

Edmonton Airports Contractor Safety Manual

Version 3.0
January 2024



Table of Contents

1	INTRODUCTION.....	6
1.1	Overview	6
1.2	Purpose.....	6
1.3	Expectations of the Program.....	6
1.4	Contractor Environment, Safety and Loss Prevention	6
1.5	Legislated Jurisdiction	7
2	ASSIGNMENT OF RESPONSIBILITY	8
2.1	Edmonton Airports, Project Manager	8
2.2	Prime Contractors' Management.....	8
2.3	Responsibilities include, but are not limited to:.....	9
2.4	Contractor Management.....	9
2.5	Contractors' Supervision.....	9
2.6	Contractors' Worker	10
2.7	Compliance Policy	10
3	HAZARD ASSESSMENT	11
3.1	Purpose.....	11
3.2	Hazard Identification.....	11
3.3	Hazard Evaluation	12
3.4	Control Measures	12
3.5	Supervisor Responsibility.....	13
3.6	Worker Responsibility	14
3.7	Field Level Hazard Assessment.....	14
3.8	Documentation Evaluation	14
4	TRAINING AND COMMUNICATIONS	15
4.1	Purpose.....	15
4.2	Contractor Workers Orientation.....	15
4.3	Completion of Documentation	15
4.4	Safety & Loss Prevention Training.....	15
4.5	Contractor Competency	16
4.6	Training Record Retention	16
4.7	Pre-Job Safety Meeting.....	16
4.8	Safety Meetings	16
4.9	Responsibility of the Contractor Supervisor.....	17
4.10	Tailgate Meetings	17
4.11	Topics of Discussion Items of review may be:	17
4.12	Record Keeping/Distribution.....	17
4.13	Posters, Pamphlets, and other Reminders	17
4.14	Smoking.....	18
4.15	Harassment	18
4.16	Definition of Discrimination	18
4.17	Modified Work	18

Edmonton Airports

Contractor Occupational Health and Safety Manual

4.18	Fitness for work.....	19
4.19	Testing	19
5	AIRPORT PERMITTING SYSTEMS.....	20
5.1	Facility Alteration Permit (FAP)	20
5.2	Safe Work Permits	21
5.3	Excavation Permits.....	21
5.4	Hot Work Permits	21
5.5	Confined Space Entry Permits	22
5.6	Lock Out Procedures.....	22
5.7	Removal of lock.....	22
6	PERSONAL PROTECTIVE EQUIPMENT.....	23
6.1	Purpose.....	23
6.2	Hard hats.....	23
6.3	Hi-Visibility Vests.....	23
6.4	Work boots	23
6.5	CSA approved eyewear.....	24
6.6	Shirts.....	24
6.7	Hearing protection	24
6.8	Gloves	24
6.9	Training and Education	24
7	ENVIRONMENTAL PROTECTION	25
7.1	Contractor Environmental Response Plans.....	25
7.2	Initial Response Actions	25
7.3	Spill Classification.....	26
7.4	Notification.....	26
7.5	Regulatory Agency Notification	26
7.6	Initial Reporting Guideline.....	27
7.7	General Spill Characteristics.....	27
7.8	Response Equipment List.....	28
7.9	Environmental Guidelines - Earthworks	29
7.10	Environmental Guidelines – Dust Control.....	31
7.11	Environmental Guidelines – Concrete and Pavement	32
7.12	Environmental Guidelines - Waste	33
7.13	Environmental Guidelines – Hazardous Materials Storage	33
8	OPERATIONAL COMPLIANCE.....	34
8.1	CRANES.....	34
8.2	Minor Review.....	34
8.3	Major Review	34
8.4	NOTAM	35
8.5	Examples of when NOTAM's should be issued:	35
8.6	Requirement for NOTAM.....	35
8.7	Request for NOTAM.....	36
8.8	Voice Advisories	36
9	PREVENTATIVE MAINTENANCE	37
9.1	Purpose.....	37

Edmonton Airports

Contractor Occupational Health and Safety Manual

9.2	Locking out Defective Equipment	37
9.3	Tagging out Defective Equipment	37
10	MONITORING THE STANDARDS	38
10.1	Inspection Purpose.....	38
10.2	Informal Inspections.....	38
10.3	Formal Inspections.....	38
10.4	Governmental Inspections.....	38
10.5	Posting Inspection Results.....	38
10.6	Auditing/Inspection Procedures.....	39
11	EMERGENCY PREPAREDNESS.....	41
11.1	Emergency Assistance Program	41
11.2	Purpose and Scope.....	41
11.3	Roles and Responsibilities	42
11.3	Identification of an Emergency	43
11.4	Notification	44
11.5	Emergency Assistance List.....	44
11.6	Emergency Evacuation.....	44
11.7	Emergency Equipment.....	45
11.8	First Aid Requirements.....	45
11.9	Fire Prevention	46
11.10	Hot Work Definition	46
11.11	Hazard Assessment.....	46
11.12	Hot Work Procedures and Monitoring.....	47
11.13	Fire Prevention and Training.....	47
11.14	Reporting of Incidents Involving a Fire	47
11.15	Waivers.....	48
11.16	Security of Work Area and Tools	48
11.17	Media Relations	48
12	GENERAL REQUIREMENTS	49
12.1	General Rules.....	49
12.2	Housekeeping.....	49
12.3	Foreign Object Damage (FOD) Control	49
12.4	FOD Protocols.....	50
12.5	Responsibilities	50
12.6	Procedures	50
12.7	Frequency of Inspections	50
12.8	Traffic Hazards.....	51
12.9	Barricades, Signage, and Hoarding.....	51
12.10	Manual Handling.....	52
12.11	Respiratory Protection Program	52
12.12	Illumination	52
12.13	Ladders and Scaffolds	52
12.14	Sanitation Facilities	53
12.15	Safe Access and Egress	53
12.16	Utilities	53
12.17	Compressed Gas Systems	53

Edmonton Airports

Contractor Occupational Health and Safety Manual

12.18	Falling Hazards	54
12.19	Overhead Protection	55
12.20	Guardrails, Floor and Wall Openings	55
12.21	Mobile Equipment and Vehicle Operation.....	55
12.22	Traffic Hazards	55
12.23	Tools and Equipment	56
12.24	Barricades, Signage, and Hoarding	56
12.25	Securing of Equipment and Materials	56
12.26	Office Environmental, Safety and Loss Prevention.....	56
12.27	Working Alone	57
13	SECURITY	58
13.1	General.....	58
13.2	Tool and Equipment Identification	58
13.3	Contractor Use of Premises	58
13.4	Parking.....	58
13.5	Restricted Area Identification Cards (RAIC)	59
13.6	Pass Control	59
13.7	Key Control.....	59
13.8	Vehicle Escort on Airside	59
14	INCIDENT INVESTIGATION.....	60
14.1	Incident Reporting Procedure.....	60
14.2	Reporting Table	60
14.3	Organizational and Government Notification	62

1 INTRODUCTION

1.1 Overview

The Contractor Performance Program has been designed to verify that all contractors working on Edmonton Airport premises have the necessary information required to verify their workers have a safe and healthy environment.

Each contractor will be expected to perform their daily tasks in accordance with this program, and applicable legislated requirements.

1.2 Purpose

The purpose of the Contractor Performance Program is to provide contractors with minimum performance standards and expectations that are necessary to identify any potential risk of personal injury, property damage, or environmental impacts and identify preventative control measures to react if an incident occurs.

1.3 Expectations of the Program

The expected results of this program are to provide information to contractors so they will:

- Implement Environment, Safety and Loss Prevention elements into each facet of their work process beginning with the planning stages of the contract.
- Reduce and eliminate risk to their own workers, other workers present, and the general public.
- Meet and exceed their moral, ethical, and legal health, safety, and environmental obligations as employers.
- Have a consistent standard by which each contractor, employed on Edmonton Airport premises, will be observed for the consideration of future contracts.

1.4 Contractor Environment, Safety and Loss Prevention

Edmonton Airports will review all contractors Environment, Safety and Loss Prevention Programs submitted with a bid through the **ComplyWorks** system. Successful contractors will be monitored for performance using the contractor's own standards and the standards outlined within this document as a measurement of the contractor's commitment to Environment, Safety and Loss Prevention. A list of preferred contractors, for Edmonton Airports' record retention, will be established from the results.

A Contractor that maintains substandard performance while engaged in work for Edmonton Airports may be asked in writing to remove themselves from the premises and have their contract voided.

1.5 Legislated Jurisdiction

Contractors performing work on Edmonton Airports premises will be required to comply with the following Environment, Occupational Health and Safety legislation:

- Alberta Occupational Health and Safety Act, and Regulations
- Alberta Environmental Protection and Enhancement Act, and Regulations
- Alberta Workers' Compensation Act, and Regulations
- Alberta Building, Fire, and Electrical Codes
- Canada Labor Code – Part II
- National Fire Code
- Canadian Environmental Assessment Act
- Canadian Environmental Protection Act

This document is based on, but not limited to the legislated standards listed above.

- For the purpose of this document any agency or employer working on the airport property on a construction project shall be referred to as a Contractor.
- This document is intended to provide guidance to contractors working on the Edmonton International Airport property and on construction related activity. Some of the defined rules are also included in this document.
- Wherever the term “including” has been used it should be interpreted as “including, but not limited to”
- Where there is a conflict of information in this document, the highest standard will prevail, either the Contractor's EHS program or the Legislation having jurisdiction

2 ASSIGNMENT OF RESPONSIBILITY

2.1 Edmonton Airports, Project Manager

Where Edmonton Airports has appointed a Project Manager that individual will act on behalf Edmonton Airports, and will be required to monitor the overall Environment, Safety and Loss Prevention Performance of each contractor. Project Managers will verify that the hired is in good standards with

ComplyWorks, other Project Responsibilities include:

- Environmental, Safety and Loss Prevention issues on the agenda for meetings with the contractor(s):
- Review the Contractor Environment, Safety and Loss Prevention Program elements during the review of contractor performance in production, and quality assurance.
- Contact the **Safety Team** when specialty services or information is required regarding Contractor Environment, Safety and Loss Prevention.
- Review Environmental, Safety and Loss Prevention documentation required by each contractor.
- Initiate action to correct substandard actions or conditions.
- Edmonton Airports Project Manager will immediately notify the **AOCC at 780 890 8327 and the Safety Team** of any governmental investigations or orders issued to the Prime Contractor.
 - Dave Kuny-Manger. Safety and Airfield Compliance
780-499-8789
 - Chelsea Laporte-Senior Safety Specialist
587-385-9763
 - Coby Perry- Emergency Planning and Safety Coordinator
780-691-0534
- **A prelim incident investigation will be completed through site docs so the Safety Team can enter it into Q Pulse.**
- Set an initiative-taking leadership example.

