

Safe Work Procedure

Hot Work

Program/Services List Departments or Programs		Document ID 18.19.4	Department: Risk and Safety Services
Personal Protective Equipment or Devices Used - Safety glasses / eye protection - Task-appropriate face protection - Flame-resistant or protective clothing - CSA-approved protective footwear - Work gloves - Hearing protection (as required) - Respiratory protection	Training Requirements - General workplace safety orientation - Hot work awareness and procedures - Fire extinguisher use - WHMIS education - Task-specific equipment training	Applicable Documents - Hot Work Safe Work Procedure - Hot Work Safety Checklist - Hot Work Permit - TRU Emergency Response Procedures	Creation Date: 04 March 2014
			Effective Date: October 2026
			Next Review: October 2027
			Revision no.: 4
			Reviewer: Safety Technician

HAZARD IDENTIFICATION — VISUAL SUMMARY

FIRE/EXPLOSION	HOT SURFACES / THERMAL BURNS	UV LIGHT	FLYING PARTICLES	EXPOSURE FUMES/GASES
				
Uncontrolled ignition of combustible or flammable materials caused by sparks, heat, open flame, or hot surfaces, resulting in fire, explosion, injury, or property damage.	Avoid contact with heated equipment, materials, sparks, slag, or molten metal that may cause burns to skin or ignite clothing.	Exposure to ultraviolet or radiant energy produced by hot work processes that may cause eye injury, skin burns, or long-term tissue damage	Particles, sparks, slag, or debris ejected during work activities that may strike the eyes, face, or body and cause injury.	Inhalation of fumes, gases, or vapours generated during work activities that may cause respiratory irritation, illness, or reduced oxygen levels.
COMPRESSED GASES	HIGH SOUND LEVELS	ELECTRICAL HAZARD	SLIPS / TRIPS	WORKING ALONE
				
Stored energy hazards associated with pressurized gas cylinders, including sudden release, impact, fire, or explosion if damaged, mishandled, or exposed to heat.	Exposure to noise levels that may exceed occupational exposure limits and cause hearing damage.	Risk of shock, burns, or injury from contact with energized electrical equipment, damaged cords, or faulty connections.	Loss of footing caused by hoses, cables, uneven surfaces, debris, or poor housekeeping.	Increased risk due to isolation where assistance may not be immediately available in the event of injury, fire, or emergency.

PURPOSE

To establish minimum safety requirements for planning, authorizing, and performing hot work activities at Thompson Rivers University (TRU) to prevent fire, explosion, injury, and property damage, and to ensure compliance with WorkSafeBC Occupational Health and Safety Regulation (OHSR) requirements.

Hot work includes any temporary activity that produces open flames, sparks, or heat capable of igniting combustible or flammable materials.

This procedure is supported by the Hot Work Safety Checklist (RSS 18.19.4a) and Hot Work Permit (RSS 18.19.4b), which must be used where applicable.

SCOPE AND APPLICABILITY

This Safe Work Procedure establishes the minimum safety requirements for hot work activities conducted under the authority of Thompson Rivers University (TRU). This procedure applies to hot work performed:

- On TRU-owned or TRU-controlled property, including campuses, shops, laboratories, and regional centres.
- Off TRU property where hot work is conducted as part of TRU programs, instruction, field activities, apprenticeship training, or TRU-authorized projects.

This procedure applies to:

- Trades and visual arts students.
- Instructors, faculty, and staff.
- Contractors, subcontractors, and vendors performing work for or on behalf of TRU.

CONTRACTORS AND THIRD PARTIES

Contractors performing hot work for or on behalf of TRU are expected to have their own written hot work procedures that meet or exceed WorkSafeBC requirements.

Where a contractor does not have an equivalent procedure, or where their procedures do not meet TRU's minimum safety requirements, this Safe Work Procedure shall apply.

All contractors must comply with:

- TRU hot work permitting requirements
- Site-specific hazard assessments and controls
- Any additional controls identified by TRU Risk and Safety Services or the designated TRU representative

OFF-CAMPUS AND FIELD WORK

When hot work is conducted off TRU property, instructors and supervisors must ensure that hazards are assessed and controls are implemented in accordance with

this procedure, unless a host organization's procedures provide an equivalent or higher level of protection.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- CSA-approved safety glasses with appropriate filter lenses
- Welding helmet or face shield (task-specific)
- Flame-resistant clothing or protective clothing
- CSA-approved protective footwear
- Heat-resistant work gloves
- Hearing protection where noise exceeds 85 dBA
- Respiratory protection where required by exposure assessment

PRE-USE REQUIREMENTS

- A Hot Work Permit is required unless hot work is performed in an approved designated hot work area with documented controls in place.
- Complete RSS 18.19.4a - Hot Work Safety Checklist prior to work
- Complete or obtain an approved RSS 18.19.4b - Hot Work Permit where required
- Where hot work is conducted in designated or approved hot work areas, controls must still be verified through hazard assessment and local procedures.
- Remove combustible materials within the hot work area or adequately protect them
- Verify fire protection equipment is present and operational
- Confirm ventilation is adequate for fumes and gases
- Inspect hot work equipment prior to use
- Assign a trained fire watch when required
- Where reasonably practicable, alternatives to hot work must be considered to reduce fire risk.

