YOUR LOGO

Risk assessment and method statement

COSHH risk assessment

Work with hazardous substances. Pre-filled with typical hazards, controls and sequence: edit it for this site.

PROJECT

SITE ADDRESS			
ACTIVITY Work with hazardous substances		RAMS REFERENCE	
CONTRACTOR CARRYING OUT THE WORK	PRINCIPAL CONTRACTOR		
PREPARED BY	APPROVED BY	REVISION	DATE

Revision record

Reissue and rebrief when the sequence, the programme, the team or the conditions change. If you would have written it differently had you known, it needs a new revision.

REV	DATE	WHAT CHANGED	BY

THE WORK

The activity, the place and the people

Pre-filled for this kind of work. Make every line specific to this site: this sequence, this access, these people, this weather.

Scope of the activity

What is being done, and what is not included.

MHSWR REGULATION 3(1)

Use of hazardous products and dust-producing processes on [site or job]. This covers cutting and chasing masonry and concrete, cutting and sanding timber, and mixing cement products. It also covers paints, adhesives, resins, welding and cleaning. Each substance and process is listed in the substance register. Not included: [list exclusions, for example spraying isocyanate coatings].

Location and access

Where on site, how people and materials get there, and the restrictions.

Site access via [gate]. Products stored at [store location], away from welfare areas, in their original labelled containers. Cutting stations set up at [location] with water or extraction. Working hours [08:00 to 17:00].

Programme and interfaces

When the work runs, and who else is working nearby.

CDM REGULATION 15(2)

START DATE

DURATION

WORKING HOURS

INTERFACES WITH OTHER TRADES

Other trades working near dusty or solvent work: [trades]. Dust and vapour zones are barriered and signed, and work is timed to keep others out of them. Spraying is programmed for when the area is clear.

Documents this RAMS relies on

Safety data sheets for every product [held at]; substance register in this document; EH40/2005; face-fit test records; LEV examination report [ref]; health surveillance arrangements; construction phase plan.

The team, and their competence

CDM REGULATION 8

ROLE	NAME	CARD, TICKET OR TRAINING NEEDED	CONTACT
Assessor		Knows the work and the products, reads safety data sheets and EH40, and gets expert help for unfamiliar tasks.	
Supervisor		Checks the controls are in place and working before and during each task.	
Operatives		Briefed on the assessment and trained in the extraction and RPE they use.	
Fit tester		Trained, qualified and experienced, as HSE guidance expects.	
LEV examiner		Competent to carry out the thorough examination and test.	
Occupational health		A competent provider for skin checks, lung function tests and asthma questionnaires.	

METHOD STATEMENT

The sequence of work

The order the team will work in on the day, with the controls built into each stage. If the sequence changes on site, revise the RAMS and brief it again.

STAGE	WHAT IS DONE, AND HOW	CONTROLS AT THIS STAGE	BY
List substances and processes	Walk the job and list every product used, and every process that makes dust, fume, vapour or mist. Get the current safety data sheet for each product.	Process dusts and fume listed even though they have no data sheet; data sheets kept on site.	Supervisor
Assess each task	Record the hazard for each task, the route into the body, who is exposed, how long and how often, and where. Note any WEL that applies.	Assessment made before work starts, under COSHH regulation 6.	Assessor
Remove or substitute	Decide whether the substance or the process can go: pre-cut materials, water-based paints, isocyanate-free products, block splitters in place of saws.	Each decision recorded, with the reason where substitution is not reasonably practicable.	Contracts manager
Control at source	Set up the engineering controls: water suppression, on-tool extraction, LEV for welding and mechanical ventilation in enclosed areas. Check each one works before the task starts.	LEV examination in date; on-tool extraction checked at least weekly.	Supervisor
Choose RPE and PPE	Choose RPE with the protection factor the task needs, and gloves matched to each product. Face-fit test each wearer on each tight-fitting model.	Fit test records held; clean-shaven rule briefed; spare filters on site.	Supervisor
Brief the team	Brief the assessment: the substances, their risks, any WEL, the controls, the RPE and what to do if something goes wrong. Show where the safety data sheets are kept.	Briefing signed against this revision before the task starts.	Supervisor
Do the work	Work to the assessed method. Keep others out of the dust or vapour zone, keep products in labelled containers, and clean up with a vacuum or by damping down.	Supervisor checks during the task that the controls are in use and working.	Operatives
Monitor and check health	Where the assessment calls for it, measure exposure and run health surveillance, such as skin checks, lung function tests and asthma questionnaires.	Monitoring records kept 5 years, or 40 years if they identify a person; health records kept 40 years.	Contracts manager
Store and dispose	Store products as their data sheets direct, away from welfare areas. Dispose of part-used tins, resin packs, empty containers and contaminated rags as the data sheet directs.	Hazardous waste kept apart and removed by a registered waste carrier with the right paperwork.	Supervisor
Review	Review the assessment at set intervals. Review it straight away when the task, product, team or place changes, or when monitoring or health surveillance shows a problem.	Review dated and signed; changes briefed to the team again.	Assessor