2.2 Prime Contractors' Management

The prime contractor will be expected to maintain Environmental, Safety and Loss Prevention Excellence through the implementation of their company standards, legislated standards, and industry best practices.

2.3 Responsibilities include, but are not limited to:

- The prime contractor will identify the individual(s) assigned to monitor and correct substandard actions or conditions at the work site.
- Provide a copy of all company Environmental, Safety and Loss Prevention policies and procedures relevant to the successful management of the site program.
- The prime contractor will have copies of all documentation of their Environmental, Safety and Loss Prevention Program and provide copies available for inspection upon request.
 - The prime contractor will immediately notify the Edmonton Airport's Project Manager of any governmental investigations or orders issued.
 - The prime contractor will participate in Edmonton Airports' inspection with the assistance of the Project Manager to ensure correct procedures and documentation are being followed to YEG standards.
 - The prime contractor should also set a proactive leadership example.

2.4 Contractor Management

Every contractor who directs the activities of an employee involved in work at areas on Edmonton Airport premises shall:

- Cooperate with the prime contractor in the delivery of the Environmental, Safety and Loss Prevention Program.
- Educate Management, Supervisors, and Workers on their legislated responsibilities.
- Ensure that a competent worker completes the work or, supervises a non-competent worker doing the job
- Identify health and safety hazards and communicate control measures to workers.
- Make all equipment that is necessary to enable a worker to perform their task available at the workplace without personal risk to their health or safety.
- Maintain equipment and tools in a condition to perform the function for which they were intended or designed.
- Report all incidents to the prime contractor and assist in the investigation and notify the AOC, Project Manager and Safety Team as per the notification list.
- Set a proactive leadership example.

2.5 Contractors' Supervision

The contractors' supervision is the front-line manager of the Environmental, Safety and Loss Prevention Program; therefore, Edmonton Airports will expect contractors to provide competent supervisors with a proactive attitude towards Environmental, Safety and Loss Prevention Practices. Responsibilities include, but are not limited to:

- Complying with and participate in the requirements their own Environmental, Safety and Loss Prevention program and legislated standards.
- Request assistance from **Project Managers** when a situation arises where there are known factors, where if left uncontrolled will cause a negative effect to themselves, other workers present, the general public, or the environment.
 - Verify workers are competent to perform their tasks safely.

2.6 Contractors' Worker

Every worker is required to cooperate with their employer to protect the health and safety of themselves and other workers at the work site. Responsibilities include, but are not limited to:

- **The Contractor Orientation for Edmonton International Airport (YEG) and Villeneuve Airport (ZVL) must be completed before work begins.** Participate in the Environmental, Safety and Loss Prevention Program, as outlined by the employer.
- Report unsafe conditions and actions to the employer.
- Report all incidents and injuries to the employer.
- Properly utilize tools, equipment, and personal protective equipment as they were intended and designed.
- Maintain safeguards on all equipment, tools, floors and wall openings.
- Remove from service any equipment, tool, or personal protective equipment that is damaged and/or will not perform the function for which it is intended or designed.
- Refuse to work were there exists an imminently dangerous situation for yourself or for workers and the general public nearby.
- Set a proactive leadership example.

2.7 Compliance Policy

Compliance with established standards is essential in verifying all workers are provided a safe and healthy workplace, the environment is protected from damage, the general public and process equipment is protected.

3 HAZARD ASSESSMENT

3.1 Purpose

The purpose of identifying, evaluating and controlling occupational hazards is to reduce and/or eliminate the potential loss of health or wellness that workers would experience from uncontrolled energy releases or fugitive emissions. In this program uncontrolled energy release or fugitive emissions will be considered exposures.

3.2 Hazard Identification

Identifying hazards is the task of reviewing a work process and observing “energy” or “emission” points in the process where negative consequences may result if not controlled. Areas of review include:

- People
 - Do the workers performing the task have the physical capabilities, experience, and adequate training?
 - What contacts are present that could cause injury, illness, stress or strain?
 - Could the worker be caught in, on or between? Struck by? Fall from? Fall onto?
 - What practices are likely to downgrade safety, productivity or quality?
- Equipment
 - What hazards are presented by the tools, machines, vehicles or other equipment present or being used?
 - What equipment emergencies are most likely to occur?
 - How might the equipment cause loss of safety, productivity or quality?
- Material
 - What harmful exposures do chemicals, raw materials or products present?
 - What are the specific problems involving material handling?
 - How might materials cause loss of safety, productivity or quality?
- Environment
 - What are potential problems of housekeeping and order?
 - What are the potential problems of sound, lighting, heat, cold, ventilation or radiation?
 - Has the external as well as the work environment been considered?
 - Identifying specific loss exposures is a key step in preventing losses from occurring.

3.3 Hazard Evaluation

A contractor supervisor and his/her management team will perform hazard evaluation in most cases. In some cases where the impact of the hazard is evaluated, a qualified person will be required for an accurate evaluation of the hazard. The evaluation process includes:

- Exposure potential for worker.
- Magnitude of exposure.
- Contaminants involved.
- Control measures already in place.
- Effectiveness of control measures.
- Documentation of evaluation results.
- Advising required personnel.

3.4 Control Measures

Best practices in Environmental, Safety and Loss Prevention involve managing hazards through engineering and administration controls. Personal protective equipment (PPE) is used only as a last resort to protect workers. Once hazards have been identified and analyzed, the employer must now manage the risk using one or more of the following controls.

Engineering Controls

Engineered controls provide the highest level of control and are the preferred method because they control the hazard at its source. These controls are listed in order of preference below:

- Elimination applied at design stage.
- Scaffolds.
- Trench boxes.
- Lifting hoists.
- Eliminating sharp edges, pinch points and trip hazards.
- Wet methods as opposed to dry sanding or sweeping.
- Isolation, barriers, shields, guards.
- Ventilation, scrubbers, fans and local exhaust.
- Dilution ventilation as a short-term solution when no heating and ventilation system has been installed in a building or while awaiting installation of more advanced controls.

Purchasing controls

- Substitution
- Purchase a non-flammable solvent and less toxic products
- Air-conditioned cabs

Administrative Controls

When engineering controls are not possible or practical, administrative controls are the next method used in hazard control. Examples include:

- Written directives (company Environmental, Safety and Loss Prevention Programs); Safe work practices, job procedures, safe work permits, policy, rules.
- Work-rest regimes to reduce exposures and hours of work.
- Scheduling - Hours of work or hazardous work in off hours.
- Monitors and alarm systems.
- Medical screening including pre-employment and ongoing training such as safety meetings and job training courses.
- Posters, bulletins, new-letters, suggestion programs, etc.

Personal Protective Equipment (PPE)

When engineering and administrative controls do not reduce the risk to acceptable levels, organizations often resort to using PPE. This is the last option for worker protection because PPE does not reduce the energy potential of the hazard at its source. Hazard analysis provides valuable information on the proper selection of PPE. In certain cases, PPE may be the only acceptable interim barrier to a hazardous condition, until more advanced methods are developed.

3.5 Supervisor Responsibility

First line management is responsible for verifying that proper control measures have been implemented and that all workers with the potential of using the control measure are competent in its uses and limitations.

3.6 Worker Responsibility

Workers will cooperate with their employer and use the prescribed control measure(s) for its intended use and design.

3.7 Field Level Hazard Assessment

- Each employee or work team must complete a Field Level Hazard Assessment (FLHA):
 - At the location where the work is to be done.
 - By the workers engaged in the task prior to beginning the task.
 - One group FLHA where more than one group of workers is spread throughout the site does not meet the requirement.
 - The foreman or supervisor as early in the shift as possible must sign the FLHA.
 - Each work team will have the FLHA with them at the work location.
 - Each FLHA must address the tasks being performed and note the hazards present at the work location.

3.8 Documentation Evaluation

During periodic contractor evaluation inspections done by the Project Manager or **designate** for the project, copies of documentation, including training records, may be requested for review for verification on existing control measures and hazard identification meetings.

4 TRAINING AND COMMUNICATIONS

4.1 Purpose

Each element of Environmental, Safety and Loss Prevention has some form of hazard control measure. To verify that the worker knows the hazards as well as control measures associated with his/her process, different levels of training are necessary to deliver a constant message of Environmental, Safety and Loss Prevention in the workplace.

4.2 Contractor Workers Orientation

Every contractor engaging in work on Edmonton Airport premises is required to verify that each of their workers has received an Edmonton Airports safety orientation prior to starting their work. The Contractor Safety Orientation is available on **ComplyWorks**. If required, the Project Manager and or YEG Safety Coordinator can provide the orientation on location. They will need to print off their orientation certificate before commencing work. Orientation must be completed online before entering site or sign off on SiteDocs with YEG Representative.

4.3 Completion of Documentation

During periodic contractor evaluation inspections, copies of training documents will be requested to view to verify required training and orientation acknowledgment.

4.4 Safety & Loss Prevention Training

Contractors are responsible for the initial training and reoccurring training of their own workers on legislated items such as, but not limited to:

- Standard First Aid.
- Workplace Hazardous Materials Information System (WHMIS).
- Transportation of Dangerous Goods (TDG).
- Confined Space Entry.
- Respiratory Protective Equipment Program.
- Working at heights and Fall Protection Program.
- Aerial Work Platforms.

4.5 Contractor Competency

The contractor shall ensure that workers on the site are adequately qualified and sufficiently experienced to perform work in a safe manner. Workers failing to meet the above criteria must be supervised by a competent person. The contractor shall provide or arrange for the necessary training to ensure sufficient workers on site are competent.

4.6 Training Record Retention

A current copy of each contractor worker's level of training shall be available during periodic contractor evaluation inspections.

4.7 Pre-Job Safety Meeting

The Pre-Job Safety meeting is a highly effective administrative tool providing an opportunity to discuss hazardous work. It is important that two-way communication exists in these meetings, so that everyone is aware of the issues.

- Key issues for discussion may include, but not limited to:
 - The hazard assessment done in the work area; existing hazards onsite.
 - Hazards identified by workers; control measures reviewed with workers.
 - Other scheduled activities that may affect Environmental, Safety and Loss Prevention.
 - Special tools and equipment required.
 - PPE required.
 - Communication barriers - noise, language, or visibility.
 - Chemicals used and any potential risks/controls in place.
 - Written procedures required and reviewed with crew.
 - Applicable legislation.
 - Employee training required.
 - Emergency response plans.
 - Critical Lifts.

4.8 Safety Meetings

As Pre-Job Safety meetings are important for providing "front line" hazard awareness training, so are (weekly, bi-weekly, monthly) safety meetings. These meetings provide timely information on Environmental, Safety and Loss Prevention issues relating to the workers activities.

4.9 Responsibility of the Contractor Supervisor

Each contractor or employer supervisor will provide their workers with continual awareness training to promote Environmental, Safety and Loss Prevention while working at Edmonton Airports. Supervisors must be aware that they set the performance standards and must lead by example.