OPERATING RULES

General

- Hot Work Permits must be posted at the work location for the duration of the work.
- Assign a trained fire watch when required
- Work must stop immediately if unsafe conditions develop
- Combustible materials must be protected, relocated, or removed
- Ignition sources must be controlled at all times

SAFETY RULES

- Hot work is prohibited in explosive or oxygen-deficient atmospheres.
- Hot work is prohibited on containers, vessels, tanks, piping, or systems unless they have been assessed and verified safe for the work being performed.
- Emergency exits must remain unobstructed.
- Fire extinguishers must remain immediately accessible.
- Hot work in confined spaces must not be performed unless the space has been assessed and controlled in accordance with TRU confined space procedures.
- Where a fire watch is required, the fire watch shall remain in place during hot work activities and for a minimum of 60 minutes after completion of work. A final inspection of the work area and adjacent exposed areas shall be completed 4 hours after completion of hot work.
- Hot work must be stopped immediately if conditions change, hazards cannot be adequately controlled, or permit requirements are not being followed.
- The permit issuer, supervisor, fire watch, instructor, or any worker involved in the activity has the authority to stop work where unsafe conditions exist.
- Work may resume only after hazards have been reassessed and appropriate controls implemented.
- Where atmospheric hazards may be present, a hazard assessment must be completed and atmospheric testing conducted where required before work begins.

FIRE WATCH REQUIREMENTS

The fire watch shall:

- Monitor the work area for signs of fire during hot work activities.
- Maintain access to appropriate fire extinguishing equipment.
- Remain in the area for the required post-work fire watch period.
- Initiate emergency response procedures if a fire occurs.
- Not perform other duties that would interfere with fire watch responsibilities.

HOUSEKEEPING

- Maintain a clean work area free of combustible debris
- Remove slag, sparks, and hot materials promptly
- Store gas cylinders upright and secured
- Dispose of waste materials in approved containers
- Restore area to a safe condition following completion of work

HAZARD CONTROLS — DETAILED TABLE

Hazard	Control Measure
Fire / Explosion	Remove or protect combustible materials; use approved hot work permit; maintain fire watch
Hot Surfaces / Thermal Burns	Wear heat-resistant PPE; allow cooling before handling
Flying Particles	Wear CSA-approved eye and face protection
Exposure (Fumes / Gases)	Ensure adequate ventilation; use respiratory protection as required
UV Light	Use welding helmet or filtered eye protection
Electrical Hazard	Inspect equipment; do not use damaged cords or leads
Compressed Gases	Secure cylinders upright; keep away from heat sources
High Sound Levels	Wear hearing protection when noise exceeds 85 dBA
Slips / Trips	Maintain clean work areas; manage hoses and cables
Working Alone	Implement working alone procedures for high-risk hot work

RECORDS/VERIFICATION OF UNDERSTANDING

- Maintain completed Hot Work Permits and checklists
- Training records must be retained by the responsible department
- Records must be made available to Risk and Safety Services upon request

WORKING ALONE

Students are strictly prohibited from working alone in any lab or shop. If an employee anticipates isolation during work activities, a Working Alone assessment and check-in procedure must be implemented per TRU policy.

ANNUAL REVIEW

Risk and Safety Services (RSS) will complete a review of this Safe Work Procedure annually to ensure it remains current and effective. The Joint Occupational Health and Safety Committee (JOHSC) may be consulted during this review.

A review will also occur if:

- Regulatory requirements change.
- The procedure is reported to be ineffective.
- An incident occurs involving operation.

APPLICABLE OCCUPATIONAL HEALTH AND SAFETY REGULATION (OHSR)

SWP Section	Requirement Met	WorkSafeBC Regulation Reference
Training Requirements	Instruction and supervision	OHSR 3.23, 3.24
Hazard Identification	Hazard assessment and controls	OHSR 4.3, 4.13
Fire Prevention	Control of ignition sources	OHSR 5.27
Hot Work Activities	Burning, welding, cutting	OHSR 12.116
PPE	Eye, face, respiratory, hearing protection	OHSR 8.2, 8.10, 8.14–8.17, 8.32
Compressed Gases	Safe handling and storage	OHSR 5.36–5.47
Ventilation	Control of airborne contaminants	OHSR 5.64
Working Alone	Risk assessment and procedures	OHSR 4.20.1, 4.21
Housekeeping	Clean and safe work areas	OHSR 4.39

SUMMARY OF CHANGES

Rev#	Date	Change	Issued By
1	04 MAR 2014	NEW	OHS Officer
2	31 MAY 2019	New version and new format	Safety Officer
3	23 AUG 2024	RSS update	Safety Advisor
4	30 MAR 2026	Full rewrite to align with TRU SWP template; updated hazards, controls, and OHSR references	Safety Technician
	21 oct 2026	Formatting prior to QR code upload, amendment of some redundancies between procedure & checklist	Safety Technician