During installation determine through risk management and consultation if there are any further hazards or risks which may have been overlooked prior to the

engineering controls are items that require Inspection, Testing and Monitoring e.g. local exhaust ventilation for protection of people. A maintenance schedule must identify what maintenance is required, when it is required

- Maintenance must be carried out according to the recommendations of the designer/manufacturer or as outlined in any relevant Australian Standard.
- Plant should be de-energised, decontaminated, tagged and/or locked out of service during the process of being cleaned, serviced, repaired or altered if that process could pose a risk to health and safety. A SWP should be followed for this process.

NOTE: If it is not reasonably practicable to comply with manufacturer's recommendations then maintenance must occur annually.

3.3.7 Isolation of plant

Isolation of Equipment for General maintenance

Cleaning, minor repairs and general plant maintenance processes should be documented in the operational SWP or in a separate SWP for such purposes. This should cover several processes, including how the plant will be withdrawn or removed from service whilst being serviced.

Always follow the maintenance and cleaning precautions and processes in the manufacturers or operators manual. Any deviation from the manufacturer's instructions must be risk managed and achieve at least the same or a greater level of safety.

When a mechanical, physical or electrical hazard may still exist

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3.3.8 Return to service

For more information please refer to the <u>HS728 Design and Modification</u> Guideline.

3.5 Personal Protective Clothing and Equipment

Where personal protective equipment is required, it should be:

- appropriate for the task;
- · accompanied by suitable training;
- used correctly and
- maintained in a serviceable condition.

The personal protective clothing and equipment required to be used when operating plant must be identified in the Risk Management Process and the Safe Working Procedure accompanying the plant.

3.6 Recordkeeping

Refer to <u>HS733 HS Records Procedure for record keeping duration and disposal</u> requirements.

Records to be kept include:

- Risk Management Form and/or operations manual relating to the plant.
- A Safe Work Procedure which describes the safe manner of operation of the plant.
- Plant Inspection, Testing and Monitoring (ITM) Schedule for all plant identified as requiring ITM.
- Record of any alteration made to the plant
- Records related to the inspection, testing, maintenance and monitoring of plant, such as log books, checklists, timetables, etc.

Electronic versions in the form of spreadsheet or database applications of these forms are permitted e.g. SafeSys.

For the plant listed in Schedule 5 of the WHS Regulation 2011, records should be kept for any tests, maintenance, inspections, commissioning or alteration of such plant, as relevant to controlling its risks. These records must be kept for the period the plant is used or until the University relinquishes control of the plant.

3.7 High Risk Work licences

SafeWork NSW requires and issues national licences to perform high risk work (high risk work licences) for:

- forklifts
- scaffolding
- rigging
- dogging
- cranes including tower cranes, mobile cranes, vehicle loading cranes, bridge and gantry cranes
- hoists including personnel and materials hoists, elevated work platforms and concrete placing booms
- pressure equipment such as boilers, turbines and steam engines
- reach s enkers

undergoing training. Only Registered training organisations (RTOs) approved by WorkCover can deliver training and assessment for high risk work licences in NSW. The training and assessment must be delivered under the supervision of an RTO but practical training can occur in the workplace.

A detailed list of high risk work licences and classes of high risk work can be found in Schedule 3 of the WHS Regulation. Schedule 4 of the Regulation lists high risk work licence – competency requirements.

Additional information is available from SafeWork NSW and Worksafe ACT.

4. References

Managing the Risks of Plant in the Workplace - Safe Work Australia, Code of Practice

HS327 Plant and Equipment Procedure Version: 3.2 Effective 3 March 2016

5. Review & History

Appendix A: History

Version	Authorised	Approval	Effective	Sections
	by	Date	Date	modified

Appendix B - Definitions

Alter: in relation to any plant means to change the design of, add to or take away from the plant where the change may affect health or safety, but does not include routine maintenance, repairs or replacements.

Commissioning: means performing the necessary adjustments, tests and inspections to ensure plant is in full working order to specified requirements before the plant is used. Commissioning includes re-commissioning.

Competent person: means a person who has acquired through training, qualification, or experience, or a combination of these, the knowledge and skills enabling that person to perform the task required.

Danger tag: Warn that operation of the device may endanger the life of the person who affixed the tag or the operator. Danger tags should be used in conjunction with a lock out device to physically prevent accidental operation.

Designer: means a person who designs plant for use in a workplace or plant intended to be used in a workplace or is responsible for the design.

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Use: means work from, operate, maintain, inspect and clean. Note: Refer to NOHSC: 1010 (1994) for full range of definitions.

Appendix C Registrable Plant

List of plant requiring registration of design as outlined in Schedule 5 (Part 1 NSW, and 5.1 ACT) of the WHS Regulations

- Pressure equipment, other than pressure piping, and categorised as hazard level
 A, B, C or D according to the criteria in Section 2.1 of AS 4343 Pressure
 equipment hazard levels
- Gas cylinders covered by Part 1.1 of AS 2030.1 Gas cylinders General Requirements
- Tower cranes including self-erecting tower cranes
- Lifts, including escalators and moving walkways
- Building maintenance units
- Hoists with a platform movement exceeding 2.4 metres, designed to lift people
- Work boxes designed to be suspended from cranes
- Amusement devices covered by Section 2.1 of AS 3533.1:2009 Amusement Rides and Devices, except Class 1 structures (see below)
- Concrete placement units with delivery booms
- Prefabricated scaffolding and prefabricated formwork
- Boom-type elevating work platforms
- Gantry cranes with a safe working load greater than 5 tonnes or bridge cranes with a safe working load of greater than 10 tonnes, and any gantry crane or bridge crane which is designed to handle molten metal or Schedule 10 hazardous chemicals
- Vehicle hoists
- Mast climbing work platforms
- Mobile cranes with a rated capacity of greater than 10 tonnes

Plant that does not require registration includes:

- heritage boiler
- crane or hoist that is manually powered
- elevating work platform that is a scissor lift or vertically moving
- tow truck.

List of plant items requiring registration as outlined in Schedule 5 (Part 2 NSW and 5.2 ACT) of the WHS Regulations

- Boilers categorised as hazard level A, B or C according to criteria in Section 2.1 of AS 4343 - Pressure equipment - hazard levels.
- Pressure vessels categorised as hazard level A, B or C according to the criteria in Section 2.1 of AS 4343 - Pressure equipment - hazard levels, except for gas cylinders; LP Gas fuel vessels for automotive use, and serially produced vessels.
- Tower cranes including self-erecting tower cranes.
- Lifts, including escalators and moving walkways.
- Building maintenance units.
- Amusement devices covered by Section 2.1 of AS 3533.1:2009 Amusement Rides and Devices, except for certain Class 1 structures (see below).
- Concrete placement units with delivery booms.
- Mobile cranes with a rated capacity of greater than 10 tonnes.