

Promoting a healthy and safe workplace



SYD Critical Risk Standards

Welcome to the Sydney Airport (SYD) suite of critical risk standards (CRS). These CRS are crucial in supporting our commitment that at SYD everyone works safely and goes home safe and well. Our safety management system (SMS) together with our environment management system (EMS) underpin a healthy, safe and environmentally conscious workplace. The CRS set minimum performance requirements to eliminate so far as reasonably practicable, or minimise risk and impacts associated with activities undertaken at the airport.

Our CRS set minimum expectations with which we must all comply **when conducting any work involving any of the below listed critical risk tasks**

1. Asbestos and hazardous materials
2. Confined spaces
3. Cranes and lifting operations
4. Demolition
5. Electrical safety
6. Excavation and trenching
7. Fitness for work
8. Formwork and falsework (including pre-cast and tilt-up)
9. Hazardous chemicals
10. Hot works
11. Isolation and lockout/tagout (LOTO)
12. Plant and equipment
13. Traffic management
14. Working at heights

Each of the CRS has an intent and outlines potential hazards and minimum performance requirements associated with the critical risk.

The work you are undertaking may involve more than one critical risk. In this case, each CRS which applies to the work must be considered and followed. Following a combination of CRS may be required. For example, the erection of formwork may also involve working at height.

The CRS are not intended to replicate every legal requirement or every requirement in a relevant Code of Practice. It is the responsibility of every person undertaking work at the airport to assess and comply with relevant legal requirements and information set out in Codes of Practice published by SafeWork NSW and other relevant guidance material. You must also identify any other specific risks and impacts applicable to your business or undertaking. Specific additional obligations may apply if you have been engaged and authorised to act as a principal contractor for a construction project.

You may notice that not every aspect of your work is covered by a CRS. The CRS set minimum expectations, it is important to remember that they do not replace the requirement for risk management and your own safety management systems for the work you do at the airport. The CRS are not a substitute for the identification of hazards, the assessment of risks and impacts and the implementation of appropriate controls to eliminate so far as reasonably practicable or minimise risks and impacts - this remains the responsibility of the person conducting a business or undertaking performing the relevant work.

Application

CRS apply to all of us who are undertaking construction and high-risk work activities at the airport, including workers and workplaces.

If, during the undertaking of your work, in the rare event it is not reasonably practicable to meet a CRS performance requirement, it is your responsibility to identify reasonably practicable controls through a risk assessment and document the identified controls via job safety analysis, safe work method statements and/or identify similar and additional controls by a competent person. For the purposes of these CRS, a competent person is defined as one who has acquired through training, qualification or experience the knowledge and skills to carry out the task.

Further Information

The SYD Organisational Safety team can provide assistance to airport stakeholders on the expectations set by the CRS, however we also recommend referring to your respective SMS, supervisors or airport contacts.

Thank you for your ongoing commitment to maintaining health and safety here at SYD.

Critical Risk 1

Asbestos and hazardous materials



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with the management, removal and disposal of hazardous materials such as synthetic mineral fibres, polychlorinated biphenyls, lead based paints and dust, and asbestos containing materials.

Hazards

Hazards associated with asbestos and hazardous material may include:

- exposure to asbestos fibres through damage to unidentified asbestos containing materials
- exposure to other hazardous materials
- cross contamination
- inadequate decontamination facilities



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with asbestos and hazardous materials.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statement
- Develop, implement, maintain, regularly review and communicate to workers an asbestos and hazardous materials management plan
- Develop, implement, maintain, regularly review and communicate to workers an asbestos and hazardous materials register
- Employ dust suppression controls and provide suitable air quality monitoring for work with the potential to generate airborne contaminants (e.g. lead dust, silica)
- Do not perform, or require any worker to perform, work involving asbestos other than the removal of asbestos or other work permitted by law
- Do not exceed the exposure standard for asbestos
- Do not use high pressure water spray or compressed air on asbestos or asbestos containing material
- Engage a licenced asbestos removalist to perform any asbestos removal work
- Display signage and barricade area prior to the commencement of asbestos disturbance or removal work
- Apply an unexpected finds protocol and refer to the SYD Asbestos Register or Contaminated Sites Register, prior to the commencement of any excavation, demolition or intrusive work
- Notify SafeWork NSW prior to licensed asbestos removal work being conducted at the workplace
- Provide air monitoring for all friable and non-friable asbestos removal work
- Provide decontamination facilities for work and equipment during asbestos removal work
- Obtain a clearance inspection prior to the reoccupation of an area following asbestos removal work
- Label all asbestos waste appropriately and dispose of the waste at a site authorised to accept asbestos waste

