Electrical Safety Management Policy and Procedures

St Pius X High School, Adamstown

Rationale

St Pius X High School, Adamstown, seeks to provide and maintain a safe and healthy working environment for students, staff, parents and visitors. In educating our community in safe practices, all members of the school community are being enabled to contribute towards ensuring a safe, caring, healthy environment for all members.

A person conducting a business or undertaking has the primary duty of care under the WHS Act 2011 to ensure, so far as is reasonably practicable, that workers and other persons at the workplace are not exposed to electrical risks arising from the business or undertaking. This duty requires eliminating electrical risks or, if that is not reasonably practicable, minimising the risks so far as is reasonably practicable.

The WHS Regulations 2011 include more specific requirements for managing electrical risks at the workplace. For example, all persons conducting a business or undertaking have duties to ensure, so far as is reasonably practicable, that electrical equipment and installations at the workplace are without risks to health and safety of persons.

Therefore St Pius X must have procedures in place that ensure our electricity supply facilities (distribution boards, RCDs, wiring and power points) and plug-in type electrical equipment are inspected and maintained in a safe condition and that there is an electrical safety management program in place.

For most of the electrical equipment used in schools the requirements for inspection, testing and tagging are to be determined by the risk management process. The Australia/New Zealand Standard AS/NZS 3760 “In-service safety inspection and testing of electrical equipment” should be used as a guide.

Aims

- To set directions, procedures and practices for our school which contribute to the ongoing safety of all members of our community in regard to the use of the electricity supply and electrical appliances.
- To ensure St Pius X complies with the requirements of the WHS Act 2011, the WHS Regulation 2011 and the AS/NZS No 3760:2010 "In-service safety inspection and testing of electrical equipment" (available from Standards Australia Offices).
- To establish and maintain a school-wide register of electrical assets.
- To ensure that all corded electrical equipment in our school is covered under the school’s electrical safety management program.
- After the risk assessment process, test and tag all electrical items and RCDs (Residual Current Devices) operating in a “hostile” environment and put in place other electrical safety management strategies, such as regular visual inspections, preventative maintenance etc or blanket test and tag all electrical items on a cyclic basis as part of the overall electrical safety management.
- To remove all non-compliant equipment from service.
- To register school compliance to this policy with the CSO.

Requirements and Implementation

St Pius X will put in place the following requirements and procedures to fulfill the aims of this policy. This information also forms the basis of our electrical safety management system.

General

- The School Executive will be responsible for monitoring and reviewing the electrical safety management system.

Registers of Electrical Appliances

- Adam's Test N Tag (0423 930 566) will supply an annual electronic report to the school showing the identity and location of all corded electrical equipment in the school. This report shows the results of testing and tagging of all such equipment. This report is kept in the Electrical Safety Management System file in the Main Office.
- The School Assets Register is part of the SAS computerized administration system. The School Assets Register will record all electrical equipment with a cost of $1000.00 or more.

Risk Assessment

- The use of all electrical appliances at St Pius X is subject to appropriate risk assessment being carried out.
- Risk assessment of any item should consider any specific workplace factors that may contribute to the risk, including:
    - the work premises and the working environment, including their layout and condition;
    - the capability, skill, experience and age of people undertaking the work;
    - the systems of work being used;
    - the range of reasonably foreseeable conditions.
    - **Note:** If multiple items of electrical equipment of the same design are installed and used under the same working conditions that are the same for all practical purposes it is only necessary to complete a risk assessment on a representative sample of those items. For example, office computers and other similar office type electrical equipment would fall into this category.
- An "Electrical Equipment Risk Assessment and Inspection Record" form is included as an Appendix to this Policy document for staff who need to risk assess an electrical item. This form is available from the Main Office and on the WHS page of the school website. Copies of completed forms are to be stored in the Electrical Safety Management System file in the Main Office.
- Following a risk assessment, appropriate control measures are to be implemented to ensure the safety of the user of the electrical appliance. The user should assess the effectiveness of these control measures and alert the appropriate supervisor (Office Manager, Coordinator, AP or Principal) if alteration to the control measures appears to be necessary.