CDM REGULATION 15(2): PLAN, MANAGE AND MONITOR THE WORK

RISK ASSESSMENT

Hazards, controls and the risk that remains

Each significant hazard rated before and after its controls, as likelihood times severity. The ratings are typical: check them for this site.

LIKELIHOOD \ SEVERITY	1	2	3	4	5
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5

1 to 4 low · 5 to 12 medium · 15 to 25 high

HAZARD	WHO COULD BE HARMED, AND HOW	RISK BEFORE	CONTROLS	RISK AFTER	BY
Silica dust from cutting, chasing and drilling	Operatives cutting blocks, kerbs, slabs or tiles, chasing walls or drilling concrete, and people nearby.	4 x 5 = 20 High	• Cutting designed out where possible: materials ordered to size, block splitters used, or fixings chosen that avoid chasing. • Water suppression on cut-off saws, or on-tool extraction with an M or H class extractor set to the right flow rate. • RPE with an assigned protection factor of at least 20, such as an FFP3 mask or a half mask with a P3 filter, face-fit tested.	2 x 5 = 10 Med	Supervisor
Wood dust from sawing, routing and sanding	Joiners, carpenters and anyone near saws, routers and sanders, especially indoors.	4 x 4 = 16 High	• On-tool extraction with an M or H class unit, and materials bought pre-cut where possible. • RPE with a protection factor of at least 20, such as FFP3, for most cutting and sanding. • Hardwood dust is a carcinogen under COSHH, so exposure is kept as low as reasonably practicable, not just under the limit.	2 x 4 = 8 Med	
Cement, mortar and wet concrete on skin	Anyone mixing, laying or finishing mortar, render, screed or concrete.	4 x 3 = 12 Med	• Waterproof gloves suitable for alkalis, with long sleeves, and wellingtons high enough to keep concrete out during pours. • Knee pads or boards where kneeling cannot be avoided, and time spent kneeling kept short. • Washing facilities with warm water, soap and basins big enough for forearms, and skin checks before starting and at intervals.	2 x 3 = 6 Med	
Solvents in paints, adhesives and cleaners	Operatives using solvent-based products, more so in small rooms and enclosed areas.	3 x 4 = 12 Med	• Water-based or low-solvent products chosen wherever they will do the job. • Ventilation in every case, mechanical where the room is small or enclosed; lids kept on tins. • Particulate filters do not stop vapour: RPE has the vapour filter the data sheet specifies, and gloves are matched to the product.	1 x 4 = 4 Low	
Isocyanates in two-pack coatings and foams	Sprayers and applicators of two-pack paints, spray foam and some sealants, and people nearby.	3 x 5 = 15 High	• Isocyanate-free products used wherever possible. • Spraying only in an enclosed, extracted area or with air-fed RPE, and the area kept clear until the clearance time has passed. • Health surveillance for asthma, with a questionnaire and lung function testing.	1 x 5 = 5 Med	Supervisor
Epoxy and polyester resins	Operatives mixing and applying resin floors, anchors, grouts and repairs.	3 x 3 = 9 Med	• Gloves chosen from the safety data sheet, changed when contaminated, and skin contact avoided. • Ventilation while mixing and curing, with only the quantity needed mixed at once. • Skin checks for anyone using resins regularly, and early signs of dermatitis reported.	2 x 3 = 6 Med	
Welding and hot cutting fume	Welders and fabricators, and anyone working in the same area.	4 x 5 = 20 High	• LEV for all indoor welding; general ventilation alone does not control the fume. • RPE where LEV alone does not control exposure, and for welding outdoors. • Mild steel welding fume can cause lung cancer, so exposure is kept as low as reasonably practicable.	2 x 5 = 10 Med	
Exhaust from engines and generators	Anyone near petrol or diesel engines indoors, in basements or in excavations.	3 x 5 = 15 High	• Electric or battery tools and plant used indoors and in enclosed areas. • Generators and engines sited outside, with exhausts pointing away from doors, windows and air intakes. • Engines switched off when not in use.	1 x 5 = 5 Med	

