test facilities for use in testing warhead components against the vibration, acceleration, temperature, shock and pressure which they would encounter in use. This same technology had been used to test the Mars lander against the environments it was likely to encounter on its voyage and make sure what it was as robust as it should be to meet the challenges of its mission.

### **Reading Museum**

The Company had also used its technology to help Reading Museum investigate the workings of a Roman pump which had been excavated during a recent dig at Calleva Atrebatum, Roman Silchester. Such pumps were very rare and nobody had yet discovered how they worked or how they were made, added to that, they were very fragile. AWE was able to send an expert to the museum with specialist radiography equipment. The pump and other artifacts had been X-rayed in situ, reducing the risk of damage. Museum staff would be invited to AWE to view a computer-generated three-dimensional image of the pump.

### **Apprentice School visit**

Malcolm Hutchinson said that he had mentioned the graduate trainee scheme several times, but that AWE also had another trainee scheme which he believed was second to none. There had been an apprentice school at AWE for over 50 years. Unlike some companies AWE had kept their apprenticeship scheme, when others abandoned theirs. The modern scheme offered a chance for young men and women to learn practical skills and gain the educational qualifications which underwrote them whilst earning a wage. At any one time there were around 100 apprentices on the scheme. This was the best way that AWE could get the quality people to do the unique work required. He said that he would take members to see the apprentice school at the December meeting.

Bill Cane thanked AWE for the financial and practical help the apprentices gave to the community.

### **Security Checks**

The Chairman said that all regular visitors to AWE sites are required to undergo a basic security check, similar to those conducted by banks on new customers. In the past this rule had not been

applied to members of the LLC but, given the current situation affecting the whole country, the Company considered that members of the LLC should now be treated in the same way as all other visitors.

If members objected then it would be necessary to hold meetings off site. However, if there was general agreement the company would be able to continue to provide visits to various facilities not normally accessible to members of the public. This would help members' understanding of AWE's operations and enable the Company to demonstrate at first hand its commitment to environment, safety and health issues.

Members agreed that this was a sensible way forward and volunteered to undergo the necessary procedures.

#### **4. Health, Safety' Environmental Issues – Alan Brandwood, Assurance Director**

##### **RoSPA Awards**

Alan Brandwood explained that any company in the world was eligible for an award from RoSPA, in practice 1000 to 1200 applications were received each year. Awards covered 16 different sectors, AWE was in the defence sector. For the third year running AWE had won the award for the defence sector for a most outstanding performance in health and safety. Only one other company had ever done this three times in a row, that was Toyota. This demonstrated that AWE was an industry leader.

The Company had also won the Astor Trophy for the best occupational health programme. AWE had been cited for its approach to drugs and alcohol, stress management and Healthy Heart and Back campaigns. The Company had been commended for its rehabilitation and counselling programme integrated into line management responsibilities.

This showed that AWE's processes were excellent, although in terms of implementation there was still a way to go. Alan Brandwood said that he was not complacent but this recognition showed that the Company was going the right way and was up there with the top two or three organisations that had entered. Among the nuclear sector he said that AWE had by far the best record.

##### **Drugs and alcohol**

Alan reminded members that a random drugs sampling policy had been implemented the previous year, the Company had now introduced random alcohol testing. The approach was the same and positive results led to rehabilitation and counselling rather than discipline. However, if people did not respond to the support offered then discipline would follow. He said that in 11 months of testing it had been shown that there was no problem with drugs at AWE, he expected same result with alcohol. He said that this policy would make sure that social activities did not impact on safety at AWE.

##### **Abnormal events**

Hand injuries had been reduced by 20 per cent as a result of new manual handling training being introduced. There had been repeat events in seven areas, four of these are had been eradicated. They included problems with the refrigerant gases, power supplies and material movements. There were still some events caused by people not following procedures.

There were still too many minor accidents. Behavioural safety was being taken out to facilities. Specific local improvement plans were being developed, the fact that some facilities and had problems which were not seen in other facilities had led to a more targeted response to the problem.