Use of Electrical Appliances

- All electrical equipment in use at St Pius X should be designed and manufactured to appropriate Australian safety standards. Electrical equipment that has been modified is not permitted to be used in the school. This type of equipment does not meet the requirements of AS/NZS 3760.
- **Staff using electrical equipment must do a visual inspection of the equipment and the power point to check for any faults or damage before each use. Light and fan switches must also be visually inspected before use. If a fault or damage is detected, the electrical item, power point or switch must not be used and must be taken out of service and tagged as such.** The "Danger – Do Not Operate" tags are available from the Electrical Safety Management System file in the Main Office.
- All electrical equipment should be used according to the manufacturer's instructions.
- In relevant areas, such as woodwork or metalwork rooms, electrical devices may also be subject to use as stipulated in SOP (Safe Operating Procedures) documentation.
- The Woodwork, Metalwork & Science rooms are fitted with isolation switches that when activated cut off electricity to all equipment in the rooms. These isolation switches will need regular testing by a TAS or Science Teacher at least every three months to check that the switch works. The start of each Term is suggested as an appropriate time to do this testing.

- Equipment fitted with Emergency Safety (Cut-off) Switches, such as in the Woodwork and Metalwork rooms, will need regular testing of the switch by a suitably trained operator (eg TAS Teacher) at least every three months to check that the switch works. The start of each Term is suggested as an appropriate time to do this testing. Visual inspection of the switch must also be done before each use.
- If any electrical device involves the use of a portable RCD, the RCD will need regular testing of the push button by a suitably trained operator (eg TAS Teacher) at least every three months to check that the push button works. The start of each Term is suggested as an appropriate time to do this testing. Visual inspection of the portable RCD must also be done before each use.
- If a situation arises where equipment is being used on a site deemed a construction site, then "Work-Cover NSW Code of Practice: Electrical practices for construction work" needs to be followed.
- Where possible, the use of 'extension' power leads should be avoided or limited. Extension power leads should not be connected end on end. Extension leads should be secured with safety tape.
- The use of power boards having multiple outlets for connection of appliances should be avoided or limited. If it is deemed necessary that a power board is required its use should be risk assessed.

Inspections and Testing & Tagging

- The purpose of inspection and/or testing and tagging is to detect any adverse condition that could make equipment unsafe, for example, frayed cords or exposed live parts. Examples of equipment to which this applies include: all types of electrical power tools, electrical kettles, microwave ovens, plug-in air conditioners, heaters, toasters, vacuum cleaners, tape recorders, televisions, data projectors, computers, extension leads, power boards etc.
- Annual inspection and/or testing of electrical equipment will occur. It should be noted that not all equipment requires the same frequency of testing. Equipment needing testing will be determined via a risk management process or may be guided by advice from the electrical contractor performing the testing. The frequency of testing for any item may depend on a number of factors, such as the risk level identified by the risk management process, the type of insulation used on the equipment and the area of the school where it is used.
- New items conforming to the relevant Australian standards do not need to be tagged and tested before use but once put into service will become part of the ongoing testing and tagging process.
- Electrical inspections and/or testing at St Pius X will at all times be done by a qualified electrical tradesperson. In the case of testing and tagging, a person trained to use a Portable Appliance Tester (PAT) may be contracted to complete this task. A PAT is an electronic instrument that automatically tests equipment plugged into it. Currently, Adam's Test N Tag (0423 930 566), conduct the testing & tagging of all corded electrical equipment in the school.
- Testing and tagging of all corded electrical equipment operating in a hostile environment will be conducted every 12 months. All corded electrical equipment operating in a non-hostile environment will be tested & tagged every 5 years.
- Annual inspection and/or testing of the condition and status of RCDs (portable and fixed), distribution boards and sub-boards will occur. This work will be completed by a licensed Electrician. Installation or replacement of power points or RCDs and repairs or upgrades to electrical circuits, distribution boards and sub-boards will be carried out by a licensed Electrician.
- The Principal (or delegate) will liaise with the inspection/ testing / tagging contractor/s and provide all relevant information to assist the contractor to perform the required work. This may mean ensuring all equipment is available for inspection and testing on the day and that the equipment is placed conveniently for the tester, parking and access arrangements are determined prior to the visit, all newly acquired equipment is available and the contractor is provided with a safety induction.
- **All electrical equipment, power points and light & fan switches must be visually inspected by the user before use.**
- New electrical equipment and privately owned electrical equipment that is brought into the school cannot be used until a documented risk assessment has been carried out by the user and any identified control measures implemented. The "Electrical Equipment Risk Assessment and Inspection Record" form included as an Appendix to this document should be used for this