4.10 Tailgate Meetings

- The contractor shall ensure that daily tailgate meetings are conducted.
- The daily tailgate meeting shall discuss topics pertinent to the activities and tasks being undertaken on the site.

4.11 Topics of Discussion Items of review may be:

- Bring forward topics for discussion, e.g., environmental, substandard acts, practices or conditions that have been observed. Decide on corrective action and follow up to verify that this has been completed.
- Review recent injuries or incidents, discuss why they happened and what can be done to prevent recurrence.
- Encourage employee suggestions and discussion.
- Governmental, environmental and safety publications.
- Brief the crew on new types of equipment and controlled products, with specific reference to their capabilities and safeguards.
- Discuss personal protective equipment suitable to the work on site.
- Demonstrate the use of emergency equipment, fire extinguishers and safety harnesses.

4.12 Record Keeping/Distribution

- Copies of these meeting minutes shall be kept on file at the site for review during contractor evaluation inspections. Any meeting minutes that include action by Edmonton Airports should be forwarded to Edmonton Airports' Project Manager.
- Edmonton Airports Project Manager will forward a copy to the Edmonton Airports Safety Team.

4.13 Posters, Pamphlets, and other Reminders

Posters and pamphlets can assist the contractors in providing continuous safety awareness for their workers. These items can be ordered for free from various contractor's safety associations, Alberta Workplace Health and Safety, and Human Resources Development Canada.

4.14 Smoking

- Smoking is only permitted in designated areas of Edmonton Airport premises. With approval from Edmonton Airports, designated smoking areas may be established on groundside exterior locations.
- Smoking is not permitted within 15 Feet (5 meters) of any doorway or air intake to a building. Smoking is not permitted within 50 Feet (15 meters) of any combustible gas or liquid.

4.15 Harassment

Harassment is a form of discrimination. It is against the law. Canadian law prohibits discrimination. Both the Federal and Provincial Human Rights Commissions provide the framework to protect our rights and dignity. Harassment as defined by the Canadian Human Rights Act includes any unwanted verbal or physical conduct related to:

- Gender
- Age
- Race
- National or ethnic origin
- Color
- Religion
- Mental or physical disability
- Family status
- Marital status
- Sexual orientation
- Conviction for which a pardon was granted that offends or humiliates.

Edmonton Airports will not tolerate harassing or discriminatory behavior.

4.16 Definition of Discrimination

Harassment is not limited to sexual behavior but includes discriminatory behavior that is directed at or is offensive to another. It includes, but is not limited to, displaying offensive pictures, insulting gestures, and making unwelcome remarks or taunting about a person's body, ethnic origin, or religion. Harassment can be an expression of perceived power or intimidation over an individual or group of people.

4.17 Modified Work

Edmonton Airports maintains a modified work policy for our employees, and we support contractors who provide modified work for their employees where the duties are meaningful and practical for a worker who may have physical limitations.

4.18 Fitness for work

The use of drugs or alcohol on premises or while on contractor business poses a serious threat to the safety of our workers, compromises the quality and reliability of our services, and jeopardizes operations at the airport. Edmonton Airports expects contractors to prohibit:

- Consumption, use, possession, or sale of controlled or illegal drugs or alcohol on Edmonton Airport premises,
- Being under the influence of or testing over the prescribed legal or accepted industry limit for drugs or alcohol on Edmonton Airport premises.
- Use of prescription drugs which may impair the performance of workers' job duties, or impairment resulting from the use of drugs or alcohol, must be reported to the contractor workers' supervisor prior to work.

4.19 Testing

- Workers may be asked to submit to a urine or saliva test (at the discretion of the testing agency) at an accredited collection place for post incident or reasonable cause where a person may have been in a position to influence the outcome of the incident, or for cause which may include the appearance of impairment, odor, observed using or other recognized signs of alcohol or drug use.
- Failure to enforce these prohibitions will result in the immediate removal of the contractor worker from the workplace.

5 AIRPORT PERMITTING SYSTEMS

5.1 Facility Alteration Permit (FAP)

Edmonton Airports requires that all construction, renovation, or major maintenance projects on airport lands comply with Edmonton Airports' Facility Alteration Permit (FAP) and development guidelines and processes, as well as to conform to all applicable codes, standards, and permit processes of local authorities having jurisdiction on the airports' premises. The process applies to Edmonton Airport projects, their tenants, or any third party working on the airports' premises.

- Edmonton Airports' Design Guidelines
- Airport Vicinity Protection Area (AVPA) Regulations
- Airport Zoning Regulations
- Transport Canada/Nav Canada Guidelines (where applicable)
- Municipal or County Zoning Regulations
- Alberta Safety Codes Act
- Alberta Building Code or National Building Code*
- Alberta Fire Code or National Fire Code*

Environmental Codes & Practices (where applicable) the following codes and design guidelines are as follows:

- Note: Additional codes and guidelines not mentioned above may apply to individual projects and should be followed accordingly. **The Act, code, regulation, Safety Manual or Guideline having the most stringent requirements will apply.**
- FAP – Development and FAP – Construction permits are required for any and all work initiated on airport premises, including work in the terminal buildings. It provides Edmonton Airports with the opportunity to provide direction on projects that may affect airport operations (or other areas of concern) and allow Airport Facility Drawing Management (AFDM) to track and incorporate changes into the airport base drawings.
- Facility Alterations Permit must be approved by Edmonton Airports prior to commencing work or applying for other required permits. Requests will require five working days prior to the work beginning. Areas covered by the FAP includes excavation/trenching, hot work, confined space entry, etc.

5.2 Safe Work Permits

Safe Work Permits develop, document, and communicate understanding between individuals responsible for performing work, and the individuals responsible for the work area.

- Each Safe Work Permit shall identify hazards that may be harmful to personnel, equipment, operations and property and the precautions that will be taken to minimize or eliminate these hazards. These permits will also identify safety requirements that will be followed while performing the scope of work described.
- The designated Prime Contractor for each area will be responsible for securing or issuing safe work permits for work being undertaken on their behalf.
- Listed below are specific situations where notifications are required prior to starting work.

Permit Type	Notifications	Copy To
Confined Space	Notify YEG Project Manager Permit and Rescue Plan required	YEG Safety
Hot Work	Notify YEG Project Manager and Fire Hall	Firehall
Asbestos Abatement	Notify YEG Project manager or Designate & YEG-Safety Work plan required	YEG Designate & YEG-Safety
Systems Disruptions	FAP required	YEG Designate
Electrical Energization/interruption	Notify YEG Project Manager Work Plan required	YEG Designate & YEG Maintenance
Excavation	FAP Issued	YEG Designate

5.3 Excavation Permits

- Excavation/trenching permits follow YEG 01 30 10 Ground Disturbance Standard.
- No permit shall be issued until Alberta First Call has provided a hard copy of the utility search and a copy forwarded to AFDM via the Project Manager. A FAP is also required.

5.4 Hot Work Permits

- An application for a Hot Work permit is needed prior to commencing with any hot work (welding, cutting, grinding) on airport premises. Edmonton Airports Emergency Response Services shall issue and approval requests for hot work on site. For information, please contact the Project Manager.

- Hot work permits are required where direct and indirect temporary construction heaters are placed. Hot work permits are required wherever propane or other combustible gas is used or present in any location other than a designated storage location.
- Pending on the work that is occurring, special considerations are made to provide a 7-day hot work permit if the same work is occurring within the same location. This must be approved by the Project Manager and the Health and Safety Department as well as informing the Fire Department on location to sign off on the permit.

5.5 Confined Space Entry Permits

- Confined Space Entry Permits are required for certain Edmonton Airports facilities and/or worksites. It is the responsibility of the contractor for the entry to complete a Confined Space Entry Permit. Confined space entry Code of Practice, submitted to YEG Project Management will be reviewed prior to the commencement of any confined space work.

5.6 Lock Out Procedures

To ensure the equipment is being locked out will not adversely affect operational systems and/or equipment; contractors must request and submit a Service Request for Lock Out through the Airport Infrastructure group. In many cases coordination with the operating personnel will be necessary (e.g.: to lock-out an HVAC system which services many areas) **as per section 9.2.**

- Contractor must also co-ordinate with Edmonton Airports' Electrical department for any fire alarm detection bypasses that may be required.
- No construction personnel may work on any equipment that represents a safety hazard unless that equipment is properly locked-out and tested. The contractor supervisors are to determine which equipment needs to be locked-out prior to proceeding with the work.
- YEG is expected to provide all primary locks, tags, and other devices necessary to participate in the work on any plant or equipment. YEG employees must lock out all equipment and machinery prior to contractors administering their company locks on equipment or machinery. Each contractor must supply their own personal lock while work is commencing but is required to be removed when that shift is complete.

5.7 Removal of lock

- If the YEG lock needs to be removed sooner than the date discussed, or in the case of an emergency, the contractor will then contact YEG and YEG will provide the services required for removal of YEG lock.

6 PERSONAL PROTECTIVE EQUIPMENT

6.1 Purpose

- If other control measures (engineering and administrative) are impracticable to eliminate or reduce a hazard(s), then personal protective equipment should be used as the last resort of controlling worker exposure to the hazard(s).
- In some cases, Engineering, Administrative, and PPE are required to reduce the potential exposure to the hazard i.e., confined space entry.
- Minimum PPE requirements for any work-related construction projects are listed below and must be worn whenever a person is working in or passing through an active construction area.
- In areas where work is undertaken outside of a designated construction zone (i.e., an area that is not identified by a fence, barricade, hoarding etc.) the PPE requirements will be based on a hazard assessment for the task to be done.

6.2 Hard hats

- Hard hats with integral side impact protection must be used where there is a risk of injury resulting from a side impact to the head.
- Only hard hats with an 8-point harness suspension and the manufacturer's approval may be worn with the peak or bill of the hat to the rear.
- All others must be worn with the peak or bill facing forward.

6.3 Hi-Visibility Vests

- CSA approved High Visibility Vest (coveralls and jackets that have "high-visibility" stripes may be worn instead of the vest).

6.4 Work boots

- Must be CSA approved and must be suitable for the task.
- The minimum standard of the YEG site is steel toe and shank with the upper part of the boot extending above the ankle to offer adequate ankle support.

6.5 CSA approved eyewear

- Properly fitting with integral side shields is required at all times when on the site.
- Additional eyewear may be required depending on the tasks being performed.
- When a worker is performing tasks which could expose, he or she to eye injuries from, such as overhead work, drilling, saw cutting, abrasive cutting or grinding or any other task where a high potential for eye injury exists workers will wear double eye protection which shall include a mono-goggle and a face shield.

6.6 Shirts

- Must have a minimum sleeve length of 6".
- For tasks that pose a cut, scrape or abrasion hazard to the worker's arms, the worker must wear long sleeves or cut resistant removable sleeves such as Kevlar armlets.

