

# OHS MONITORING, MEASUREMENT & REGISTRATION AT MONASH UNIVERSITY

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## 1. PURPOSE

The purpose of this document is to provide details of OHS monitoring, measurement and registration requirements at Monash University including workplace inspection programs in accordance with the requirements of the Occupational Health and Safety Act (2004) and associated regulations and with Australian Standards AS/NZS 4801:2001 *Occupational Health & Safety Management Systems – specifications with guidance for use* and OHSAS 18001:2007 *Occupational Health & Safety Management Systems – requirements*.

## 2. SCOPE

Information contained in this procedure applies to all monitoring, measurement and registration undertaken on the Australian campuses of Monash University.

In addition, this procedure addresses criteria 4.5.1 of *AS/NZS4801:2001 Monitoring and Measurement*, criteria 4.5.1 of *OHSAS 18001:2007 Performance Measurement and Monitoring* and the risk assessment and control requirements of the *OHS Act 2004* and associated legislation.

## 3. ABBREVIATIONS

<b>GMO</b>	Genetically modified organism
<b>OGTR</b>	Office of the Gene Technology Regulator
<b>OH&amp;S</b>	Occupational Health & Safety branch
<b>OHSPC</b>	Occupational Health & Safety Policy Committee
<b>OHS</b>	Occupational health and safety
<b>RPO</b>	Radiation protection officer

## 4. DEFINITIONS

### 4.1 COOLING TOWER RISK MANAGEMENT PLANS

4.1.1 Under the Public Health and Wellbeing Act 2008, all cooling tower systems must be registered with the Department of Health. Risk management plans are completed within 12 months of the registration.

4.1.2 The risk management plans specify activities that are to be carried out at predetermined intervals, including:

- regular inspections;
- regular servicing;
- monthly testing to identify bacterial levels in system; and
- Legionella testing.

### 4.2 IONISING RADIATION SOURCE

For the purposes of this document, ionising radiation source means radioactive material, an ionising radiation apparatus, a sealed source or a sealed source apparatus. Further details are provided in the document *Using radiation at Monash*.

### 4.3 MONASH CONTROLLED ENTITY

Monash controlled entities (eg companies) include entities where Monash can control decision making, directly or indirectly, in relation to the financial and operating policies so as to enable the entity to operate with it in pursuing the objectives of Monash University.

For the remainder of this document, a Monash controlled entity will be referred to as a controlled entity.

#### **4.4 NON-IONISING RADIATION**

Non-ionising radiation is radiation of electromagnetic form which does not have a high enough energy level to ionize (i.e., remove electrons from) material with which it comes in contact. Examples of non-ionising radiation include lasers, microwaves, extremely low frequency electromagnetic fields, infrared and ultraviolet light, ultrasound.

#### **4.5 PLANT**

4.5.1 Plant is defined in the Victorian OHS Regulations 2007 to cover machinery and equipment such as lifts, cranes, pressure equipment, machinery, hoists, powered mobile plant, lasers, turbines, explosive-powered tools, scaffolds and temporary access equipment. The regulations do not apply to hand-held plant and plant which relies exclusively on manual power for its operation.

4.5.2 The Victorian OHS Regulations 2007 prescribe specific duties for the designers, manufacturers and operators of such plant. Maintenance, testing, inspection and registration apply to specific plant.

#### **4.6 WORKPLACE INSPECTIONS**

4.6.1 Workplace inspections are planned, systematic appraisals of physical aspects of the workplace that identify OHS hazards and non-compliances with Monash University policies, procedures and practices and legal requirements.

4.6.2 Audits differ from workplace inspections in that the underlying OHS systems are not examined during inspections. Audits examine an entire process from start to finish, and include reviews of written procedures and observation of tasks as well as an inspection of the equipment and processes to which the written procedures apply. Audits evaluate whether written procedures meet legislative requirements and include interviews with employees to ensure that procedures are being followed.