Critical Risk 2

Confined spaces



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risk and impacts associated with access to confined spaces on SYD grounds. This standard applies to entry to any space that is enclosed or partially enclosed and is or is likely to be, a risk from unsafe oxygen levels, fire or explosion, harmful airborne contaminants, or engulfment.

Confined spaces may be found in vats, tanks, pits, pipes, ducts and similar enclosed or partially enclosed structures.

Hazards

The hazards associated with confined spaces may include:

- harmful airborne contaminants
- unsafe oxygen level
- fire and explosion
- engulfment
- uncontrolled introduction of substances (e.g. steam, water or other liquids, gases or solids)
- electrical hazards
- biological hazards (e.g. contact with micro-organisms)
- mechanical hazards (e.g. hazards associated with plant)
- noise
- skin contact with hazardous substances
- hazardous manual tasks
- physiological and psychological demands
- environmental hazards (e.g. heat or cold stress; slips, trips and falls; lighting; etc.)



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with access to confined spaces on SYD grounds.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
 - provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented. This includes in relation to:
 - the nature of all hazards relating to confined spaces
 - the need for, and the appropriate use of, control measures to control risks to health and safety associated with those hazards
 - the selection, fit, use, wearing, testing, storage and maintenance of any personal protective equipment
 - the contents of any Confined Spaces Entry Permit that may be issued in relation to work carried out by the worker in confined spaces
 - emergency procedures
- Control unauthorised access into the confined spaces
- Undertake the risk assessment with a competent person, record the risk assessment in writing and retain this for at least 28 days
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Develop, implement, maintain, communicate and practice an emergency plan and certify all emergency equipment
- Complete a Confined Spaces Entry Permit with a competent person which identifies the location of the work and a description of the type of work to be undertaken in order to control the entry and the measures to control risk based on the completed risk assessment
- Maintain an entry/exit log for the confined spaces
- Brief workers on permit system controls prior to work commencing
- Erect signage and barricades to prevent unauthorised entry
- Provide a stand-by person when there are workers inside confined spaces
- Provide suitable access and egress, including in an emergency
- Provide adequate communication system/s
- Isolate hazardous plant, moving parts and stored energy in line with the SYD isolation and lockout/tagout (LOTO) CRS
- Confirm confined spaces are adequately ventilated with sufficient fresh air or implement controls to eliminate so far as reasonably practicable or minimise risks (e.g. self-contained breathing apparatus)
- Perform atmospheric testing using a calibrated device by a competent person, before and during entry in line with Confined Spaces Entry Permit requirements

Critical Risk 3

Cranes and lifting operations



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with cranes and lifting operations.

Hazards

The hazards associated with cranes and lifting operations may include:

- faulty design or manufacturing errors
- adverse weather conditions
- faulty lifting anchors or connectors
- incorrect lifting and erection practices, including unsafe rigging and inadequate or unsafe lifting equipment
- incorrect loading or unloading methods
- inappropriate or unstable work areas for cranes
- inadequate structural capacity of foundations
- damage to concrete due to:
 - modifications
 - repairs
 - seismic activity
 - handling before reaching adequate strength