6.7 Hearing protection

- Must be carried at all times and used whenever a worker is in areas where noise levels may exceed 82 DbA.

6.8 Gloves

- Gloves must be carried by all workers at all times.
- Must be worn whenever there is a possible exposure to cuts, abrasions, pinch-points or other hazards and tasks that have the potential to cause hand injuries.
- Gloves must be appropriate for the task.

6.9 Training and Education

- Contractors shall educate their workers on the uses, limitations, maintenance requirements, etc., as outlined by the equipment manufacturer.

Copies of the training records shall be made available for review upon request.

7 ENVIRONMENTAL PROTECTION

7.1 Contractor Environmental Response Plans

The primary purpose of this section is to provide limited general guidance to contractors working for Edmonton Airports to quickly, safely, and effectively respond to a hazardous material spill incident. It is not a site-specific plan for a specific project. For detailed information on preparing a plan, refer to the CAN/CSA-Z731-95 Emergency Planning Standard for Industry.

Of all the possible airport environmental emergencies, oil/fuel spills present the greatest overall risk. Not only does fuel represent the greatest spill volume, once released, it presents hazards such as fire/explosion, hazards to human health, and environmental contamination.

Prior to starting a project all contractors should assess the nature and risk of potential hazardous material spills to develop a site-specific response contingency plan for the project and provide appropriate spill response training to their employees.

7.2 Initial Response Actions

The circumstances of individual spill incidents will vary widely depending on specific factors such as location, type of product, source and rate of discharge, time of day or week, and weather. The initial generic response actions described below are the actions necessary to invoke spill management and cleanup.

- **Ensure** the safety of all personnel (i.e., workers, passengers, and tenants).
- **Stop** the product flow if safe to do so.
- **Isolate/Secure** the area.
- **Assess** the situation
- **Notify** the AOCC 780-890-8327 and Emergency Response Services **911** (for co-ordinating emergency response action) and Manager, Safety and Airfield Compliance (ensure regulatory agencies are contacted/site remediate/proper documentation to follow).
- **Contain/Recover/Clean-up**

7.3 Spill Classification

Prior to notification, any person who discovers a spill must identify it as a minor or major as defined by CSA-B836, Storage, Handling, and Dispensing of Aviation Fuels at Aerodromes. The following table provides the classification category as per the CSA document.

Table 7-1: Spill Classification

Minor	Major
• Spill can be contained. • Spill area does not exceed 1.5 m (5ft) in any direction and is less than 12 mm (1/2 inch). • Spill has not entered an underground utility a subsurface or surface body of water or soil. • Spill has not entered other areas that may be deemed receptors	• Spill area exceeds 1.5 m (5ft) in any direction and is greater than 12 mm (1/2 inch). • Presents a safety hazard to aircraft, vehicle, facilities, or persons within 15 metres of the contaminated area. • Has or may have the potential to enter a receptor

7.4 Notification

All spills, regardless of size, are to be reported by the spill observer or person-in-charge immediately to **AOCC** and then to Emergency Response Services. ERS will determine if further support is required and inform the Environmental Team if reporting needs to be completed for regulatory bodies.

AOCC 780-890-8327

Emergency Response Services – 911

7.5 Regulatory Agency Notification

After a spill there may be a requirement to notify regulatory agencies. As soon as it is safely possible to do so, the contractor person-in-charge will make the following calls or designate an employee to notify those regulatory agencies

For Land Spills on Federal Airport Property

Environment Canada/Alberta Environment – 1-800-222-6514

This includes spills or releases that get off hard surfaces or enters storm sewer systems. Ensure the call center personnel are aware that the spill occurred on federal land. They will require a written follow-up report within seven calendar days.

For Spills into Sanitary Sewer Systems

Leduc County Public Works and Utilities 780-955-7226

7.6 Initial Reporting Guideline

As information about a spill is passed on through the notification process to various personnel and agencies, it must be clear, concise, accurate, and delivered in a timely manner. The minimum information communicated in any report includes:

- Name & telephone number of caller
- Date and time of call
- Estimated time of spill/release
- Location of spill/release
- Hazardous materials spilled/released
- Estimated quantity spilled
- Actions taken so far
- Evacuation required
- Assistance required

Refer to the spill release report in Appendix A as a guide.

7.7 General Spill Characteristics

7.7.1 Water Spills

The typical characteristics of light density fuels when spilled on water include:

- The product will spread quickly across the surface of the water in a thin film or sheen
- If uncontained, the product may cover a wide area.
- A strong odor may be present even at non-toxic levels
- Product will tend to evaporate rapidly compared to thicker or more viscous oils
- In a sheltered environment, evaporation of the product may be slow; evaporation and wave action are effective on small spills in a high-energy environment.

7.7.2 Land Spills

Typical characteristics of light density fuels when spilled on land include:

- Soil penetration will be dependent on the permeability of the soil and on the moisture content of the ground. If the ground is sufficiently wet, the product will float on the water and soil penetration will be limited but surface migration will be more rapid. If the ground is dry, the product will be able to penetrate the ground more easily resulting in contaminated soil
- Product which seeps into the ground may settle at the top of the water table and can reappear months later, some distance away, on the surface or in a water well
- Product released onto pavement or concrete will spread rapidly across the surface and evaporate quickly. Penetration into the concrete or pavement should be minimal if the spill is cleaned up quickly
- The behavior of these products determines the most appropriate and effective response tactics to be taken by responders to contain and recover the spilled protect sensitive environmental resources, and to clean-up the spill site and other affected areas

7.8 Response Equipment List

Contractors and sub-contractors handling hazardous materials on **Edmonton Airports** property should have in place a site-specific contingency plan and be capable of providing an initial first response to a spill/release of hazardous materials. Additional response equipment belonging to the **Airport Airports** can and will be made available to contractors on a replacement or cost recovery basis.

The Project Manager and the contractor will jointly determine the type and quantities of spill response equipment required for each project based on the project environmental risk assessment. The following equipment list is an example of response equipment that may be required for a small project with minimal risk.

LOCATION	QUANTITY	DESCRIPTION
Job Site	1 Spill Kit	Containing: 100 sorbent “white” pads – polypropylene (fuels & lubes) 25 sorbent “general purpose” pads – cellulose (glycol) 6 sorbent socks - polypropylene 3” x 48” 1 drain cover; neoprene 36” x 36” 1 roll of barrier tape - 300’ 4 refuse bags (6 mil) Personnel Protective Equipment (PPE) for two: nitrile gloves, splash goggles, poly-coated Tyvek suit and boots. 1 - spill kit container List detailing contents of kit and where to obtain replacement items. Set of instructions on how to use each item in the kit.
Individual Equipment	Small Kit	Nylon spill kit containing; 20 pads, 2 sorbent socks, refuse bag, goggles and gloves.

7.9 Environmental Guidelines - Earthworks

Construction projects usually involve land disturbance such as removing vegetation and reshaping topography. Such activities make the soil vulnerable to erosion. Soil removed by erosion may become airborne and create a dust problem or be carried by water into natural waterways and pollute them.

7.9.1 Erosion

When considering land disturbance and its consequences, priority should be given to preventive rather than treatment measures.

To develop effective erosion controls it is necessary to obtain information on the erosion potential of the site where soil disturbance is planned. Erosion potential is determined by soil type and structure, vegetative cover, topography, rainfall and wind, and the nature of land-clearing. Erosion potential will also be affected by the type, nature and intensity of the earthworks.

Groundcover provides the most effective means of preventing erosion. Consequently, sediment run-off and dust controls depend on retaining existing vegetation or re-vegetating and mulching disturbed areas as soon as possible.

The following measures should be taken to minimize erosion:

- Keep land disturbance to a minimum.
- Re-vegetate progressively as each section of work is completed. The interval between clearing and re-vegetation should be kept to an absolute minimum.
- Program construction activities so that the area of exposed soil is minimized during times of the year when the potential for erosion is high, i.e., during summer when intense rainstorms are common.
- Smoothly graded cut and fill slopes should be avoided. Instead, surfaces should be roughened perpendicular to the flow direction in order to retard surface water run-off and increase filtration.
- Stabilize the site and install and maintain erosion controls so that they remain effective during any pause in construction. This is particularly important if a project stops during wetter months.
- Keep vehicles to well-defined haul roads.

7.9.2 Contaminated Stormwater

Soil eroded during land disturbance can wash away and contaminate stormwater. The type of sediment controls used for a particular situation depends on the nature of the site combined with rainfall patterns, soil type and topography. There are three ways of minimizing sediment run-off.

Reduce stormwater on the site

If uncontaminated surface water enters a recently cleared site, it will quickly pick-up sediment and need to be treated. As more water enters the site, it could add to the erosion potential, increasing the risk of pollution.

It is therefore desirable to divert stormwater away from areas of exposed soil. This can be done by constructing diversion banks and intercept drains around

the site while ensuring that the water discharging from such banks or drains is disposed of without causing erosion.

Wherever possible, new on-site inlets should not be connected to stormwater drainage system until the site has been stabilized and rehabilitated. This will ensure that silt-laden stormwater cannot escape the site via this route. Instead it will have to be treated on-site.

Water Flow Rate

There is a direct relationship between water flow rate over exposed soil and the rate of erosion. Installation of rock structures on the site to retard water flows is an effective measure to reduce erosion in areas where high water flows are expected. It is desirable to minimize continuous slopes where flowing water can scour.

To prevent scouring, drainage lines may need to be lined or velocity-reducing structures, such as crushed rock or geotextile placed in the drainage line.

Slopes

Any natural drainage lines that discharge water on to the top of a slope should be directed to grassed areas by interceptor drains. Otherwise water will run down the slope, eroding it. Perimeter banks or sediment fences should also be constructed at the toes of the slope to contain sediment run-off.

7.10 Environmental Guidelines – Dust Control

Dust from unpaved roads can be a significant source of particulate matter in the atmosphere and can have numerous environmental and socio-economic implications such as air pollution, impairment of driver vision, health impacts, and impacts to aesthetics. Road deterioration can increase because of loss of fines since they act as road surface binders. This can lead to road safety issues, increased economic cost to vehicles and increased road maintenance needs. The use of dust suppressants has been shown to lower road maintenance requirements and associated costs as well as mitigate the environmental and health impacts associated with road dust. The following measures taken to reduce dust problems:

- Prevent the generation of dust in preference to applying dust suppression measures.
- Ensure in the project schedule that the area of cleared land is minimized during the drier months of the year, when dust generation is at its greatest.
- Water haul roads promptly. Frequency of watering will be determined by weather conditions and the erodibility of the soil.
- Water areas other than haul roads, if they are a source of dust.

