1. Introductions and apologies

1.1 The Chairman welcomed everybody to the 20th meeting of the committee. He welcomed ad hoc members attending for the item on asbestos and officials from HSE and HSL attending for specific items. He welcomed David Neadle from the UK Lubricants Association (UKLA) Metalworking Fluids Product Stewardship Group who would be making a presentation to the committee as part of the agenda item on metal working fluids.

Apologies were received from Ching Aw and David Farrar

2. Administrative issues
2.1 The Chairman asked for any declarations of interest related to the items on the agenda. Steve Williams and Robin Chapman declared interests in the item on metal working fluids. Martie van Tongeren declared an interest in the item on assessing the UK occupational cancer burden.

3 Asbestos: finalisation and confirmation of the position statement of WATCH following the Oct 2010 meeting and subsequent email consultation

3.1 The Chairman indicated that there were two aspects to this item – the final wording of the position statement, and the possibility of progressing an additional piece of work on measurement and monitoring. Regarding the position statement, he reminded members that he had circulated version (v) 4 of the draft statement. Most members had already indicated that they agreed with this version, accepting that one would always be able to spot opportunities for small editorial amendments. In relation to the wording of the final paragraph and the possibility of further work being done on the question of measurement and monitoring, he thanked one member for ‘anchoring’ a telephone discussion on this earlier in the month, and confirmed that the outcome of that discussion was that the wording of the final paragraph of the draft position statement should remain as in v4. Therefore, he asked the committee if it was now able to confirm the wording in v4 as its final position statement. He invited members to identify any small editorial changes that might be readily agreed without debate - but cautioned against raising points that would invite a resumption of detailed debate, for which there was no time available.

3.2 One member suggested an additional introductory sentence which was agreed by the committee. Another member explained he had some concerns about the use of the words ‘not far’ in the penultimate paragraph and it was agreed that this could be deleted. Members also suggested some minor rephrasing suggestions. The Chairman reminded the committee to consider at this stage whether they could live with the wording. Members discussed the various changes suggested and all agreed the final wording [link to final agreed statement]. The Chairman thanked the members for their patience and persistence in working together to achieve this unanimously agreed committee position.

3.3 The Chairman returned to the note of the teleconference held earlier in the month. He observed that the conclusions of that discussion presented some ideas for future work on aspects of measurement and monitoring for asbestos fibres. The Chairman commented that it would be for HSE to consider whether or not it wanted such work taking forward and noted that HSE had another committee - the Committee on Fibre Measurement – that, given its focus, would need to be involved if such a project were agreed. One member reminded WATCH of research work being done involving the assessment of asbestos fibres in lung samples taken from people born pre- and post-1965. The results of this work provide a measure of cumulative exposure, including environmental exposure, thereby offering a complimentary approach to airborne fibre measurement at specified points in time. He argued that the progression of both approaches was important. The lung burden
approach could provide valuable data outside of the traditional asbestos materials manufacturing and removal sectors. Members agreed they would be happy to see both areas of work advanced.

**Action: Secretariat to clarify HSE mandate for further work**

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<th>3.4</th>
<th>Members noted that the conclusions of the teleconference also asked WATCH for guidance on the lowest level for which there was a need to quantify exposure. The Chairman suggested that in view of the limited time available at the meeting, members might consider this question outside the meeting and offer their views, perhaps at the same time as responding to the draft minutes. One member suggested that it might be better to identify the various specific circumstances where measurement might be required and the lowest levels that might apply in those circumstances.</th>
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<th>3.5</th>
<th>One member drew attention to the recent notification of infringement proceedings taken by the EU against the UK. The Chairman explained that the EU alleged that UK implementation of the Asbestos Directive (2009/148/EC) did not adequately implement all the requirements of this directive. The case involves the UK derogation for activities that involve only sporadic and low intensity exposure to asbestos. HSE was currently considering how to respond. Members asked to be informed of the outcome; the Chairman agreed to this, thanked WATCH for its deliberations on asbestos and drew this item to a close.</th>
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**4. Metalworking fluids (MWFs) and respiratory disease: presentation from David Neadle on chemical formulation of MWFs – plus update on the overall programme of work on this issue.**