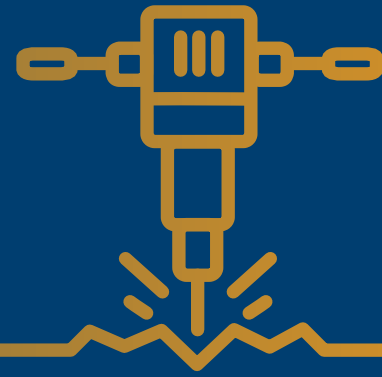
Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with cranes and lifting operations.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work, the nature of the risks associated with the work, and the control measures implemented
- Hold all required high-risk work licences for the relevant work and keep readily available on site
- Only use plant to lift or suspend a load that has been specifically designed for that purpose
- Never lift or suspend loads over people. Tag lines must be used when lifting loads over existing assets
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Develop, implement, maintain, communicate and practice an emergency plan
- Maintain, inspect, certify and register cranes and lifting equipment in accordance with regulatory requirements, manufacturer advice, competent person recommendations and risk assessment outcomes
- Make readily available evidence of crane registrations
- Develop, implement and maintain a lifting plan using a competent person
- Confirm the lifting equipment is appropriate to the task and type of lift, is never overloaded and is certified by competent persons
- Inspect lifting gear and tag as per legal requirements, by a competent person. Tags must always be in place and a lifting/rigging equipment register must be kept on site
- Lifting equipment must not be left on the hook overnight
- Visually inspect lifting equipment before every use
- Establish exclusion and drop zones and delineate, communicating to these relevant persons
- Comply with all prescribed airspace surfaces, including the Obstacle Limitation Surface (OLS), and obtain appropriate approvals for use of cranes or lift equipment prior to a crane lifting operation

Critical Risk 4

Demolition



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with demolition works. Demolition work includes demolishing or dismantling a structure or part of a structure that is either load bearing or related to the physical integrity of the structure.

Hazards

Hazards associated with demolition work may include:

- uncontrolled demolition or unplanned structure collapse
- falls from one level to another or work on uneven surfaces
- dropped materials
- disturbing above or underground essential services
- exposure to airborne hazardous chemicals or hazardous materials
- hazardous noise from plant used in demolition work
- manual handling



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with demolition work.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Plan explosive free demolition work as SYD operates as an explosive free environment
- Check workers have undertaken general construction induction training (white card)
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Refer to the asbestos and hazardous materials register/s during planning stages and undertaking further hazmat testing prior to work. If necessary, having regard to the proposed demolition, revise the asbestos register
- Visually inspect areas prior to demolition
- Submit demolition notification to the regulator five days before undertaking any work that involves:
 - o the demolition of a structure more than six metres high
 - o load-shifting machinery (e.g. an excavator), on a suspended floor
- Identify and disconnect live services, including the supply of gas, water, sewerage, telecommunications, electricity, chemicals, fuel and refrigerant in pipes or lines prior to works commencing. Obtain confirmation of isolation in writing
- Identify underground services through non-destructive testing
- Protect adjoining buildings and immediate environment
- Establish exclusion zones including public and aviation safety. Restrict access to the work area via physical barricading and signage
- Complete smoke detector and other fire isolation work before any dusty works in neighbouring areas commence
- Develop, implement, maintain, communicate and practice an emergency plan
- Follow the requirements in the working at heights CRS
- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements

Electrical safety



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts arising from electrical hazards in the workplace.

Hazards

Hazards associated with working with electricity may include:

- electric shock causing serious injury or death
- arcing, blast and flash causing burns
- electric shock from 'step-and-touch' potentials
- toxic gases generating due to burning and arcing associated with electrical equipment causing illness or death
- fire resulting from an electrical fault



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with electrical installations.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Consult with relevant workers and consult, cooperate and coordinate activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Do not perform electrical work on energised electrical equipment unless in the interests of health and safety, permitted by law and with written approval from the supervisor of the works
- If work is carried out on energised electrical equipment complete a permit and conduct a risk assessment with a competent person. Retain the permit and risk assessment for at least 28 days
- Treat all electrical sources and equipment as "live until tested for dead" at all times
- Trouble shooting and fault finding must first be attempted in a de-energised environment using de-energised testing methods. If unsuccessful, energised testing methods may be used subject to following the requirements for energised work
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Refer to updated electrical drawings and electrical system data prior to and during works. Maintain copies of these on site
- Clearly identify, mark and record in schematics all electrical sources and circuits including walls, ceilings and underground services. Use scanning and non-destructive testing for underground services prior to penetrating a surface or any ground-breaking exercise
- Identify all electrical work that must be performed by a licensed or registered electrical worker and have the work performed by a licenced or registered electrical worker
- Provide suitable control measures to prevent mobile plant contacting overhead powerlines
- Keep electrical leads and cables off ground to prevent contact with water and damage, or from creating a hazard to personnel or other operations
- Disconnect or isolate any unsafe electrical equipment from the electrical supply and do not reconnect unless tested, found safe and tagged
- Regularly inspect and test all required electrical equipment. Inspect all portable power tools before use. Tag out any faulty equipment and report it to a supervisor
- Provide and have a competent person regularly test residual current device or ground fault circuit interrupters for the temporary or permanent supply of electricity to electrical equipment
- Install barriers and signage to protect workers from inadvertently contacting energised exposed parts
- Provide first aid and rescue equipment
- Comply with all applicable Australian Standards including AS/NZS 3012 - Electrical installations - Construction and demolition sites
- Refer to the SYD isolation and lockout/tagout (LOTO) CRS for further information