7.11 Environmental Guidelines – Concrete and Pavement

7.11.1 Concrete

A concrete wash-down area needs to be established and maintained on the project site so equipment can be properly washed without contaminating the stormwater system. The following best management practices should be taken to reduce negative impacts associated with concreting activities:

- Wash down area must be located with appropriate sediment controls. These should be inspected and maintained regularly and be repaired or replaced as necessary.
- To minimize the amount of wash-down water generated, scrape excess concrete off the equipment before it is washed.
- Excess concrete should be placed into a site receptacle designated for concrete and masonry and allow to set.
- A high pressure, low volume water spray nozzle conserves water usage and reduces maintenance of sediment controls.

Wash-down water is best managed by draining it into a container, allowing the water to stand until the solid particles settle at the bottom. After adjusting the pH of the water to neutral, it can then be siphoned off and reused, and the residue in the bottom can be allowed to set, then recycled with other excess concrete and masonry material. No wash-down water may be disposed of to the sewage system.

Wash-down area should drain to a low point where water is allowed to percolate through geotextile fabric into the soil. The settled and hardened concrete residue on the ground must be allowed to set and must be placed in a designated concrete/masonry recycling bin on-site. Do not allow equipment wash-down water to flow directly into a stormwater system.

7.11.2 Pavement

Pavement management activities may create environmental issues that need to be addressed in planning and undertaking. The following best management practices should be taken to reduce negative impacts associated with asphalt surface activities:

- Prior to surface management activities, identify what areas of the stormwater drainage system are nearby i.e., manholes and drainage ditches.
- Determine how much of an impact the activities will have on the system to identify if there are environmental concerns.
- Work activities should be undertaken during periods of dry weather to minimize contaminated run-off.

- If work activities need to occur during or around rainfall, take steps necessary to ensure stormwater run-off is prevented, particularly for surface repair works requiring the application of patching and sealing compounds, tar, asphalt, and chemical surface sealants.

7.12 Environmental Guidelines - Waste

Waste storage should be conducted in approved containers. Waste should not be stored for excessive periods of time and should be transported off-site for disposal as soon as possible. Garbage shall be disposed of in a designated landfill site. Contractors need to maintain a high quality of housekeeping and ensure that materials are not left where they can be washed or blown away to become litter.

Throughout the life of a project, waste and debris may be found in storm drainage courses such as ditches, swale, culvert, etc. or surface drainage features such as manholes, catch basins, etc.). When this occurs, it must be removed on completion of the work.

7.13 Environmental Guidelines – Hazardous Materials Storage

Hazardous materials can include, but are not limited to, fuel, hydraulic oil, paint and solvents. All materials shall be stored using purpose-made CSA and ULC listed containers clearly labeled and stored in lockable cabinets. Spill containment shall be provided as a best management practice. Hazardous materials shall be disposed according to applicable legislation.

Storage of hazardous materials such as fuel on construction sites shall conform to Environmental Code of Practice for Aboveground and Underground Storage Tanks Systems Containing Petroleum and Allied Petroleum Products and the *National Fire Code* and *Alberta Fire Code*.

8 OPERATIONAL COMPLIANCE

8.1 CRANES

- Crane usage at the Edmonton International Airport has the potential to create significant impacts on operations, as well as impacts to the airport's certification. It is important that prior to crane erection and movement on airport property, the details be reviewed to understand the impacts and the required mitigations. Crane usages will undergo one of two types of reviews: Minor or major.
- A crane assessment form has been included in Appendix B. To initiate the review process, complete the form with details such as height, time and locations and send it for evaluation via the EA Project Manager. The EA Project Manager and contractor will be notified of all accepted reviews and will be responsible for notifying the **Manager, Safety and Airfield Compliance** the day before the approved crane is erected or moved on site.

8.2 Minor Review

- Minor reviews occur when cranes are unlikely to cause operational impacts, which may include:
 - Smaller mobile cranes.
 - Usage for short periods of time.
 - The maximum tip height will not exceed the height of neighboring structures.
 - The crane will be located in a non-sensitive area (like groundside).
- Minor reviews require a minimum 72-hour notification and do not require the issuance of a NOTAM for potential crane impacts.

8.3 Major Review

- Major reviews occur when large crane operating at heights greater than neighboring structures, or a crane is to be at height for extended periods of time. A major review involves submissions to **Edmonton Airports** as well as Transport Canada and NAV CANADA to understand possible impacts to aviation safety that will require mitigation.
- Transport Canada's review process is conducted through their Aeronautical Obstruction Clearance Form process. Typical review timings are between one and two weeks.
- For crane usage in sensitive locations on the property, NAV CANADA will review this through their Land Use Submission Form Process. Edmonton Airports will coordinate the submission of requests on behalf of the contractor. Typical review timings are three to four weeks.

- The results of the Transport Canada and NAV CANADA reviews will be complied to form the mitigation strategy to maintain aviation safety while lifting occurs. Mitigations can range from basic notification NOTAMs to operational restrictions to runway closures. If the results of a major review identify the potential for significant operational impacts, the contractor will be notified, and changes will be required in order for the crane usage to be approved.

8.4 NOTAM

NOTAMS are an advisory notice broadcasted to pilots. They contain information on the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to flight operations.

8.5 Examples of when NOTAM's should be issued:

Significant changes in serviceability of runways and associated approach or runway lighting systems that could restrict aircraft operations:

- The presence or removal of obstructions considered hazardous to aircraft navigation. Hazardous obstructions are defined in TP 382E, Standards Obstructions Markings, Chapter 2, General Criteria.
 - The establishment, withdrawal, or significant changes to designated airspace or air traffic procedures and services.
 - Interruptions in service or unreliability and the return to normal operation of enroute and terminal aids to air navigation.
 - The establishment or withdrawal of electronic and other aids to air navigation and aerodromes.
 - Changes in frequency, identification, orientation, and location of electronic aids to air navigation.

8.6 Requirement for NOTAM

As the requirement for a NOTAM is based on the need to mitigate an aviation safety impact from a construction-related activity, the need for a NOTAM is established through the development of a Plan of Construction Operations for an airside project. The Plan of Construction Operations identifies when a NOTAM is required, according to the project schedule, and NOTAM language required.

8.7 Request for NOTAM

All NOTAM requests must be submitted a minimum of three days prior to the anticipated date that the NOTAM is scheduled to take effect. Submission of the Request for NOTAM does not constitute a guarantee that the NOTAM will be approved. Approvals will be subject to acceptance by Edmonton Airports and Project Managers must receive confirmation that the NOTAM has been granted prior to proceeding.

- The Request for NOTAM must include:
- Name, phone, and fax number of Requester.
- Date that NOTAM is to take effect, length of time that NOTAM required, and recurrence if necessary.
- Details on the nature of the aerodrome impact that requires the NOTAM to be placed, reference approved Plan of Construction Operations for the work
- Details from the approved crane review, which may include height of “obstruction”, if applicable.
- Swing and/or arc radius of “obstruction”, if applicable.
- Location of “obstruction”, given in latitude and longitude coordinates.
- Distance of “obstruction” from nearest runway

The Airport Authority reserves the right to request or require further documentation, information or other relevant materials as necessary to ensure that the NOTAM requirements are properly met, and to stipulate any requirements appropriate to ensuring the “obstruction” is properly located, marked and identified as necessary to ensure the safety of aircraft and/or normal operations.

8.8 Voice Advisories

Voice advisories are an alternative to NOTAM's and are often required for work on taxiways and aprons. The requirement for a Voice Advisory would be identified in a project's Plan of Construction Operations.

- Questions regarding voice advisories should be referred through the Project Manager.

9 PREVENTATIVE MAINTENANCE

9.1 Purpose

When tools, equipment, or designed structures are not maintained to the manufacturers or engineers' specifications, failures may occur resulting in loss. Contractors shall verify that tools, equipment, machines, and structures used for work at Edmonton Airports' premises:

- Are maintained in a condition that will not compromise the health or safety of workers using or transporting the equipment.
- Will perform the function for what it was intended for or was designed.
- Is of adequate strength for that purpose and is free from defect.
- Where a worker has equipment under his/her control that does not function according to manufacturer's specifications, the worker shall remove the item from service.
- The contractor who owns the item shall have it repaired by a qualified person with manufacturers approved parts to restore the tool or equipment to the standards it was approved under (i.e., CSA) or removed from Edmonton Airports' premises.

9.2 Locking out Defective Equipment

Equipment that is to be locked out to control the energy source will be done so in compliance with Part 15 of the Alberta Occupational Health and Safety Act, Regulation & Code. **Please reference 5.6 and 5.7.**

9.3 Tagging out Defective Equipment

If equipment or tools are tagged out of service, then the following information shall be marked legibly on the tag:

- Danger do not operate.
- The date the tag was installed.
- The workers printed and signed name.

10 MONITORING THE STANDARDS

10.1 Inspection Purpose

The purpose of an inspection is to measure the compliance to established standards, to commend excellence and correct deviations from the standards.

10.2 Informal Inspections

May or may not be documented. These inspections are done on an ad-hoc basis as opposed to being scheduled. When a contractor supervisor corrects a deviation from a standard, he/she may document the corrective measures in their daily progress report. Inspections can occur at any time from an YEG Project Manager or YEG Safety Coordinator. FLHA's will be inspected at this time and to ensure all correct documentation is readily available.

10.3 Formal Inspections

- Are documented, follow a distribution system and are scheduled.
- Contractors will be expected to perform scheduled inspections as per the Contractors' Environmental, Safety and Loss Prevention Program.
- Records of scheduled and periodic inspections are to be maintained for the duration of the contract.
- Distribution Reports:
 - A copy of the contractors' inspection results will be given to Edmonton Airports' Project Manager or to Edmonton Airports Manager of Safety upon request.

10.4 Governmental Inspections

If a governmental department inspects a contractors' work area of responsibility and issues an order, Edmonton Airports shall be given a copy of the report immediately after the contractor receives the documentation or within a reasonable period if after regular business hours. All issues shall be resolved and corrected within the prescribed amount of time as noted on the order.

10.5 Posting Inspection Results

The contractor shall post, for worker access, all governmental inspection documentation for a 10-working day period.

10.6 Auditing/Inspection Procedures

To ensure project compliance, Contractor's will, as part of the auditing process:

- Conduct, at a minimum, weekly self-inspections of their operations or facilities. This may include but not be limited to daily tailgates, hazard assessments, hazard controls, emergency response plans. Depending on the scope of work and potential severity of hazardous conditions/behaviors, the self-inspections will be conducted on a daily basis. Additional unscheduled audits or inspections may be requested at the discretion of the YEG representative(s) in response to regulatory agency inspection or a significant on-site incident, near-miss or injury.
- Participants will conduct daily walkthrough inspections of their work areas to assess environmental health & safety problems, deficiencies, or adverse conditions. Corrective actions will be taken when violations and/or deficiencies are observed. Appropriate documentation will be sent to the YEG representative(s).
- Participate in all compliance inspections, with YEG representatives.
- Attempt to eliminate the hazard or non-compliance on the spot or as soon as possible after completion of the inspection.
- Resolve all non-compliances. Resolution shall include the non-compliance, corrective actions, and time period.
- Stop all work posing an imminent danger and/or substandard condition until corrective action has been taken and accepted.
- Contractors are responsible for implementing corrective actions for every identified item and shall track the status of each item. Requirements for implementation of corrective actions are as follows:
 - Whenever possible, on-the-spot corrections will be accomplished. For these cases, information regarding the corrective action can be provided to the YEG representative(s) when reporting the results of the audit/inspection.
 - For items that cannot be corrected immediately, the Prime Contractor will identify appropriate corrective actions to the YEG representative(s) for concurrence.
 - If implementation of the final corrective action will require more than 30 calendar days to accomplish, an "interim action" must also be implemented to prevent incident/injury from occurring until the final corrective action is implemented.
 - As each corrective action is implemented, the Prime contractor will provide written notification to the YEG representative(s).