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<th>4.1</th>
<th>Members heard a short presentation from Gareth Evans of HSL outlining recent progress in this work programme. The work undertaken in the early stage of the programme had primarily been focused on constituents of metalworking fluids and the potential problems these might cause. The current work is more about risk management approaches. Microbial growth in used MWFs had been identified as one area of concern. The recent studies had included work to examine whether microorganisms would establish in ‘long-life’ metalworking fluids, which are designed to resist microbial growth but without the addition of conventional biocides. Using a standardised laboratory test it had been shown that two types of long life fluids remained free of bacteria for up to three months even when subjected to regular low-level contamination with tramp oil, swarf, and inoculums of MWF adapted bacteria. In a second study it had been shown that the growth of bacteria in a biocide free MWF was critically dependent upon pH with no viable organisms surviving above pH 9.5. This study is being continued to look at other types of MWFs to establish whether for those formulated as alkaline solutions, careful management of the fluid pH could help to restrict microbial growth in those fluids with no biocide or bactericidal additives.</th>
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| 4.2 | Turning to consideration of metalworking fluid mists, members heard |
that HSL is planning an industry consultation on methods used to monitor exposure levels. HSE inspectors had identified particular concerns over the use of compressed air for cleaning purposes; this could potentially generate significant mists of metalworking fluid. HSL has undertaken research, and measured exposure to mists caused by use of compressed air both in the laboratory and in the workplace. They identified that mist formation is dependent upon a number of factors but that the greatest risk for exposure was for droplet deposition onto the hands, arms and lower torso of the compressed airline operator.

4.3 Members next heard a presentation from Chris Barber of HSL about work undertaken on case definition for reports of extrinsic allergic alveolitis, EAA. He reminded members that this was one of the problems that arose during the investigation of the ‘Powertrain’ outbreak - the lack of agreed case definition. There is no single diagnostic test for EAA, nor an accepted ‘gold standard’ for its diagnosis. HSL set up an expert panel of clinicians to review the details of alleged cases from the ‘Powertrain’ outbreak. The aim of this work was to develop a case definition for EAA and to identify which factors best differentiate between people considered to have EAA and those considered not to have the disease. It was hoped that this would enable recommendations for clinical care of EAA-affected workers in future. The proposed case definition was also applied to other published reports of outbreaks of MWF-related respiratory disease and the results suggested the proposed criteria might perform quite well. HSL is looking to do a similar project with MWF-related occupational asthma with a view to producing an evidence-based questionnaire. It was noted that since the ‘Powertrain’ outbreak there have been other outbreaks in the UK, and in some EU countries.

4.4 Members next heard a presentation from David Neadle of the UKLA Metalworking Fluids Product Stewardship Group. [link to presentation] He explained that the purpose of this group was to maintain and promote high ethical standards and regulatory compliance in maintaining and using metalworking fluids. He provided each WATCH member with an information pack about the work of the group and a copy of the presentation covering the varied types of metalworking fluid available. Different fluids are selected for different types of metalworking. Whilst some fluids are relatively simple in their constituents others may include about 20 components. The composition of metalworking fluids can be significantly changed during use and thus fluids can become very complex mixtures. Members heard that there have been industry initiatives to improve working conditions in machine shops since the time of the ‘Powertrain’ incident with introduction of measures such as mist extraction.