Dupont, a company with a 200-year safety record had been brought in to present at a recent senior management seminar. The presenter explained how, two hundred years previously, whilst making gunpowder, an explosion had blown up their factory and the local village. This had motivated them to develop an excellent safety culture.

The Dupont presenter advised on methods of problem solving and gave examples of these practices in his company. The aim of the seminar was to review and improve local Assurance plans in order that management systems and working levels processes could be simplified. With over 50 years of processes documented, the system operated well on paper but there had been instances where staff had not complied with what was written down. The objective was to clarify and simplify the orders that must be followed. The first improved operating procedures were being rolled out but it was expected to take two or three years to complete the process across both sites. Also during this seminar a behavioural psychologist had presented on behavioural safety.

### **Minimising traffic**

The Company was gathering data from employees to look at alternatives to taking the car to work. From the survey, improvements and incentives would result in around 10 more people walking to work, 60 more cycling to work, 50 to 60 more using public transport and over 1500 willing to car share. The Company was therefore looking at ways to encourage car-sharing, giving maximum benefit.

David Leeks asked that the cyclists and walkers were not overlooked as 60 to 70 people not bringing their cars to the AWE sites would be a benefit for Tadley. Alan said that the Ministry of Defence Police had recently reviewed which gates should be opened and the Company had been able to negotiate to retain one gate open purely for cyclists and pedestrians. Another incentive was to provide all cyclists with a free cycle helmet. He assured Councillor Leeks that staff would be encouraged to cycle or walk to work.

### **Environment week**

An onsite exhibition was being held at both AWE sites covering a full range of environmental issues. Although the exhibition had been put together to raise awareness of environmental issues to staff, it would be of equal interest to the general public. The Company was therefore taking the exhibition out to Tadley and Basingstoke, Alan said he would circulate details to members.

**Action 33/2:** circulate details of the public environment exhibition to LLC members.

### **Key Performance Targets** (See tables attached)

Alan Brandwood pointed out that although targets had been set for the number of accidents at AWE, he was aiming firmly for zero. The KPI for Lost Time accidents (LTAs), where a staff member or contractor had more than three days off work following an accident, looked as though it would miss the target. However, senior staff were trying very hard to bring this under control.

Non attendance was improving, and the figures compared well with the rest of industry. Waste recycling was currently running at a level in excess of local council achievements, and was well on the way to reaching government targets. Discharges were well within authorised limits, showing that decommissioning work had not generated rises in discharges.

Senior managers' target of five planned visits per quarter had been reported in the quarterly report at 91 per cent, however, updated figures showed that 100 per cent compliance had been achieved.

Bill Cane noted that the accident rate was up and asked what type of accidents these were. Alan said that it continued to be slips, trips, bumps and falls. One instance had been a contractor who had twisted his ankle. This had been down to poor housekeeping. He said that there were no major injuries but these minor incidences were an indication of unacceptable behaviours in some areas.

Alan Sumner asked whether this was due to more contractors on site. Alan Brandwood said that a contract safety manager had been recruited as part of the driver to improve safety. He pointed out that contractors also included catering staff, for example one lady had picked up a hot plate and burned her hand. Analysis of accidents had shown that 25 per cent of abnormal events were related to contractors, 60 per cent of that had a root cause of 'lack of communication'.

John Mazillius praised the company for the major achievement in rewriting safe systems of work.

Alan said that as a further initiative to improve contractor safety, a seminar was to be held on Assurance for members of staff from all the contracting companies. At that seminar he would share good and bad practice, this would give recognition to those with a good safety record and motivate those with a poor record to improve. In fact, one Contractor had gone two months without an injury event, which proved it could be done. The RoSPA citation showed that AWE's approach was second to none, implementation needed work to bring it up to that same standard.