Edmonton Airports

Contractor Occupational Health and Safety Manual

- A review of critical SOPs (Standard Operating Procedures) by the affected Contractor will occur prior to each required use and documentation of the review process will be made available to the YEG representative(s) upon request.
- The YEG or its representative reserves the right to audit all aspects of a contractor's HSE policies, procedures and processes.

11 EMERGENCY PREPAREDNESS

11.1 Emergency Assistance Program

- Each contractor shall have the means and knowledge on how to communicate an emergency occurrence. Participation in this element may be as simple as knowing the nearest fire alarm pull station to participating in a rescue operation until medical responders take over the scene.

11.2 Purpose and Scope

- Proper planning and preparation shall provide effective management of any incident, spill or disaster, with the objective of ensuring the personal safety of all individuals within the influence of the project and to reduce damage to property and the environment.
- To accomplish these objectives, Edmonton Airports requires that the prime contractor develop a Construction Emergency Response Plan (CERP) for each construction site/area prior to the commencement of construction activities.
- The CERP shall detail specific responses to the following occurrences:
 - Serious injury or fatality.
 - Fire or explosion.
 - Hazardous material release/spill.
 - Threat of insurrection.
- The CERP shall also address potential risks associated with the project due to:
 - Working in remote locations on airside, where response times of emergency services personnel may be increased.
 - Working inside the terminals, wherein minor events could have adverse effect on tenants and the general public.
 - Working in proximity to airside and aircraft, wherein minor events could have the potential for creating substantially larger events, i.e., fire, aircraft damage, flight delays.
- Where site access and egress routes change frequently as areas are added to the project or turned over to the Airport Authority/tenant, **Edmonton Airports Emergency Response Plan will be followed where applicable.**

11.3 Roles and Responsibilities

The Project Manager shall ensure that:

- The CERP has been properly developed, documented and posted conspicuously on the site. A command structure has been established that identifies the contractor Person-in-Charge, and as many alternates as deemed necessary based on types of hazards, number of workers on the jobsite, size of jobsite and any other consideration. The person named as the contractor Person-in-Charge is knowledgeable of the requirements of the role and capable of undertaking the CERP duties.
 - A responsible person is designated to manage the CERP.
 - Supervisory personnel are aware of their respective roles and responsibilities, and that said personnel have received appropriate instruction and training.
 - All workers receive appropriate indoctrination in emergency response measures.
 - All site visitors receive indoctrination in site emergency procedures.
 - Workers have appropriate training on emergency equipment.
 - The CERP is regularly reviewed and updated to reflect any changes in area, environment or risk factors.
 - Changes to the CERP are disseminated to all subcontractors, workers and visitors.
 - On-site drills are conducted as required to ensure that the program is operating effectively.

Contractor Supervisors shall ensure:

- When an event is reported, immediately assess the situation and initiate the appropriate response measures.
- The appropriate calls are made to emergency agencies, contractor management and **Edmonton Airports**.
- That all personnel under his/her authority is accounted for, and report to the contractor Person-in-Charge whether any of his/her personnel are not accounted for.
- All changes to areas, egress routes or emergency equipment that could affect the CERP are reported.
- All upcoming shutdowns to emergency equipment, egress routes etc. to the CERP manager are reported.
- Emergency equipment is maintained in proper functioning order.
- Workers who violate CERP requirements are disciplined.

Workers shall ensure that:

- They immediately report any situation or incident that comes under the CERP to their supervisor. If they are unable to report directly, that they initiate a response by sounding a site warning device or requesting another worker to initiate the response.
- They immediately report the use of any emergency equipment to their respective supervisor.
- They report to the muster area when an evacuation has sounded and advise their respective supervisor on the location of any accounted for colleagues.
- They abide by the conditions of the CERP.

Emergency Response Coordinator shall:

- Upon notification of an event, immediately assess the scene and initiate the appropriate level of response.
- Secure the scene, evacuate personnel as required.
- Determine the extent and number of injured persons.
- Initiate, as per the CERP, the notification process; liaise with responding agencies.
- Co-ordinate rescue, injury management, firefighting, spill containment efforts until such times as the incident has been resolved, or until relieved by a higher command authority.
- Determine whether any persons are unaccounted for and report this information to rescue personnel document the scene and co-ordinate the investigation.
- Provide written reports to management and other concerned parties.

11.3 Identification of an Emergency

A situation which has the potential to be classified and treated as an emergency may become apparent in a number of different ways, including but not limited to:

- An incident has occurred where a worker or workers have sustained injuries or death.
- An incident has occurred where structural collapse or significant property damage was sustained.
- Automated warning systems have been activated in the existing facilities as a result of fire, smoke, heat or gas detection.
- A release/spill of hazardous materials has occurred that may be harmful to persons or cause serious environmental damage.
- A verbal warning has been given by an individual who is aware of a major safety problem.
- An evacuation signal has been initiated within the construction area by a person who is aware of a major safety concern.

- The contractor has been advised by responsible Airport Authority personnel that an event has or will occur that could affect the safety of individuals on the construction project.

11.4 Notification

Each CERP shall have an Emergency Contacts List (ECL) that will include a list of all persons and/or agencies that may require notification of an event. This information shall be prominently displayed on the site Project Information Board and near site telephones. The ECL shall be updated as required to reflect current command structures and corresponding phone numbers.

11.5 Emergency Assistance List

- A copy of the Contractor's Emergency Assistance List indicating emergency personnel and contact information will be prepared by the Contractor. This list will be posted above each phone or radio dispatch station.
- The contractors' workers shall be trained on the use of the communications system to ensure workers know how to call for help. This is the responsibility of the contractors' supervision.
- Edmonton Airports' contractor orientation will provide appropriate emergency numbers for the airport.

11.6 Emergency Evacuation

- Each contractor supervisor shall educate his or her workers about Edmonton Airports Emergency Evacuation Plan. Assistance in the training may be acquired through Edmonton Airports' Project Manager who will request assistance from the **Fire Chief/ Manager of** Emergency Response Services (ERS).
- A general evacuation plan shall be developed and posted for each site. The objectives of the plan shall be:
 - To provide for a quick, safe evacuation of all employees in the event of an emergency.
 - To establish the necessary teams and equipment required to respond to the emergency.
 - To account for all personnel at the assembly points.
 - Report to the Edmonton Airports fire department an "all clear" or "not all clear".
- All workers shall, when notified, immediately shutdown equipment and proceed in an orderly manner to the designated evacuation point or assembly area. The respective supervisors shall take head counts. Workers shall not return to the site until proper authorization has been received.
 - The evacuation plan shall include:

- A checklist for securing any equipment or work in progress at the time of the evacuation.
- A list of assembly areas, including alternates, to which employees are to go in the event of an evacuation signal Map(s) showing assembly areas and routes.
- A system of accounting for all employees at assembly areas Criteria for confirming the safety of the area prior to allowing workers to return to work.
- A system of signals for "evacuation", for "test" and for "all-clear."
- A plan for practicing evacuations and testing the suitability of the accounting system.
- A plan for checking the availability of emergency equipment on a frequent basis.
- The evacuation plan shall be discussed at the site safety orientation sessions and the site evacuation plans shall be posted in conspicuous places around the site and the Project Information Board.

11.7 Emergency Equipment

- An itemized list of equipment - including equipment locations - which could be utilized in the event of an emergency shall be prepared, updated and posted on the Project Information Board as well as being made available to:
 - Airport Authority Operations.
 - YEG Fire Department.
 - Alberta Health EMS.
 - Other Airport Authority departments or external agencies as requested.
- The following categories shall be included:
 - First Aid Equipment and Attendants.
 - Fire Fighting Equipment.
 - Equipment Available for Rescue, Evacuation or Spill response.
 - Radio Equipment.

11.8 First Aid Requirements

- Contractors will verify that they have an adequate amount of first aid trained personnel and necessary equipment on any given work shift as outlined in the Alberta Occupational Health & Safety Act, Regulations and Code.
- Worker injuries take precedence over construction site activities and normal airside operations.
- The site First Aid Attendant will evaluate the injured worker(s) and ERS will make decisions regarding the need to transport the injured worker, including the appropriate level of transportation.
- Accordingly, in medical situations the Airside Escort will take direction from ERS in all matters relating to the disposition of the injured worker(s).

11.9 Fire Prevention

- Each contractor will be required to participate in Edmonton Airports' Fire Prevention Program.
- It's the expectation of the Edmonton Airports that every reasonable and prudent effort will be taken to prevent or minimize the risk of fire. The safety of all persons, property, environment and equipment shall have the highest priority.
- This program encompasses hot work performed inside the Terminal Buildings, on Groundside and Airside. At the discretion of Edmonton Airports fire safety requirements may be imposed on tenant leasehold space, including aprons, where the risk of fire is deemed to be detrimental to the normal functioning of the Airport.
- Requirements under the program shall vary depending on the location, duration, and potential hazards identified with the work. Hot work may only be undertaken with the express written consent of the Edmonton Airport Authority fire department and shall be subject to compliance with components of the program.
- Hot work permits are required for any work process that creates a spark, flame or heat. 48 hours' notice to Edmonton Airports Project Manager is required. Emergency Response Services shall issue and approve all Hot Work Permits.

11.10 Hot Work Definition

The following criteria will constitute hot work under the Construction HSE Manual:

- Welding, cutting or soldering employing open flame.
- Arc welding or similar processes creating hot by-products.
- Equipment or processes that create spark and/or flame.
- Any equipment that uses combustible fuels and has an open flame not tied into the building fire systems. Several examples of this are: propane heaters, hot water tanks and barbeques.
- Any other activity or equipment that could generate a heat source sufficient to cause combustion.
- Edmonton Airports Hot Work Permit will be followed.

11.11 Hazard Assessment

Prior to any hot work proceeding, the contractor must complete and submit the appropriate Fire Safety Hazard Assessment to the Edmonton Airport Authority fire department for review and approval. Hazard Assessments must be submitted a minimum of 2 working days in advance of the start of hot work activities.

