

Health and Safety Executive		Sector Information Minute	
Field Operations Directorate			
Manufacturing Sector IR7		SIM 03/2005/14	
Motor Vehicle Repair: Spraying Isocyanate – containing paints			
Cancellation Date	11/08/2009	Open Government Status	Fully Open
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Target Audience:
 AFQ Inspectors
 SG Specialist Inspectors
 HSAOs
 Health Unit
 Local Authority Inspectors

**OPERATIONAL WORK 2005/06 –DISEASE REDUCTION PROGRAMME
 NATIONAL PROJECT 27: REDUCING THE RISK OF RESPIRATORY ILLNESS
 FROM 2-PACK ISOCYANATE-CONTAINING PAINTS IN THE MOTOR VEHICLE
 REPAIR (MVR) INDUSTRY**

The Project's aims and objectives are described. Four pilot Safety and Health Awareness Days (SHADs) have been run and evaluated and a further 14 are planned for 2005/6. The follow-up visits are primarily being carried out by SG Inspectors. FOD staff who are likely to visit MVR bodyshops will need to be aware of the Project and Divisions are encouraged to nominate appropriate Inspectors to attend, and assist at, one of the events. Band 3/4 and HSAO time for organizing the SHADs has been allocated under the FIT3 programme.

BACKGROUND

1 2-pack isocyanate-containing paints are used in virtually every MVR bodyshop. There is currently no other product that gives such an effective and reliable finish and which cures so quickly. 'Water-based' paints frequently contain isocyanates and there is no isocyanate-free topcoat substitute at present (and any paint having similar properties is likely to be highly reactive and have adverse health effects).

2 Unfortunately, isocyanate is the biggest single cause of occupational asthma (OA) in the UK and MVR bodyshop "**vehicle paint sprayers**" (VPSs) are the work group at greatest risk. The HSE-financed THOR reporting scheme estimates the average OA incident rate for VPSs is 80 times greater than that for the rest of the UK workforce. This rate equates to over 50 VPS cases of OA per year. And allowing for the likely under-reporting to THOR there may be up to 150 VPS cases of OA in the UK per annum.

3 In addition to OA, workers in MVR bodyshops also have a high incidence of skin disease; VPSs are one of the top ten occupational groups with the highest incidence of skin disease in the UK.

4 About 170,000 people are employed in MVR in approximately 44,000 businesses, including about 8000 bodyshops. The vast majority are micro-businesses, which are particularly hard to reach and influence. Field experience, including inspection and audit of 100 MVR bodyshops in the South East, revealed widespread ignorance about the risks from using 2-pack isocyanate paints and how to control them properly. Many companies were unaware that they were using isocyanate products.

5 In 2004 a 3-year 'Star Chamber' project was started. The Project has two overall aims, one mainly concerned with direct involvement with small MVR bodyshop businesses and the other designed to influence the groups supplying and advising the industry. Four pilot Safety and Health Awareness days were held attracting over 210 representatives from the MVR bodyshop industry. The SHADs unveiled, in novel ways, control problems that were previously unappreciated by the industry. The methods included: video-clips of exposure and clearance of booths and spaces; models of booths and spaces, showing air-movement and clearance time; and demonstrations of skin condition and spirometry. Early results from the four Pilot SHADs are very positive; over 90% of participants reported that their awareness of the risks had been raised and a similar number stated they would be carrying out remedial action. This indicates that the SHAD material and presentations are effective. About 100 non-attendees have been visited by inspectors resulting in significant enforcement and further influencing.

AIM

6 The aim of this National Project is to continue the 3-year initiative, building on the success of the pilot SHADs and reduce the risk of respiratory illness from isocyanates. It also aims to raise awareness of and reduce the risk of skin disease in MVR bodyshop workers. This contributes to the "Fit 3" Strategic Programme and specifically the Disease Reduction Programme in relation to occupational asthma and skin disease.