### **5. SPECIFIC RESPONSIBILITIES**

A comprehensive list of OHS responsibilities is provided in the document *Occupational health and safety management at Monash University: Structure, functions, roles and responsibilities*. The responsibilities with respect to OHS monitoring, measurement & registration are summarised below.

#### **5.1 DIVISIONAL DIRECTOR, FACILITIES & SERVICES**

The responsibilities of the Divisional Director, Facilities & Services include:

- implementation of plant registration and preventative maintenance programs,
- development and maintenance of the cooling tower management program.

#### **5.2 RESEARCH COMPLIANCE OFFICER, RESEARCH, ETHICS & COMPLIANCE, RESEARCH OFFICE**

The responsibilities of the Research Compliance Officer, Research, Ethics & Compliance include:

- coordination of approval of teaching and research activities involving genetically modified organisms via the Monash University Biosafety committee and the OGTR;
- coordination of laboratory registration, inspection and maintenance programs required by the OGTR;
- provision of training required by the OGTR.

### 5.3 HEADS OF ACADEMIC/ADMINISTRATIVE UNITS/CONTROLLED ENTITIES

It is the responsibility of the head of the academic/administrative unit/controlled entity to:

- ensure that all unit/entity plant and equipment is registered and that appropriate preventative maintenance programs are in place;
- maintain plant and equipment registers, risk assessments and maintenance records for unit/entity plant and equipment;
- ensure that staff and students undertaking workplace inspections are trained;
- ensure that the areas under their control undertake 2 workplace inspections per year.

### 5.4 OHS POLICY COMMITTEE

The responsibilities of the OHSPC include:

- review existing OHS documents on a regular basis to determine whether they meet the prevailing needs of the university including all its campuses and centers within Australia and to identify any new documents that may be required;
- monitoring and continuously improving university compliance with OHS legislation, standards, compliance codes, policies and procedures;
- review the OHS performance of faculties, divisions, schools, departments, centres, and controlled entities to ensure that all areas consistently achieve a high standard.

### 5.5 OH&S BRANCH

The responsibilities of the OH&S branch include:

- coordination of the university's monitoring, measurement and registration program;
- maintaining records of assessment, monitoring and registration programs according to the *OHS records management at Monash University*;
- coordination of corrective actions and controls applied to adverse monitoring results;
- conducting university level risk assessments according to legislative requirements;
- maintenance of databases and registers as required by legislation, eg carcinogen register;
- ensure training in the conduct of workplace inspections is available to staff and students.

### 5.6 OCCUPATIONAL HEALTH TEAM, OH&S

The responsibilities of the occupational health team, OH&S include:

- coordination of the university's health surveillance program;
- maintaining records of assessment according to the *OH&S procedures for OHS document control & retention*; and
- applying corrective actions and controls to address and to prevent recurrences of adverse monitoring results.

### 5.7 OCCUPATIONAL HYGIENISTS, OH&S

The responsibilities of the occupational hygienists at OH&S include conducting workplace assessments according to the Monash University monitoring, measurement and registration matrix, as outlined on Section 7, using Australian Standard approved methodology, eg noise assessments.

## **5.8 RADIATION PROTECTION OFFICER, OH&S**

The responsibilities of the radiation protection officer, OH&S include:

- coordination of the university's personal monitoring program for users of radiation sources, including follow-up of cases of exposure exceeding specified action/legislative limits;
- arranging the calibration of monitoring instruments;
- maintaining site wide licenses and records for ionising radiation sources to ensure compliance with statutory requirements.

## **6. REQUIREMENTS FOR MONITORING, MEASUREMENT & REGISTRATION**

The monitoring, measurement and registration requirements at Monash University are determined regularly via:

### **6.1 REVIEW OF OHS LEGISLATIVE COMPLIANCE**

Monitoring and review of OHS legislative compliance occurs via:

- quarterly review of the OHS risk and legal compliance register, followed by twice yearly submission of compliance reports to the Audit & Risk Management office;
- regular review of regulatory websites by OH&S staff

### **6.2 OHSPC MEETINGS**

Quarterly meetings of the OHSPC are held to monitor and review of the Monash University OHS management system, including:

- OHS performance indicators;
- OHS policy documentation;
- OH&S planning documentation
- OHS risk and legal compliance register;
- WorkSafe Victoria interventions;
- Results of audits;
- Management reviews.