11.12 Hot Work Procedures and Monitoring

- The following procedures shall be required for all hot work:
- Persons performing work are properly trained and qualified
- Ensure that work area is clear of flammable materials
- Combustible walls must be adequately protected by fire blankets, metal or other protective materials
- Combustible materials that cannot be moved must be adequately protected,
- Fire extinguishers must be present at work area
- Appropriate personal protective equipment must be worn/used by all worker(s)
- Where required, flash shields or other adequate protective devices must be used to prevent harmful exposure to persons within the influence of the work
- Once hot work is completed, the area will be inspected to ensure no lingering embers or hot spots remain
- Between 15 and 30 minutes after hot work is completed the area will be re-inspected to ensure that no hot zones remain
- For all airside work, notification shall be made to Airport Authority Operations prior to starting, and upon completion, of all hot work

11.13 Fire Prevention and Training

- All workers must receive instruction on the relevant fire prevention rules and regulations for each area where hot work will occur. Locations of firefighting equipment must be identified, well-marked and maintained to provide easy and quick access. Procedures to be followed in the event of a fire shall be posted on the Project Information Board.
- Persons performing fire watch must receive proper instruction on the use of portable fire extinguishers, and shall be trained in the operation of hydrants, hose cabinets and stations if said equipment constitutes part of the firefighting methods employed on the construction site.

11.14 Reporting of Incidents Involving a Fire

All fires, regardless of size, shall be promptly reported to the Edmonton Airport Authority fire department (911), to the **AOCC** (780 890-8327) and to the Project Manager. An investigation shall be conducted to determine the cause of the fire, along with recommendations for adequate measures to prevent a reoccurrence.

11.15 Waivers

- At the discretion of Edmonton Airports, some components of this program may be waived if the risk of fire from the hot work is such that the implementation of the component is unwarranted. Contractors should consult with Edmonton Airports Project Manager.
- Waivers may be granted in circumstances where the hazard assessment and subsequent preventative measures have previously been determined through the Facility Alteration Permit process. Waivers may also be granted when an existing fire safety program is already in place through a base building contractor which all other contractors shall follow.
- Waivers shall be provided in writing, identifying which components of the program may be waived. Under no circumstance shall granting a waiver negate the contractors' responsibility to follow all other aspects of the program.

11.16 Security of Work Area and Tools

Edmonton Airports assumes no responsibility for lost or stolen items.
Contractors are responsible for the security of their tools and equipment.

11.17 Media Relations

- Edmonton Airports has a Corporate Communications department, which will field questions from the media. This department handles all media liaison.
- Contractors and their workers are encouraged to politely direct any media inquiries to Edmonton Airports' Corporate Communications department.

12 GENERAL REQUIREMENTS

12.1 General Rules

- All personnel shall adhere to the following general rules:
- Radio or personal music device headphones shall not be permitted on site since they render the user unaware of potential dangers and a sounded evacuation alarm.
- Firearms or weapons of any kind are not permitted on the premises.
- Beverages and drugs that may cause impairment are not permitted.
- Workers are to report equipment and property damages to their supervisor.
- Personnel who perform lifting tasks should verify that good ergonomic posture is used when handling material. Lift with your legs, not with your back.
- Theft, vandalism, horseplay, and fighting will not be tolerated and are grounds for immediately being asked to leave the workplace after potential charges have been laid.

12.2 Housekeeping

The contractor shall adopt a “Clean As You Go” attitude. Any materials or debris with a potential of becoming blown around the project either airside or groundside poses a high risk of damage to jet engine aircraft. The risk of damage to an aircraft due to the ingestion of Foreign Object Damage (FOD), such as extraneous construction materials is significant, not only in terms of the cost of repair or the down time of the aircraft itself, but the potential for injury or the death of passengers as a result of the catastrophic loss of the aircraft. Good housekeeping should also include the control and clean-up of mud and stones tracked onto aprons and aircraft maneuvering areas.

12.3 Foreign Object Damage (FOD) Control

- The Foreign Object **Damage/Debris** Control Program details Edmonton Airports’ policy for the prevention of foreign object damage/debris (FOD) to aircraft on movement surfaces. Foreign object damage/debris can be caused by the presence of any material that may be ingested into aircraft engines or cause other damage to aircraft and vehicles. Types of FOD include paper, small hardware (such as bolts, nuts, nails), stones, baggage hardware (such as handles, wheels, locks) and other debris.
- Everyone whose working airside is responsible for monitoring potential FOD hazards and ensuring that foreign objects are not discarded on or near aircraft maneuvering areas.

12.4 FOD Protocols

Edmonton Airports procedures for the control and removal of foreign objects involve daily inspections, constant monitoring, provision of foreign object control receptacles, corrective actions for various types of common FOD hazards, and levels of administrative involvement.

12.5 Responsibilities

- Edmonton Airports
 - The Airport Safety Team with the help of Airfield Maintenance are responsible for Edmonton Airports' FOD Program. All employees (and contractors) are required to monitor potential FOD hazards on an ongoing basis and take steps to eliminate them or bring them to the attention of the AOCC and Field Maintenance.
- Airport Contractors
 - All airport contractors working on airside are required to appoint a FOD control officer. This officer is responsible for ensuring that the company's FOD control procedures are followed, and that all workers (and contractors) are aware of potential FOD hazards and act to eliminate them.

12.6 Procedures

- Maintenance and servicing contractors (including aircraft maintenance contractors) should account for all tools and hardware used during the repair and maintenance of aircraft on airside areas.
- Foreign objects found in the vicinity of an aircraft must be identified and, if determined to be from an aircraft, the airline responsible for the aircraft should be notified immediately.
- All contractor workers should be aware of potential FOD hazards resulting from their actions. FOD control is everyone's responsibility. When FOD is found, it should be removed and identified immediately.

12.7 Frequency of Inspections

- Edmonton Airports Field Maintenance staff complete daily inspections of aircraft maneuvering areas. Ongoing monitoring is required by all contract workers at the airport including airline and control tower personnel, who are working on or near aircraft maneuvering areas.
- Contractors will keep access and egress areas clean and free from slipping and tripping hazards.
- The contractor shall maintain a clean workplace at all times (a "clean as you go" approach), including:

- Immediate removal of any material that may become FOD (Foreign Object **Damage/ Debris**). In an airport the control of FOD is essential and is a fundamental obligation of the contractor.
- Design of construction techniques to reduce the risk of FOD, such as barriers, screens, etc.
- Maintenance of access/egress paths to avoid tripping and slipping hazards.
- Wherever possible, hang cords and hoses above workers.
- Remove debris and construction waste material from work areas to prevent congestion and eliminate hazards.
- Maintain access roads to avoid vehicular damage to public and construction traffic.
- Regular water spraying of appropriate area of the site to avoid FOD and dust clouds in general.

12.8 Traffic Hazards

Contractors shall take appropriate measures to ensure workers are protected from traffic hazards. Control measures include Traffic Management Plans

12.9 Barricades, Signage, and Hoarding

- The Contractor shall ensure that sufficient warning and protection is in place wherever the general public can access a potentially hazardous work area.
 - Hard barricades and signs will be required wherever the general public can access a potentially hazardous work area, creating an exclusion zone.
 - Barricades shall be highly visible and of adequate strength to perform the task. Barricades cannot be attached to Edmonton Airports furniture or fixtures i.e., rope tied to chairs and garbage cans.
 - Exclusion Zone hoardings shall be constructed in such a way to prevent construction activities, material movement and material storage accessible to the general public.
 - No unauthorized worker or public member shall have access to an exclusion zone.
 - The contractor responsible for the exclusion zone shall verify that an emergency evacuation for workers inside the exclusion zone is possible and communicated to the affected workers.

12.10 Manual Handling

- No worker shall manually lift or move materials or equipment exceeding 50 lbs. (23 Kg).
- Materials and equipment exceeding 50 lbs. (23 Kg) must be handled by mechanical means or by more than one person.
- The maximum amount of weight a single person may lift may be reduced after a complete and accurate hazard assessment is done taking into account, in addition to weight:
 - The physical size and configuration of the object,
 - Distance to be moved,
 - Number of items to be moved,
 - Level (above shoulders, below waist), and
 - Any other factors which may increase the likelihood of injury resulting from the manual task.

12.11 Respiratory Protection Program

Where the work may result in workers being exposed to contaminated or oxygen deficient or enriched atmosphere the contractor shall require the use of respiratory protective equipment. The contractor shall develop a code of practice that will govern the selection, maintenance and use of the equipment.

12.12 Illumination

The contractor will verify that illumination at the work place is sufficient to enable the work to be done safely. Where the failure of normal lighting would endanger workers, the contractor shall ensure a system exists to provide a safe egress out of the area in darkness. Contractors with YEG Projects Team must ensure illumination doesn't impact day to day operations.

12.13 Ladders and Scaffolds

- The contractor shall ensure that ladders meeting the requirements of applicable legislation are provided *when no other safe means of access or egress between levels is present*.
- The contractor shall ensure that a scaffold will be designed to the requirements stated in the Alberta OH&S Act, Regulations & Code and the CSA Standards governing Scaffold Equipment and Erection.
- Thrust outs used to suspend scaffolds shall be secured against movement or attached to the building or structure as prescribed by the regulations.

12.14 Sanitation Facilities

- The contractor shall verify that his/her workers have access to washroom facilities. The contractor will verify that workers have access to fresh potable water and a clean room to consume his/her lunch.
- For the abatement of hazardous products or the use of corrosive chemical(s), showers with recovery tanks will be required.

12.15 Safe Access and Egress

- All means of entry to and exit from a work area must be maintained in a good state of repair and free from materials, equipment and other obstructions that might endanger workers or impede their exit from the area in an emergency.
- Routes of worker entry include ramps, runways, walkways, stairways, ladders and doors.

12.16 Utilities

- The contractor shall ensure that all underground utilities are located and that the procedures outlined in YEG Ground Disturbance Procedures, the Pipeline Act, Electrical Utilities Regulations, and other applicable legislation are followed. An Edmonton Airports Excavation/Trenching Permit is required prior to excavating an area.
- The contractor shall ensure that the workers are made aware of the location of overhead utilities, the dangers of contacting these utilities are communicated to all workers and the safe limits of approach as outlined in the legislation are maintained for workers and equipment.

12.17 Compressed Gas Systems

- The contractor shall ensure compressed and liquefied gas cylinders are:
 - Clearly identified as to their contents.
 - Equipped with valve protection.
 - Secured to prevent dislodgment.
 - Flashback devices are installed on the regulator end of all lines.
 - Oil or grease does not contact oxygen cylinders.