### **LLC workshop on information from AWE**

Bill Cane said the workshops followed an action to look at the information supplied to the LLC by AWE. Bill Cane, John Mazillius and Peter Taylor (Peter had been unable to attend the second workshop) together with assurance staff and communications staff had attended the two Workshops. The Company's aim had been to make reports more applicable and relevant, they needed to be understandable to all members. He said that it had not been an easy job but that he hoped that LLC members would be pleased with the result.

Alan Brandwood said that his team made information available to the LLC, but also to many other stakeholders. The Local Liaison Committee also received information in presentations at the meetings as well as other reports and publications which were regularly made available to them. Several issues were considered in the review these included feedback from the PASCALEA report.

The workshop found that there was a need for information rather than data. The current report was not easy to understand to those without a nuclear background and some data was less relevant to the LLC. The current quarterly report was backed up by presentations at the meetings, this would continue but instead of a quarterly report, a shorter simpler monthly report would be provided.

The new monthly report would provide more timely information which was more relevant to the communities that LLC members served. The report would provide the LLC with the same information as the other stakeholders such as employees and the media etc and the changes would only affect the quarterly report. The reports would appear on the AWE website, but would continue to be circulated in hard copy to members. A prototype copy was circulated.

John Southall asked that any questions from members, together with their answers should be circulated all LLC members by e-mail. This was agreed.

**Action 33/3: Avril Burdett to collect e-mail addresses from members.**

Murray Roberts raised a concern that the KPI graphs were very useful and it was not possible to take in the detail from an on-screen presentation. Alan Brandwood said that members would get a hard copy at the meetings.

Councillor Faulkner said that the difference from when he first had dealings with AWE in 1992 to the present was marked. The ease with which he could obtain information now was excellent. Members received a great deal of consolidated information which showed a remarkable change and increased openness and response, to the extent that there was now very little local concern about AWE. He congratulated AWE on this.

John Mazillius said that AWE gave members the opportunity to attend these workshops. Both John and Peter Taylor were past employees of AWE and understood the language. He said it had been difficult for them to see what level of language should be used. He asked that next time other members should attend as these workshops needed a broader cross section of the LLC. Bill Cane said that one thing which came out of the workshop was that the Company would produce a glossary or booklet explaining technical terms in the near future. Alan Brandwood said this had been produced in draft form but he felt it was still too technical and his staff would work on it. Cllr Maynard said that he felt the information was good, but he also felt the terms were difficult to understand. John Southall said that a glossary was essential in order for members to fully understand and ask questions.

Council Faulkner said that information provided had become more simple, but it was useful to relate dosage from tritium from AWE for example to that contained in food we ingest and the environment around us. Graeme Hammond said that the Company was committed to continuous improvement and that included this monthly report. Councillor Broad suggested that two pages of information was sufficient.

Councillor Maynard asked whether AWE was considering having a visitors' centre. Malcolm Hutchinson replied that the cost of a centre would be enormous and there were security issues with this. It was not something that the Company was currently considering.

## **5. Presentation on the Radiation Emergency Preparedness and Public Information Regulations (REPPIR) – George Sallit, AWE Radiological Protection Adviser.**

Regulations to ensure public safety were introduced following a major accident in Italy at Sveso involving a chemical plant. The investigation report highlighted that people around the plant were unaware of what the plant did and what actions members of the public and the Local Authorities should take in the event of a major emergency. These recommendations were accepted by the EU and published in EU 96/82/EC (Sveso II Directive).

This directive was enshrined in UK legislation, COMAH regulations, which dealt with chemical hazards.

For radioactivity these requirements were defined in EU 96/20/Euratom which covered the Basic Safety Standards for Radioactive Materials. In the UK REPPIR also includes the requirements from the PIRER regulations, some of the radioactive transport regulations and para 26 of the Ionising Radiations Regulations 1985.

The regulations require sites that have radioactive materials above a certain activity level to carry out a risk assessment. This risk assessment examines all the likely fault schedules and describes what steps are taken to mitigate against any of the incidents occurring. This risk assessment must be made public and made available to members of the public.

