

# Grand Valley Transit

# Public Transportation Agency

# Safety Plan

Prepared by: Mesa County Regional  
Transportation Planning Office

August, 2020

Updated November, 2022

## Table of Contents

1. Transit Agency Information.....	2
2. Plan Development, Approval, and Updates.....	2
3. Safety Performance Targets.....	3
3.1. Safety Performance Target Coordination.....	3
4. Safety Management Policy.....	4
4.1. Safety Management Policy Communication.....	4
4.2. Authorities, Accountabilities, and Responsibilities.....	4
4.3. Employee Safety Reporting Program (ESRP).....	8
5. Safety Risk Management.....	9
5.1. Safety Risk Management Process (SRM).....	9
5.2. Safety Hazard Identification.....	10
5.3. Safety Risk Assessment.....	12
5.4. Safety Risk Mitigation .....	13
6. Safety Assurance.....	14
6.1. Safety Performance Monitoring and Measurement.....	14
7. Safety Promotion.....	16
7.1. Competencies and Training.....	16
7.2. Safety Communication.....	17
8. Additional Information .....	18
8.1. SMS Documentation Retention.....	18
8.2. Supporting Documentation.....	18
9. Definitions of Special Terms Used in the Safety Plan.....	18
10. List of Acronyms Used in the Safety Plan.....	21

Appendix A- Mesa County Fleet Services Safety Policies and Procedures

Appendix B- Mesa County Division of Transportation Safety Policy and Procedures Manual

Appendix C- City of Grand Junction Safety Manual

Appendix D- Transdev Safety Training Table of Contents

Appendix E- GVT Safety Event Investigation Process

Appendix F- Resolution adopting PTASP

Appendix G- TrAMS Certification

Under the Public Transportation Agency Safety Plan (PTASP) Final Rule, Mesa County is required to develop a safety plan that include the processes and procedures to implement a Safety Management Systems (SMS). This plan was developed by Regional Transportation Planning Office (RTPO) staff with input from Mesa County Fleet and Facilities, City of Grand Junction Fleet and current transit operations contractor Transdev.

**1. Transit Agency Information:**

Mesa County receives 5307, 5310, and 5339 funds from Federal Transit Administration (FTA) and/or the Colorado Department of Transportation (CDOT) for fixed route, paratransit and limited on-demand service for Grand Valley Transit (GVT) as well as capital purchases for buses and equipment. GVT does not provide transit services on behalf of another agency. All GVT service is currently operated through a multi-year contract with Transdev, a private transportation provider.

Grand Valley Transit is located: at 525 S 6th St, Grand Junction, CO 81501

Accountable Executive: Grand Valley Regional Transportation Committee Chair- Greg Mikolai  
Chief Safety Officer/SMS Executive: RTPO Director- Dana Brosig.

**2. Plan Development, Approval, and Updates**

**Drafted by:**

Regional Transportation Planning Office staff/ Grand Valley Transit.

In compliance with 49 U.S.C Part 5329(d) (B), updates to the PTASP are done in cooperation with frontline employees. All operational staff are consulted about safety concerns and PTASP procedures and development during at least one all-staff safety meeting each year.

**Approved by:**

The Grand Valley Regional Transportation Committee approved the PTASP and appointed the GVRTC chair as the Accountable Executive on August 24, 2020 by resolution 2020-008, and most recently updated on November 7, 2022 by resolution 2022-019 as attached in Appendix F. As Chair of the GVRTC, the Accountable Executive signature is included in GVRTC resolutions approving the PTASP update.

Certification documentation found in Appendix G.

Version Number	Section/Pages Affected	Reason for Change	Date Issued
<b>1</b>		New Document	
<b>2</b>	Section 2—pg 3 Section 3—pg 3 Section 5—pg 9-11 Section 9—pg 18-20	Update to annual performance targets. Clarification of definitions. Clarification of Calendar year timeline.	11/15/21
<b>3</b>	Section 1—pg 2 Section 2—pg 4  Section 4.1—pg 5  Section 5.4.1—pg 13	Update of Accountable Executive Update to annual performance targets. Addition of update development in cooperation with frontline workers. Addition of specific language on infectious diseases.	

This plan will be jointly reviewed and updated by the Chief Safety Officer (CSO) and GVT Contractor- General Manager by December 1st of each year, to be implemented for the following calendar year. The Accountable Executive will review and approve any changes, then forward to the Grand Valley Regional Transportation Committee (GVRTC) for review and approval.

This ASP addresses all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan

### **3. Safety Performance Targets**

Fixed route and paratransit operations are intertwined in that cutaway buses are used for both services whereas the lowfloor buses are utilized only for fixed route service. Fixed Route and ADA Paratransit are operated by the same contractor and maintained through the same facilities. Targets below are based on review of the previous 2 years of GVT's safety performance data.

2022 Safety Performance Targets							
Mode of Transit Service	Fatalities (total)	Fatalities (per 100k VRM)	Injuries (total)	Injuries (per 100k VRM)	Major Safety Events (total)	Major Safety Events (per 100k VRM)	System Reliability (VRM / failures)
Fixed Route Bus /ADA Paratransit	0	0	4	0.45	3	0.35	7,500 mi

### 3.1. Safety Performance Target Coordination

GVT’s Accountable Executive shares our ASP, including safety performance targets, with the Grand Valley Metropolitan Planning Organization (MPO) annually after its formal adoption by the Grand Valley Regional Transportation Committee (GVRTC). GVT’s Accountable Executive also provides a copy of our formally adopted plan to the Colorado Department of Transportation (CDOT). GVT personnel are available to coordinate with CDOT and the MPO in the selection of Colorado and MPO safety performance targets upon request.

2022 Targets Transmitted to Colorado Department of Transportation on December 1, 2021  
 2022 Targets Transmitted to Grand Valley Metropolitan Planning Organization on December 1, 2021.

## 4. Safety Management Policy

Safety is a core value at GVT, and managing safety is a core business function. We will develop, implement, maintain, and continuously improve processes to ensure the safety of our customers, employees, and the public. GVT is committed to the following safety objectives:

- Communicating the purpose and benefits of the Safety Management System (SMS) to all staff, managers, supervisors, and employees.
- Providing a culture of open reporting of all safety concerns, ensuring that no action will be taken against any employee who discloses a safety concern through GVT’s Employee Safety Reporting Program (ESRP), unless such disclosure indicates, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures.
- Providing appropriate management involvement and the necessary resources to establish an effective ESRP that will encourage employees to communicate and report any unsafe work conditions, hazards, or at-risk behavior to the management team.
- Identifying hazardous and unsafe work conditions, collecting data from the ESRP as well as other methods of data collection, and, after thoroughly analyzing provided

data, developing and implementing processes and procedures to mitigate safety risk to an acceptable level.

- Establishing safety performance targets that are realistic, measurable, and data driven. Continually improve our safety performance through management processes that ensure appropriate safety management action is taken and is effective

#### **4.1. Safety Management Policy Communication**

GVT's safety management policy will be communicated throughout the organization through:

- SMS Training provided by Safety Managers for all transit-related employees annually;
- Notice to All Personnel (memo to all transit-related employees informing them of SMS and posted on all general bulletin boards) and given to new employees by Safety Managers;
- Discussion of dissemination of the safety policy at Safety Meetings to be included in meeting minutes
- In compliance with 49 U.S.C Part 5329(d) (B), updates to the PTASP are done in cooperation with frontline employees. All operational staff are consulted about safety concerns and PTASP procedures and development during at least one all-staff safety meeting each year. Suggestions and concerns are recorded and, where applicable, changes made to the PTASP. Concerns of note are:
  - Poor lighting situations within and around the buses, including but not limited to: Interior lighting causing glare, poor headlight brightness
  - Poor lighting at bus stops leading to drivers not seeing passengers
  - Poor lighting at facilities
  - Foliage not being trimmed along driveways, creating unsafe driving situations and obscuring passengers at bus stops
  - Non-efficient maintenance of buses leading to unreliable bus operation
  - Old, or poorly designed seating for drivers, leading to gradual employee discomfort and potential for injury

The Public Transit Agency Safety Plan will be maintained by the Chief Safety Officer in an electronic file and in hard copy(s) and made available to transit-related employees through the Safety Managers.

#### **4.2. Authorities, Accountabilities, and Responsibilities**

An organigram showing the relationship between the Accountable Executive, Chief Safety Officer, Safety Managers, and Safety Committees is shown below in Figure 1.



Figure 1: Organigram of PTASP personnel

#### 4.2.1. Accountable Executive

The Chair of the GVRTC is identified as the Accountable Executive (AE). The AE, with support of the entire GVRTC, is accountable for ensuring the agency's SMS is effectively implemented throughout the Transit Agency system; and ensuring action is taken, as necessary, to address substandard performance in the Transit Agency's SMS.

The GVRTC is made up of an elected official from the local transit funding partners of Mesa County, City of Grand Junction, City of Fruita and Town of Palisade. As these partners provide funding for the system through an intergovernmental agreement (IGA) and oversee the facilities (Mesa County facilities) and maintenance of fleet (Mesa County and City of Grand Junction fleet), they are responsible for controlling and directing the human and capital resources to develop and carry out the ASP and TAM Plan. The Chair of the GVRTC, designated as the AE on behalf of the GVRTC, will ensure the SMS is effectively implemented and action is taken, as necessary, to address substandard performance in the agency's SMS.

#### 4.2.2. Chief Safety Officer

The Accountable Executive designates the Regional Transportation Planning Office (RTPO) Director as the Chief Safety Officer. The Chief Safety Officer (CSO) will have direct communication with the Accountable Executive and will be adequately trained for the position.

The Chief Safety Officer has the following authorities, accountabilities and responsibilities under this plan:

- Oversees the safety function within the transit agency
- Communicates with GVRTC and Safety Managers
- Works with the Safety Managers to confirm that each entity complies with federal, state and local regulations.
- Chair of the Transit Safety Committee
  - Coordinates the activities of the committee to support SMS implementation
  - Maintains and distributes minutes of Transit Safety Committee Meetings
  - Establishes and maintains the Safety Risk Register
- Advises the Accountable Executive on SMS progress and status
- Administers contractual agreements with operations and maintenance providers and ensure they comply with SMS
- Ensures that Safety Managers are collecting data related to safety events and key performance indicators.

#### **4.2.3. Executive Management: Safety Managers**

The Accountable Executive with support of Mesa County, City of Grand Junction, and the transit operations contractor will designate a representative from Mesa County Fleet, Mesa County Facilities, City of Grand Junction Fleet and Grand Valley Transit to be Safety Managers.

Safety Managers have authorities and responsibilities for day-to-day SMS implementation and operation of GVT's SMS Plan within their department including:

- Dissemination of the SMS Plan and other relevant safety information
- Hazard identification
- Accident investigation
- Safety Certification, as required by their agency
- Reporting requirements
- Participation in Transit Safety Committee meetings

#### **4.2.4. Other Committees/Activities:**

GVT (Grand Valley Transit) uses a Transit Safety Committee as well as a number of other safety committees and existing safety procedures to support its SMS and safety programs including:



- **Transit Safety Committee**

Made up of a member from GVT operations, Mesa County facilities, and Mesa County and City of Grand Junction fleet maintenance. CSO will share and discuss the Chief Safety Officer Safety Summary, which is prepared before each Transit Safety Committee meeting and includes a narrative of safety issues based on safety data collected from meeting notes of other safety committees, ESRP, and other sources. Hazard reports and mitigations will be shared, safety topics will be brought up for open discussion, further feedback solicited, and hazard self-reporting further encouraged. Information discussed in these meetings will be documented and shared through meeting minutes. The committee will meet quarterly or as needed.

- **Operations Safety Committee**

Made up of contractor staff and includes the General Manager, Operations Supervisor, Safety Supervisor, and a representative from road supervisors, dispatch, utility and from fixed route/paratransit who meet monthly to review issues and make recommendations to improve safety.

- **Operations Monthly All-Staff Safety Meeting**

The operations contractor conducts a safety meeting monthly which all staff is required to attend. Safety topics will be discussed and feedback is solicited. Hazard reporting will be encouraged at these meetings.

- **Mesa County Safety Committee**

Made up of Public Works, Fleet, Transportation, Traffic and Risk Management. Meets monthly to discuss safety issues seen across departments. Hazard reporting will be encouraged at these meetings.

- **Mesa County Fleet Safety Meeting**

Conducts safety meetings monthly or as needed with all fleet staff to discuss safety issues and related topics. Hazard reporting will be encouraged at these meetings.

- **City Fleet Safety Meeting**

Conducts monthly safety meetings with all fleet staff. Hazard reporting is expected at these meetings.

The Safety Managers will report to the CSO any input regarding major events or patterns of minor events received from the respective Safety Committee meetings.

### **4.3. Employee Safety Reporting Program (ESRP)**

GVT's ESRP encourages employees who identify safety concerns in their day-to-day duties to report them to senior management in good faith without fear of retribution. There are many ways employees can report safety conditions:

*All:*

- Report conditions directly to any supervisor, manager, safety manager or director.
- Report conditions during safety meetings or to safety committee
- Report conditions using their name or anonymously to [gvtsafety@mesacounty.us](mailto:gvtsafety@mesacounty.us)
- Report condition to RTPO Office at 525 S. 6th Street 2nd Floor, Grand Junction, CO 81501

*Operations:*

- During bus operations, report conditions directly to the dispatcher, who will inform the supervisor and Safety Manager.
- Report bus safety conditions on daily vehicle inspection form

*Facilities:*

- Mesa County Facilities- Enter safety issues in the Computerized Maintenance Management System (CMMS)

Major safety concerns are reported to the Chief Safety Officer who manages the Safety Risk Register (SRR). These concerns will be discussed and entered into the SRR and reviewed at the Transit Safety Committee meetings.

The Chief Safety Officer reviews ESRP reporting and includes findings into SRM Process. GVT's Chief Safety Officer, supported by the Transit Safety Committee and RTPO staff, as necessary, will review reported safety concerns, ensuring that hazards and their consequences are appropriately identified and resolved through GVT's SRM process and that reported deficiencies and non-compliance with rules or procedures are managed through GVT's Safety Assurance process.

GVT's Chief Safety Officer discusses actions needed/taken to address safety concerns reported through the ESRP during the quarterly Transit Safety Committee Meetings or, if necessary, during the bimonthly GVRTC meetings. Additionally, if a reporting employee provided his or her name during the reporting process, the Chief Safety Officer or designee follows up directly with the employee when GVT determines whether or not to take action and after any mitigations are implemented.

GVT encourages participation in the ESRP by protecting employees that report safety conditions in good faith. GVT will notify and request disciplinary action of the respective jurisdiction if the report involves any of the following:

- Willful participation in illegal activity, such as assault or theft;
- Gross negligence, such as knowingly utilizing heavy equipment for purposes other than intended such that people or property are put at risk; or
- Deliberate or willful disregard of regulations or procedures, such as reporting to work under the influence of alcohol or controlled substances.

## 5. Safety Risk Management

### 5.1. Safety Risk Management Process (SRM)

GVT uses the SRM process to ensure the safety of our operations, passengers, employees, vehicles, and facilities. It is a process whereby hazards and their consequences are identified, assessed for potential safety risk, and resolved in a manner acceptable to GVT’s leadership. GVT’s SRM process allows us to carefully examine what could cause harm and determine whether we have taken sufficient precautions to minimize the harm, or if further mitigations are necessary. The diagram in Figure 2 below shows how events are reported and documented.