12.18 Falling Hazards

- *Approved* fall protection equipment must be worn continuously where there is a hazard of:
 - Falling 2 meters or more from a temporary or permanent work area.
 - Falling into operating machinery.
 - Falling into or onto hazardous substances or objects; or
 - Falling into waste or liquids.
- As well, workers must be tied off when moving to, from or between elevated work locations where safe access is not provided. Fall protection is not required when accessing and egressing from work areas using a portable ladder.
- Where continuous fall protection cannot be used because it creates additional risk, the contractors shall establish approved work procedures offering the equivalent or better protection to guard against falls.
- A full body harness is mandatory in all *Fall Arrest Systems* (FAS).
- Fall protection equipment, which has been involved in arresting an actual fall must NOT be used again and is removed from service.
- NOTE: Once equipment intended for one-time use only, such as lifelines and shock absorbers has been used to arrest a fall, it must never be reused and must be removed from service.
- Anchor points must be used if a worker uses a FAS. Anchor points and plates must comply with the specifications of Part 9 of the Alberta OH&S Code.
- Lifelines must be positioned to prevent damage from chafing, burns and sharp edges.
- A rescue plan is mandatory wherever fall arrest systems are used.
- All users of fall protection equipment must be properly trained.
- No user modifications are allowed to fall arresting equipment.
- A competent person must inspect all fall arrest equipment before it is used on each work shift and that fall arrest equipment is recertified as specified by the manufacturer.
- Raising and Lowering Tools and Material
 - An *approved* hand line must be used for raising or lowering tools and material to workers on structures (approved tool bags may be used in conjunction with the hand line).
 - Articles must NOT be thrown to workers aloft and must NOT be thrown or dropped to the ground.
 - Tool bags must NOT be suspended from the worker's belt.

12.19 Overhead Protection

Where the risk of falling material presents a hazard, overhead protection must be provided. Where this is not practicable, the hazardous area must be roped off and posted with warning signs.

12.20 Guardrails, Floor and Wall Openings

- All openings in floors, roofs or other surfaces to which people have access must have a cover in place strong enough to withstand any load that may be applied to it. In conjunction, there should be a guardrail and posted signs to identify the hazard.
- The perimeter, open sides and ends of roofs and other surfaces where workers could fall must have guardrails or appropriate travel restraints.
- Access to roofs and other surfaces where workers could fall must be controlled if guardrails or appropriate travel restraints are not provided.
- Guardrails must meet the requirements of the Alberta Occupational Health and Safety Code and the Canada Labor Code-Part II.

12.21 Mobile Equipment and Vehicle Operation

- The contractor shall ensure that powered mobile equipment meets the requirements of governing legislation. Personnel shall not be transported in a vehicle unless adequate seating is provided. Equipment fitted with roll belts shall be worn when the equipment is operated. Equipment requiring back-up alarms shall have the alarms maintained in good working order.
- All contract workers will operate all vehicles and equipment in accordance with the *Highway Traffic Act* and posted instructions while on Edmonton Airport's premises.

12.22 Traffic Hazards

- Contractors shall take appropriate measures to ensure workers and, where specified, the general public are protected from traffic hazards. Control measures include:
 - High visibility vests (CSA Level II)
 - Barricades and signs directing traffic
 - Flag person directing traffic away from workers
 - A combination of these control measures

12.23 Tools and Equipment

- The contractor will supply all tools and equipment necessary to complete the work safely and without adverse health effects to the workers. Tools and equipment shall be kept in an orderly fashion and away from public access. If working in a public area, a storage area will be identified.
- The use of explosive actuated tools is restricted in the airport. Approval from the Project Manager must be obtained before this type of equipment is used. In addition, the operator of explosive actuated tools must have the proper certification to use the equipment.

12.24 Barricades, Signage, and Hoarding

- Hard barricades and signs will be required wherever the general public can access a potentially hazardous work area.
- Barricades shall be highly visible and of adequate strength to perform the task. Barricades cannot be attached to Edmonton Airports' furniture of fixtures i.e., rope tied to chairs and garbage cans.
- Containment hoarding shall be maintained to ensure the adequacy of the protection factor. No unauthorized worker or the general public shall have access to a containment zone.
- The contractor responsible for the containment zone shall verify that an emergency evacuation from inside the exclusion zone is possible and communicated to the affected workers.

12.25 Securing of Equipment and Materials

- The contractor shall verify that loads and materials are secured from unintentional movement that could adversely affect the safety of workers and/or the general public.

12.26 Office Environmental, Safety and Loss Prevention

- Contractor shall keep office spaces free and clear of tripping, slipping or fire hazards.
- Contractors shall have an adequate number of fire extinguishers posted by the exit(s).
- Ignition sources such as coffee makers shall be turned at the end of the workday.

12.27 Working Alone

- Any worker required to work alone will make every reasonable effort to keep the dispatcher, the on-duty person, the answering service and/or the supervisor aware of their progress and expectation of completion.
- Workers will have the means to communicate a call for emergency assistance.

13 SECURITY

Each contractor shall ensure that they have reviewed, understand and will abide by the Edmonton Airports Security Plan, contained separately.

13.1 General

When access to "Restricted (secure) Areas" of the airport is provided, an employee or agent of the contractor is subject to Edmonton Airports' security controls (i.e., search, surveillance, or escort) while within a restricted area. A Restricted Area Pass holder supplied by the contractor or by Edmonton Airports under terms of a specific agreement shall provide security controls. A designated escort for contractors shall be in a position to communicate with the contractor and/or airport security i.e., portable radios.

13.2 Tool and Equipment Identification

Contractors will have a means of identifying their tools and equipment prior to arrival to the site. If a discrepancy occurs on the owner of a tool or piece of equipment, the issue will be handled by the local police authority.

13.3 Contractor Use of Premises

- The contractor will participate in all Edmonton Airports requirements in the protection of workers, the general public, the environment, equipment, and process.
- Contractor visitors to areas outside Edmonton Airports' security zones, shall be educated by the contractor on site procedures for that area.
- Movement of personnel and equipment will be subject to Airport security regulations and controls.

13.4 Parking

Parking of contractor and their workers' vehicles shall be limited to areas designated by Edmonton Airports for contractor use. Unauthorized vehicles will be towed at the owner's expense.

13.5 Restricted Area Identification Cards (RAIC)

- All passes issued are the property of Edmonton Airports.
- The pass shall be returned to the Pass Control Office on termination of employment, completion of contract or on demand from the issuing authority at Edmonton Airports.
- The pass must be visibly displayed (worn on a worker's outer clothing) at all times while in a restricted area.
- The pass must be safeguarded at all times. Loss or theft of the pass must be reported to the Pass Control Office immediately.
- Unauthorized use of the pass is prohibited.
- Only to be used while employees or agents of the contractor are performing work in areas requiring a pass.
- Violations of the terms of issue for Restricted Area Passes are subject to prosecution under the Aerodrome Security Regulations. A violation may also result in suspension of pass privileges by Edmonton Airports.
- A fee of \$100 (one hundred) shall be charged for a lost or non-returned Restricted Area Pass.

13.6 Pass Control

Edmonton Airport's pass control office is located on the Mezzanine Level (Room #03-076) at the Edmonton International Airport. Hours of operation are from 08:00 – 17:00 hours Monday to Friday. Alternative arrangements can be made by phoning 780-890-8377.

13.7 Key Control

The Pass Control Office at the Edmonton International Airport issues all keys for airports under Edmonton Airports' direction. Arrangements for keys should be made 48 hours in advance.

13.8 Vehicle Escort on Airside

Movement of contractor's vehicles and equipment on "airside" must be in accordance with the provisions of the Airside Vehicle Operator's Permit program and Edmonton Airports' traffic directives. Approved escorts may be required for movement of personnel and equipment on airside.

14 INCIDENT INVESTIGATION

14.1 Incident Reporting Procedure

- Contractors shall investigate all incidents including:
 - near miss
 - injury
 - fire
 - environmental release
 - premises and equipment damage
 - security breach
 - refusal to work
 - imminent dangerous work environment

14.2 Reporting Table

- ASARP – As soon as reasonably practical but no later than the end of the workday
- ASAP – As soon as possible (worker and site are to be made stable and safe as the absolute first priority)
- EOD – No later than End of Day

Level	Description	Who Reports	Reporting to Whom	When
1	Unsafe Acts/Near Misses	The worker(s) that were affected by or witnessed the behavior	Their Front-Line Supervisor	ASARP
		Front Line Supervisor	Project Manager	ASARP
		Project Manager	HSE Manager/Coordinator	ASARP
		HSE Manager	YEG – Senior Management	Monthly Report
2	Significant Learning Experience/Property Damage of less than \$5000.00/First Aid/Non reportable Environmental Release	The worker(s) that was affected	Their Front-Line Supervisor	ASARP
		Front Line Supervisor	Project Manager	Notification - ASARP
		Project Manager	HSE Safety/Coordinator	Notification - ASARP Report – 3 business days
		HSE Manager	YEG – Senior Management	Notification - EOD Report – 5 business days

Edmonton Airports

Contractor Occupational Health and Safety Manual

Level	Description	Who Reports	Reporting to Whom	When
3	Recordable Injury/Illness/Damage over \$5000.00	The worker(s) that was affected	Their Front-Line Supervisor	Notification – ASAP
		Front Line Supervisor	Project Manager	Notification - ASAP
		Project Manager	HSE Manager/Coordinator	Notification - ASARP Report – 3 business days
		HSE Manager	YEG – Senior Management	Notification - EOD Report – 5 business days
4	Restricted and or day away from work/Reportable Environmental Release/Damage over \$25,000.00 (Incident must be Investigated)	The worker(s) that was affected	Their Front-Line Supervisor	Notification - ASAP
		Front Line Supervisor	Project Manager	Notification-ASARP
		Project Manager	HSE Manager/Coordinator	Notification-ASARP
		HSE Manager	YEG Senior Management	Monthly Report
	Employee is Hospitalized/Damage over \$100,000.00 (If hospital stay exceeds 24 hours) must be reported to Work Safe Alberta	The worker(s) that was affected	Their Front-Line Supervisor	Notification - ASAP
		Front Line Supervisor	Project Manager	Notification - ASAP
		Project Manager	HSE Manager/Coordinator	Notification-ASARP
		HSE Manager	YEG Senior Management	Notification-ASARP
5				

- All fires regardless of size or consequence must be reported to the Edmonton Airports fire hall immediately.
- Contractor supervisors when advised of an incident will notify Edmonton Airports Emergency Response Services (if the incident requires emergency response), the Project Manager and the Prime Contractor immediately upon securing the incident area.
- The **Safety Team** will receive a copy of the incident report from the contractor within 24-hours from the time of the occurrence.

14.3 Organizational and Government Notification

The contractor supervisor shall follow his/her own company policy regarding government notification. When an occurrence requires government notification, the **Safety Team** shall be notified immediately.

Dave Kuny-Manger. Safety and Airfield Compliance
780-499-8789

Chelsea Laporte-Senior Safety Specialist
587-385-9763

Coby Perry- Safety Coordinator
780-691-0534