MHSWR REGULATION 3(6): WITH FIVE OR MORE EMPLOYEES, RECORD THE SIGNIFICANT FINDINGS

RISK ASSESSMENT, CONTINUED

More hazards, and those specific to this site

HAZARD	WHO COULD BE HARMED, AND HOW	RISK BEFORE	CONTROLS	RISK AFTER	BY
Acids, alkalis and cleaning chemicals	Operatives using brick cleaners, descalers, drain cleaners and site cleaning products.	3 x 4 = 12 Med	• Products used at the dilution and in the way the safety data sheet sets out. • Goggles and gloves to the data sheet, with eyewash on hand. • Products never mixed, and kept in their original labelled containers.	1 x 4 = 4 Low	
Dust raised by sweeping and clean-up	Labourers and anyone nearby when dust is swept up or blown down.	4 x 4 = 16 High	• Clean-up with an M or H class vacuum, or by damping down first. • No dry sweeping and no blowing down clothing or surfaces with compressed air. • Clean-up planned as part of each dusty task, not left to the end of the day.	2 x 4 = 8 Med	
Leptospirosis and other biological hazards	Operatives working in drains, sewers, watercourses or where there are rats.	3 x 4 = 12 Med	• Cuts covered with waterproof dressings, and waterproof gloves worn. • Hands washed before eating, drinking or smoking, with welfare close to the work. • Operatives told to mention their work to a doctor if they develop flu-like symptoms.	2 x 4 = 8 Med	
Unlabelled or decanted products	Anyone using a product moved into an unmarked bottle, tub or sprayer.	3 x 3 = 9 Med	• Products kept in their original containers, or decanted only into containers labelled with the contents and hazards. • Safety data sheets for every product kept on site and available to the team.	1 x 3 = 3 Low	
RPE that does not seal or is not maintained	Wearers whose mask is the wrong size, worn over stubble, or fitted with a spent filter.	3 x 4 = 12 Med	• Each wearer face-fit tested on each tight-fitting model they use, and clean-shaven where the mask seals. • Loose-fitting powered hoods for anyone who cannot be clean-shaven. • Pre-use checks, filters changed as the maker directs, and reusable RPE thoroughly examined at suitable intervals.	1 x 4 = 4 Low	
Extraction that has stopped working	Operatives relying on on-tool extraction or LEV that has lost flow without anyone noticing.	3 x 4 = 12 Med	• On-tool extraction checked as working at least weekly, with hoses tight and filters in good order. • LEV thoroughly examined and tested at least every 14 months, with the report kept for 5 years. • Work stopped and reported if extraction fails during a task.	1 x 4 = 4 Low	Supervisor

EQUIPMENT

Plant, equipment and PPE

Plant and equipment

Each item, the checks and certificates it needs, and who may operate it.

PUWER 1998, LOLER 1998

ITEM	CHECKS AND CERTIFICATES	OPERATOR COMPETENCE
On-tool extraction unit	M or H class; flow, hose and filter checked at least weekly.	Trained user
Water suppression kit	Water connected and flowing before cutting starts.	Trained user
LEV for welding	Thorough examination and test within the last 14 months.	Trained welder
Mechanical ventilation	Draws vapour out of the room, away from the operative.	Supervisor
Reusable RPE	Pre-use check, filters in date, thorough examination at intervals.	Fit-tested wearer

Personal protective equipment

PPE is the last line of defence, after the controls above. Specify the type, not just the item.