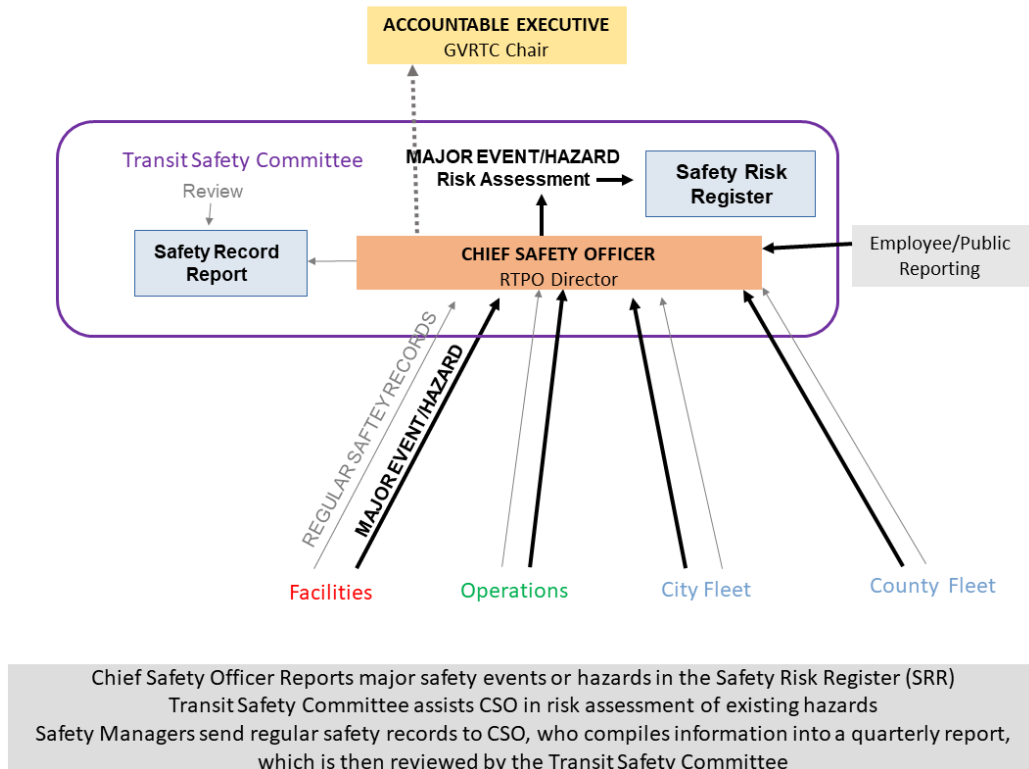


Figure 2: PTASP Reporting Structure

GVT's Chief Safety Officer and Safety Managers lead GVT's SRM process, working with GVT's various Safety Committees to identify hazards and consequences, assess safety risk of potential consequences, and mitigate safety risk. The results of GVT's SRM process are documented in the CSO Safety Summaries and the Safety Risk Register (SRR) and referenced materials.

In carrying out the SRM process, GVT uses a number of specific terms found in Section 9.

Minor hazards related to transit should be recorded internally in each department and may be included in safety committee reports/notes submitted to the CSO. The Safety Managers shall report Major hazards, in writing, to the CSO for inclusion in the SRR.

Safety Managers will send reports from safety meetings to the Chief Safety Officer after each meeting. Reports should include the following information:

- Completed safety trainings
- Accidents including "near miss" incidents, property & equipment damage and employee injuries- related to transit
- Hazards or unsafe work practices observed

Those events included in the SRR shall be discussed and prioritized by the Transit Safety Committee with a recommendation to the Accountable Executive, if additional resources are needed.

GVT's SRM process applies to all elements of our system including our operations and maintenance; facilities and vehicles; and personnel recruitment, training, and supervision.

## **5.2. Safety Hazard Identification**

The Safety Hazard Identification Process offers GVT and contractors the ability to identify hazards and potential consequences in the operation and maintenance of our system.

Examples of sources hazards can be identified through include:

- ESRP;
- Review of vehicle camera footage;
- Review of monthly performance data and safety performance targets;
- Observations from supervisors;
- Maintenance reports;
- Design Review
- Walk-throughs
- Monthly facility self-inspections
- Customer, Contractor, and Employee Complaints
- Safety Committee Meetings
- Results of audits and inspections of vehicles and facilities;
- Results of training assessments;
- Investigations into safety events, incidents, and occurrences; and

- Federal Transit Administration (FTA) and other oversight authorities (mandatory information source).
- Transit Industry Experience

When a major hazard is observed by GVT's management or supervisory personnel, whatever the source, it is reported to GVT's Chief Safety Officer. Procedures for reporting hazards to GVT's Chief Safety Officer are reviewed during the Transit Safety Committee meetings. GVT's Chief Safety Officer also receives employee reports from the ESRP and input from the public. GVT's Chief Safety Officer reviews these sources for hazards and may document major issues in the Safety Risk Register.

GVT's Chief Safety Officer may conduct, or request that a Safety Manager conducts, further analyses of hazards and consequences entered into the Safety Risk Register to collect information and identify additional consequences and to inform which hazards should be prioritized for safety risk assessment. In following up on identified hazards, GVT's Chief Safety Officer and/or Safety Managers may:

- Reach out to the reporting party, if available, to gather all known information about the reported hazard;
- Conduct a walkthrough of the affected area, assessing the possible hazardous condition, generating visual documentation (photographs and/or video), and taking any measurements deemed necessary;
- Conduct interviews with employees in the area to gather potentially relevant information on the reported hazard;
- Review any documentation associated with the hazard (records, reports, procedures, inspections, technical documents, etc.);
- Contact other departments that may have association with or technical knowledge relevant to the reported hazard;
- Review any past reported hazards of a similar nature; and
- Evaluate tasks and/or processes associated with the reported hazard.

GVT's Chief Safety Officer will then prepare an agenda to discuss identified hazards and consequences with the Transit Safety Committee during quarterly meetings. This agenda may include additional background on the hazards and consequences, such as the results of trend analyses, vehicle camera footage, vendor documentation, reports and observations, or information supplied by FTA or other oversight authorities.

Any identified hazard that poses a real and immediate threat to life, property, or the environment must immediately be brought to the attention of the Chief Safety Office and Transit Safety Committee and addressed through the SRM process for safety risk assessment and mitigation. This means that the Chief Safety Officer believes immediate intervention is necessary to preserve life, prevent major property destruction, or avoid

harm to the environment that would constitute a violation of Environmental Protection Agency or Colorado environmental protection standards. Otherwise, the Safety Committee will prioritize hazards for further SRM activity.

### 5.3. Safety Risk Assessment

GVT assesses safety risk associated with identified major safety hazards using its safety risk assessment process. This includes an assessment of the likelihood and severity of the consequences of hazards, including existing mitigations, and prioritizing hazards based on safety risk.

The Chief Safety Officer and Transit Safety Committee assess prioritized hazards using GVT’s Safety Risk Matrix. This matrix expresses assessed risk as a combination of one severity category and one likelihood level, also referred to as a hazard rating. For example, a risk may be assessed as “1A” or the combination of a Catastrophic (1) severity category and a Frequent (A) probability level.

RISK ASSESSMENT MATRIX				
SEVERITY LIKELIHOOD	Catastrophic (1)	Critical (2)	Marginal (3)	Negligible (4)
Frequent (A)	High	High	High	Medium
Probable (B)	High	High	Medium	Medium
Occasional (C)	High	Medium	Medium	Low
Remote (D)	Medium	Medium	Low	Low
Improbable (E)	Medium	Low	Low	Low

Figure 3 GVT Safety Risk Assessment Matrix

This matrix categorizes combined risks into levels, High, Medium, or Low, based on the likelihood of occurrence and severity of the outcome. For purposes of accepting risk:

- “High” hazard ratings will be considered unacceptable and require action from GVT to mitigate the safety risk,
- “Medium” hazard ratings will be considered undesirable and require GVT’s Safety Committee to make a decision regarding their acceptability, and
- “Low” hazard ratings may be accepted by the Chief Safety Officer without additional review.

Using a categorization of High, Medium, or Low allows for hazards to be prioritized for mitigation based on their associated safety risk.

The Chief Safety Officer schedules safety risk assessment activities on the Transit Safety Committee agenda and prepares a Safety Risk Assessment Package for each major hazard identified. This package is distributed at least one week in advance of the Safety Committee meeting. During the meeting, the Chief Safety Officer reviews the hazard and its consequence(s) and reviews available information distributed in the Safety Risk Assessment Package on severity and likelihood.

If it's determined by the Transit Safety Committee that sufficient information has not been obtained, the Chief Safety Officer may request support from members of the Transit Safety Committee and Safety Managers in obtaining additional information to support the safety risk assessment. If it's determined that sufficient information has been obtained, the Chief Safety Officer will facilitate completion of relevant sections of the Safety Risk Register, using the GVT Safety Risk Assessment Matrix shown above in Figure 3, with the assistance of the Transit Safety Committee. The Chief Safety Officer will document the Safety Committee's safety risk assessment, including hazard rating and mitigation options for each assessed safety hazard in the Safety Risk Register. The Chief Safety Officer will maintain on file Safety Committee agendas, Safety Risk Assessment Packages, additional information collection, and completed Safety Risk Register sections for a period of three years from the date of successful mitigation.

#### **5.4. Safety Risk Mitigation**

By reducing the likelihood and/or severity of potential consequences or hazards GVT can reduce safety risk. GVT's Accountable Executive and Chief Safety Officer review current methods of safety risk mitigation and establish methods or procedures to mitigate or eliminate safety risk associated with specific hazards based on recommendations from the Safety Committee.

Prioritization of safety risk mitigations is based on the results of safety risk assessments. GVT's Chief Safety Officer tracks and updates safety risk mitigation information in the Safety Risk Register and makes the Register available to the Safety Committee during quarterly meetings and to GVT staff upon request. In the Safety Risk Register, GVT's Chief Safety Officer will also document any specific measures or activities, such as reviews, observations, or audits, that will be conducted to monitor the effectiveness of mitigations once implemented.

##### **5.4.1 Infectious Diseases**

In compliance with 49 U.S.C. Part 5329(d) (D) GVT monitors all state and national health recommendations and stays compliant with all public health policies to the fullest extent able, minimizing the risk of exposure to infectious diseases.

## **6. Safety Assurance**

### **6.1. Safety Performance Monitoring and Measurement**

Through a variety of activities, GVT's Safety Assurance Process monitors the system for compliance with procedures for operations and maintenance. Through our Safety Assurance process, GVT:

- Works with contractor and partners to ensure that operations and maintenance procedures are in place to control our safety risk;
- Assesses the effectiveness of safety risk mitigations to make sure the mitigations are appropriate and are implemented as intended;
- Investigates safety events to identify causal factors- investigation process shown in; and
- Analyzes information from safety reporting, including data about safety failures, defects, or conditions.

GVT and its contractor and partners may monitor compliance with this plan through a variety of activities including:

- Safety audits,
- Informal inspections,
- Review of camera footage to assess events
- Safety surveys,
- ESRP,
- Investigation of safety occurrences,
- Regular vehicle inspections and preventative maintenance.

Results from the above processes will be discussed at the quarterly Transit Safety Committee Meetings to determine if action needs to be taken. The Chief Safety Officer will enter any identified non-compliant or ineffective activities, including mitigations, back into the SRM process for reevaluation by the Safety Committee.

GVT monitors safety risk mitigations to determine if they have been implemented and are effective, appropriate, and working as intended. The Chief Safety Officer maintains a list of safety risk mitigations in the Safety Risk Register. The mechanism for monitoring safety risk mitigations varies depending on the mitigation.

The Chief Safety Officer establishes one or more mechanisms for monitoring safety risk mitigations as part of the mitigation implementation process and assigns monitoring activities to the appropriate Safety Manager. These monitoring mechanisms may include tracking a



specific metric on daily, weekly, or monthly logs or reports; conducting job performance observations; or other activities. The Chief Safety Officer will endeavor to make use of existing GVT processes and activities before assigning new information collection activities.

GVT's Chief Safety Officer and Transit Safety Committee review the performance of individual safety risk mitigations during quarterly Transit Safety Committee meetings, based on the reporting schedule determined for each mitigation, and determine if a specific safety risk mitigation is not implemented or performing as intended. If the mitigation is not implemented or performing as intended, the Transit Safety Committee will propose a course of action to modify the mitigation or take other action to manage the safety risk. The Chief Safety Officer will approve or modify this proposed course of action and oversee its execution.

GVT's Chief Safety Officer and Transit Safety Committee will also monitor GVT's operations on a large scale to identify mitigations that may be ineffective, inappropriate, or not implemented as intended by:

- Reviewing results from accident, incident, and occurrence investigations;
- Monitoring employee safety reporting;
- Reviewing results of internal safety audits and inspections; and
- Analyzing operational and safety data to identify emerging safety concerns.

The Chief Safety Officer works with the Transit Safety Committee to carry out and document all monitoring activities.

GVT maintains documented procedures to conduct safety investigations of major events (accidents, incidents, and occurrences, as defined by FTA) to find causal and contributing factors and review the existing mitigations in place at the time of the event. These procedures are found in Appendix E.

The Chief Safety Officer maintains all documentation of GVT's investigation forms, checklists, activities, and results. An investigation report is prepared and may be sent to the Transit Safety Committee for review.

The Chief Safety Officer will work with the appropriate Safety Manager to determine whether:

- The event was preventable or non-preventable;
- Personnel require discipline or retraining;
- The causal factor(s) indicate(s) that a safety hazard contributed to or was present during the event; and
- The event appears to involve underlying organizational causal factors beyond just individual employee behavior.

The Chief Safety Officer and Safety Managers routinely review safety data captured in

employee safety reports, safety meeting minutes/notes, customer complaints, the ESRP, and other safety communication channels. When necessary, the Chief Safety Officer and Safety Committee ensure that the concerns are investigated or analyzed through GVT's SRM process.

The Chief Safety Officer and Safety Committee also review internal and external reviews, including audits and assessments, with findings concerning GVT's safety performance, compliance with operations and maintenance procedures, or the effectiveness of safety risk mitigations.

## **7. Safety Promotion**

### **7.1. Competencies and Training**

Each respective department including Operations contractor, City of Grand Junction Fleet, Mesa County Fleet and Mesa County Facilities, shall be responsible for providing comprehensive safety training to their employees including:

- Bus vehicle operators,
- Dispatchers,
- Utility Staff
- Mechanics
- Managers and supervisors,
- Agency Leadership and Executive Management,

Trainings conducted by each entity shall be documented and provided to the Chief Safety Officer.

The scope of the safety training, including annual refresher training, is appropriate to each employee's individual safety-related job responsibilities and their role in the SMS as determined by each entity. Safety Trainings are on-going and part of the monthly safety meetings. Safety topics are dependent on safety issues identified.

The following safety policies are attached:

- Appendix A- Mesa County Fleet Services Safety Policies and Procedures
- Appendix B- Mesa County Division of Transportation Safety Policy and Procedures Manual
- Appendix C- City of Grand Junction Safety Manual
- Appendix D- Transdev Safety Training Table of Contents

GVT's Chief Safety Officer and Safety Managers must complete FTA's SMS Awareness online training and an executive session on safety management.

## **7.2. Safety Communication**

GVT's Chief Safety Officer and Safety Managers coordinate GVT's safety communication activities for the SMS. GVT's activities focus on the three categories of communication activity established in 49 CFR Part 673 (Part 673):

- *Communicating safety and safety performance information throughout the agency:* GVT communicates information on safety and safety performance in quarterly Transit Safety Committee meetings or other means, as needed, and Safety Managers will share information within their department through internal meetings, flyers, etc.
- *Communicating information on hazards and safety risks relevant to employees' roles and responsibilities throughout the agency:* Safety Managers will be responsible for communicating information on hazards and safety risks to employees within their department.
- *Informing employees of safety actions taken in response to reports submitted through the ESRP:* Safety Managers will inform employees of safety actions taken in response to reports submitted through the ESRP which may include handouts and flyers, safety talks, updates to bulletin boards, and one-on-one discussions between employees and supervisors.

## **8. Additional Information**

### **8.1. SMS Documentation Retention**

The Mesa County RTPO staff including the CSO will collect data from Mesa County, City of Grand Junction, and transit operator, Transdev. Required SMS documentation will be organized and retained in a secure RTPO drive for at least three years and available upon request to the FTA or other oversight agencies.

### **8.2. Supporting Documents**

See the following for supporting documentation from Mesa County and City of Grand Junction Fleet:

Appendix A- Mesa County Fleet Services Safety Policies and Procedures

Appendix B- Mesa County Division of Transportation Safety Policy and Procedures Manual

Appendix C- City of Grand Junction Safety Manual

Appendix D- Transdev Safety Training Table of Contents

Appendix E- GVT Safety Event Investigation Processes

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## 9. Definitions of Special Terms Used in the Safety Plan

GVT incorporates all of FTA's definitions that are in 49 CFR § 673.5 of the Public Transportation Agency Safety Plan regulation.

- **Accident-** An Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.
- **Accountable Executive-** A single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan, in accordance with 49 U.S.C. 5326.
- **Consequence** – An effect of a hazard involving injury, illness, death, or damage to GVT property or the environment.
- **Equivalent Authority-** An entity that carries out duties similar to that of a Board of Directors for a recipient or subrecipient of FTA funds under 49 U.S.C. Chapter 53, including sufficient authority to review and approve a recipient or subrecipient's Public Transportation Agency Safety Plan.
- **Event-** Any Accident, Incident, or Occurrence that occurs: on transit right-of-way or infrastructure, at a transit revenue facility, at a maintenance facility, during a transit related maintenance activity, or involving a transit revenue or non-revenue vehicle.
- **Fatality-** A death due to collision (including suicides), derailment, fire, hazardous material spill, acts of God, system or personal security event (including suicides), or other safety event. Must be reported within 30 days of an event
- **Hazard-** Any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.
- **Incident-** An event that involves any of the following: a personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.
- **Investigation-** The process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.
- **Major Hazards-** Hazards that are likely to result in a Major Safety Event or cannot be address in 14 calendar days using internal resources. Major Hazards are included in the Safety Risk Register and addressed by the Transit Safety Committee.
- **Major Safety Event-** A safety event that is reportable to the National Transit Database (NTD), which are defined as “an event occurring on transit right-of-way, in a transit revenue facility, in a transit maintenance facility, or involving a transit revenue vehicle

that meets the following NTD reporting thresholds for non-rail modes:

- A fatality (including suicide) confirmed within 30 days of the event
- An injury requiring immediate medical attention away from the scene for one or more persons
- Property damage equal to or exceeding \$25,000
- Collisions involving transit revenue vehicles that require towing away from the scene for a transit roadway vehicle or other non-transit roadway vehicle
- An evacuation of a transit facility or vehicle for life safety reasons

Reportable Events include either planned or unplanned events. A reportable event does not include occupational safety events occurring in administrative buildings. Agencies may not report illnesses that require transport away from the scene for medical attention if the illness is unrelated to a Safety Event.” Major Safety Events and the number of reportable injuries involved are included in the GVT Safety Performance Targets.