4.5 Members asked questions at the end of these presentations. In the aftermath of the ‘Powertrain’ incident HSL has reviewed other incidents reported in the literature, most of which had occurred in the USA. It has been difficult to establish with certainty the cause of ill-health in each incident, although much of the focus of attention has been microbial contamination of the fluids. There has been no single identified cause.
4.6 It was confirmed that the immunological biomarkers are not diagnostic for EAA but underpin evidence gathered from case history and the results of CT scans and lung biopsy. There are three different disease types of EAA – the acute, subacute and chronic forms. Comparing cases from metalworking fluids with other known groups of people in which EAA is known to occur, bird fanciers tend more towards the chronic type of EAA, with a greater incidence of pulmonary fibrosis; farmer's lung tends to be a subacute form of EAA with emphysema being prominent. A WATCH member noted that in order to elicit antibody production in experimental animals, antigens were often mixed with oils to prime the animal and enhance the humoral immune reaction. This seemed to have a parallel with occupational exposure to airborne used MWF that may contain mixture of oils as well as microbial antigens. It was therefore logical to suspect that the causative agent could be microbial allergens, endotoxin, enhanced by the adjuvant properties of oil. HSE commented that the available literature suggested that most outbreaks of MWF-induced respiratory disease have occurred in the USA and UK, with relatively few outbreaks reported from Europe despite the presence of a large engineering sector in many EU countries (e.g., Germany). HSE also commented that the reported numbers of cases of MWF-induced occupational asthma tends to be greater than those of EAA.

4.7 Looking forward to the next item on the agenda (HSE Occupational Cancer Burden project), a member noted that the authors of the published paper (Rushton *L et al*: British Journal of Cancer (2010) 102, 1428 – 1437) had estimated 1730 cancer registrations (for bladder, lung non-melanoma skin, and sinosal cancers) in 2005 that were attributable to historical exposure to mineral oils. Accepting that this paper was reporting on a historic cohort, and there have been changes to working conditions in this sector of employment, the member asked if this might be a continuing problem. Mr Neadle believed much of this apparent cancer problem was likely to reflect a historical situation; in more recent times there have been significant beneficial changes in working practices and the substances used, together with changes to the work environment aimed at better control of the working atmosphere around metal working machines.

4.8 Members asked for views as to how the REACH Regulation was anticipated to affect the metalworking fluids sector. Mr Neadle considered that REACH was likely to reduce the variety of raw materials, and product innovation was likely to be driven more by the need to satisfy REACH requirements. One would anticipate cost increases and there might be changes in hazard classifications that would make products appear more dangerous than formerly, although their composition was the same. This in itself could result in consequences within the user industry related to perceptions that some types of product have 'bad' hazard profiles.

4.9 Members recorded their thanks to all of the speakers for interesting and
helpful presentations.

5. **Burden of occupational cancer in the UK and the HSE/UK cancer/carcinogens intervention programme – preliminary discussion**

5.1 The Chairman introduced this item, indicating that the main purpose was to enable members to consider how it might be best to set up a more in-depth discussion at the next meeting, possibly including inviting a member of the research team that had recently published the paper supplied to WATCH for this item.

5.2 A member noted that by its nature the published paper is recording current cancer cases caused by historical exposures, rather than the current exposures that might cause cancers in the future. The work of WATCH is essentially concerned with current occupational exposures and what might be the appropriate measures to take in relation to them. HSE responded by clarifying that HSE technical reports and published papers are being prepared to summarise work on predicting the future burden of cancers arising from current exposures. The member commented that it should be an aim to examine a selection of current exposure situations that might pose particular concerns.

5.3 Another member reminded the committee of its previous consideration of another strand of what was the Disease Reduction Programme (DRP) Cancer Project looking at current occupational exposures in the UK to priority carcinogens. The outcome of this work was to be used to prioritise consideration of the need for further control measures.

5.4 Members agreed that it would be good to get an update of the various elements of the “cancer intervention” work. It was suggested that if there was to be a debate on the methods used in the published paper supplied and the interpretation of its findings, other epidemiologists should also be invited to such an agenda item. However, another member cautioned that, whilst this would undoubtedly create a very interesting debate, it might be better to use the available time at a WATCH meeting to draw together an overview of the various strands of HSE funded cancer work that have been done and consider the whole picture.