Critical Risk 6

Excavation and trenching



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with excavation and trenching work. Excavation and trenching include any activity that breaks or penetrates the surface or ground.

Hazards

Hazards associated with excavating and trenching may include:

- excavation or adjacent structure collapse
- falls from one level to another
- dropped materials or objects
- struck by plant or equipment
- contact with existing services or utilities
- exposure to buried hazardous materials
- exposure to contaminated environmental media
- flooding or ingress of liquid, toxic fumes or gases
- disturbing above or underground essential services



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with all excavation and trenching activities.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Consider the nature of the excavation, the methods for carrying out the work and the means of entry and exit to the excavation (if applicable)
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Refer to the asbestos and hazardous materials register/s during planning stages and test environmental media where contamination may exist. Where results indicate the presence of hazardous materials, develop, implement and maintain appropriate worker exposure controls
- Provide a safe means of access and egress at all times
- Undertake post rainfall or inclement weather inspections
- Maintain sufficient ventilation at all times to manage gas, fume, vapour, dust and heat within the excavation or trench
- Perform atmospheric testing where a risk of atmospheric contamination exists using a calibrated device by a competent person
- Implement confined space management controls where the excavation or trench meets such criteria
- Develop, implement, maintain, communicate and practice an emergency plan specific for each excavation activity
- Document an excavation methodology that includes identification of underground essential services through non-destructive testing and consider works near overhead services
- Provide spotters for all plant or machinery when in use
- Restrict access to the work area via physical barricading and signage
- Excavations must be benched, shored and battered to a safe angle of repose as determined by a competent person (e.g. geotechnical engineer or similar)
- Consider the 'zone of influence'. No spoil, loads and equipment must be located within close proximity to excavations or trenches
- Develop, implement and maintain sediment control plans to prevent run off and stockpile dust management controls applied
- Undertake excavation activities in accordance with the SYD Safeguarding Buried Services Procedure (WHS-PR-E4-2-002)

Fitness for work



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with fitness for work at SYD and that all workers present fit for duty.

Hazards

Being fit for work encompasses all physical, psychological and social factors of employment. Measuring fitness for work can be task specific or based on the general fitness of the individual and work demands. Work health and safety may be impacted by fitness for work factors, which may include:

- unplanned overtime or irregular work hours
- physically or psychologically demanding tasks
- working in safety critical and high-risk situations
- exposure to temperature extremes
- medical conditions, injury or illness
- poor quality or lack of sleep
- fatigue
- lifestyle or personal factors
- the consumption of and/or being impaired by drugs and/or alcohol



Minimum performance requirements

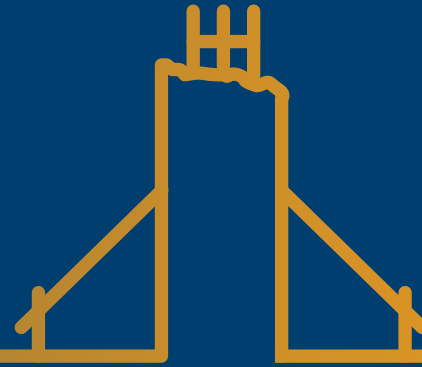
To eliminate so far as reasonably practicable or minimise risks and impacts associated with fitness for work.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Implement controls to eliminate or minimise so far as reasonably practicable, fitness for work risks (e.g. maximum shift lengths and adequate rest periods between shifts)
- Assess and comply with all relevant legal requirements
- All workers must attend fit for work and able to perform work tasks and not cause harm to themselves or adversely affect the health and safety of others
- Report fitness for work concerns that may affect work ability to a supervisor, including consumption of over the counter or prescribed medication
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Consult with relevant workers and cooperate and coordinate activities with other relevant duty holders
- Workplaces established at SYD must have a drug and alcohol monitoring program for workers involved in high-risk work. Where work involves Safety Sensitive Aviation Activities, Part 99 of the Civil Aviation safety Regulations requires compliance with the SYD Drug and Alcohol Management Plan
- Participate in testing for drugs and alcohol when required. This may include following high-risk incidents
- Do not consume during work hours, or present to work under the influence of and/or with the presence of any illicit drugs and/or alcohol
- Consult a medical practitioner if fitness for work is adversely affected, or before returning to work from a period of being unfit for work

