

Foundries Industry Advisory Committee

Minutes of the 3rd meeting of the Foundries Industry Advisory Committee held on Thursday 21st October 2004 at 10.00am at the Health and Safety Executives Offices, Hagley Road, Birmingham.

Present

Mr J Parker
Mr P Harvey
Mr M Shenton
Mr S Nicholas
Mr T McGowan
Mr A McCarthy
Mr R Sneddon
Mr G Roper
Mr R Turley
Mr D Wells
Mr G Morley

Representing

Acting Chairperson- Cast Metals Federation
HSE- Secretary
James W Shenton Ltd
Saint Gobain
Halberg Guss
NUDAGO
Community
Zeus
Roger Turley Engineering Consultancy
CTI
CTI

Apologies

Mr J Barrett
Mr D Oddy
Mr T Parker
Mrs P Murrell

HSE
Federal Mogul
Amicus MSF
ICME

Absent

Mr P Clews
TGWU

1. Introduction and apologies

Mr J Parker chaired the meeting in the absence of Mr J Barrett.

2. Actions arising from previous meeting

CTI have compiled the draft report "Foundry training initiative project" and submitted it to HSE for approval. An executive summary of the project was provided for FIAC members. However, it should be noted that this remains a draft version.

Action: a) CTI to forward updated version to HSE and
b) P Harvey to circulate final version to FIAC members.
c) P Harvey to provide outlines of typical foundry accidents for inclusion on the SHIFT website.

3. Minutes of the 2nd Meeting held on 22nd April 2004

The minutes were agreed as a true and accurate record.

Main Agenda

4. Furfuryl Alcohol (FA)

FIAC members were provided with:-

- a. Letter on behalf of FIAC dated 6.01.04. to ACTS
- b. Letter of response from ACTS dated 4.10.04

- c. Draft COSHH essentials guidance FD16.
- d. Draft revision of CHAN 33.
- e. Summary produced by the Industrial Chemicals Unit, HSE of activities on classification and labelling of furfuryl alcohol.

P Harvey reported on the activities within HSE on the classification of FA including the consultation undertaken with industry. ACTS have declined the FIAC request to investigate whether human ill health data exists for FA and confirmed that FA is on the agenda for review by the EU expert Scientific Committee on Occupational Exposure Limits (SCOEL) although no timetable for this exists. ACTS have asked FIAC to respond to the revision of the CHAN33 and COSHH Essentials guidance by 19 November 2004.

Points raised in response to ACTS letter:

- There is no evidence of ill health either via user or supply industry.
- FA is a non oil based product , currently available alternatives are all oil based.
- Proposed limit and classification will push foundries towards oil based systems that use phenol, formaldehyde and / or isocyanates. Both have their own health issues. Revision of both FA and formaldehyde has the potential to seriously affect the future of the foundry industry.
- CTI has historical exposure data for FA, this shows typical levels at 10 – 20 mg/m³. CTI believes that the industry could not achieve the levels proposed in the original CHAN33.
- The ACTS response regarding costs of research should be challenged.

Actions:

- FIAC should meet with representatives of ACTS and HSE Industrial Chemicals Unit to set out:
 - Concerns regarding validity of the data upon which review is based.
 - Foundry industry difficulties in meeting lower limits.
 - The potential knock on effects of FA and formaldehyde limit changes.
 - Need for properly costed evaluation of ill health data.
- P Harvey to arrange meeting before 19 November 2004 with ACTS and Industrial Chemicals Unit to include CTI, binder suppliers, CMF, foundry representative and trade unions.
- J Parker to consult with CMF members on the likely effects of ACTS proposals.

Points raised on the proposed CHAN33:

- Health effects are generic to the classification and not proven as “actual effects.”

- Long term exposure effects should be clearly indicated as being extrapolations of an animal analogy, this requires emphasis before the given effects rather than after.
- Emphatic wording such as “*did cause;*” “*long term effects...include*” and “*can cause serious long term effects*” should be replaced with “*could;*” “*may include*” and “*may.*”
- The link to COSHH Essential information sheet FD16 is too strong at present as the controls outlined are not considered practicable.
- The CHAN does not set out a limit to enable industry to recognise when adequate control has been achieved. Any limit set must be based upon sound evidence (see above).
- The CHAN (and all CHANS!) should advise readers that when considering substitute systems or materials, it is vital to carry out a thorough risk assessment (including environmental and technical issues in addition to health and safety concerns) of the alternatives prior to any change (see comments re formaldehyde below)

Actions:

- To be discussed with ACTS/ Industrial Chemicals Unit as above.