- **Major Mechanical Failure (NTD)**- A failure of some mechanical element of the revenue vehicle that prevents the vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip because actual movement is limited or because of safety concerns. Used in system reliability performance measure.
- **Minor Hazards**- Hazards that are unlikely to result in a Major Safety Event and can be address in 14 calendar days using internal resources. If reported, Minor Hazards and how they are addressed will be noted in the CSO Safety Summary but are not included in the Safety Risk Register
- **Minor Safety Event** - Less severe events that are not reportable to the NTD. If reported, Minor Safety Events are noted in the CSO Safety Summary but are not included in the GVT Safety Performance Targets.
- **National Public Transportation Safety Plan**- The plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.
- **Occurrence**- An event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.
- **Operator**- A provider of public transportation as defined under 49 U.S.C. 5302.
- **Performance measure**- An expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.
- **Performance target**- A quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the FTA.
- **Public Transportation Agency Safety Plan (or Agency Safety Plan)**- The documented comprehensive Agency Safety Plan for a transit agency that is required by 49 U.S.C. 5329 and Part 673.
- **Risk**- The composite of predicted severity and likelihood of the potential effect of a hazard.
- **Risk Assessment**- The methods or processes to assess the safety risks associated with identified safety hazards.

- **Risk mitigation-** The methods or processes to identify mitigations or strategies necessary as a result of safety risk assessment.
- **Safety Assurance-** Processes within a transit agency's Safety Management System that function to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information.
- **Safety Event (NTD)-** Other Safety Events include but are not limited to slips, trips, falls, smoke, power failure, maintenance-related issues, electric shock, or runaway train events. To be reported as a major event, these events must either meet the fatality, evacuation, or property damage threshold or result in two or more injured persons. Other Safety Events that cause only one person to be immediately transported from the scene for medical attention, and that do not trigger any other reporting threshold, are reported on the Non-Major Monthly Summary Report form. The FTA includes Other Safety Events that occur in a transit maintenance facility and meet a reporting threshold but continues to exclude occupational safety events occurring in administrative buildings.
- **Safety Management Policy-** A transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.
- **Safety Management System-** The formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.
- **Safety performance target-** A performance target related to safety management activities.
- **Safety Promotion-** A combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.
- **Safety risk assessment-** The formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.
- **Safety Risk Management-** A process within a transit agency's Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- **Serious injury-** Any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date when the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses); (3) Causes severe hemorrhages, nerve, muscle, or tendon damage; (4) Involves any internal organ; or (5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
- **System Reliability-** Vehicle Revenue Miles/Major Mechanical Failure
- **Transit agency-** An operator of a public transportation system.
- **Transit Asset Management (TAM) Plan-** The strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation, as required by 49 U.S.C. 5326 and 49 CFR Part 625.

## 10. List of Acronyms Used in the Safety Plan

<b>Acronym</b>	<b>Word or Phrase</b>
ADA	American's with Disabilities Act of 1990
ASP	Agency Safety Plan (also referred to as a PTASP in Part 673)
CDOT	Colorado Department of Transportation
CFR	Code of Federal Regulations
CT	County Transit
ESRP	Employee Safety Reporting Program
FTA	Federal Transit Administration
GVRTC	Grand Valley Regional Transportation Committee
MPO	Metropolitan Planning Organization
NTD	National Transit Database
Part 673	49 CFR Part 673 (Public Transportation Agency Safety Plan)
RTPO	Regional Transportation Planning Office
SMS	Safety Management System
SRM	Safety Risk Management
U.S.C.	United States Code
VRM	Vehicle Revenue Miles

# Appendix A-Mesa County Fleet Services Safety Policies and Procedures

## Fleet Services Safety Policies and Procedures

These Policies and Procedures are guidelines specific to the various job related activities that Fleet Services personnel may encounter on a day-to-day basis. The stated Policies and Procedures, although not all inclusive, address specific issues that will promote the safety of the employees and minimize liability, lost time and monetary losses to Mesa County.

No job is so urgent that we cannot take time to perform our work safely. Compliance with established safety policies and standards is a primary job requirement and is considered a condition of continued employment. Violation of established safety policies/Procedures and standards may be a cause or disciplinary action.

Each employee will be given a copy of the Policies and Procedures and required to read and study the content and then sign off acknowledging their awareness and individual responsibility to safety.

**I. General Safety:** Each employee, regardless of position, will be responsible for his or her immediate work area. Work environments are to be kept clean and uncluttered. Upon completion of an assignment, the immediate work area is to be left clean and organized. Leftover materials or discarded parts will be placed in proper places. All air hoses, drop lights, electrical cords, tools, high lift adapters, shop rags, aerosol products and miscellaneous items are to be picked up and placed in designated areas at the end of each shift.

The following tasks are the responsibility of shop personnel individuals in general and should be addressed appropriately to maintain and promote a safe/healthy work environment. Dispose of trash, clean areas daily, maintain used oil, filter disposal area, lunch/break areas, library/shop manuals, tool room, and wash areas. Personnel assigned to these tasks shall complete them by the end of their shifts each day.

**II. Ventilation and Exhaust Systems:** The repair shop is equipped with a vehicle exhaust system with hoses and adapters, which will fit various tail pipe or exhaust stacks of vehicles and equipment. The exhaust system is to be used any time an engine is running in the shop for any reason other than vehicle shop entry and/or exit.

**IV. Welding Area:** When welding or cutting metal materials in the welding shop, ventilation is essential. There is an exhaust system located on the wall, which must be used to discharge welding fumes as much as possible.



**V. Welding and Machine Work/Grinders:** When performing any type of welding or metal cutting procedure, carefully inspect surrounding areas to make sure there are no flammable materials in close proximity that may have the potential of exploding or igniting. Ensure that there is a fire extinguisher close by and fully charged.

Proper welding helmets, goggles and/or face shields must be worn at all times when welding, cutting or grinding metal materials. Extreme caution must be taken when performing welding and grinding activities around others who may be in the shop area. Use fireproof screen if necessary to protect others from welding flashes and grinding sparks. Always wear safety glasses or face shields and proper hearing protection when chipping welding slag.

Always wear protective heat insulated welding gloves when performing arc, wire feed, mig/tig or gas welding procedures. Always check your personal clothing and make sure cuffs and collars are fully buttoned and that pant or coverall pant legs are not frayed at the bottoms so they will not catch fire from sparks.

Oxygen, acetylene, argon or other compressed gases must be capped and securely stored when not in use or while in transport if not in an enclosed cabinet with secure bottle racks.

**VI. Bench Grinders and Side Grinders:** When operating any type of grinder, safety glasses and/or a full-face shield must be worn at all times. Before use, make sure that tool rests are properly adjusted and that grinding wheels are in good condition. Check clothing to make sure shirt or coverall cuffs are buttoned and secured and that shirt tails are tucked in preventing clothing from being caught in high speed grinders. Finger rings should also be removed as well as neck jewelry.

**VII. Shop Drill Press:** When operating the drill press, safety glasses must worn at all times. Shirtsleeves must be buttoned at the cuffs, shirttails must be tucked in, shirt fronts or coveralls must be fully zipped or buttoned to prevent loose clothing from becoming tangled in high speed rotating arbors, chucks, tools and bits. Finger rings should be removed as well as neck jewelry.

**VIII. Flammable Materials and Chemicals:** The shop and part's room have fireproof cabinets to store flammable materials. When not in use and at the end of each work shift, individual employees are to inspect their work areas and make sure flammable materials are secured in the fireproof cabinets.

**IX. Tire Repair:** When repairing tires the following practices must be followed. Tires must be fully deflated before dismounting. Carefully check rims, rings and lock rings for corrosion and damage before assembly. If rust corrosion or other damage is found on rims, rings and/or lock rings they must be wire brushed until clean or discarded if corrosion or damage is too severe for continued use. Tire

beads should be lubricated with mounting lubrication before installing tires on rims. Tires should be only partially inflated until tire beads are seated against sealing area on rims. When the tire bead has seated, inflate tire to proper inflation pressures.

**X. Vehicle/Equipment Wash Area:** Before washing a vehicle in the wash bay area make sure that wash bay floor is unobstructed and that floor grating is in place. Clean up any grease spots, which could cause loss of footing. Be cautious while washing the vehicle, as soap and water can make the floor surface slippery. Clean up the area upon completion of wash/steam cleaning assignment. Use rubber gloves when using steam cleaner/high and pressure washer to prevent potential burns from hot water and steam. Place cloths and rags used to clean windows and interior trim in trash can or rag bin. Place all cleaning materials back in storage cabinet upon completion of job.

**XI. Driving Vehicles/Heavy Trucks:** When operating a Mesa County vehicle the driver/operator must check the vehicle to make sure that engine and power train fluids are at proper levels, tires are inflated and that all lighting works. When operating a vehicle with a "Gross Vehicle Weight of 26,001 pounds or more," a pre/post trip inspection form must be completed, signed, and dated acknowledging that the unit is safe to operate as mandated by the "Federal Department of Transportation".

Driver/operators and passengers in Mesa County vehicles must wear seat belts at all times. Mesa County has a no smoking policy in vehicles that must be adhered to. Drivers/operators are to obey all traffic laws and drive defensively and courteously at all times. Vehicle use policies are also addressed in "Chapter 12 of Mesa County's Personnel Manual."

CDL "Commercial Drivers License's" holders must carry a valid health card with them while driving a vehicle with a gross vehicle weight exceeding 26,001 pounds. All CDL holders will be subject to drug and alcohol testing. The drug and alcohol policy is further defined in "Chapter 14 of Mesa County's Personnel Manual".

**XII. Shop Vehicle High-Lifts:** The shop vehicle high-lifts are rated at 10,000-50,000 pounds lifting capacity. Carefully check the lift you are using to make sure the vehicle weight does not exceed the maximum lifting capacity. Check to make sure latch mechanisms are securely locked in place when the vehicle is at the preferred lifted height. Always check placement of lift adapters to frame lift points to make sure they are even and centered.

When the hoist is not in use, swing out arms are to be retracted and parked parallel to the hoist frame. All lift adapters are to be placed on hoist pedestal platforms when not in use. Check system hydraulic pump/motor and lines for

damage or leakage and report any leakage or damage. Lifts will be inspected annually by a licensed lift inspector and safety certified.

**XIII. Lifting, Moving and Securing Parts and Materials for Transport:**

When lifting heavy items use the shop crane/hoist, fork lift, or service truck auto cranes when possible. Ask for assistance if needed when lifting or moving heavy objects manually. The shop has a two-wheeled manual dolly for use in transporting components from one area to another.

**XIV. Material Safety Data File (MSDS):** The shop has a "Material Safety Data File" located in the shop office upper level where the vehicle reference library area is located. The Material Data Sheets list products and chemicals utilized in the shop environment. Each sheet contains information specific to the chemical make-up of products, safety precautions and protective gear required for safe usage and handling of materials. The information sheets also provide product names, manufacturer contacts and emergency medical information. The Material Safety Data File is accessible to all personnel twenty-four hours a day and seven days a week.

**XV. First Aid Kit and Eye Wash Stations:** There are two master first aid kits located in each shop wash area equipped with first aid supplies. Part's room personnel and the Fleet Safety Representative will ensure the first aid kits are stocked and replenished. Two eyewash stations is also located in the shop wash area.

**XVI. Fire Extinguishers:** Several fire extinguishers are located in strategic areas within the shop facility and identified with signs, which are visible from a distance. When a fire extinguisher is discharged, immediately inform shop supervision or parts personnel so that the extinguisher can be re-charged and inspected. Fire extinguishers will be checked for proper charge and certified annually. Shop service trucks are also equipped with fire extinguishers and must also be checked and refilled in the event of a discharge.

**XVII. Shop Electrical/Breaker Box Panels:** The main electrical shop service and breaker panels must remain un-obstructed and easily accessible at all times. These defined areas must remain open and accessible at all times in the event that power would need to be disconnected quickly.

Gasoline filters are to be discarded in separate disposal drums identified as gasoline filter recycling containers. Gasoline cannot be mixed with waste oils. Used brake fluid and paint wastes must also be disposed of in separate containers which are labeled for specific waste types.

Soiled cloth shop rags are to be placed in container labeled shop rag disposal for cleaning. Do not place paper rags in with cloth rags. Rags which are heavily saturated with fuel, solvents, reducers or thinners should not be placed in a waste

can with other materials as this could cause a spontaneous combustion. All waste cans are to be covered when not in use.

**XVIII. Maintenance and Repair Activities:** When performing maintenance and repair to vehicles and equipment always follow guidelines found in OEM "Original Equipment Manufacturer's" operator's and maintenance manuals. Always use safety props and latches when working under truck dump bodies. Never work beneath a raised dump body without making sure that it is secured and locked in the raised position. Always lock or block articulated joints in place before working on or around an articulation point. Always block and support raised implements such as loader booms, backhoe booms, forklift masts, dozer blades, motor grader blades and rippers etc. before performing maintenance and/or repairs. Always remove keys, de-energize units and utilize lock-out/tag-out method to disable the vehicle from being started until you have completed repairs and/or maintenance.

When using jack stands always make sure that stands are weight rated to the vehicle or piece of equipment being supported. Carefully check stands to make sure locking latches are not damaged and are working properly. Check the structure of the jack stand to make sure it is not bent or damaged. Never use a damaged jack stand.

Always set the park brake or chock wheels when performing service work that may cause the vehicle to roll unexpectedly. Disconnect vehicle power supply when working on electrical components that could cause a shock, burn or component damage if shorted to ground.

When performing brake work wear a dust mask and do not blow brake dust residue with compressed air from brake and drum/rotor surfaces. If cleaning of brake residue is required, use the shop brake wet wash collector to prevent brake particles from being discharged and circulated in the atmosphere.

Always be aware of engine and power-train components that may be rotating when operating the component is required for diagnostic purposes. Always be extremely careful of moving parts in relationship to fingers, hands, legs, feet, etc. to prevent entanglement and possible serious injuries or possible fatalities.

When working in the field carefully survey surrounding conditions and make adjustments such as moving equipment to level ground or other actions when possible. Ask for assistance if heavy or awkward lifting or positioning is required to perform the recommended repair. Each service truck is equipped with an electric auto crane to lift and place heavy items. Check condition of hoist cable, pulleys, hooks, boom and other components of the auto crane before operating. Never walk directly under any hoisted item, always work a safe distance away and operate crane controls with cable remote.

**XIX. Fork Lift and Hoist Equipment:** Before operating a forklift or any other type of lifting equipment check to make sure that the object being lifted does not exceed the weight lifting capacity of the piece of equipment being utilized. Always make sure that the forklift or hoisting equipment is in proper working condition. Check all operating and safety devices of lifting equipment before use. Report any safety or operational problems to supervisory personnel and tag the unit out-of-service until the defects have been corrected.

Always check the condition of straps or chains before attaching or lifting an object. If chains, lifting straps, or brackets are frayed or damaged they should be repaired or discarded. Always make sure that chains, straps, or other lifting devices are capable of lifting and supporting the object being lifted.

**XX. Power Tools:** Always check condition of power tools before use. Make sure power cords are not cut, frayed, or damaged before tools are put into service. Carefully check power tool cases, handles, grips, triggers and trigger locks to make sure they are not damaged and that they function properly. When using pneumatic power tools check condition of air supply hoses and connectors. Air hoses are not be used if there is evidence of cuts, tears or separations. Refer to operators information found in operator's/owner manuals or notify supervisory personnel if you are unsure about the safe operation of a specific power tool.

**XXI. Provided Safety Equipment:** Mesa County will provide employees with required safety equipment to perform their jobs safely. The part's department stocks safety glasses, hearing protection, reflective vests, face shields, several types of gloves, respirators, dust masks, welding hood lenses etc. It is the responsibility of the employee to use and care for these items. When a piece of safety equipment is worn out or damaged, part's department personnel will issue replacement equipment.

