

Is there a problem with delivery
of quality OH consultancy in
UK?

In my view – yes

Code of Ethics

Code of Ethics - developed to ensure that hygienists act in such a way that

the protection and preservation of worker health remains their paramount responsibility at all times
and to

guide those who may be subject to contradictory pressures and enable them to act with integrity and objectivity.

After three years of visits from a hygienist
(Directory listed large firm)



Have consultancies lost the “ethical plot”? for example

- “They can have recommendations if they pay for them”
- “I don’t put detailed recommendations in the report – they only come back to haunt you”
- Supplying technician level, or non OH staff to provide a professional occupational hygiene service

A photograph of a blue barrel filled with various items, including a red tape dispenser, a white plate, a yellow can, a red tape roll, a white cup, a red tool, a black handle, a white cloth, a yellow sponge, a metal nozzle, and a small box labeled 'rexic'. The items are scattered across the top of the barrel, which is surrounded by a metal frame. The items appear to be remnants of a failed experiment or a collection of materials. The red tape dispenser is a prominent feature, with its red tape and black handle clearly visible. The white plate is a simple, round object. The yellow can is a small, cylindrical container. The red tape roll is a large, cylindrical object. The white cup is a simple, white container. The red tool is a small, red object. The black handle is a long, black object. The white cloth is a small, white object. The yellow sponge is a small, yellow object. The metal nozzle is a small, metal object. The small box labeled 'rexic' is a small, white object. The items are scattered across the top of the barrel, which is surrounded by a metal frame. The items appear to be remnants of a failed experiment or a collection of materials.



Kelvin Williams
Occupational Hygiene Consultancy

ONE DAY SURVEY

Tall Order! Given –

- One day per year may represent about 0.03% of operational time
 - “you should be here when...”





ONE DAY SURVEY

- Man in a white coat with a clipboard
 - Excess caution on the day (usual)
 - Excess recklessness on the day (claim conscious worker!)
 - Effect on results?



ONE DAY SURVEY

Common problems

- Poor research / planning / strategy
- Failure to identify hazards / issues (poor dialogue with client)
- Over reliance on measurement / lack of critical thinking
- Poor observation skills
 - No “bedside manner”
 - Laziness / lack of thoroughness / not inquisitive
- Poor interpretation of data
- Unhelpful report – client doesn’t know what to do

Consequences of poor survey

Context: Soldering

- Enforcement authority dissatisfied with previous survey
- Report
 - No mention of technique or job monitored
 - “*Hygienist*” spent day in local café
 - Results – all well below WEL – therefore all OK



Consequences of poor survey

Re-survey: one day results

- One member of staff was 1.5x WEL
- Others about 0.5x WEL



Do these measurements matter?

Analyte	Airborne concentration (mg.m ⁻³)*		
	P G	D B	P P
cis-1, 2 Dichloroethene	-	-	0.11
Chloroform	0.02	-	1.95
1,1,1-Trichloroethane	0.04	-	4.93
Carbon tetrachloride	-	-	0.73
1,2-Dichloroethane	0.006	-	1.67
Trichloroethene	0.007	-	0.84
Toluene	0.017	0.021	1.17
Ethylbenzene	-	-	0.63
m&p-Xylene	0.024	-	2.33
o-Xylene	-	-	0.21
Isopentane	0.008	0.005	0.66
Pentane	0.015	0.005	1.67
2-Methyl propanal	**	-	3.26
Acetone	0.015	-	1.02
Ethyl acetate	-	-	1.21
Allyl ether	-	**	1.49
3-Carene	-	-	0.60

ONE DAY SURVEY

Reliance on Air Monitoring Results

CLIENT – WASTE CONSOLIDATION – “just wanted numbers”

No local exhaust ventilation

No health surveillance

No adequate training

No monitoring records (apart from 1 x A4 sheet similar to soldering case study)

Inappropriate personal protective equipment (eg domestic Marigold kitchen gloves)

Inadequate COSHH assessments

“Ah yes! – but the results show we’re OK!”

Client dialogue

- What is the problem?
- Where is the problem?
- What do you do?
- What are the hazardous agents involved? (if known – get MSDS or similar)

Thoroughly research the above

- What is the history / who is concerned?
- How many staff do you have? How many are affected?