Critical Risk 8

Formwork and falsework

(including pre-cast and tilt up concrete)



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts arising from the erection, alteration, dismantling and use of formwork and falsework and pre-cast and tilt up concrete. Formwork means the surface of the form and framing used to contain and shape wet concrete until it is self-supporting.

Risk

Hazards associated with formwork and falsework and pre-cast and tilt up concrete may include:

- collapse of structure
- damage to adjacent buildings and structures
- unstable ground conditions
- unrestricted maximum live and dead loads
- exposure to electric lines or services
- falls and falling objects during loading or lifting
- unsafe use of powered mobile plant and traffic in the vicinity of workers or work areas
- unauthorised access to the construction workplace
- adverse environmental conditions (e.g. wind speed, wet weather)

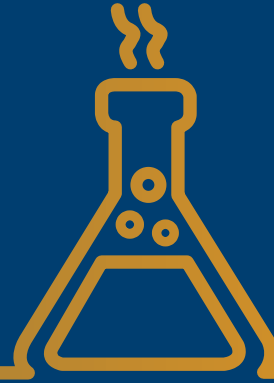


Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with formwork and falsework and pre-cast and tilt up concrete.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Require all workers to undertake general construction induction training (white card)
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Develop, implement, maintain, communicate and practice an emergency plan for erection, alteration, dismantling and use of formwork and falsework and pre-cast and tilt up concrete
- Maintain safe access and egress at all times
- Consider load tolerances, lifting calculations, installation, erection, dismantling and access/egress for formwork and falsework and pre-cast and tilt up activities
- Obtain a certified design for precast and tilt up concrete verified by a competent person, with any changes to panel and support system designs approved
- Obtain approval from geotechnical engineer prior to erection of formwork and falsework. A lift study is required for each panel to prevent incorrect handling, lifting or structural failure of the panel or lifting point
- Verify the structural integrity of the formwork before starting a concrete pour
- Erect formwork frames progressively to maintain the stability of the overall structure
- Maintain fall prevention throughout the entire erection and dismantling process
- Install perimeter containment screens throughout the construction process when erecting or stripping formwork to encapsulate falling objects
- Inspect formwork components before use, remove defective components from service and tag them out for disposal or repair
- Designate an exclusion zone, including drop zone, when working near the live edge, stripping formwork or dismantling falsework and during erection of pre-cast and tilt up concrete structures
- Identify the location of overhead and underground electric lines and observe safe working distances

Hazardous chemicals



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with the use, handling and storage of hazardous chemicals.

Hazards

Hazards associated with storing, handling or using hazardous chemicals may include:

- fire or explosion (e.g. resulting from uncontrolled release of substances)
- exposure to airborne contaminants (e.g. fumes, vapours, gases, mists and dusts) from poorly ventilated storage area or work practices
- asphyxiation from oxygen deficient or enriched atmospheres
- burns to skin or eyes
- noise induced hearing loss (e.g. exposure to ototoxic chemicals)