### **6.3 INTERNAL & EXTERNAL REVIEWS**

Internal & external reviews of the Monash University OHS management system, are conducted regularly, including:

- Twice yearly compliance reports to the Audit & Risk Management office
- Quality reviews
- Compliance audits
- Fortnightly OH&S staff meetings
- OH&S planning meetings

## 7. OHS MONITORING, MEASUREMENT & REGISTRATION AT MONASH UNIVERSITY

Monitoring of the work environment (for chemical, physical and biological hazards), registration of plant and maintenance of plant, equipment and services is conducted according to the table below and the related databases.

Monash University will ensure that all monitoring, measurement and registration activities are conducted by qualified and competent persons.

	Frequency of measurement	Responsible area	Areas	Animal facilities	Laboratory areas	Laboratory areas that use GCM	Maintenance/workshop	Roofs
<b>MONITORING/ REGISTRATION</b>								
<b>TEACHING &amp; RESEARCH ACTIVITIES</b>								
ASSESSMENT OF RADIATION BADGE RESULTS – PREGNANT LADIES & EXTREMITY RESULT BADGES	Monthly	RPO, OH&S			✓			
ASSESSMENT OF RADIATION BADGE RESULTS - OTHER	At least quarterly	RPO, OH&S			✓			
CARCINOGEN REGISTER	5 years	OH&S			✓		✓	
FUME CUPBOARDS	Annual	Occupational Hygiene, OH&S			✓		✓	
NUCLEAR NON-PROLIFERATION LICENCE	Annual	RPO, OH&S			✓			
OGTR CERTIFICATION OF FACILITIES	Annual	Monash University Biosafety committee/ Research Office				✓		
TELECOMMUNICATIONS RADIATION MAPS	After change	Monash Property & Leasing, telecommunication companies, RPO, OH&S						✓
<b>BUILDING SERVICES &amp; STRUCTURES</b>								
ASBESTOS REGISTER	5 yearly	Occupational Hygiene, OH&S		Refer to the Asbestos Register				
CONFINED SPACE RISK ASSESSMENTS	5 yearly	Occupational Hygiene OH&S		Refer to the Confined Spaces Register				
COOLING TOWERS	Monthly	Facilities & Services, OH&S		Refer to the Cooling Tower Management Plan				
ESSENTIAL SERVICES (FIRE & EMERGENCY EQUIPMENT)	Various	Facilities & Services		Refer to Essential Services				
LIFTS (PASSENGER & GOODS)	Annual	Facilities & Services		Refer to the elevator (lift) records				
PERMIT TO WORK SYSTEMS	Each job	Facilities & Services		All jobs involving excavation, confined space, hot work, roof access				
PRESSURE VESSELS	Various	Facilities & Services, units/entities		Refer to list of registered plant				
NOISE ASSESSMENT	5 years	Occupational Hygiene, OH&S		All areas identified as high risk by noise survey				
SCAFFOLD & STAGING APPARATUS	Various	Monash University Arts Centres		Refer to Monash University Arts Centres				

## 8. WORKPLACE INSPECTIONS

### 8.1 GENERAL REQUIREMENTS

- 8.1.1 The Monash University OHSPC requires all units/entities to undertake 2 workplace inspections each year.
- 8.1.2 The number of completed inspections per area is recorded by OH&S and reported as a key performance indicator to the quarterly meetings of the local OHS&E committees.

### 8.2 WORKPLACE INSPECTION PROGRAM

OH&S has developed a workplace inspection control program, which is available at the OH&S web site ([www.adm.monash.edu.au/ohse/assets/docs/others/workplace-inspections-prog.pdf](http://www.adm.monash.edu.au/ohse/assets/docs/others/workplace-inspections-prog.pdf)) that includes:

#### 8.2.1 Guidelines for completing workplace inspections:

- Each department/school/area is divided into sections to be inspected;
- A team is nominated to inspect each section;
- A timetable is developed to complete two inspections in the year.