PPE AT WORK REGULATIONS 1992

ITEM	NEEDED	TYPE AND SPECIFICATION
Safety helmet	☑	To site standard
Safety footwear	☑	Safety boots; wellingtons for concrete pours
High-visibility clothing	☑	To site standard
Gloves	☑	Chosen from the data sheet for each product
Eye protection	☑	Goggles where splashes are possible
Hearing protection	☐	
Respiratory protection Type, and face-fit tested	☑	APF 20 minimum for dusty work, fit-tested
Harness or restraint Anchor points identified	☐	

CONTROLS

Substances, permits, emergencies and the environment

Hazardous substances

Each substance and its COSHH assessment.

COSHH 2002, REGULATION 6

SUBSTANCE	COSHH ASSESSMENT REFERENCE	CONTROLS
Silica dust from cutting and chasing	[COSHH ref]	Water or M/H class extraction, FFP3 fit-tested, no dry sweeping
Cement, mortar and concrete	[COSHH ref]	Alkali-resistant gloves, washing facilities, skin checks
Solvent-based paints and adhesives	[COSHH ref]	Water-based where possible, ventilation, vapour filter if the SDS asks
Welding fume	[COSHH ref]	LEV indoors, RPE where LEV is not enough and outdoors

Permits and plans

PERMIT OR PLAN	NEEDED	REFERENCE
Hot work permit	☑	
Permit to work	☑	
Permit to dig or break ground	☐	
Confined space entry	☑	
Lift plan	☐	
Temporary works design	☐	

Emergency and rescue

First aid, fire, and how someone is rescued. The rescue plan belongs in the RAMS, not after it.

Section 4 of each safety data sheet gives the first aid for that product. Eyewash on hand where splashes are possible, and cement washed off skin at once with clean water. Anyone affected by vapour is moved to fresh air. A diagnosis of occupational dermatitis or asthma from regular exposure at work is reportable under RIDDOR regulation 8.

Environment and neighbours

Dust, noise, vibration, waste, spills and hours of work.

No cement, paint or resin washed into drains or watercourses. Part-used products, empty containers and contaminated rags disposed of as the safety data sheet directs. Dust kept on site with water or extraction.

SUBSTANCE REGISTER

Substances and processes on this job

One row for each product and each process that makes dust or fume. Take the hazard from section 2 and the limit from section 8 of the safety data sheet, or from EH40.

SUBSTANCE OR PROCESS	HAZARD AND WEL	ROUTE	CONTROLS	RPE	HEALTH SURVEILLANCE
Silica dust from cutting blocks, kerbs and slabs	Silicosis and lung disease. WEL 0.1 mg/m3, 8-hour average	Inhalation	Water suppression or M/H class on-tool extraction; vacuum, no dry sweeping	APF 20: FFP3 or half mask with P3, fit-tested	Yes, where regularly exposed
Hardwood dust from sawing and sanding	Asthma; carcinogen under COSHH. WEL: see EH40	Inhalation	M/H class on-tool extraction; pre-cut materials where possible	APF 20: FFP3, fit-tested	Yes, for asthma
Cement, mortar and wet concrete	Alkali burns and dermatitis, including chromium allergy	Skin, eyes	Alkali-resistant gloves, sleeves, washing, knee pads	Only where cutting or mixing raises dust	Skin checks
Two-pack paint containing isocyanates	Respiratory sensitiser: occupational asthma	Inhalation, skin	Isocyanate-free product, or spray in an extracted enclosure; keep clearance time	Air-fed RPE for spraying	Yes: questionnaire and lung function
Solvent-based adhesive	Headaches, dizziness, dermatitis. Limits: see SDS section 8	Inhalation, skin	Water-based alternative; ventilation; lids kept on	Vapour filter where the SDS requires	Skin checks for regular users

COSHH REGULATIONS 2002, REGULATIONS 6, 7 AND 11; HSE EH40/2005 WORKPLACE EXPOSURE LIMITS

BRIEFING RECORD

Briefed before the work starts

Each person signs against this revision, on the day, before starting. Anyone joining later is briefed before they join the work. When the RAMS is revised, everyone is briefed again.

BRIEFED BY	REVISION BRIEFED	DATE AND TIME

NAME	COMPANY	CARD OR TICKET NUMBER	SIGNATURE	DATE

A SIGNATURE AGAINST A REVISION, ON A DATE, BEFORE THE WORK STARTED, IS HOW A BRIEFING IS EVIDENCED