**XXII. Hearing Protection:** Ear protection in the form of ear muffs or approved ear plugs must be worn on all high noise level jobs, or as directed by a supervisor.

**XXIII. Field Work:** When employees are required to work away from the shop, they shall be aware of conditions that are more critical in the field. Always be aware of traffic while working along roadways. Always pull service trucks as far off roadway as possible and activate vehicle emergency flashers and strobe lights to warn traffic. Place emergency triangles along roadway if needed to further warn oncoming traffic of activity. Wear reflective, highly visible vests when working along roadways and/or shoulders.

Field-work can pose more safety issues since individuals will routinely be working alone in an environment that is less controlled and monitored. Always maintain situational awareness and survey the surrounding conditions of terrain, weather, traffic, power lines, etc. before beginning work. Be sure to communicate any safety hazards to your supervisor and refuse risk if in a hazardous situation.

**XXIV. Lock Out/Tag Out:** When work is being performed on mobile or stationary equipment, proper lock-out/tag out procedures must be taken to prevent accidental starting and moving of equipment.

The following minimum procedures must be followed.

1. The power source must be de-energized, tagged, and properly locked. In the event that a lockout cannot be utilized, because of design or circumstances, an equally comprehensive tag-out procedure must be performed.
2. All Potentially hazardous stored or residual energy must be relieved, disconnected, restrained or otherwise rendered safe to work with or around.
3. An authorized person shall verify isolation and de-energization of a system has taken place before maintenance and/or repair work is begun.
4. Equipment is not to be re-energized and put back into service until all lock-out devices and tags have been removed and rendered safe for operation.

Conclusion: It is the responsibility of the employee to maintain, wear and utilize the proper safety equipment for the environment they are working in. If an employee feels that he/she does not have proper protective equipment (PPE) for the environment they are working in, or for a specific chemical or product they may have contact with, they need to notify supervisory personnel to communicate the hazard.

By signing this document, I acknowledge that I understand my responsibility to safety, not only to myself, but also to those around me. I will follow the policies and guidelines as established in these policies and procedures. I will take a proactive approach to safety in my day-to-day job activities.

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

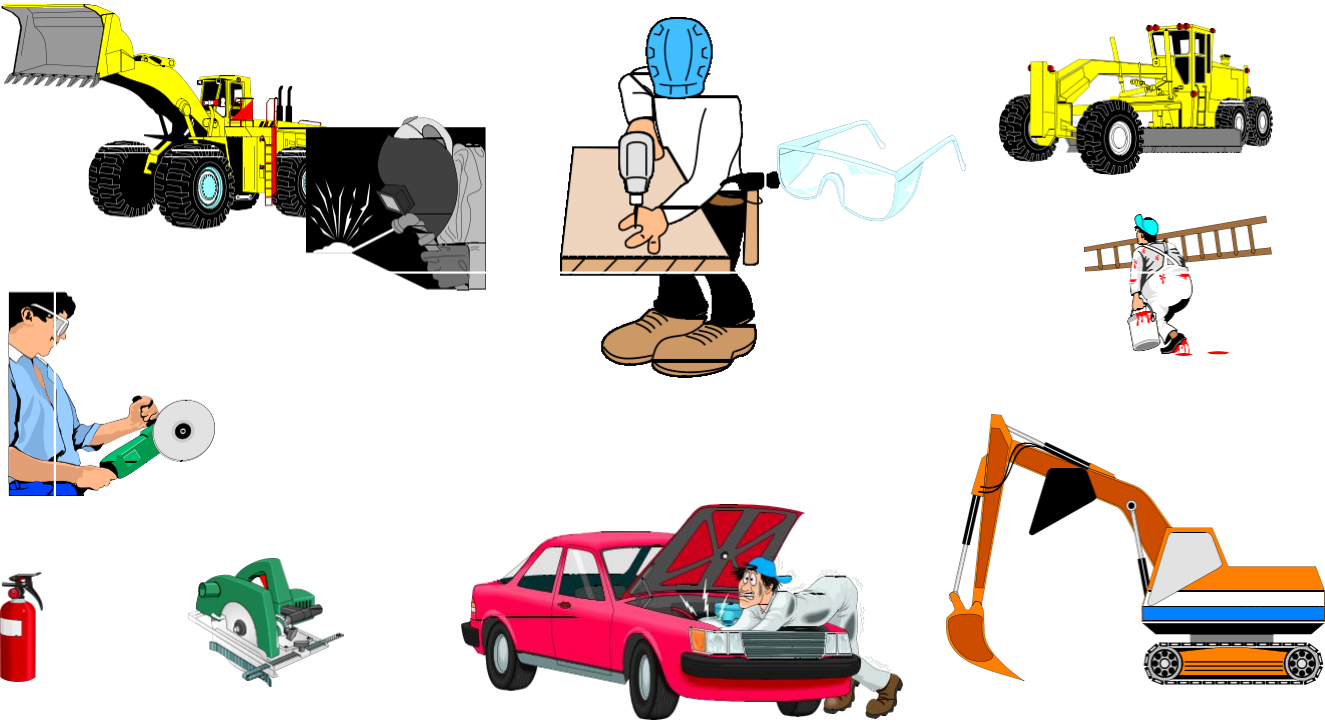
**The only other PPE item issued by Fleet is a \$130.00 boot allowance used towards the purchase of steel toe boots only.**

**Appendix B- Mesa County Division of Transportation- Safety Policy and Procedures Manual**



# **Division of Transportation Safety Policy and Procedures Manual**

Adopted by the Division of Transportation Safety Committee in cooperation with the Fleet Maintenance Section, November 2, 1999  
Revised November 2004





## **Table of Contents**

<b>Policy Statement</b> .....	5
General Rules of Safety .....	5
Purpose.....	5
Scope .....	5
Responsibility .....	5
<b>I. Personal Protective Equipment</b> .....	6
A Appropriate Dress .....	6
1 Clothing to be worn .....	6
2 Loose, baggy clothing not to be worn.....	6
Wearing jewelry .....	6
4 Gloves .....	6
B Eye Protection .....	6
1 Person responsible for obtaining and using the appropriate protection.....	6
2 Provision of safety glasses.....	7
C Hearing Protection .....	7
1 Type of protection to be worn .....	7
2 Provision of protective devices .....	7
D Respirator Protection .....	7
1 When to use respirators .....	7
2 Fitting respirators .....	7
3 Respirator training.....	7
4 Provision of respirators.....	7
E Shoes and Boots.....	7
1 Type of footwear to be worn.....	7
F Hard Hats	
1 When hard hats are to be worn.....	7
2 Hard hats must be worn in gravel pits.....	7
3 Hard hats must be worn by visitors and contractors .....	7
G Seat Belts.....	7
1 Mobile equipment must be equipped and operators must wear .....	7
2 Operators and outboard front seat passengers must wear.....	7
3 Seat belts must be maintained .....	7
H Confined Space Entry .....	8
I Lock Out / Tag Out .....	8
1 When work is performed .....	8
2 Power source must be de-energized .....	8
3 Equally comprehensive tag-out procedure shall be performed .....	8
4 Relief of residual energy .....	8
5 Authorized person shall verify isolation and de-energization.....	8
6 Equipment is not to be re-energized until all locks and tags are removed .....	8
<b>II. Use of Equipment and Tools</b> .....	8

A	Tool Safety .....	8
1.	Check condition of power tools before use.....	8
B	Bench Grinders and Side Grinders .....	9
1.	When operating grinders, safety glasses or a full face shield must be worn.....	9
C	Mechanical Guarding .....	9
2.	Adequate guards must be provided .....	9
D	Welding.....	9
1.	Procedures to follow before welding .....	9
2.	Wear protective heat insulated welding gloves.....	9
3.	Oxygen, acetylene, argon or other compressed gases must be capped .....	9
4.	Welding area must be ventilated.....	9
E	Lifting/Back Safety .....	9
1	Learn to lift properly .....	9
F	Safety Belt/Life Line.....	10
1	Safety belts shall be worn .....	10
G	Ladder Usage .....	10
H	Mobile Equipment .....	10
1	A pre-trip and post-trip inspection must be conducted.....	10
2	Repairs or adjustments.....	10
3	Non County employees, are prohibited from operating or riding in vehicles .....	10
4	Authorized and trained individuals only permitted to operate equipment .....	10
I	Housekeeping/Fire Protection.....	10
1	Maintain a clean and safe work place .....	10
2	Spills must be promptly cleaned up .....	10
3	Combustible, flammable and hazardous materials must be properly stored.....	10
4	Adequate fire protection devices must be maintained .....	10
<b>III.</b>	<b>Driving Vehicles Heavy / Trucks .....</b>	<b>10</b>
1	Driver/operator must check the vehicle.....	10
2	Driver/operators and passengers must wear seat belts at all times.....	10
3	Holder of CDL Driver's License must carry a valid health card .....	11
4	All loads must be properly secured during transit .....	11
<b>IV</b>	<b>Maintenance and Minor Repair Activities.....</b>	<b>11</b>
1	Follow Original Equipment Manufacturer's guidelines .....	11
2	Use of jacks and/or jack stands .....	11
3	Set the park brake or chock wheels .....	11
4	Be careful of moving parts in relationship to fingers, arms, legs, feet, etc .....	11
<b>V</b>	<b>Fork Lift and Hoist Equipment.....</b>	<b>12</b>
1	forklift lifting capabilities .....	12
2	Check condition of straps or chains before attaching or lifting an object.....	12
<b>Employee Training.....</b>		<b>12</b>
A	Supervisor/Foreman Responsibilities.....	12
1	Supervisory personnel have the ultimate responsibility.....	12
2	Supervisors responsibilities .....	12
3	Report all accidents and injuries.....	12

B. Employees Responsibilities .....	13
1 Make "Safety" part of normal duties.....	13
2 List of responsibilities .....	13
<b>Reporting Accidents.....</b>	<b>14</b>
Automobile Liability.....	14
Automobile Physical Damage.....	15
Property Damage.....	16
Worker's Compensation .....	17
Employer/Supervisor Responsibility.....	18
<b>Safety Inspections.....</b>	<b>19</b>
<b>Safety Committee .....</b>	<b>19</b>
Purpose.....	19
Policy .....	19
1 Number of representatives .....	19
2 Meeting dates .....	19
3 Review accidents .....	19
4 Employees rights to present testimony .....	19
5 Employees may request a review of the accident and decision.....	20
<b>Safety Equipment Checklist and Policy Acknowledgment .....</b>	<b>21</b>

## MESA COUNTY SAFETY POLICY

### **Policy Statement:**

Mesa County recognizes the importance of safety and health on the job for the well being of the individual worker, the protection of the equipment and property, and overall productivity on the job.

We are committed to providing a safe work place for employees, and in turn, require that established standards and policies be adhered to.

We also recognize the jurisdiction of the various Federal and State agencies that have authority in the realm of workers health and safety and fully intend to comply with the mandated standards of these agencies.

The Mesa County Division of Transportation (MCDOT), Fleet Management, and its employees will give *safety Top Priority* at all times. No job is so important and no service is so urgent that we cannot take time to perform our work safely. Mesa County considers no phase of our work or operation as being of greater importance than *Accident Prevention*.

This policy is extended to and includes all contractors, subcontractors, vendors and visitors of the County while present on a County Project.

Compliance with established safety policies and standards is a primary job requirement and is considered to be a condition of continued employment.

Violation of safety policies and standards may be cause for disciplinary action.

### **!! Everyone is accountable for safety!!**

A conscientious effort will be made to provide a safe work place for all employees. It is a job requirement to observe safety policies and to perform designated tasks according to prescribed methods giving diligence to Safety Standards.

Primary consideration must be given to safe work practices in order to prevent injury to the general public, fellow workers, County property as well as to oneself.

It is the responsibility of the employee to maintain, wear and utilize the proper safety equipment for the environment they are working in. If an employee feels that he/she does not have adequate protective equipment for the environment they are working in, or for a specific chemical or product they may have contact with, they need to notify their supervisor, and together resolve the problem.

## **GENERAL RULES OF SAFETY**

### **Purpose:**

These policies have been implemented for your protection. Please use issued equipment and protect yourself and your fellow employee from injury.

### **Scope:**

All Division of Transportation employees shall comply with the requirements set forth in this policy. Administrative staff is exempt from wearing high visibility shirts or vests, but shall wear safety equipment when exposed to any of the conditions outlined in this policy.

### **Responsibility:**

Employees not dressed according to these policies will be sent to change clothing on their own time. Failure to adhere to the policies outlined will result in disciplinary action up to and including termination. Failure to properly wear or use personal protective equipment may reduce compensation, including injury leave. It shall be the responsibility of each employee to dress in clothing that is in good repair and free of tears that expose any part of the body. Other related County policies or requirements still apply.

All employees must follow safe practices by demonstrating the practice of safety and give all possible assistance to maintaining safe operations. Unsafe conditions or practices must be reported promptly to your supervisor.

### **I. Personal Protective Equipment.**

#### **A. Appropriate Dress:**

1. Each Division employee is expected to come to work prepared for the day's work activities and dressed for the occasion. Wear clothing suitable for weather and work conditions. As a minimum: long pants, a short sleeved shirt and sturdy shoes or boots are required. Shorts, tank-tops and sandals are not considered to be appropriate apparel. In addition, each employee is expected to wear proper safety gear such as high-visibility clothing while working in road right-of-way, high-visibility head-wear with the Division of Transportation's identifying emblem.
2. Loose, baggy clothing must not be worn while working on or around moving machinery.
3. The wearing of jewelry such as rings, earrings, and long necklaces is discouraged.
4. Use gloves when handling rough-edged or abrasive materials, or when the work subjects hands to laceration, puncturing or burns, gloves with leather palms or a reasonable substitute must be used. Use rubber or neoprene gloves when handling caustic materials such as cleaning agents, solvents, wet cement, or when working in water.

#### **B. Eye/Face Protection:**

1. When performing work that may subject eyes or face to injury from physical or chemical

agents, appropriate and adequate protection is required. The individual performing work that poses a hazard to eyes or face is responsible for obtaining and using the appropriate protection.

2. MCDOT will provide employees with safety glasses, safety goggles or full face shield upon request from their supervisor.

C. Hearing Protection:

1. Ear protection in the form of ear muffs or approved ear plugs must be worn on all high noise level jobs, or as directed by supervisor. In the event of exposure to noise levels that are suspect, hearing protection shall be used until an investigation of exposure confirms or disproves need for wearing protection.
2. MCDOT will provide employees with approved ear plugs or ear muffs upon request from their supervisor.

D. Respirator Protection:

1. Appropriate, approved respiratory protection must be used when exposure to dust, fumes, gases or other harmful atmospheres could potentially pose a health hazard.
2. Effective respiratory protection depends on a tight fit between the apparatus and face. In order to attain an adequate fit, employees that are subject to wearing respirators may be required to be clean shaven to a point to facilitate a proper fit. Fit testing will be performed by the individual and/or a supervisor to verify adequacy of respirator.
3. Employees required to use respiratory protection must be trained in the use and care of respirators.
4. Appropriate respiratory protection devices will be provided by MCDOT.

E. Shoes/Boots:

1. Adequate footwear will be required at all times for any job that presents a potential hazard to the workers feet. Safety shoes or steel toed shoes/boots may be required. As a minimum, sturdy leather shoes or boots must be worn for all work performed outside. Other suitable footwear may be worn as approved by the supervisor excluding sandals.

F. Hard Hats:

1. An ANSI approved hard hat is required to be worn on the job whenever there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shocks and burns.
2. A hard hat must be worn when entering any gravel pit, Mesa County owned or privately owned.
3. This policy is extended to and includes all contractors, subcontractors, vendors and visitors of the County while present on a County Project referenced in these policies.

G. Seat Belts:

Mesa County is concerned with the well being and safety of its employees during the operation of mobile equipment, whether on-road or off-road, as well as complying with various

regulatory agency requirements.

1. Mobile equipment, including on-road and off-road vehicles, must be supplied with adequate operable seat belts. The only exceptions to this requirement are those types of construction equipment not provided with an approved ROPS (roll over protection structure).
2. Employees operating a vehicle that is required to be supplied with a seat belt shall not operate that vehicle until properly restrained with the seat belt. All outboard front seat passengers must be properly restrained while the vehicle is being operated.
3. A conscientious effort must be made to maintain the seat belt assembly in an acceptable condition. The vehicle operator must report broken or less than acceptable assemblies to the supervisor. All passengers must be properly restrained while the vehicle is being operated.

#### H. Confined Space Entry:

A confined space is any work area that has a restricted entrance and exit, it is not designed for extended occupancy, has little or no ventilation, or may contain a hazardous atmosphere. Employees are not to enter a confined space until the environment within the confined space is determined to be safe by a competent person. When a confined space is identified to exist, appropriate measures must be taken to provide for workers' safety before the worker is permitted to enter.