8.2.2 **Reference sheets** which provide guidance for staff undertaking the inspections. The reference sheets cover:

- public areas
- offices
- laboratories
- workshops
- studios

8.2.3 **Inspection worksheets** to record the outcomes of the inspections, including instructions for completion, which include:

- describing any hazard/problem(s) identified for each room inspected;
- outlining the preventative/corrective action (Actions);
- nominating the person responsible for follow up (Responsibility);
- providing a realistic date by which the actions should be completed/implemented.

8.2.4 Following completion, copies of the inspection worksheets are then provided to those responsible for follow up actions.

8.2.5 When all actions have been completed, a copy of the form is then returned to the Safety Officer of the unit/entity.

8.2.6 Following each round of inspections, the *Summary of inspections* form must be completed and forwarded to the local safety officer, OHS&E committee chairperson and OH&S.

### 8.3 TRAINING FOR WORKPLACE INSPECTIONS

8.3.1 Practical training in the use of the workplace inspections program is provided by the Staff Development Unit (SDU) both centrally and in work areas.

8.3.2 Information regarding the content and scheduling of OHS courses offered at Monash University is:

- provided at the SDU web site; ([www.adm.monash.edu.au/staff-development/ws/ohs/index.html](http://www.adm.monash.edu.au/staff-development/ws/ohs/index.html));

- in the Guide to OHS training at Monash University; ([www.adm.monash.edu.au/ohse/assets/docs/others/training-guide.pdf](http://www.adm.monash.edu.au/ohse/assets/docs/others/training-guide.pdf)) and;
- in the document *OHS Induction & training at Monash University* ([www.adm.monash.edu.au/ohse/documents](http://www.adm.monash.edu.au/ohse/documents) ).

## 9. RECORDS

<u>Record to be kept by</u>	<u>Records</u>	<u>To be kept for:</u>
<b>Facilities &amp; Services</b>	Cooling tower registration, test, inspection & maintenance records	5 years
	List of registered plant	5 years
	Completed work permits	5 years
	Elevator database	5 years
	Essential Services register	5 years
<b>OH&amp;S</b>	Results of monitoring and measurement programs, corrective actions and control plans, including:	5 years
	• Cooling tower risk management plan	5 years
	• Use of carcinogens	Indefinitely
	• Radiation dose results	Indefinitely
	• NATA test results for fume cupboards	5 years
	• Registration documentation	2 years after disposal of the ionising radiation source
	• Licence documentation managed by OH&S	Indefinitely
	• Noise assessment records	Indefinitely
	• Non-ionising radiation survey reports	5 years
	• Asbestos register	Indefinitely
• Confined spaces register	Indefinitely	
	Records of workplace inspections	5 years
<b>Research, Ethics &amp; Compliance, Research Office</b>	OGTR records	5 years
<b>Units/entities</b>	Lists of registered plant	5 years
	Records of workplace inspections	5 years
<b>Monash University Arts Centres</b>	List of registered plant	5 years

## 10. REFERENCES

### 10.1 LEGISLATION

Public Health and Wellbeing Act 2008(Vic)  
 Gene Technology Act 2000  
 Gene Technology Regulations 2001  
 Occupational Health and Safety Act 2004 (Vic)  
 Occupational Health and Safety Regulations 2007 (Vic)

### 10.2 MONASH UNIVERSITY OHS DOCUMENTS

(<http://www.adm.monash.edu.au/ohse/documents/index.html>) )

Legionella notification procedures  
Monash University Workplace Inspection Program  
OH&S internal procedures  
Permit to work forms and procedures

**10.3**

**AUSTRALIAN STANDARDS**

OHSAS 18001:2007 Occupational Health & Safety Management Systems - requirements

AS/NZS 4801:2001 Occupational Health & Safety Management Systems – specifications with guidance for use.

AS/NZS 2243.4:1998 Safety in Laboratories - Ionising radiations