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with hazardous chemicals.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Develop, implement and maintain a current register of hazardous chemicals, and where applicable a hazardous chemicals manifest
- Make readily available the current, safety data sheets for all hazardous chemicals and ensure it meets the Globally Harmonised System criteria and includes details of an Australian manufacturer or supplier
- Designate, signpost and secure hazardous chemical storage areas
- Store hazardous chemicals, including gas cylinders in accordance with the safety data sheets (e.g. provide adequate ventilation, segregation, secondary containment, impact protection)
- Eliminate ignition sources within the immediate use or storage area
- Bund to 110% of the volume for all storage containers
- Label hazardous chemicals containers, clearly identifying the substance and outlining basic health and safety information about the substance
- Do not store chemicals in bottles that could be used for drinking purposes
- Manage workplace exposure standards for chemicals in accordance with legislation
- Wear personal protective equipment in accordance with the safety data sheets and risk assessment (e.g. overalls, aprons, footwear, gloves, chemical resistant glasses, face shields and respirators)
- Supply spill provisions for all hazardous chemicals in accordance with the safety data sheets (e.g. neutralising material, absorbent material, waste bags)
- Provide safety and emergency equipment at storage and use locations (e.g. fire extinguisher, eye wash)
- Provide health monitoring to all workers as required by law
- Develop, implement, maintain, communicate and practice an emergency plan

Hot works



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with hot works. Hot work includes activities such as grinding, welding, thermal or oxygen cutting or heating, and other related heat or spark producing operations.

Hazards

Hazards associated with hot work may include:

- fire or explosion (e.g. resulting from a gas or vapour leak, materials backfire or flashback)
- crush or impact injuries (e.g. resulting from an explosion)
- burns (e.g. contact with the flame, sparks, molten or hot metal)
- exposure to airborne contaminants (e.g. welding fume, heat applied to lead coated surfaces)
- eye injury (e.g. arc, eye or welders flash)
- asphyxiation from oxygen deficient atmospheres
- radiation exposure
- noise induced hearing loss
- electric shock or electrocution



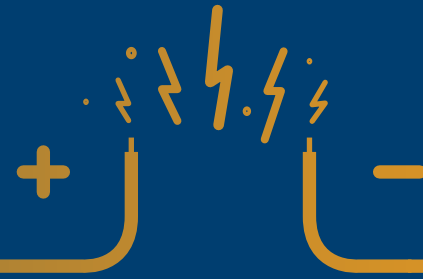
Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with hot works.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Do not undertake hot works on a total fire ban day
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Implement a permit system for hot works at the worksite. Identify whether a SYD hot work permit is required, and if so, obtain this prior to commencing work
- Hot work activities must not be performed within 15 meters of an aircraft at any time
- Develop, implement, maintain communicate and practice an emergency plan
- Implement fire system isolations prior to hot work commencing
- Remove any flammable or combustible material or provide non-flammable covers or screens to control sparks
- Keep flammable or combustible substances at their lowest practicable quantity
- Assess ventilation prior to commencing work and where reasonably practicable use local exhaust ventilation
- Inspect tools and equipment prior to works and confirm they are fit for purpose and in suitable working condition
- Designate restricted work areas via physical barrier or screening to minimise risk to others and signpost
- Communicate with workers or other persons in the vicinity of hot works, advising of hazards and relevant controls
- Confirm gas cylinders are fit for purpose and fitted with flashback arresters. When not in use, close all valves and secure all cylinders in an upright, well ventilated position
- Do not conduct hot work in confined spaces or hazardous atmospheres/areas unless the atmosphere has been tested and permit conditions are met
- Wear suitable personal protective equipment including fire retardant clothing, boots, gloves, eye protection and respiratory protection, where required
- Maintain a fire watch post hot work as defined in the safe work method statement or hot work permit (e.g. break periods or completion of work)

Critical Risk 11

Isolation and lockout/ tagout (LOTO)



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with energy sources.

Hazards

Hazards associated with energy and a failure to isolate may include:

- electric (high or low voltage) shock causing injury or death
- arcing, blast and flash causing burns
- toxic gases generating due to burning and arcing associated with electrical equipment causing illness or death
- fire resulting from an electrical fault
- injury due to entanglement, falling, crushing, trapping, cutting, puncturing, shearing, abrasion or tearing from the uncontrolled release of stored energy
- creation of hazardous conditions due to harmful emissions or the uncontrolled release of stored energy



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with energy sources.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Develop, implement and maintain an isolation and lockout/tagout procedure
- All energy sources and equipment must be treated as “live until tested for dead”, at all times
- All sources of energy and appropriate steps to isolate must be identified by a competent person
- A SYD shutdown, or services isolation, is to be in place and approved via the SYD online shutdown application process, where the works occur in a shared area or have the potential to impact one or more stakeholders
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Isolation plans, instructions or permits to work must identify each isolation point and specify the test requirements for the presence of hazardous materials/stored energy
- Personal danger locks and tags must include the date, name, contact details of the person installing it and reason for isolation, lockout/tagout. Any tampering or the removal someone else’s lock and tag is strictly prohibited
- Isolations must include a verification step to confirm de-energisation and re-energisation
- Identify all isolation points and clearly label, lock and control isolation points to prevent inadvertent energising
- Test the isolation status after a break or change in condition

Plant and equipment



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with using plant and equipment. Plant and equipment include fixed and mobile machinery and handheld powered equipment.