#### I. Lock Out/Tag Out:

1. When work is being performed on mobile or stationary equipment, proper lock-out and tag-out procedures must be taken to prevent accidental starting of the equipment.
2. The power source must be de-energized and locked out with a personal lock for each individual performing work on the unit.
3. In the event that a lockout can't be utilized, because of design or circumstance, an equally comprehensive Tag-out procedure shall be performed.
4. All Potentially hazardous stored or residual energy must be relieved, disconnected, restrained or otherwise rendered safe.
5. An authorized person shall verify isolation and de-energization before servicing or maintenance work is started.
6. Equipment is not to be re-energized until all locks and tags are removed and all participants are accounted for.

## **II. Use of Equipment and Tools.**

#### A. Tool Safety:

1. Always check condition of power tools before use. Broken or damaged tools must be replaced. Use the correct tool for the job. Assure that the tool is firmly engaged to prevent slips. Be aware of, and avoid pinch points. Safety devices on any power tools are not to be altered or tampered with. Don't drop or throw portable tools. Never carry tools by the cord, or yank the cord from the receptacle. Make sure that power cords are not cut, frayed, or otherwise damaged before tools are put into service. Carefully check power tool cases, handles, grips, triggers and trigger locks to make sure they are not damaged and that they function properly. When using pneumatic power tools check condition of air supply hoses and connectors. Air hoses are not to be used if there is evidence of cuts, bruises or separations. Refer to operators information found in operator's/owner manuals or notify supervisory personnel if you are unsure about the safe operation of a power tool.

#### B. Bench Grinders and Side Grinders:

1. When operating any type of grinder, safety glasses or a full face shield must be worn at all times. Before use, make sure that tool rests are properly adjusted and that grinding wheels are in good condition. Check clothing to make sure shirt or coverall cuffs are buttoned and secured and that shirt tails are tucked in preventing clothing from being caught in high speed grinders. Finger rings should also be removed.

#### C. Mechanical Guarding:

1. Adequate guards must be provided and maintained for all equipment. Altering or removal of safety guards while using tools or machines is a violation of these safety policies.

#### D. Welding:

1. When performing any type of welding or metal cutting procedure, carefully police surrounding areas to make sure there are no flammable materials in close proximity that may have the potential of exploding or igniting. Make sure that there is a fire extinguisher close by and fully charged. Proper welding helmets, goggles and/or face shields must be worn at all times when welding, cutting or grinding. Extreme caution is to be taken when performing welding and grinding activities around others who may be near. Use a fireproof screen if necessary to protect others from welding flashes and grinding sparks. Always wear safety glasses or face shields when chipping welding slag.
2. Always wear protective heat insulated welding gloves when performing arc, wire feed, mig/tig or gas welding procedures. Always check your personal clothing and make sure cuffs and collars are fully buttoned and that pant or coverall pant legs are not frayed at the bottoms so they will not catch fire from sparks.
3. Oxygen, acetylene, argon or other compressed gases must be capped and secured in an upright position while being stored or transported. Acetylene at 15 pounds of pressure is highly explosive. Check cutting torch regulator gage. The gage should read between 5 and 10 pounds of pressure depending on the tip size being used.
5. The welding area must be ventilated in such a way as to draw fumes away from the person



doing the welding and anyone in the immediate area.

E. Lifting Safety/Back Safety:

- 1) Learn to lift properly. Bend knees, keep back erect and let your legs do the lifting. Hold the load close to you. Get help for heavy loads. Use proper lifting equipment.

F. Safety Belt/Life Line:

1. Safety belts shall be worn and tied off when working on any unguarded platform or structure where there is a chance of falling six feet or more.

G. Ladder Usage:

Always assure that the ladder is in good condition and sized properly for the job. Keep both hands free when climbing a ladder and make sure the base of the ladder is firmly planted. Use safety belts and tie offs if necessary.

H. Mobile Equipment:

1. A pre-trip and post-trip inspection must be conducted for all on-highway equipment. Written inspections must be done according to federal and Colorado DOT.
2. If repairs or adjustments are required only authorized adequately trained individuals are permitted to make repairs or adjustments.
3. People who are not County employees, volunteers performing County business, or clients of the County are prohibited from operating or riding in County owned vehicles, including friends or family members, and hitchhikers.
4. Only authorized adequately trained individuals will be permitted to operate mobile equipment. Equipment will be used only in the manner for which it was intended.

I. Housekeeping/Fire Prevention:

1. Caution must be taken in order to maintain a clean and safe work place. Items must be properly stored. Refuse must be disposed, of in a timely, proper fashion. Work areas are not to become cluttered, and must be kept clean as possible.
2. Spills must be promptly cleaned up.
3. Combustible, flammable and hazardous materials must be properly stored. Gasoline is not to be used as a cleaning agent. Only use properly approved cleaning substances in the method for which they were intended.
4. Adequate fire protection devices must be maintained at all work stations and in all vehicles.

### **III. Driving Vehicles / Heavy Trucks:**

1. When operating a Mesa County vehicle the driver/operator must check the vehicle to make sure that engine and power train fluids are at proper levels, tires are properly inflated and that all lighting works. When operating a vehicle with a “Gross Vehicle Weight of 26,001 pounds” a pre/post trip inspection form must be completed, signed, and dated acknowledging that the unit is safe to operate as mandated by the “Federal Department of Transportation”.
2. Driver/operators and passengers in Mesa County vehicles must wear seat belts at all times. Mesa County has a no smoking policy in vehicles that must be adhered to. Drivers/operators are to obey all traffic laws and drive defensively and courteously at all times. Vehicle use policies are also addressed in “Chapter 12 of Mesa County’s Personnel Manual.”
3. Holders of “Federal Commercial Drivers License’s” must carry a valid health card with them while driving a vehicle with a gross vehicle weight of 26,001 pounds. All commercial drivers’ license holders will be subject to drug and alcohol testing. The drug and alcohol policy is further defined in “Chapter 14 of Mesa County’s Personnel Manual”.
4. All loads must be properly secured during transit. ANSI and/or DOT approved tie-down straps, cables or chains must be used. Always check the condition of straps or chains before use. Tension adjusters such as chain boomers should be used to firmly hold the load in place. Vehicles must tarp their loads if they are subject to blowing, sifting, dropping, leaking or otherwise escaping from the vehicle. A vehicle is allowed to drive up to two miles without tarping when transporting materials one inch in diameter or less. Hot asphalt, including asphalt patching material, wet concrete, and other materials not susceptible to blowing, are not considered aggregate material and are therefore not subject to the tarping requirements.

### **IV. Maintenance and Minor Repair Activities:**

1. When performing maintenance and/or minor repair to vehicles and equipment always follow guidelines found in “Original Equipment Manufacturer’s” operator’s and maintenance manuals. Always use safety props and latches when working under truck dump bodies. Never work beneath a raised dump body without making sure that it is secured and locked in the raised position. Always lock or block articulated joints in place before working on or around an articulation point. Always block and support raised implements such as loader booms, backhoe booms, forklift masts, dozer blades, motor grader blades and rippers etc. before performing maintenance and /or repairs. Never walk directly under any hoisted item. Always remove the keys or by some other method disable the vehicle from being started until you have completed the service work. **(See Section I. I. Lock Out/Tag Out of these policies).**
2. When using jacks and/or jack stands always make sure that they are weight rated to the

vehicle or piece of equipment being supported. Carefully check stands to make sure locking latches are not damaged and are working properly. Check the structure of the jack stand to make sure it is not bent or damaged. Never use a damaged jack stand.

3. Always set the park brake or chock wheels when performing service work that may cause the vehicle to roll unexpectedly. Disconnect vehicle power supply when working on electrical components that could cause a shock, burn or component damage if shorted to ground.
4. Always be extremely careful of moving parts in relationship to fingers, arms, legs, feet, etc. to prevent entanglement and possible serious injuries or even possible fatalities.

## **V. Fork Lift and Hoist Equipment:**

1. Before operating a forklift or any other type of lifting equipment check to make sure that the object being hoisted is within the weight lifting capabilities of the piece of equipment being utilized. Always make sure that the forklift or hoisting equipment is in good working condition. Check all operating and safety devices of lifting equipment before use. Report any safety or operational problems to supervisory personnel and do not operate until the defects have been corrected.
2. Always check the condition of straps or chains before attaching or lifting an object. If chains, lifting straps or brackets are frayed or otherwise damaged they should be repaired or discarded. Always make sure that chains, straps, or other lifting devices are capable of lifting and supporting the object being lifted.

## **Employee Training**

It is the policy of Mesa County that it's employees shall be adequately trained to perform the tasks to which they are assigned.

Workers shall have demonstrated ability and aptitude to perform a given job and shall be trained in the job to a minimum proficiency level before assignment to the position can occur.

Training for a position will be based upon Safety and Efficiency, and will require that the candidate for the position be able to perform the task in a manner that is considered to be safe to the candidate, other workers, the general public, property and equipment, and be able to do so at an acceptable production rate.

Regular Safety Training will be conducted in order to keep employees informed on safety issues, and to maintain a safety-conscious work force.

A pre-start safety meeting will be held for certain designated large projects.

As a minimum, all employees shall be required to attend a quarterly safety training session.

Workers that have satisfactorily completed the training program for a specific task or position will then be "certified" for that position as having met the minimum proficiency standards.

## A. Supervisor/Foreman Responsibilities

1. Supervisory personnel have the ultimate responsibility to monitor and enforce compliance with established Safety Standards and Policies.
2. The responsibilities of Supervisors include, but are not limited to:
  - a. Assure that safe working procedures are incorporated into normal job responsibilities.
  - b. Assure use of proper safety equipment and procedures.
  - c. Look for and correct unsafe acts and conditions.
  - d. Assure that workers are adequately trained and competent.
  - e. Assure that all tools and equipment are properly maintained and are used in an appropriate manner. All safety-related guards and controls must be maintained and in place.
  - f. Issue reprimands for safety violations.
3. Report all accidents and injuries to Personnel Office immediately and submit an Accident/injury Report. Please see Mesa County's "Guide to Reporting Claims" February 19, 1998

## B. Employee's Responsibilities

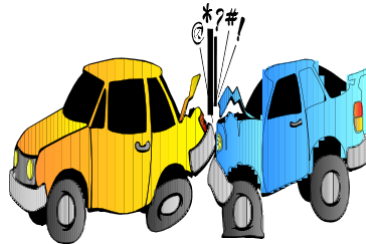
1. It is the responsibility of every employee to make "Safety" part of your normal duties. Ultimate success of a safety program depends on everyone doing his or her part to provide and maintain a safe work place.
2. The responsibilities of every employee include, but are not limited to:
  - a. Know the safety policies and standards for your job and make a commitment to comply for the benefit of everyone on the job.
  - b. If an accident occurs involving an on-highway vehicle, the appropriate law enforcement agency shall be notified. Do not leave the scene of the accident until clearance is received from the law enforcement agency to do so.
  - c. Report any unsafe acts or conditions to your supervisor. If the unsafe act or condition can be easily corrected, DO IT!
  - d. Attend safety meetings with zeal to make Mesa County a safe place to work.
  - e. Report All accidents or injuries to your supervisor immediately.
  - f. Submit a written Report of Injury for all work-related injuries or illnesses to the office within 24 hours of the incident.
  - g. Offer suggestions to improve safety at the work place.
  - h. Observe all safety policies and standards whether written, verbal, or common sense to the best of your ability.
  - i. Refrain from "horseplay" or other behavior that could cause injury or accident.
  - j. Failure to report any accidents or incidents the day of occurrence may result in discipline action.

**Reporting Accidents:** If you are involved in an accident involving vehicles, property damage and/or bodily injury Please see “**Mesa County Guide To Reporting Claims.**” An outline and check list of procedures are described below:

## **Automobile Liability**

When a vehicle is involved in an accident involving another party, please use the check list provided.

*By agreement between Fleet Management and Risk Management, vehicle damage will not be repaired until reports have been supplied to Risk Management.*



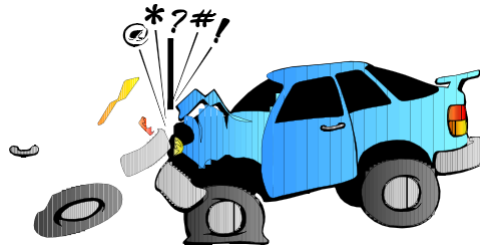
### Check List

- Notify the law enforcement office which has jurisdiction.
- Notify Fleet Management of the incident as soon as possible at 244-1820.
- Notify Risk Management of the incident as soon as possible at 244-1868.
- Have the employee in charge of the vehicle complete a Vehicle Accident / Incident Report. *This report will open both the auto liability claim and auto physical damage claim.*
- Be sure the Supervisor reviews the report and comments in the Director’s and Supervisor’s Accident Review area.
- Send the Vehicle Accident/Incident Report, and any other paper work (tow invoices, police reports, etc.) to Risk Management for processing.
- If the employee was injured in the Accident/Incident, turn to the Workers’ Compensation section of this booklet.

## Automobile Physical Damage

Please use the following checklist when only a County vehicle is damaged and no third party's vehicle or property is involved.

*By agreement between Fleet Management and Risk Management, vehicle damage will not be repaired until reports have been supplied to Risk Management.*



### Check List

- \_ Notify the law enforcement office which has jurisdiction.
- \_ Notify Fleet Management of the incident as soon as possible at 244-1820.
- \_ Notify Risk Management of the incident as soon as possible at 244-1868.
- \_ Have the employee in charge of the vehicle complete a Vehicle Accident / Incident Report.
- \_ Be sure the Supervisor reviews the report and comments in the Director's and Supervisor's Accident Review area.
- \_ Send the Vehicle Accident/Incident Report and any other paper work (tow invoices, police reports, etc.) to Risk Management for processing.
- \_ If the employee was injured in the Accident/Incident, turn to the Workers' Compensation section of this booklet.

## Property

Any loss or destruction of County equipment or property while performing your job as a County employee, (hand-held radios, laptop computers, tools, etc.) is covered under the County's property insurance. **This does not include personal property.** Personal property is generally insured through personal home owners insurance.

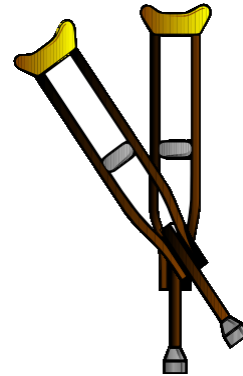
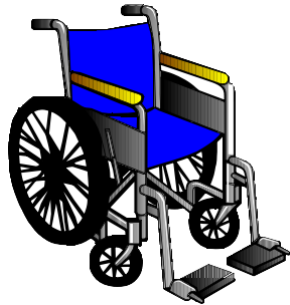


### Checklist

- \_ Notify Risk Management of the incident within 48 hours if possible, at 244-1868.
- \_ Have the employee who is involved with the incident complete a Property Damage/Incident Report.
- \_ Send the Property Damage/Incident Report to Risk Management for processing.
- \_ If the employee was injured in the incident, turn to the Workers' Compensation section of this booklet.

# Workers' Compensation

When an employee is injured, use the following check list.



## Checklist

- An employee must notify their Supervisor immediately of the injury. A Preliminary Accident Form should be completed by employee.
  - The Supervisor fills out First Report of Injury using information from the Preliminary Report. Both forms go to Risk Management.
  - Once the injury has been reported to the Supervisor, the Supervisor should contact Risk Management within 24 hours of notification, so the process of the claim can begin.
  - **Emergencies and injuries needing immediate attention go directly to:**
    - St. Mary's Hospital Emergency Room**
    - 2635 North 7<sup>th</sup> Street
    - Grand Junction, CO 81501
  - Injuries that are not emergencies, an appointment may be made by calling the Designated Physician:
    - St. Mary's Occupational Medicine**
    - 1100 Patterson Road
    - Grand Junction, CO 81506
    - (970) 244-2001
    - Monday - Friday 8 a.m. to 5 p.m.
- Holidays, Weekends, After Hours**  
St. Mary's Hospital Emergency Room  
2635 North 7<sup>th</sup> Street  
Grand Junction, CO 81501

## Exposures:

- An employee exposed to blood, hepatitis, or TB (Tuberculosis) should go to the Designated Physician. A baseline test may be performed on the employee and a sample of blood from the infected person may need to be tested.

**As a Supervisor, any time you have questions on a claim, or the course of treatment for your**



employee, please feel free to call Risk Management at 244-1868.