purpose. Note that the form must be signed by an appropriate supervisor (Office Manager, Coordinator, AP or Principal). Copies of completed forms are to be stored in the Electrical Safety Management System file in the Main Office.

Records of Inspections, Testing and Electrical Work Carried Out

- Results of all inspections and or testing will be kept in the Electrical Safety Management System file in the Main Office. Also in this file will be records of any risk assessments and records for other safety control measures if equipment is not subject to regular testing and tagging – i.e. when visual inspections are made, when repairs have been carried out or replacement or disposal of the item occurs. These records should include the type of equipment and the control, date of inspection, clear identification of the equipment tested, the ID of the tester and the findings of the test.
- Equipment identified as non-compliant will be withdrawn from service and either repaired, tested and tagged or disposed of in a safe manner.

Procedures for Reporting Electrical Hazards

- If a member of staff becomes aware of or suspects an electrical hazard they shall immediately act to ensure the safety of themselves and others by reporting the hazard to the HSR or to a member of the School Executive. For electrical hazards this report needs to be made immediately by phone or by sending a student to Student Services to procure assistance. The staff member should remain in the area where the hazard has been identified but at a safe distance and location to ensure that no person comes into contact with the hazard.
- The report of any electrical hazard should include the following information:
    - specific location of the hazard
    - the nature of the hazard
    - any other action taken in relation to the hazard
- The electrical item in question should be immediately disconnected from the electricity supply (if this is safe and/or practical to do), withdrawn from service and inspected by a person qualified to make an assessment of its safety. It may be appropriate that it is then cleared for use, repaired, tested and tagged or disposed of in a safe manner.
- If an item is withdrawn from use due to concerns over its electrical safety (faulty or damaged) it will be appropriately 'tagged out' of service. The tag should be placed so as to provide clear visual indication that the appliance is not to be used. If the device is portable it should be removed from use, tagged out of service and stored in a secure place until it can be assessed by a qualified person. The "Danger – Do Not Operate" tags are available from the Electrical Safety Management System file in the Main Office.
- A record of the electrical hazard and the actions taken to eliminate the hazard will be made either by the HSR or by the Executive member who dealt with the hazard. This record will be filed in the Electrical Safety Management System file in the Main Office. The person making this record will also inform the Principal of the incident.

Maintenance and Repair of Electrical Items

- Maintenance and repair of any electrical item is to be carried out by a person/contractor who is licensed and qualified to carry out such work.
- Any electrical item requiring maintenance or repair is to be removed from service. An order form should be completed by the appropriate member of the School Executive or Studies Coordinator. This order form, stipulating the required work, should be forwarded to the Principal for approval. This is as per the established process at St Pius X for the purchasing of items or request for completion of works.
- Under no circumstance should any member of staff or any student attempt to modify, maintain or repair any electrical item.

Budget

Sufficient funds will be allocated from the school budget to ensure the electrical safety management system can be fully implemented and maintained. Funds will also be made available to maintain and repair or replace equipment as necessary.

Evaluation

This Policy will be evaluated after the end of the 2012 school year and thereafter every 3 years or as the need arises. It is the Principal's responsibility to ensure that the electrical safety management system is at any time sufficiently stringent to comply with legislative requirements.