OBJECTIVES

7 14 SHADs will be delivered (2 in each Division) in 2005/6 (with the intention of running 12 more in 2006/7). This will result in attendees having a better understanding of:

- How isocyanates affect health
- What exposures can damage the skin
- How exposure occurs
- How control measures can minimise exposure

- How to check that control measures are working by measuring exposure (using biological monitoring)
- What health surveillance needs to be in place;

8 Intelligence generated during the mail shot and subsequent attendance will allow better targeting of enforcement.

9 . In addition, there will be increased use of key stakeholders and improved awareness of key industry third parties including training organisations, paint suppliers, trade associations and motor factors. This will result in better awareness of good practice advice and increasing awareness of the dangers from isocyanates in spray paints. It is anticipated that by the various interlinked activities the work, with industry stakeholders, will lead to a step-change in the control culture of the industry.

PROJECT PLAN

10 The key elements of this proposal are to:

- Run 14 SHADs including follow-up inspections and evaluation of their effectiveness during 05/06;
- Places will be made available for Inspectors nominated by their Division who may be visiting MVR bodyshops to attend one of the SHADs
- Run a campaign of influencing through key stakeholders (already identified);
- Use innovative communication techniques to target non-attendees and those not covered by SHAD invitations (including 'Key Message' CD);
- Publish regular targeted articles in trade press plus local publicity surrounding SHADs/inspections (three articles have been agreed to appear in alternative months in Bodyshop Magazine).

COSTS

11 The total amount of staff time will be 6.55 staff years (at various grades) of which 1.6 years is HSL planned support / Visual Presentation Service time). As a very rough estimate based on the staff year costs for a Regulatory Inspector (Band 3) as an approximation equates to £235,800 (an accurate cost using staff year costs per grade will follow).

12 The cost of running 14 SHADs is £70,000 (based on £5000 per SHAD).

13 The communications budget for the work is estimated to be in the region of £11k (CD production and circulation, drama pilot). Publicity materials have been

developed in conjunction with HSL and will be further developed with the Communications Delivery Service (CDS) (costs above).

BENEFITS

14 It is estimated that the work will give at least a 20% improvement in measures to control isocyanate exposure, leading, in the longer term, to a 20% reduction in OA cases. This should prevent 15 new cases of occupation asthma by 2008. The total number of cases prevented will, clearly, depend on the timeframe used for the calculation. We would certainly hope that the benefits in terms of cases prevented would continue for many years.

AVAILABLE GUIDANCE

15 SHAD [organisational](#) and inspection follow-up guidance is available on the Intranet. The guidance incorporates the lessons from the Pilot SHADs and a set of letters etc is available. The [Project Topic Pack](#), gives further background and guidance on inspection, Notice Schedules and enforcement steer. The enforcement expectation is explained to SHAD attendees and is supported by trade bodies.

REPORTING

16 Two inspection Forms have been developed for use by Specialist OH Inspectors (and Operational Inspectors who wish to also follow-up non-attendees after the SHADs). One form is similar to the Asthmagens Topic form and uses Risk Control Indicators to judge risk management and control. The other is for recording inspection and test findings in some detail. The inspection Forms should be returned by 28 February 2006 to Derek Morgan (HSL) for collation and analysis and appropriate entries made on FOCUS/COIN. See Topic Pack for instructions.

17 An update on progress with the project and details of new initiatives will be published on the HSE's MVR webpages

PUBLICITY

18 This project is being widely publicised within the MVR bodyshop industry. A copy of the questionnaire and key messages on reducing the risks of respiratory illness and skin disease are to be posted on the MVR webpages. The results of the project will be publicised widely.

FURTHER ADVICE

19 The project is being managed by SG leading a Project Team drawn from across HSE disciplines. Further information can be obtained from the Project Manager, Dr Mark Piney, (VPN 510 5307) or Andrew Lake, Manufacturing Sector (VPN 503 4243).