### **Employer/Supervisor Responsibility:**

**What happens if a supervisor chooses not to report an injury?** The employer can incur severe penalties that are not covered by CCIA, as well as having a high claim cost due to an unmanaged claim. The law requires a First Report of Injury within 10 days of notification by the employee, regardless if the notification is written or verbal. Employers who do not file within this 10-day time frame may be fined up to \$500 per day for each day the report is late. Besides late reporting penalties, litigation becomes more possible and increased claims costs frequently occur. (C.R.S. 8-43-101)

**Does the supervisor have to file an injury even if they do not believe an injury really took place or if they think the employee isn't really hurt?** The answer is yes. The supervisor may express their reservations in writing of the injury when the claim is filed. This documentation will give the basis to begin an investigation.

**What if the injured worker does not report the claim within 4 days, or doesn't report it in writing?** The employer/supervisor is still required by law to file the First Report when you have any knowledge of the injury, **regardless of whether or not a written report was received from the worker.** (C.R.S. 8-43-102 and C.R.S. 8-43-103)

### **Employee Responsibility:**

**Filing Injury Reports:** The injured employee has an obligation to report the injury to his supervisor/employer in writing within 4 days of its occurrence. Failure to do so can result in the *loss of one day compensation for each day delay, except when the employee is physically or mentally unable to report the injury.* (C.R.S. 8-43-102)

### **Compensation payments can be reduced by 50% in cases where the injury**

1. Was caused by the willful failure of the employee to use safety devices provided by the employer;
2. Arose from willful failure by the employee to obey any reasonable rule adopted by the employer for the safety of the employee;
3. Resulted from the intoxication of the employee. (C.R.S. 8-42-112 II)

## Safety Inspections

It shall be the responsibility of all supervisory personnel to conduct a daily appraisal of the project site or plant to certify that no unsafe conditions exist.

In the event that an unsafe condition is discovered, immediate measures shall be taken to correct the situation.

Safety inspections will be conducted in consideration of the standards of the various regulatory agencies that have jurisdiction over job site health and safety.

Results of the inspection will be submitted to the managerial staff with recommendations for corrections including pertinent information.

## Safety Committee

### Purpose:

To review accidents, incidents and damage to County property and to provide input on safety training and effective means for the communications of safety issues.

### Policy:

The Division of Transportation shall hold Safety Committee meetings once monthly, or as needed. The following procedures shall be followed.

1. Committee representatives shall be appointed by the Road Supervisor and shall include representatives from Fleet, each maintenance district, the construction crews, office administrative staff, and the Construction Foreman. Members must have been employed by the department no less than one year to be eligible to serve. Members shall serve on the committee for a period of two years and may serve subsequent terms.
2. Safety Committee meetings shall be held monthly.
3. Any Accidents, incidents or damage to County equipment will be reviewed by the committee to determine if the accident was preventable. Preventable shall be defined as, "Were safety policies followed?" "Did the employee do everything he/she reasonably could have done to prevent the accident?" The Safety Committee will review the accident. The results of the review of the Committee will be passed on to the supervisor to determine if action is needed up to and including disciplinary action.
4. Employees have the right to present testimony either in writing or in person at any Safety Committee meeting. Employees shall coordinate with their foreman if they wish to attend. However, employees are not allowed to be

present while the committee is discussing or is in the process of preparing a recommendation.

5. Employees who disagree with recommendation of the Safety Committee, or have new or different information that could have affected the committee's decision or recommendation may request a review of the decision. The request will be made in writing to the Road supervisor no later than ten days after the committee's final decision.

## Safety Equipment Checklist and Policy Acknowledgment

I have received and read the Division of Transportation's Safety Policy and Procedures Manual.

I have read, understand and agree that it is my responsibility as an employee Mesa County to perform my work in a safe, professional manner in accordance with the policies contained in this manual.

I further understand that my continued employment at Mesa County is dependent upon my compliance with established safety standards and policies and that failure to sign this form will result in disciplinary action.

**Employee Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

The following equipment has been issued for your safety and protection. Failure to properly use it may result in disciplinary procedures and/or reduced Worker's Compensation benefits:

- ◆ Safety Vest
- ◆ Orange Cap
- ◆ Hard Hat
- ◆ Safety Glasses
- ◆ Hearing Protection (available in all trucks)

By signing this document, I acknowledge that I understand my responsibility to safety, not only to myself, but also to those around me. I will follow the policies and guidelines as established in these policies and procedures. I will take a pro-active approach to safety in my day to day job activities.

**Employee Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



# Safety Manual

Updated 12/12/2016

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## TABLE OF CONTENTS

<b>POLICY STATEMENT.....</b>	<b>4</b>
<b>GENERAL SAFETY RULES .....</b>	<b>5</b>
<b>FIRE FIGHTING EQUIPMENT .....</b>	<b>6</b>
<b>PERSONAL PROTECTIVE EQUIPMENT.....</b>	<b>6</b>
<b>VEHICLE AND EQUIPMENT OPERATION.....</b>	<b>8</b>
<b>VEHICLE BACKING OPERATIONS.....</b>	<b>9</b>
<i>Backing .....</i>	<i>9</i>
<i>Helper's position.....</i>	<i>10</i>
<b>MATERIAL HANDLING AND STORAGE.....</b>	<b>10</b>
<b>HOUSEKEEPING .....</b>	<b>10</b>
<b>HAND TOOLS.....</b>	<b>11</b>
<b>POWER TOOLS .....</b>	<b>11</b>
<b>LADDERS .....</b>	<b>11</b>
<b>SCAFFOLDS.....</b>	<b>12</b>
<b>BARRICADES AND WORK AREA PROTECTION .....</b>	<b>12</b>
MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) .....	13
PLANNING.....	13
TRAINING.....	13
PERSONAL PROTECTIVE EQUIPMENT IN TRAFFIC ZONES.....	13
<b>WORKING OVERHEAD .....</b>	<b>14</b>
<b>CRANES, HOISTS, ETC.....</b>	<b>14</b>
<b>MANUAL LIFTING .....</b>	<b>15</b>
<b>LOCKOUT / TAGOUT .....</b>	<b>15</b>
<b>COMPRESSED GAS CYLINDERS .....</b>	<b>16</b>
<b>WELDING, CUTTING OR BRAZING.....</b>	<b>16</b>



**CONFINED SPACE WORK ..... 18**

INTRODUCTION ..... 18

WHAT IS A CONFINED SPACE? ..... 18

WHAT ARE SOME TYPICAL CONFINED SPACES? ..... 18

WHY ARE CONFINED SPACES HAZARDOUS? ..... 18

WHAT ARE SOME OF THE COMMON HAZARDS? ..... 19

*Atmospheric Hazards* ..... 19

*Mechanical Hazards* ..... 19

*Electrical Hazards* ..... 20

*Entrapment* ..... 20

*Engulfment* ..... 20

IDENTIFY ALL CONFINED SPACES ..... 20

*Permit Entry System* ..... 20

*Testing* ..... 21

*Safety Equipment* ..... 21

*Monitoring* ..... 21

*Ventilation* ..... 21

*Observation* ..... 21

*Training* ..... 22

CONFINED SPACE SAFETY REGULATIONS ..... 22

**MAINTENANCE SHOP SAFETY ..... 23**

RADIATOR SERVICE ..... 23

TIRE SERVICE ..... 23

BATTERY SERVICE ..... 23

LUBRICATION AND MAINTENANCE SERVICE ..... 24

AIR COMPRESSORS ..... 25

SPECIAL FIRE PREVENTION - PROTECTION ..... 25

WHAT TO DO IN CASE OF FIRE ..... 25

CLOSING OF VEHICULAR SERVICE BUILDING ..... 26

**FUEL DISPENSING SAFETY ..... 26**

GENERAL ..... 26

AUTOMATIC NOZZLES ..... 27

RECEIVING AND STORING GASOLINE ..... 27

**REFUSE COLLECTION ..... 28**

INTRODUCTION ..... 28

UNLOADING OPERATIONS ..... 28

HAZARDOUS MATERIALS ..... 29

VEHICLE BREAKDOWNS ..... 29

INJURIES ..... 29

VEHICLE FIRES ..... 29

**OFFICE SAFETY ..... 30**

**TREE TRIMMING OPERATIONS ..... 30**

TOOLS AND EQUIPMENT ..... 30

FUELS ..... 31

PERSONAL PROTECTIVE EQUIPMENT ..... 31

WORK AREA PROTECTION ..... 31

TREE TRIMMING OPERATION - GENERAL RULES .....	31
<b>TRENCHING AND SHORING OPERATIONS .....</b>	<b>33</b>
<b>CELLULAR PHONE USE IN VEHICLES .....</b>	<b>33</b>
GUIDELINES FOR CELLULAR PHONE USE IN VEHICLES.....	33
<b>LPG - LIQUID PETROLEUM GAS (PROPANE) .....</b>	<b>34</b>
BASIC PRECAUTIONS .....	34
GENERAL SAFE WORK PRACTICES.....	35
HEALTH CONSIDERATIONS.....	36
PERSONAL PROTECTIVE EQUIPMENT (PPE).....	36
EMERGENCY GAS PROCEDURES.....	36
<b>HAZARD COMMUNICATION PROGRAM .....</b>	<b>37</b>
INTRODUCTION .....	37
<b><i>Written Program</i></b> .....	<b>38</b>
LABELING .....	38
MATERIAL SAFETY DATA SHEETS (MSDS) .....	38
TRAINING.....	38
OTHER ITEMS OF DISCUSSION.....	39
THE CHEMICAL INVENTORY .....	39
<i>Labeling</i> .....	40
<i>Material Safety Data Sheets</i> .....	40
INTERPRETATION OF THE STANDARD REGARDING MSDS .....	41
ARRANGEMENT OF MSDS BOOKS.....	42
<b>CITY-WIDE HAZARD COMMUNICATION REGULATIONS .....</b>	<b>43</b>
<b>HEARING CONSERVATION PROGRAM .....</b>	<b>44</b>
<b>RESPIRATORY PROTECTION PROGRAM .....</b>	<b>44</b>
INTRODUCTION .....	44
SCOPE .....	44
PURPOSE.....	44
COVERED EMPLOYEES .....	45
PERSONAL PROTECTIVE EQUIPMENT .....	45
RESPIRATOR CARE AND MAINTENANCE .....	45
EMPLOYEE TRAINING.....	46
FIT TESTING PROCEDURE AND RESULTS .....	46
RECORDKEEPING REQUIREMENTS.....	47
EMPLOYEE RESPIRATORY PROTECTION PROGRAM ACKNOWLEDGEMENT .....	47
<b>STATEMENT OF EMPLOYEE RESPONSIBILITY.....</b>	<b>48</b>
<b>INDEX.....</b>	<b>48</b>





## POLICY STATEMENT

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# *SAFETY AND WELLNESS: A CITY PRIORITY*

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Employees are our most valuable resource. You – your experience, education, knowledge, and most of all your health and safety – are more important than just quickly completing a task.

For this reason The City of Grand Junction will strive to provide the safest possible working conditions for our employees and will provide appropriate medical care to minimize the effect of injuries when they occur.

Department Heads and Managers: Occupational safety and health shall be given full consideration in the planning, development, and operation of every program and activity throughout the City. Support and assist supervisors in their safety efforts and reward them for attention to safety planning, equipping and training of staff.

Supervisors and Lead Workers: Encourage involvement of all employees in safety awareness, and make sure that each job activity is done safely. Plan ahead to anticipate safety and health hazards for each activity. Train and equip workers appropriately for the specific activities of their jobs. Inspect and update facilities and equipment as needed. Utilize the safety resources provided by the City, and communicate any safety needs. Promptly investigate and report accidents and “near-misses” that could contribute to future injuries. Finally, ensure that every employee is empowered and rewarded for participation in the Department’s safety and health programs.

Employees: Take responsibility for your own safety. Report safety hazards that you encounter in your work. Make use of safety equipment that is needed for your job. Always be on the alert for the safety of your fellow workers, and work together to promote safe and healthy work practices. Make use of safety training opportunities that are offered in your work group, and communicate any safety needs that you see.

Accident prevention and efficient production go hand in hand. All employees, supervisors and managers must work together continuously to promote the safety and wellness of our workforce.

**Greg Caton, City Manager**



## GENERAL SAFETY RULES

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1. Use caution when lifting. Bend knees, and keep back straight. Leg muscles, not your back, should do the work. When lifting heavy loads, use lifting devices such as forklift, pallet truck, etc. or get help from other employees. Do not lift large objects in high winds. **DO NOT ATTEMPT TO LIFT LARGE/HEAVY LOADS BY YOURSELF.** Supervisors should provide appropriate equipment to assist employees in managing heavy loads.
2. Fighting or horseplay is strictly prohibited.
3. Smoking is permitted only in designated areas.
4. Personal protective equipment shall be worn at all times when required by your supervisor or safety regulations. All PPE must be maintained in good condition.
5. Tools and equipment shall be kept in proper working condition, and proper electrical grounding and guards in place before use.
6. Good housekeeping practices shall be maintained at all times in all City work areas and vehicles.
7. All employees should familiarize themselves with the nearest fire extinguisher and first aid kit and know the proper use of each.
8. Report missing or damaged equipment immediately to your supervisor.
9. All equipment used during the work day shall be de-energized and secured at the end of the day.
10. Hazardous wastes such as waste oils, hydraulic fluids, cleaning fluids etc. shall be disposed in a proper manner. Contact your supervisor for proper disposal procedures. Consult with the Fire Department Hazardous Materials Division for disposal problems.
11. All city speed limits and traffic signs shall be observed.
12. Report accidents immediately to your supervisor and complete accident forms promptly.
13. Report unsafe work situations to your supervisor.
14. Frequently review and be aware of the requirements of the emergency evacuation plan for your building.
15. Do not interfere with other employees while they are using power tools, motorized equipment, or when they are working near electrical lines and equipment.
16. Use equipment with safeguards that are adequately designed and intended for normal operations.
17. Wrist watches, metal wrist bands, rings, or other jewelry shall not be worn while working near moving parts of machines or energized circuits.
18. Clean clothes are essential in preventing skin irritations. Clothing saturated with solvents or other materials shall be removed and shall not be worn until properly cleaned. It is recommended that employees working in areas of high contamination keep an extra set of work clothes on the job.
19. When in doubt about safety regulations consult the appropriate OSHA standard.

## **FIRE FIGHTING EQUIPMENT**

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1. Use fire extinguishers for emergencies only, unless otherwise approved for training purposes. If used for training, make sure that extinguishers are recharged.
2. Report all fires immediately to your supervisor and call 911.
3. Personnel shall be trained in the proper use of fire extinguishers.
4. Keep fire equipment and exit routes free from obstructions.
5. Inspect fire extinguishers on a monthly basis.
6. Inspect buildings at least annually for presence of fire hazards, and review emergency evacuation routes and procedures.
7. For further guidance on fire protection, consult OSHA standard 29 CFR 1910 subpart L.

## **PERSONAL PROTECTIVE EQUIPMENT**

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1. Personnel shall wear personal protective equipment that is consistent with the type of work conducted. This may include but is not limited to eye protection, hand protection, head protection, skin protection, hearing protection or respiratory protection. Use appropriate Material Safety Data Sheets, and contact your supervisor to determine what personal protective equipment is required.
2. Approved clothing (including city issue clothing, caps, etc.) shall be worn and maintained in good repair. Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing which can become entangled shall not be worn. Working without shirts is not permitted. See Page 17 for work zone apparel requirements.
3. Any employee not using the personal protective equipment required by the City, who is injured on the job and whose injury was caused by failure to use prescribed personal protective equipment, shall forfeit 50% of his/her workers' compensation benefits, pursuant to the Colorado Workers' Compensation Act, section 8-52-104.
4. Employees will wear hearing protection when working in areas marked with appropriate warning signs or upon instructions to do so by their supervisor.
5. Welders and their assistants shall wear approved eye protection during cutting, welding or brazing operations. See page 21 for welding & cutting requirements.
6. Respirators shall be worn as necessary. Supervisors shall ensure that employees are properly fitted and trained in the use of respiratory equipment.
7. Per the OSHA construction standard [29 CFR 1926.502](#), each employee on a walking/working surface with an unprotected side or edge which is 6 feet or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems. Some City operations may fall under the OSHA general industry standard [29 CFR 1910.23](#), which requires open-sided floors or platforms 4 feet or more above adjacent floor or ground level to be guarded by a standard railing (guardrail) or equivalent.