Note: the above two questions are crucial for discerning psycho-social issues / possible industrial relations issues

- What is the working pattern? (Busy days / quiet days / worst case days)

ONE DAY SURVEY

Making it count

- Planning / Identifying hazards and issues
 - If possible visit site
 - Walk through the process (include maintenance)
 - Identify similarly exposed groups
 - Collect data (including shift times / production schedules / worst case etc)

Ask: What can I do that is going to be helpful?

Making measurements that matter



Making measurements that matter



Making measurements that matter

Paper Processing

- Intermittent complaints of stinging eyes during paper processing

Planning included

- Who is affected
- When does problem occur
- Research (raw materials / additives)
- Decision on measurement (aldehyde screen)

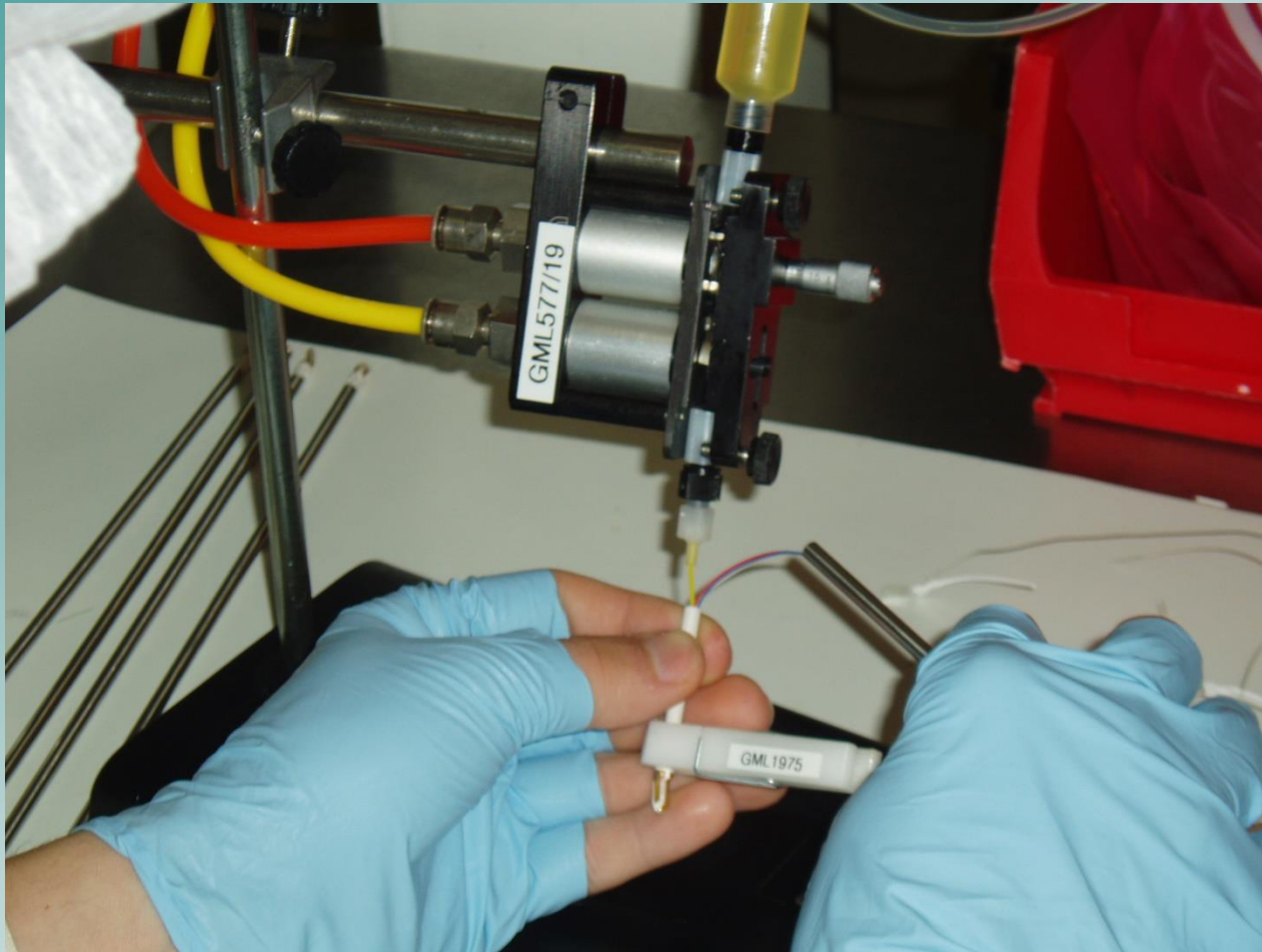


Making measurements that matter

- Formaldehyde detected during processing of a particular recycled paper product
 - Contact manufacturer
 - Ventilation improvements recommended based on observations
 - Liaison with workforce



It could be obvious



It could be obvious



Nocebo and Psychosocial factors

- Prevalent in office environments (in my experience)
- Often vague / non-descript symptoms
- Explore history and extent of problem carefully – step back and take broad view
- Is there a stress issue?
- Lack of job satisfaction?