If the risk assessment finds that it is “reasonably foreseeable” that there may be a radiation accident that could lead to members of the public getting doses above 5mSv then the operator must also produce an on-site emergency plan. The Operator must also make available to the Local Authority sufficient information for them to produce an off-site emergency response plan.

Suitable training must be given to all the people likely to be involved in the radiation emergencies and suitable exercises must be carried out on at least a 3 yearly basis to demonstrate the effectiveness of the plan to the NII. The operator is responsible for providing information to the public about actions to be taken if a radiation emergency was declared. On the day the Local Authority is responsible for informing the public of what to do via the Chief Constable.

AWE has completed risk assessments for Aldermaston and one for Burghfield and they are available in AWE Main Reception. We have an on site emergency plan and we have provided an off site plan for the LA emergency planning officer to agree and issue.

We carry out emergency response exercises involving off site emergency response teams including the Thames Valley Police, the Fire Services, the LA ambulance crews and the local hospital (Royal Berkshire Hospital). The next major exercise will be on 2<sup>nd</sup> July at Aldermaston. We have produced a new REPPIR leaflet.

John Mazillius asked where the REPPIR leaflet was distributed. The leaflet is delivered to all households and businesses within the sheltering zones around the Aldermaston and Burghfield sites. The REPPIR Risk Assessment documents were lodged in reception at the two sites, where the public had access to them.

Cllr Maynard asked about the possibility of an attack on AWE from the air following the terrorist attacks of September 11<sup>th</sup>. He was told that AWE had a no-fly zone around the site and buildings and structures had been changed. A small aircraft would not significantly effect major buildings, as only small amounts of radioactive material were in use at any time, and the rest was stored in secure underground safes. Alan Brandwood said that conventional safety would have a much greater impact. The major impact would be the spread of aviation fuel and the loss of life of the passengers in the aircraft. This scenario had also been exercised as a major site exercise on both sites. The real protection against such attacks was airport security and national and international intelligence.

Councillor Faulkner asked whether Hampshire County Council would have to develop new plans. George Sallit said that there was no change in the arrangements as AWE's plans had been a viable for many years. West Berkshire Council was the lead authority.

## **6. Infrastructure Issues - Jonathan Brown, Head of Environmental Programmes Pangbourne Pipeline Update**

The Pangbourne Pipeline discharges low level liquid waste from AWE Aldermaston to the Thames at Purley. The effluent consists of rainwater and hand-washings from RA facilities. All sampling and independent surveys show that over 50 years of use, the impact is negligible. This has been confirmed by sampling the sediments on the riverbed, no elevated levels have been found, levels are marginally above background level. Water from hand washings and rainwater ingress in into the system is all treated as though it was radioactive waste.

Liquid effluent is held in holding tanks on site whilst samples are taken, analysed and authorised prior to discharge. The pipeline consists of two parallel pipes 18 kilometres long, gravity fed with a 44 metre fall along its length. The pipeline is four inches in diameter, reducing to three inches further down the line. This system has a proportional sampler which gives a representative sample of the discharge. It also contains flow gauges. The activity of the discharge is measured

both at the top and the bottom of the pipeline. If it is necessary to clean the nozzles on the riverbed then clean water is pumped through them.

The maximum discharge allowed is 300 m<sup>3</sup> per day but a typical batch is around 150m<sup>3</sup> with a discharge rate of 7.5 m<sup>3</sup> per hour and is discharged over a two calendar day period. The frequency of discharges depends on rainfall, during dry periods they are less frequent.

AWE will cease use of the pipeline by 1st April 2005 and is developing replacement technology.

John Southall said he had watched the Environment Agency dispersal tests using red dye in the River Thames. As a bystander, it was easy to see the dispersal pattern under different flow conditions over the years.