8. Hard Hats:
  - A. OSHA approved hard hats that meet the [ANSI Z89.1](#) Standard, along with proper Class and Type are required as minimum standards for the following jobs:
    1. On all contractor construction sites where there is danger of overhead impact or where contractor employees are required to wear hard hats.
    2. All job sites with heavy equipment in use or present on the job, such as backhoe, loaders, skid Steers, dump trucks, etc.
    3. By all employees working in or near excavations 4' deep or greater.
    4. Where danger from electrical hazards exist, such as working out of a bucket on boom truck or working in an electrical panel.
      - a. Class G hard hat is required up to 2200 volts
      - b. Class E hard hat is required up to 20000 volts
    5. Where there is a risk of an overhead impact.
    6. A class II type hardhat is required where there is a risk of a side impact.
    7. Where workers are working in or underneath vertical lift devices such as bucket trucks, man lifts and personnel baskets for forklifts.
    8. Supervisors and Crew Leaders in charge of a work site will be responsible for wearing of personal protective equipment in the work zone.
  - B. Requirements
    1. Hard hats must be in good condition and free of physical defects.
    2. Hard hats should be worn and maintained according to manufacturer recommendations.
    3. Bump caps are not acceptable head protection.
    4. Hard hats should be inspected before each use. Damaged hats or those that have sustained a heavy impact should be removed from service and replaced.
    5. Hard hats should be identified with a City of Grand Junction logo.
  - C. Remember the goal of wearing a hard hat is to provide a safe working environment and reduce injuries to employees and job site visitors. It also provides recognition that you are a City of Grand Junction employee and demonstrates safety consciousness.
9. Footwear:
  - A. Sturdy work boots are required and safety toed boots are encouraged. No open toed or tennis type shoes are allowed except when special operations specify non-hard soled footwear.
  - B. Safety toed boots are required when working with equipment or material that could pose a risk of foot injury.
  - C. Metatarsal foot protectors or safety toed boots are required when operating jackhammer or compaction equipment.
  - D. Each Division should create a list of safety shoe required and safety shoe exempted routine tasks. For non-routine tasks supervisory discretion should be exercised according to the above guidelines.
10. Gloves shall be worn during any work where there is danger of hand injury.

11. High Visibility Safety Apparel: See page 12 for safety apparel requirements in work zones exposed to traffic hazards.
12. All personal protective equipment shall be kept clean, in good repair, and ready for use.
13. If in doubt, wear protective equipment for your safety!

## **VEHICLE AND EQUIPMENT OPERATION**

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1. Employees operating motor vehicles will carry a current driver's license that is valid for the type of vehicle driven.
2. Personnel operating motorized equipment will be adequately trained in its use and operation. Equipment operation should not be assigned to an untrained member of a crew.
3. All employees operating forklifts shall maintain proof of training.
4. Lift trucks will be attended at all times when running.
5. Pedestrians will be given right-of-way in all cases.
6. Equipment operators shall obey all speed limit and warning signs, drive at reasonable speeds for the type of equipment driven with due regard for weather, traffic conditions, and intersections.
7. Tank trucks and semi trucks will be braked and the engine turned off during loading or unloading operations unless otherwise required for specific equipment operation.
8. All safety and emergency equipment will be in proper working order on vehicles or moving equipment currently in use.
9. Vehicles must meet all DOT requirements before use. Deficiencies must be reported immediately to your supervisor.
10. The brakes and other safety systems shall be tested by the operator before leaving on the first trip of the day and any deficiencies noted and corrected. When required, DOT inspection logs shall be properly filled out and kept in the vehicle.
11. Employees will have their entire body inside the moving equipment at all times and shall not enter or exit a vehicle while it is moving.
12. Drivers shall make certain that all loads are properly loaded and secure. Employees must position themselves properly to avoid being exposed to loads shifting or falling from the sides or end of the vehicle.
13. Employees will not ride in buckets, Hi-Ranger lift baskets, forks (of lift trucks), etc. not designed to transport personnel while the vehicle or equipment is in motion.
14. Seat belts will be used in all vehicles except as permitted by Colorado law for emergency vehicles, sanitation vehicles, and meter reading operations.
15. The driver shall inspect their footwear before driving a vehicle to ensure their footwear is free of mud, excessive water, oil or grease to prevent a slippery contact with brake and/or clutch pedals.
16. Vehicles shall not be operated with dirty or damaged windshields, mirrors, inadequate brakes, faulty steering gear, horn or lights.
17. The severe application of brakes, especially booster brakes, shall be avoided except in an emergency. The operator must at all times have the vehicle under control so as to be able to bring it to a complete stop within the assured clear distance ahead.

18. No vehicle shall be parked on a hill or grade unless the front wheels are turned into the curb or the wheels securely chocked.
19. No vehicle shall be driven on a downgrade with gears in neutral or clutch disengaged.
20. Employee drivers shall not permit more employees to ride in the vehicle than the number of seat belts provided.
21. All tools and equipment shall be properly guarded, stowed, and securely fastened when transported.
22. All doors of cabinets, lockers, and tail gates must be latched before moving the vehicle.
23. All trucks except those equipped with closed circuit camera systems shall have someone directing during backing. See "Vehicle Backing" below for specifics.
24. When possible do not load and unload a vehicle from the street side of the load.
25. Special regulations and instructions governing the loading and unloading of poles, pipes, etc., shall be strictly observed in every case.
26. The vehicle hood shall be secure at all times when it is raised. When it has been lowered into position it shall be checked to determine that it is completely latched.

## **VEHICLE BACKING OPERATIONS**

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Driving large trucks, in general, is a challenge to any professional driver -- but backing is the toughest and most hazardous operation. Backing accidents are the source of some of the most costly and heartbreaking accidents in the workplace. City employees consequently should use extra care and precaution in backing.

### *Backing*

---

1. Prior to backing, check the path of your truck to make sure the way is clear. If you can't see where you are going, get out and look. Check all clearances, on the right side, left side, front, back, and top of your truck. Do this as often as is necessary to do a safe job of backing.
2. Back your vehicle slowly and cautiously. Make sure you have absolute control of your vehicle at all times.
3. Alert other drivers or pedestrians who may be in, or about to cross your path of travel by blowing your horn. Be careful, though. They may not understand your intentions.
4. If you have a loader or helper working on your crew, always have the helper direct you in the backing up operation. Only one person, however, should be giving the backing signals.
5. It is both the Driver and the Helper's responsibility to have a clear understanding of the signals that will be used for direction. Even though there is someone directing, drivers are not relieved of their responsibility. It is still up to them to see that the backing operation is done safely.
6. If there is any other way of driving to your objective, do it rather than by backing. Plan or help management to plan your route to eliminate all unnecessary backing.

### *Helper's position*

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1. The helper must be on the ground in a position that gives them an unobstructed view of the ground over which the truck is about to be moved, with their body facing the driver, and visible to the driver at all times either directly or through rear or side mirrors.
2. Wherever possible, the helper should station himself at the point where the backing maneuver is to end, so that he avoids the hazards of walking backward over the surfaces he does not see. This may require stopping the truck and changing positions several times.

Final Note: Bad weather can reduce visibility, or cause a slippery road surface from rain, snow, or ice, presenting a greater hazard in backing operations.

### **MATERIAL HANDLING AND STORAGE**

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1. Store and stack material so that the load is stable.
2. Floors and platforms supporting loads must be properly constructed to support the weight of the load, particularly on upper level floors.
3. When moving material with a lift truck, make sure the load is balanced and stable.
4. Do not exceed load carrying capacity of vehicles being used.
5. Store and stack material in approved locations. Make sure all aisle widths conform to Fire and Building Codes.
6. Keep aisles, stairways, exits, fire equipment, water heaters, boilers, electric panels and switch boxes well marked.
7. Do not store materials where exits, firefighting equipment, emergency equipment, ladders, walkways or roadways may be obstructed.
8. Do not store materials near sources of combustion or electrical equipment.
9. Maintain a clear view when moving loads.
10. Use caution to prevent contact of sharp or pointy materials with other items or people. Remove packing nails and/or wire if they are not necessary for storage.
11. Flammables must be stored a safe distance from regularly occupied office areas.
12. Materials hauled in a dump truck must be secured with a tarp in accordance with Colorado law to prevent materials from falling or blowing off the truck.
13. Consult OSHA Construction standard [26 CFR 1926.953](#) for material handling safety issues on jobsites.

### **HOUSEKEEPING**

---

1. Keep all work areas orderly and clean. (See OSHA Standard [26 CFR 1910.22](#))
2. Keep aisles, passageways and stairways clear and accessible.
3. Clean up all spills and/or leaks.
4. Place rags and other materials in approved containers.

5. At the end of the work day or upon completion of a job, remove all tools and excess materials and barricade the area if necessary.

## HAND TOOLS

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1. Select the proper tool for the job.
2. Use tools that are in good repair. Replace any broken tools immediately.
3. Tools should be inspected before each use.
4. Secure tools when transporting them in vehicles.

## POWER TOOLS

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1. Carefully read instructions before using power tools.
2. Ground all tools before using them, and do not alter three prong grounding plugs.
3. Powered electrical tools are required to have a grounding plug or be double insulated.
4. All tools must have a "dead man" switch.
5. Use the correct tool for the job.
6. Do not disconnect tools by pulling on the cord.
7. Do not use equipment with frayed or damaged cords.
8. Avoid using power tools in wet situations whenever possible; otherwise be sure GFI (Ground Fault Interrupter) protection is in place and functioning properly.
9. Do not change bits, blades, etc. when the tool is energized. Unplug the tool before making changes.
10. Do not operate power tools without guards.
11. Wear eye protection when using power tools.
12. Breakers, fuses and other over-current protection shall be maintained in all circuits. Power tools should not be used on circuits exceeding 20 amperes rating unless otherwise approved in the Uniform Building Code.
13. Extension cords shall not be used as a substitute for fixed wiring of a structure or building. Electrical outlets should be installed where needed.
14. Do not leave cords of portable electric tools where cars or trucks will run over them.
15. Consult OSHA standard [26 CFR 1910 subpart P](#) for hand and power tool safety.

## LADDERS

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1. Ladders shall be in good repair and used in their intended manner.
2. Wooden ladders shall not be painted.
3. Ladders shall be placed so that the base is one (1) foot out for every four (4) feet of height.
4. Ladders shall be properly secured and equipped with shoes at the bottom to prevent slippage.
5. Always climb and descend facing the ladder. Ladders are not to be used as scaffolds.

6. Only one (1) person shall work on a ladder at a time.
7. Metal ladders shall not be used near electrical lines, electrical cabinets, or energized equipment.
8. Benches, boxes and other materials shall not be used in place of a ladder.
9. Damaged ladders will be repaired or discarded.
10. Ladders should be inspected prior to each use, and repaired or taken out of service if not up to standards. Weight limits should be observed for each ladder used.
11. Ladders should not be placed in front of doors unless the door can be and is secured.
12. Materials should not be carried by hand when ascending and descending a ladder.
13. Use 3 points of contact when going up or down a ladder.
14. When using a ladder to gain access and dismount onto a higher surface, be sure the top of the ladder extends 3 ft above top surface and the ladder is firmly anchored.
15. Consult [OSHA Ladder Safety E-Tool](#) for guidance regarding ladder safety.

## **SCAFFOLDS**

---

1. All scaffolding shall be installed by qualified individuals.
2. All scaffolding shall be constructed of approved materials in an approved manner, in accordance with applicable OSHA Standards.
3. Scaffolding shall be equipped with toe boards and guardrails in locations greater than ten (10) feet.
4. A personal fall arrest system per OSHA Standard [29 CFR 1926.502](#) shall be used if scaffolding cannot be provided with guardrails.
5. Scaffolding shall be equipped with a ladder to facilitate access.
6. Scaffold boards shall not be painted.
7. Mobile scaffolds shall not be moved while personnel are located on them.
8. Metal scaffolds shall not be used in or near electrical lines or equipment.
9. Consult OSHA standard [26 CFR 1910.28](#) for guidance on scaffold safety.

## **BARRICADES AND WORK AREA PROTECTION**

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1. Working in traffic exposes employees to extreme danger. Construction, maintenance, utility and incident zones on streets and roadways can result in hazards to workers, motorists, and citizens alike. Since the risk of injury or death in such work is significant, certain safeguards must be instituted to minimize the risks. Temporary traffic control can compensate for the unusual or unexpected situations faced by road users.



## Manual on Uniform Traffic Control Devices (MUTCD)

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2. All City temporary traffic control work zone set-ups must conform to the current Manual on Uniform Traffic Control Devices, [MUTCD 2009 Edition](#) (Published by the Federal Highway Administration).

## Planning

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3. It is very important to pay special attention to the safety and accessibility of all pedestrians, bicyclists, motorists, and workers during each step of the planning process. Coordinate with transit, other highway agencies, law enforcement and other emergency units, utilities, schools and railroad companies to reduce unexpected and unusual road user operation situations. Commercial vehicles may need to follow a different route than passenger vehicles because of bridge, weight, clearance or geometric restrictions. Follow the fundamental principles of the Temporary Traffic Control chapter in the MUTCD to assist road users and protect workers.

## Training

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4. Temporary traffic control work zones shall be designed and set up under the supervision of a person possessing an American Traffic Safety Services Association (ATSSA) certification as a traffic control supervisor. The traffic control design and set up may be accomplished in-house by qualified City personnel or by contracting with a traffic control company.

Prior to their assignment, all workers will be trained on how to work next to motor vehicle traffic in a way that minimizes their vulnerability. Workers having specific temporary traffic control responsibilities will be trained in temporary traffic control techniques, device usage and placement.

## Personal Protective Equipment in Traffic Zones

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### *High Visibility Safety Apparel:*

1. Night Hours: When working at night on streets, roads, or highways employees are required to wear class III ANSI #107 approved apparel.
2. Daytime:
  - A. On State and Federal Highways, or roads with posted speed limit of 50 mph or higher, employees are required to wear class III ANSI #107 approved apparel.
  - B. Employees shall also wear class III ANSI #107 approved apparel on traffic arterials with high traffic volume. Examples: 1<sup>st</sup>, 7<sup>th</sup> & 12<sup>th</sup> Streets and 28 Road.

- C. Class II apparel is required for streets and roads with posted speed limits between 26 mph and 49 mph.
- D. Low traffic side streets with speed limits marked 25 mph or less will only require the employee to wear the standard City-issued lime green upper attire.

To keep costs down for the city, class III apparel should be worn by all employees who have already been issued such attire, even when working in lower speed limit or traffic volume areas. Class II ANSI #107 approved apparel may be used in areas indicated by 2 C above if Class III is not available. It is always acceptable to wear a higher class than specified for conditions.

- 3. **Hard Hats:** See Hard Hat guidelines under Personal Protective Equipment on page 7. Hats shall conform to ANSI Z89.1 and be of the appropriate type and class for the hazard that may potentially be encountered in the work zone.
- 4. Other personal protective equipment may be required depending on the type of work being done, including but not limited to hearing, eye, and respiratory protection.

## **WORKING OVERHEAD**

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- 1. When working overhead, take precautions to protect personnel working below. Loose materials, tools and the like must not be left in places where they can be knocked, blown or vibrated off balance and fall.
- 2. Rope off or barricade the area below the overhead work to prevent access to non-working personnel.
- 3. Do not drop or throw material, tools or supplies from overhead work areas.
- 4. Use a tag line to lift heavy or awkward loads.

## **CRANES, HOISTS, ETC.**

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- 1. Inspect the hoist or crane before work begins.
- 2. Inspect chains, chocks, etc. before securing to load.
- 3. Fasten chains, chocks, etc. securely to the load.
- 4. Use tag lines for heavy or awkward loads.
- 5. Keep all personnel away from the area below the boom or load and barricade off the area.
- 6. Only one person shall give directions to the equipment operator.
- 7. When equipment is left unattended, its block and load shall be secured and the equipment de-energized.
- 8. Personnel shall be adequately trained in the use of hoists, cranes, etc.
- 9. Repair and/or maintenance of chains, chokers, hoists, etc. shall be conducted by a qualified individual.

10. Personnel shall not be lifted or lowered with a crane unless proper equipment is utilized. Contact your supervisor for additional instructions.
11. For Safety guidance, consult OSHA Construction standard [26 CFR 1926.550](#) or General Industry standard [26 CFR 1910.175](#).

## MANUAL LIFTING

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1. Inspect the path to be traveled prior to lifting and carrying heavy objects. Where possible, remove obstacles from path.
2. Back support belts will be made available to employees and should be used when lifting. In certain situations, belt use is mandatory: consult your supervisor.
3. Use powered equipment whenever possible to avoid unnecessary back strain.
4. When you must lift heavy materials, use the following procedures:
  - A. Separate and place both feet close to the object lifted.
  - B. Bend knees and squat down to the object to be lifted.
  - C. Grip the object with the palms of the hands.
  - D. Position the arms and elbows close to the body.
  - E. Draw the chin towards the chest to straighten the back and lift with the back in a vertical position.
  - F. When shifting a load, turn the feet but do not twist the trunk.
5. When two or more individuals are lifting a load, use signals to coordinate the lift so that an injury does not result.