Good literature on the subject

ONE DAY SURVEY

DETAILED OBSERVATIONS ARE VITAL!!

- Gather as much information as possible – THROUGHOUT THE DAY!!
- Take notes, photos, video – make diagrams etc continually! Be curious – don't be afraid to be a pain.
 - Working sequence / how does it all work / be alert and questioning / poke around / rummage through the cupboards
 - Air movement
 - PPE
 - Training
- Bedside Manner – charm the details out of staff (what happens when you're not there)
- Good questions – draw out staff

ONE DAY SURVEY

Be prepared to be thorough

- Equipment - smoke tubes, dust lamp (torch), Drager kit (or similar), camera / video, thermometer etc.
- Contingency equipment - be prepared to make additional measurements as unforeseen circumstances arise,
- Don't be afraid to be a nuisance, pursue the information you need,
- Be inquisitive, get the “whole story”.
- Use checklists
- Consider and investigate feasibility of control measures while on site

ONE DAY SURVEY

TIP

WRITE THE REPORT WHILE YOU'RE ON SITE
(afarp!)

Think!! - could you defend your ideas?

If not, what do you need to do, right here and right now, to get the information necessary to qualify your ideas?

Demonstrate problems



Demonstrate Problems



Demonstrate problems



Demonstrate Solutions



Data Interpretation (EN689)

- We are normally dealing with low numbers of samples
- Context of survey is a crucial report item eg;
 - Normal working
 - Worst case scenario
 - Quiet day

Statistics - RCS survey

Three results
Compliant or
not?

0.04 mg.m⁻³

0.03 mg.m⁻³

0.02 mg.m⁻³

WEL 0.1 mg.m⁻³



Report Writing

- Give clear helpful advice
 - You're being paid to be helpful
 - **Client needs to know what to do**
- Reflect in-depth research
- Provide reasonable caveats
- Beware personal bias
 - Let data / evidence speak
 - Imagine being in front of a barrister (actually, you might be!)

ONE DAY SURVEY

SUMMARY

- One day surveys are rarely straightforward and need very careful planning to be of any use
- The results of measurements made during one day surveys need careful interpretation in light of a wide range of factors
- Measurements that matter are
 - those that address the real issues (properly researched)
 - those that are qualified by detailed supporting information and observations
- Report must be helpful, with properly supported and clearly listed action points and graphics









Consultant Reports

The Smart Client

Sustained Compliance

Parmjit Gahir CMFOH MFAAM
HM Specialist Inspector

What We See Wrong



**In the Eyes of a
HSE Inspector**

Consultants

- What is a consultant ?
- “A person who provides expert advice professionally”
- Who can become a consultant ?
- Anyone !!!

Consultant Reports

- Noise, Vibration, Exposure Monitoring, LEV, Indoor Air Quality
- Routine
- Investigative
- Compliance
- Expert Opinion



Clear and concise report writing: guidance for occupational hygienists

Adrian Hirst, Lynne Morgan, Sean Semple
Issue 1.0 December 2011





The Chartered Society for
Worker Health Protection

The British Occupational Hygiene Society

Faculty of Occupational Hygiene

Good Practice Guide for
Consultants



www.bohs.org

Version 1 | March 2019

So What Do We See Wrong ?

- Single Noise Readings
- Vibration Assessed by Touch
- Water Base Paints Cannot Contain Isocyanates
- COSHH Doesn't Require Health Surveillance
- No Contextual Information
- Incorrect Calculations
- Copy and Paste Errors
- Incorrect Conclusions

The Smart Client

- Are They Really ?
- Do you Speak With Clients ?
- Do They Know or Think ?
- Do They Require Education ?
- Are You Speaking with a Decision Maker?
- Are You a Decision Maker ?

Impact

- Incorrect Advice
- Persons Exposed to Risk
- Incorrect Controls
- False Sense of Security

Why Does This Matter ?

- Sustained Compliance
- Why Is This Important

When It Goes Wrong

- Prohibition Notices
- Improvement Notices
- Prosecutions

Questions