Risk

Hazards associated with plant and equipment may include:

- entrapment, entanglement, crushing, shearing
- being hit by a moving object
- fire and explosion
- noise and vibration
- contact with chemicals
- slips/trips/falls from height
- contact with hot machinery
- uncontrolled vehicle movements
- rollover due to unstable or unsuitable ground conditions



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated when working with plant and equipment.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Undertake and document daily inspections of mobile plant and implement a program of risk assessment and inspection, in line with manufacturer advice
- Verify as competent all operators of mobile plant and equipment for relevant plant and tasks
- Register all relevant vehicles for use Airside and comply with minimum vehicle standards as defined in the Airside Vehicle Control Handbook
- Where practicable, separate plant and people (e.g. physical barriers, spotters etc.)
- Maintain, inspect, certify and register plant in accordance with regulatory requirements, manufacturer advice and risk assessment outcomes
- Apply safety controls as per manufacturer advice and risk assessment outcomes (e.g. guard or cover moving parts, signage, alarms, emergency stops, interlocking devices)
- Do not interfere with, bypass, remove or redesign safety controls on plant without approval of manufacturer or competent person
- Develop, implement and maintain traffic management plans for mobile plant and equipment. Consult with SYD should this interfere with airport operations
- Assess ground conditions with approval of a geotechnical engineer, or other competent person
- Define exclusion zones and control entry to work areas
- Verify seating is available for all persons on powered mobile plant and that seat belts are provided and used
- Fit warning or safety devices to moving plant and equipment (e.g. amber beacons, audible alarms)
- Secure unoccupied mobile plant from unauthorised access and uncontrolled vehicle movements
- Develop, implement and maintain a procedure for plant refuelling, service or maintenance tasks, including documenting adequate isolation and spill control
- Mobile plant must be switched off when not in use

Traffic management



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with working with, near or next to vehicles, mobile plant and aircraft.

Hazards

Hazards associated with traffic management may include:

- unsafe interaction between vehicles and pedestrians
- contact with stationary objects (e.g. overhead services and structures)
- hit by mobile plant or vehicle (e.g. person, vehicle, infrastructure)
- loading and unloading vehicles
- separation between vehicles and pedestrians
- paths of travel
- work scheduling
- public access and interaction
- traffic volumes
- blind spots
- physical environment impacts (e.g. road surfaces, lighting, visibility, drainage)
- uncontrolled vehicle movements



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with traffic.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Develop, implement and maintain traffic management plans, eliminating or minimising plant and pedestrian interface risks, including for temporary works (e.g. construction sites)
- Traffic management plans must be developed or development overseen by a competent person
- Avoid the need for vehicles to reverse
- Consider public safety in all traffic management planning (e.g. workers, passengers, others)
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Physically separate mobile plant, pedestrians, workers and other operations (e.g. barriers)
- Define and maintain exclusion zones (e.g. loading/unloading activities, site entry/exit, separation of plant and workers)
- Follow road rules including speed and directional signage at all times
- All vehicles driving airside must hold a valid Airside Driving Authority or be under escort by a valid Airside Driving Authority holder
- Shadow vehicles must follow workers when airside on road aprons/fringes
- Complete and seek approval of Road Occupancy Licences and Speed Zone Authorisations
- Operate amber flashing lights when driving airside or inside a terminal
- Be aware of and comply with requirements for changing conditions (e.g. temporary overflow drop off, road works etc.)

Working at heights



Sydney Airport (SYD) expects the elimination so far as reasonably practicable or minimisation of risks and impacts associated with working at height. Working at heights involves any work where there is the potential to fall from one level to another, regardless of the distance. It includes the use of ladders, elevated work platforms and scaffolding.

