



SAFETY ASSESSMENT
FEDERATION

Guidance

Dusts and Fumes – From Welding Processes

Current HSE Guidelines

REFERENCE: HSC 09
ISSUE: 01
DATE: 09/02/2021

DOCUMENT INFORMATION:

REFERENCE:	HSC 09
ISSUE:	01
DATE:	09/02/2021
PREPARED BY:	Health and Safety Committee (TC9)
APPROVED BY:	TSC

DOCUMENT HISTORY RECORD:

ISSUE:	DATE:	CHANGE DETAIL:
01	09/02/2021	Initial Document

© The Safety Assessment Federation Ltd

All rights reserved. Except for normal review purposes, no part of this publication may be reproduced, utilised, stored in a retrieval system or transmitted in any form by any means electronic or mechanical, including photocopying, recording or by any information, storage or retrieval system without the written permission of the publisher.

CONTENTS

INTRODUCTION 1

DISCUSSION 1

 1.1. Regulations 1

 1.2. Work activity – Inspection 1

 1.3. Risk assessment 1

 1.4. Planning 2

 1.5. Competency..... 2

CONCLUSION 2

RISK ASSESSMENT – Dusts and Fumes from Work Processes 3

INTRODUCTION

Safety Assessment Federation (SAFed) member company Engineer Surveyors carry out inspections of plant and equipment at various third-party client sites. The work processes carried out on such sites may result in the generation of dusts and/or fumes into the workplace where the Engineer Surveyor needs to access. This document is aimed at providing guidance on the actions to be taken by an Engineer Surveyor where risks to health and safety may be present from the presence of dusts and/or fumes.

DISCUSSION

1.1. Regulations

The Control of Substances Hazardous to Health Regulations (COSHH) place a duty on persons in control of premises to ensure suitable and sufficient measures are in place to control the potential exposure to dusts and fumes which may affect the health of employees, contractors and others.

Section 4 of the Health and Safety at Work Act places a duty on those in control of premises to ensure risks from exposure to substances to persons who are not employees are controlled, so far as is reasonably practicable.

The above clearly places a duty on owners / occupiers of premises to ensure the potential exposure of dusts and fumes to Engineer Surveyors, which may cause harm to health, are controlled.

1.2. Work activity — Inspection

Engineer Surveyors visit premises where activities carried out may produce dusts and /or fumes. Exposure should be managed on site to eliminate or reduce the risks to health.

1.3. Risk assessment

HSE guidance advises that exposure to welding and cutting fume may cause respiratory irritation and metal fume fever. It can also increase susceptibility to pneumonia. Long term exposure can lead to serious lung diseases including occupational asthma and cancer.

Current evidence also suggests that long term exposure to welding fume may cause chronic obstructive pulmonary disease (COPD). Welding fume may also cause adverse neurological effects from exposure to manganese, common in mild steels, some stainless steels and welding consumables.

There are also exposure risks where inspections are carried out in areas where excessive volumes of dusts are generated.

Where required the Engineer Surveyor should carry out a Point of Work Risk Assessment and discuss the concerns with a site representative wherever possible.

Where unacceptable risks are present, or the Engineer Surveyor feels their health and/or safety is compromised, they should initially discuss with a site representative with the aim to reduce the risks to an acceptable level to allow the inspections to be completed.

The requirement for additional PPE such as face masks should not be an acceptable control measure, however there may be some locations where there is no alternative.

1.4. Planning

It is recommended that the process be in operation for an assessment of control to be completed. Where this is not possible then the process should be demonstrated / simulated to enable a judgement to be taken.

1.5. Competency

The Engineer Surveyor shall be competent to assess each site visited and the evaluate the hazards and associated risks.

CONCLUSION

The generation of dusts and / or fumes should be controlled on site to eliminate or reduce the risks of exposure to anyone working at the site or visiting the site.

Where this has not been done, or is ineffective, the Engineer Surveyor shall assess the risks on site.

In the event where suitable control measures are not possible to implement the Engineer Surveyor has the authority to cancel the inspections and walk away.

RISK ASSESSMENT – Dusts and Fumes from Work Processes

Hazard	Who Might Be Harmed	Control Measure	What More Needs To Be Doing	By Whom	When
<p>Exposure to dusts and/or fumes generated by work processes at a client site.</p>	<p>Engineer Surveyor.</p>	<p>The Engineer Surveyor shall assess the conditions on arrival. Where possible discuss any concerns with the site representative. If the levels of dust are excessive and likely to cause harm or discomfort, the Engineer shall take a decision to continue with the inspections or not. The Engineers should not be expected to wear breathing apparatus; however this is at the discretion of the Inspection Body and the Engineers concerned.</p>	<p>The Engineer Surveyor may wear a suitable face mask where they are comfortable to do so. This should be supplied by the client. If breathing apparatus is to be used, face fit testing should be provided to the Engineer concerned.</p>	<p>Engineer Surveyor. Client representative.</p>	<p>Every site where conditions arise.</p>