Points raised on the proposed COSHH Essentials guidance FD16:

- The most recent version does not appear to have taken on board the FIAC comments from the meeting with the author in 2003.
- The controls detailed are not reasonably practicable.

Actions:

- G Morley to draft improvements to the document, forward onto P Harvey for circulation within FIAC.
- Meeting with the author (as above).

5. Formaldehyde

HSE’s Industrial Chemical Unit has reported that formaldehyde (MEL = 2ppm) is on a priority list for review as IARC has recently reclassified it as a carcinogen; it is suspected as being an asthmagen and other organisations have limits lower than the current 2ppm. No timetable has been set for review by WATCH/ ACTS and there will be the opportunity for formal consultation.

Points raised:

- Substitute materials for furfuryl alcohol based resin binders are likely to contain significantly more formaldehyde than some of the furane resins and many will also contain phenol
- Formaldehyde is evolved in most casting processes of which hot box is considered to have highest levels of formaldehyde (1-2ppm) and cold box probably the least.

- OSHA limit is 0.1 ppm which would effectively exclude the hot box technique and may make others at least problematical). This has already been experienced in the USA and USA companies in the UK.

Actions:

- P Harvey to seek consultation with Industrial Chemicals Unit as with furfuryl alcohol.
- CTI to prepare evidence of formaldehyde exposure data for consultation.
- J Parker to consult CMF members on the likely effect of any proposal to change limits.
- P Harvey to identify who is the industry representative on ACTS and mechanisms for ensuring industry is properly consulted by ACTS.

6. Optical Radiation

FIAC members were provided with:

- a) Email from D Wells to Norman Smith (HSE)

Optical radiation is included in the Physical Agents Directive. Likely that the directive will require employers to assess the level of risk and implement controls. Exposure limits are likely to be those set out by the International Commission on Non-Ionising Radiation Protection (ICNIRP) and include 3 limits (2 for retinal damage and one for heat damage). HSE believes that only heat damage risk will be significant in most foundries.

Points raised:

- Empirical assessment is very complex and likely to be expensive.
- Need clear guidance on what is effective control and when measurement is and is not required.
- Manufacturers data on attenuation performance of eye wear needs improving.

Actions:

- P Harvey to investigate whether HSL can evaluate performance of a range of protective eye wear.

7. Electromagnetic Radiation

Arwel Barrett is meeting with contractors of research project to evaluate risk levels of existing equipment.

Actions:

- J Parker and G Morley to identify volunteers to be included in the research to cover a range of medium frequency furnace types (embedded and floor mounted) and being greater than 5 years old.

8. Hand Arm Vibration

Review of position shows that there have been no significant improvements in tool design to reduce risk.

Points raised:

- Emissions data remains based upon free running wheel.
- Controls practiced include auto-fettling, maintenance of equipment, job rotation and health surveillance. It is becoming difficult to use job rotation in smaller foundries and health surveillance can be limited in its effectiveness as it relies on self reporting.
- Sufficient guidance exists on the range of control strategies.

Actions:

- Direct foundries to existing guidance through SHIFT website (P Harvey & J Parker).

9. SHIFT

The steering committee has been joined by S Nicholas and T McGowan. Agreement that topic forum would be held at which 20 organisations would be invited to meet to share best practice on particular topics. The findings of those forum could then be shared via the website. If possible forum to be held at foundries.

Accident data collection system to be reviewed.

Actions:

- J Parker to progress forum programme.

10. Review of accidents and ill health

Members received a copy of all reported accidents within one of the casting categories over a set period.

11. FIAC Action Plan

TU and employer members reported a large number of non English speaking workers entering the industry from new EU member states and Russia. These workers are filling vacancies which foundries are finding increasing difficult to fill. The workers are usually provided by employment agencies. Providing information and training to these groups is difficult.

Actions:

- To monitor situation and evaluate whether CTI research on training techniques could be promulgated.

12. Recent Experience

- Several accidents have been reported at high pressure diecasting machines. HSE hopes to re-iterate guidance on control measures via the trade press and/or SHIFT.

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- A large employer has reported difficulty in agreeing standards for repairing molten metal PPE with its contract laundry company. To eliminate subjective assessment they have introduced a policy of no repairs.

13. Any other business

- Foundry pattern shop recently became aware that hardwoods can have maximum exposure limits.

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14. Date and time of next meeting

Thursday 14th April 2005, 10.00am at the HSE offices, Hagley Road, Birmingham.

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Future meetings: Thursday 20th October 2005 and Thursday 27th April 2006.

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