Hazards

Hazards associated with working at heights may include:

- falls from heights:
 - as a result of slips or trips
 - as a result of bending and reaching over rails
 - associated with working in the roof space or on the roof
 - from elevated work platforms, scaffoldings or ladders
- incorrect tools or equipment (e.g. working off a ladder)
- unsuitable or inappropriately used personal protective equipment (e.g. not wearing a harness)
- poor ground conditions (e.g. uneven ground for elevated work platform use, trip hazards)
- limited access and egress to the work area
- substandard erection of fixed or mobile scaffolding
- barrier protection and exclusion zones not defined
- poor housekeeping standards and work areas not made safe upon completion



Minimum performance requirements

To eliminate so far as reasonably practicable or minimise risks and impacts associated with working at heights.

- Conduct, document and make readily available a risk assessment (e.g. job safety analysis, safe work method statements)
- Assess and comply with all relevant legal requirements
- Maintain evidence of consultation with relevant workers, cooperation and coordination of activities with other relevant duty holders
- Provide information, instruction, training or supervision to workers that is suitable and adequate having regard to the nature of the work carried out by the worker, the nature of the risks associated with the work, and the control measures implemented
- Where it is reasonably practicable, undertake work on the ground or on a solid construction (as opposed to working at heights)
- Hold all required high-risk work licences for the relevant work
- Develop, implement and maintain a safe work method statement in line with SYD review checklist. All relevant workers must review, understand, sign onto and apply the safe work method statements
- Develop, implement, maintain, communicate and practice a rescue plan for works above two meters outlining the fall prevention or arrest control measures
- Inspect working at heights equipment and infrastructure at periodic intervals to confirm it remains fit for purpose and is maintained in accordance with statutory and manufacturer's requirements. Make readily available documented evidence of periodic inspections
- Assess ground conditions prior to use or installation of any working at heights equipment which may include a geotechnical engineer assessment for civil work (e.g. use of cranes, elevated work platforms)
- Install fit for purpose fall and edge protection (e.g. handrails, mid-rails and toe boards) where the risk of a person or object falling over an edge exists
- Designate via physical barrier and signpost exclusion zones, drop zones or overhead protection where the risk of a falling object exists
- Establish exclusion / drop zone, and or secure tools and equipment using tether, lanyards or similar
- Maintain 100% hook up of a harness lanyard when working within two meters of an exposed edge or on an incomplete structure, to a suitable anchorage point
- Check harnesses are tagged and visually inspected before use
- Establish emergency and rescue procedures for any fall arrest system
- The use of A-frame ladders are restricted for inspection tasks only, with a requirement to maintain three-points of contact. Safer alternatives are to be used, such as but not limited to scaffold, platform ladders, or elevated work platforms. Any other use of A-frame ladders will only be approved by SYD where no other safe means of access is suitable
- Cover or barricade maintenance hatches, excavations, holes, shafts, risers or other penetrations where the risk of a person falling from one level to another exists. Ensure these are fixed into position and do not load bear onto maintenance hatches etc.
- Do not exit an elevated work platform when elevated unless a risk assessment has been completed and verified by a competent person

For Further Information

If your matter is urgent and relates to a serious WHS incident, please contact:

Airport emergency number – 02 9667 9090

On-call member of the Safety team – 0466 795 121

Assets and Infrastructure Compliance team duty phone – 0466 421 205

SafeWork NSW – 13 10 50

If you have a general enquiry, please refer the InfoSYD webpage, contact the SYD Organisational Safety team via safety@syd.com.au or the following SYD operational contacts:

Emergency – 02 9667 9090

IOC Duty Manager – 02 9693 3290

Technical Facilities Manager (Precinct) – 02 9667 9026

International Precinct Duty Manager – 02 9693 3291

Domestic Precinct Duty Manager – 02 9693 3292

Car 2 (Airfield Operations) – 02 9667 9824

Security – 02 9667 9673

Environment on-call – 0466 851 299

Assets and Infrastructure Compliance team duty phone – 0466 421 205

The logo for SYD, consisting of the letters 'S', 'Y', and 'D' in a bold, white, sans-serif font. The 'S' and 'Y' are connected at the top, and the 'D' is positioned to the right of the 'Y'. The logo is set against a dark blue background.