5.5 A WATCH member stressed the importance in any such future agenda item of being clear about what WATCH is expected to deliver and to check whether there was any overlap with others who are involved in the consideration of this topic.

5.6 Members were advised that the British Journal of Cancer is expected to publish towards the end of 2011 a supplement covering all of the work of this research group on the current occupational cancer burden in Britain. It was expected that within the next few weeks the American Journal of Epidemiology would be publishing a paper from this group summarising the methodology used to estimating the future occupational cancer burden. Members re-emphasised that WATCH should be interested in current exposures and what preventative activity is indicated to
It was observed that a prominent reported cause of occupational cancer – cancer of the breast - was attributed to shift work. This falls outside of the “chemicals” remit of WATCH; HSE is funding additional research with the aim of determining the importance of shift work as a risk factor for breast cancer.

The Chairman summed up the discussion, noting that WATCH was enthusiastic to consider the recent work on the burden of occupational cancer at the next meeting. He said that if such an agenda item were to be put together, HSE would be clear as to what was being asked of WATCH.

### Minutes of 19th meeting held on 27 October 2010 and matters arising

**6.1** Members agreed the minutes as drafted and were complimentary about their quality.

### Dates of next meetings

**7.1** Members agreed that the next meetings would be held in York on 30th June and 25th October, unless those members unable to attend this meeting indicated that they were unable to attend on these dates.

**Action:** secretary to check

### Any Other Business

**8.1** Members heard that a COSHH Essentials working group had met recently, looking primarily at guidance sheets produced for the offshore oil industry. Some WATCH members who knew of these sheets aired a concern that they represented a move away from the original intentions of COSHH Essentials. It was clear that the expected benefits of COSHH Essentials could only be realised if the initiative stayed within its original scope, that of simple, readily available, practical guidance of widespread relevance. Whilst it was accepted that the offshore industries have some specific characteristics, there was obviously some commonality with other industries and it was not clear why a separate sheet was required for the offshore sector for cases such as painting or some cleaning operations. It was accepted that the offshore industry did use some specific terminology. WATCH noted that there had been reasonable validation of the original COSHH Essentials material and commented that there is a need for on-going governance to ensure continued validity and consistency. Members assumed there would be further consideration of these matters and the Chairman said that the WATCH Secretariat would inform WATCH on current and future plans for COSHH Essentials.

**Action:** WATCH Secretariat

**8.2** The Chairman drew attention to the French paper on a control banding tool for nanomaterials that had been posted by a member on the WATCH webcommunity. The Chairman said that the UK REACH Competent Authority was commenting on this paper in a REACH
context. The Chairman asked members to what extent they wanted to use the webcommunity as an informal discussion forum, perhaps to determine whether members think there is a justification for WATCH to pick up particular issues for formal discussion. The secretary indicated that the webcommunity had been introduced with a view to sharing documents such as draft minutes for comment to allow members to respond to each others comments and to save them repeating points raised by colleagues. Members asked for a tutorial at a future meeting to help them make better use of this new tool.

**Action: Secretary**

| 8.3 | A WATCH member had heard an item on a radio consumer programme recently suggesting that high concentrations of formaldehyde in hair straightening products was causing concern for trading standards officials. Apparently some products were said to contain about 100 times the specified limit for formaldehyde. There might be a particularly concern that in some hair salons staff specialising in hair straightening could be experiencing significant exposures regularly. The Chairman agreed to pass this concern to those in HSE now responsible for reducing occupational skin disease. |

**Action: Chairman**

| 8.4 | A member commented that there seemed to be more confidence about the future of WATCH. The Chairman confirmed that it had always been considered that an expert advisory committee for chemicals and occupational health was essential. The future relationship between WATCH and ACTS was not yet finalised and members noted that there might be a need for new terms of reference for WATCH, recognising a continuing need for good interaction with ACTS. |