### **Site development**

A site was now being cleared for a new accommodation and conference centre. This site had previously contained several large office blocks and other buildings. The first step was to make a detailed assessment of the facilities including an asbestos check. Buildings were checked for documents as well as chemicals etc. The whole area was fenced off into an enclave for contractors which was then under their control. All the debris from the demolition was sorted. Metal windows were recycled and aggregates re-used or re-cycled. The aggregates were certified as clean and later AWE will use some of these aggregates for the new build. During demolition water was sprayed on to the area to reduce dust. Malcolm Hutchinson added that previously AWE had plenty of space and therefore left old buildings. Although there was still space, the policy now was to remove unused buildings and improve the site.

Cllr Dymond asked what would happen if archaeological remains were found. Bill Haight said that there were extensive surveys carried out however, this was not an area where it was expected to find archaeological remains. The Company had good links with Reading University and English Nature who helped with these issues.

### **Pangbourne Pipeline repair**

Malcolm Hutchinson introduced the topic of the small leak in the Pangbourne Pipeline reported in the quarterly reports. He said that it was a credit to Jonathan Brown and his team that the leak had been detected and dealt with so well.

Jonathan Brown told members that the Pipeline was used to discharge low level liquid effluent from Aldermaston into the Thames at Purley. The pipeline had many valve pits which allowed a cross over between the two pipes.

At the head of the pipeline was a leak detector, a header cylinder containing liquid with a graduated scale. If the level of liquid in the cylinder fell, then there was possibility that there was a leak in the pipeline. This had happened in the past when it had been due to valves in the pits leaking. The pits are concrete lined chambers, so it was simple to repair leaks pump out the chamber and deal with the liquid effluent. Some pits were prone to flooding with groundwater or rainwater and these were pumped out and the effluent returned to site. However, in this case staff could not find a leaking valve in any of the pits. The pipeline was flushed and filled with town water (tap water). The team needed to find out if there was a leak and if so where it was.

The World Health Organisation set limits for drinking water which assumes continuous consumption. Tap and bottled water have to comply with these limits. The effluent in the pipeline has activity comparable to the drinking water standards.

By sealing off sections of Pipeline and checking each section, the problem was narrowed down to a 1.5 kilometre stretch of the pipeline. Staff walked the line looking for evidence of dredging

operations or digging. There was neither. This section of pipeline was checked with a scanner, but no leak was detected. Staff now had to look at specialist leak detection equipment as the leak was too small to be found by other means. Liquid nitrogen was used to freeze a plug of liquid in the pipeline to narrow down the section where the leak was located. This left a 1km section of pipeline isolated. The next step was to use helium in the line and helium detection equipment. This reduced the search zone to a 2 metre length of pipeline. This was the first time that this method of detection had been used. AWE has wayleaves which allow staff to work on the pipeline, but the matter was discussed the landowner prior to work starting. The landowner was very helpful.

The defect was found to be a two-inch long area of the pipeline. A wooden stake was found sticking vertically in the ground butting onto the pipe. The pipeline is coated in bitumen along its length, but the stake had rubbed against the pipe and had removed a small area of the bitumen coating. The size of the hole was 1mm in diameter. This 1mm hole had been traced in 36 kilometres of pipeline. The section of pipeline was removed and replaced from the stock of the original pipe held at AWE. The condition of the section of pipeline removed is remarkable, the removed section and the replacement section were almost identical. Following the repair the area was back-filled and made good.

Sampling around the area of the leak showed no measurable environmental impact. Regulators had been informed. This exercise showed that the general condition of the pipeline was very good and that AWE's capability to detect leaks had now been demonstrated using modern technology. The removed sectioned of the pipeline has been surveyed and will continue to be sampled and checked. All this information will be fed into the decommissioning programme, but it confirms that AWE's proposals for the decommissioning of the pipeline are sound.

LLC members thought this was a remarkable story and that the incident had been well handled.

## **7. Any other business**

John Southall thanked the Secretary for organising the Burghfield visit which he had found informative and interesting. John Mazillius thanked the Environment Agency for their comprehensive quarterly reports.

Bill Cane wished Graeme Hammond well for his future as he left AWE and said it had been a pleasure working with him.

## **8. Date of next meetings:**

Thursday 4<sup>th</sup> September

Thursday 4<sup>th</sup> December