## LOCKOUT / TAGOUT

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1. Review the specific **Lockout/Tagout Procedure** of your specific facility before beginning work. Consult OSHA Standard [29 CFR 1910.147](#).
2. All types of electrical wiring and equipment regardless of voltage shall be handled properly and safely.
3. Only qualified individuals will work on live or energized equipment.
4. When working on live equipment, work on only one (1) wire at a time and insulate all conductors which may come in contact with the live circuit.
5. Adequate personal protective equipment must be used when working on live circuits.
6. Use only **nonconductive** ladders and hard hats when working near energized circuits.
7. Treat all electrical equipment as though it is live.
8. Shut off power before removing guards from motor driven equipment.
9. Keep the work area as dry as possible.
10. Fuses shall be replaced with fuses of the same capacity as the ones removed.
11. Finger rings, bracelets or metal watch bands shall not be worn when working with electrical equipment.
12. When opening disconnects, wear proper eye protection to shield the eyes from the flash or sparks and approved hand protection, such as linesman gloves.
13. After repairs, replace cover plates on lighting and power cabinets or electrical enclosures.

14. All portable tools and equipment shall be grounded by means of a three wire cord and polarized plug or wire leading from the frame of a machine to a good return ground, or OSHA approved insulated portable power tools may be used. Grounding plugs shall not be altered.
15. Consult [OSHA Lockout/Tagout E-Tool](#) and section on Power Tools Pg 11 for further training and guidance.

## **COMPRESSED GAS CYLINDERS**

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1. Store all cylinders in upright and fastened positions. (Except 1 ton cylinders designed for horizontal storage.)
2. Place the protective cap on cylinders when they are not being used.
3. Keep stored oxygen cylinders at least twenty (20) feet from acetylene cylinders and other flammables.
4. Always check the label or stencil on the cylinder to make certain you have the proper gas.
5. Never use oil or grease as a lubricant on valves or attachments of oxygen cylinders.
6. Do not store cylinders next to heat sources.
7. Always transport cylinders in a secured, upright manner.
8. Tag or label all cylinders that are empty and remove them from the workplace.
9. Unless cylinders are firmly secured on a special carrier intended for this purpose, regulators shall be removed and valve protection caps put in place before cylinders are moved or transported.
10. Consult OSHA Standard [26 CFR 1926.153](#) and Safety Manual Page [66 LPG](#) for safety information on handling of Liquefied Petroleum Gases. (Propane)

## **WELDING, CUTTING OR BRAZING**

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1. Inspect the area to ensure that flammable or combustible materials are not present.
2. Inspect the equipment to be worked upon before the work begins. Drums, barrels or small containers shall be thoroughly cleaned before the work begins.
3. All storage tanks or vessels must be clean, gas free, and blinded before the work begins. Mechanical ventilation shall be provided in any space less than 10 cubic feet per welder or any other confined space where natural cross ventilation is restricted. Ventilation shall be at a rate of at least 2,000 cubic feet per minute.
4. When working inside a vessel, welding gases which are not in current use shall be turned off both at the nozzles and the cylinders to prevent leakage and gas buildup.
5. Test the area for flammable or combustible materials before re-entering after taking any breaks.
6. Test the area for flammable or combustible materials at the beginning of each shift if work is going on continuously.
7. A firewatcher shall be assigned to all cutting or welding operations that are conducted outdoors or in the vicinity of any flammables.

8. A fire extinguisher shall be made readily available during all cutting or welding operations. The firewatcher and employees doing welding or cutting shall be familiar with the operation of a fire extinguisher.
9. Report any fire that results during a cutting or welding operation.
10. Welding shields shall be used if the work is conducted in a high activity area, for protection of passersby. Avoid looking at an electric arc without eye protection; serious eye injury could result.
11. Personnel will wear appropriate eye and skin protection, including gloves, and approved helmet or goggles for the type of operation performed.
12. Welding and/or cutting cylinders will be operated in a standing position, with cylinders properly secured.
13. Keep grease and oil away from oxygen cylinders. Also be cautious of grease or oil your hands when turning on or off cylinders; the combination forms a highly explosive mixture.
14. Open valves on welding and/or cutting cylinders slowly. Before connecting a regulator to a cylinder valve, the valve should be opened slightly and closed immediately. (This is termed "cracking" and is done to purge the valve of dust or dirt that might enter the regulator.) Stand to one side of the outlet, not in front of it, when cracking the valve.
15. When an oxygen cylinder is in use, valves shall always be opened completely. Valves shall be turned "OFF" when not in use.
16. Replace caps and properly store empty welding and/or cutting cylinders. Oxygen cylinders in storage shall be separated from fuel gas cylinders (and other combustibles) by at least 20 feet or separated by a 30 minute fire resistive barrier of at least 5 feet high.
17. Practice good housekeeping techniques at all times in welding and cutting areas.
18. Properly ventilate any welding area. Check ventilation equipment annually to make sure air flow is adequate.
19. Use Acetylene only at pressures below 15 pounds per square inch. At higher pressures the gas is unstable and may explode.
20. Do not use copper tubing to repair acetylene hose. Acetylene will attack pure, unalloyed copper, forming a very explosive powder, copper acetylene.
21. Never strike an arc or tap an electrode against a cylinder.
22. Always use a spark lighter to light a torch. Never use matches.
23. Never use oxygen to dust off clothing and the work area. Use fuel gases only for intended purpose.
24. All arc welding ground connections shall be mechanically strong and adequate for the required current.
25. When not in use, electrode holders shall be placed so that they cannot make electrical contact with people, objects, fuel or compressed gas tanks.
26. Cables with splices within 10 feet of electrodes are prohibited from being used.
27. Cables with damaged insulation or exposed bare conductors shall be replaced.
28. The welder shall not coil or loop the electrode cable around parts of his body.
29. Do not leave welding rod stubs on the ground or floor where they may cause an accident.
30. See applicable OSHA [Welding Cutting and Brazing](#) Standards.

## CONFINED SPACE WORK

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### INTRODUCTION

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The term "confined space" is often misunderstood. The following introductory section is designed to be educational: it explains confined spaces and outlines their characteristics and hazards, with an explanation of the City confined space program. Actual City safety rules regarding confined spaces begin on page 22.

### What is a confined space?

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Unlike a trench or excavation, 'confined space' is not something easily visualized by the mind. Part of the reason for this is that a confined space can be almost anything. However, it does have some common components that we can define.

1. It is not designed for continuous human occupancy.
2. It has restricted or limited entry and exit...hence, **confined**.

### What are some typical confined spaces?

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In a municipality, sewer lines and manholes are among the most commonly encountered confined spaces. However, other common confined spaces found in municipal operations might include:

- storage tanks and trash containers
- utility pits
- tank trucks and trash trucks
- storm sewers
- lift stations
- trenches
- water vaults

Again, however, a confined space may be any space meeting the above three criteria, and failing to recognize or identify a confined space can be a hazard in itself.

### Why are confined spaces hazardous?

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The word that best describes the hazardous nature of a confined space is: "uncertainty." Often the conditions within a confined space appear benign. Workers enter such spaces routinely to make repairs, perform maintenance work, check readings of gauges or meters, clean, etc. At such times, the conditions within the confined space may have been harmless. In many instances the worker has performed the task within the confined space repeatedly without incident. Thus, the worker is lulled into a false sense of security that the space will always be harmless, or that any necessary escape from the space will be quick and easy.

However, because the space is **confined**, toxic or flammable atmospheres may become contained and concentrated. Mechanical or electrical hazards may be in direct

proximity to the worker where they can be mangled or electrocuted. The worker can become entrapped or engulfed by material within the space. Because, by definition, a confined space has restricted entry and exit, escape becomes difficult or impossible. The worker thus may be seriously or fatally injured.

Another reason confined spaces can be hazardous is that workers fail to recognize a confined space as being such. It is important for the municipality to first identify every confined space that it has as the first step in a confined space safety program.

## What are some of the common hazards?

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### *Atmospheric Hazards*

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Atmospheric hazards can vary depending on the type of confined space. However, one potential atmospheric hazard common to most confined spaces is oxygen deficiency. There are numerous conditions that can cause oxygen deficiency. Furthermore, insufficient oxygen is a condition that cannot be sensed by the worker. The end result may be that the worker enters the space, gradually becomes faint, passes out, and perhaps dies from this lack of adequate oxygen.

A common toxic hazard in sewers and manholes is sewer gas or hydrogen sulfide. Because it is heavier than air, this gas settles near the bottom of the confined space. In small concentrations, its typical 'rotten egg' smell is easily recognized for a short time, until it dulls the senses. In higher concentrations it may not be smelled and can immediately cause unconsciousness and/or death in a matter of a few seconds.

Flammable atmospheres are another risk. Methane can reach levels of explosive concentration. Petroleum products fumes can often be encountered in many confined spaces, as well as fumes of other flammable chemicals. A match, a spark from a hammer, static electricity, lighting a welding torch... all can easily cause an immediate explosion. Gases such as hydrogen sulfide and carbon monoxide are also very toxic and can cause death in relatively low concentrations.

### *Mechanical Hazards*

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Some confined spaces may contain mechanical equipment with sharp blades or other moving parts that can become accidentally energized and mangle a worker. Stored energy from springs or counterweights, for example, can be accidentally triggered causing the mechanical equipment to move suddenly and injure the worker.

## *Electrical Hazards*

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Like mechanical hazards, a confined space may also contain electrical equipment that can accidentally become energized and electrocute the worker.

## *Entrapment*

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Workers can become trapped within a confined space and die from exposure. The space can unknowingly close, trapping a worker inside. Workers can drown inside a water line when an upstream valve is unknowingly opened. Some substances, such as asphalt, can cause entrapment due to their viscosity or "stickiness."

## *Engulfment*

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An example of this type of hazard would be a salt or sand bin where a worker walking on the surface of the substance in the bin can literally be swallowed by the motion of the material and suffocate.

In addition to these possible hazards, confined spaces may contain excessive heat causing heat exhaustion or can contain excessive noise requiring hearing protection. Dim or inadequate lighting may increase the likelihood of accident and injury.

## *Identify All Confined Spaces*

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You should begin by identifying every confined space that workers may be required to enter within the scope of their work. Applicable employees then need to be informed of the existence, locations and dangers of these spaces by posting danger signs or other equally effective means.

## *Permit Entry System*

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Many injuries and deaths occur in confined spaces because a worker enters a confined space without telling anyone or because management fails to alert the worker to a known hazard that the worker may be unaware of. To prevent these tragic occurrences, a permit entry system needs to be developed. Such a system requires that a permit be completed for any worker to enter into a confined space. The permit forces both the worker(s) and management to recognize the confined space as being a hazard, identify the hazards that may be encountered upon entry, require any testing of the atmosphere, safety equipment, attendants, rescue equipment, etc. OSHA regulations and the City Safety Regulations (provided at the end of this section) require the use of a permit entry system when entering confined spaces.



## *Testing*

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Testing for atmospheric hazards is also an OSHA requirement. Many hazardous atmospheres cannot be detected by our sense of smell. These include carbon monoxide, oxygen deficiency, methane, and large concentrations of hydrogen sulfide. Without testing, the worker's first clue to the presence of the hazard might be sudden collapse and subsequent death. Testing of a confined space thus becomes critical. Furthermore, since such hazardous substances tend to be heavier than air and displace air, testing of the confined space must be done **at the bottom** of the confined space especially, although the rest of the space also needs to be tested.

## *Safety Equipment*

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The permit entry system needs to address individual items of safety equipment needed for each confined space. This might include respirators, hard hats, safety harnesses, etc. This would also include emergency equipment necessary for any rescue such as a rescue tripod, winch, first aid kit, etc.

## *Monitoring*

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For prolonged periods of work in a confined space, provision for continued monitoring of the space may be necessary. Portable monitoring devices may be needed to detect and warn workers of changing atmospheric hazards.

## *Ventilation*

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One of the easiest methods of reducing or eliminating hazardous atmospheres, particularly in manholes and sewer lines, is through ventilation. Mechanical blowers can eliminate many hazardous atmospheres if properly set up and used.

## *Observation*

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No worker should enter a confined space without a trained attendant standing by to summon help or operate a man-lift in the event of an emergency. The attendant is part of the permit entry system.

## Training

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As with any hazardous activity, training is essential to prevent accidents and fatalities. Equally important is the periodic use of emergency drills. Such drills help ensure that employees respond properly in emergency situations. Training should be documented and records maintained. Contact Risk Management or the insurance loss control representative for confined space training.

Below are listed the safety regulations that apply to all City operations when a confined space must be entered. However, some City locations may have their own specific confined space entry program. If you are working in one of these areas, consult this program for more detailed instruction.

## CONFINED SPACE SAFETY REGULATIONS

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1. Review the specific **Confined Space Program** of the department or facility before beginning work.
2. Any vessel entered shall be properly blinded and/or isolated before work begins.
3. The vessel will be clean, gas free and contain adequate oxygen concentration before entry is permitted.
4. An **Entry Permit** shall be issued before anyone enters a permit-required confined space.
5. A **Confined Space Attendant** shall be assigned to the work area. The attendant will be adequately trained in the duties of a **Confined Space Attendant** as defined in OSHA regulations.
6. A **Confined Space Attendant** shall not leave the area when personnel are working inside a confined space.
7. The potential hazards of a confined space will be determined prior to entering the confined space.
8. All personnel entering the confined space will be adequately trained.
9. Personnel entering the confined space will be briefed by their supervisor as to the risks of the operation.
10. The confined space atmosphere shall be monitored on a regular basis. The area should be retested after breaks or lunch periods.
11. Do not enter a confined space unless you are properly attired to do so.
12. Contact a supervisor if assistance is required. **Never enter a confined space when unsure of the hazards.**
13. Rescue involving a confined space **shall not be attempted** unless the rescuers are qualified and properly trained and equipped for confined space rescue.
14. Do not attempt rescue without appropriate personal protective equipment.
15. Immediately report any confined space incident and/or accident to your **supervisor**.
16. Consult OSHA Standard [29 CFR 1910.146](#) for guidance on Confined Space entry procedures.

## MAINTENANCE SHOP SAFETY

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Maintenance shop personnel, in addition to the areas outlined below, should pay particular attention to Safety Manual sections on [Welding Cutting & Brazing](#), [Cranes](#), [Power Tools](#), [Hand Tools](#), and [Lockout/Tagout](#) procedures.

### Radiator Service

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Be careful when checking the radiator since automotive cooling systems work under pressure. The coolant may be in the boiling range and therefore too hot to check safely. Always observe the following precautions when checking the radiator.

1. Place wiping cloth over cap and turn it 1/4 turn counter-clockwise. This will permit the escape of pressure.
2. Caution: If a rumbling noise is heard coming from the radiator, or if coolant spews out from under the cap, close the cap immediately because the coolant is too hot and will boil over violently if pressure is released. The coolant will have to cool down before it can be checked safely.
3. Remove the cap by turning it counter-clockwise until stop is reached, and then lift it off.
4. Operate the engine at idle speed when adding water or anti-freeze while the engine is hot. This will allow it to circulate quickly without damage to the engine block. If water is very low or engine is extremely hot, wait for it to cool before adding coolant.

### Tire Service

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1. Check pressure and inspect tires before inflating them.
2. Protect yourself against blowout when inflating tires. Never squat facing the tire. Stand at one side, so that the fender is between you and the tire, if possible. Use chuck gauge with clip and extension hose.
3. Never leave jack handles or other tools where they can be a tripping hazard.
4. A protective cage or equivalent protection shall be provided for the inflating of truck tires.

### Battery Service

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1. Do not smoke or permit open flames or sparks near batteries that are being recharged, as they emit hydrogen gas, which is explosive. Recharge batteries only in a well ventilated area.
2. When disconnecting a battery always remove the ground cable first in order to prevent sparks if the wrench is accidentally grounded.
3. When installing a battery always attach the ground cable last.
4. Wash acid and corroded particles from hands immediately after performing battery service. Be sure that clothing is free of acid and corroded particles.

5. Face shields or other eye protection shall be worn when handling batteries. If acid gets into the eye, promptly rinse the eye thoroughly with water until chemical is completely removed. After a thorough rinsing, cover the eye with a sterile gauze compress and take the injured person to a doctor.
6. Use great care in the storing and handling of electrolyte for dry charge batteries.
7. Follow safe lifting practices when handling batteries. Use only an approved carrier. When lifting batteries in and out of under hood mountings, you can sometimes gain additional leverage by resting your elbows on the fenders.

## Lubrication and Maintenance Service

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1. To prevent slipping, promptly clean up oil and grease from floors. Never discharge a high pressure grease gun at any part of the body, as grease may penetrate the skin, causing injury.
2. Do not rock cars while they are on a twin post or free wheel lift, as movement may cause enough shifting of the car on the supports to fall off the lift.
3. Do not stand in front of a vehicle when guiding onto a lift or pit. If you do, you may be injured if it does not stop in time.
4. When using floor lift jacks, be sure they are resting on a firm base and make good contact with the car. When chain hoists or jacks are used, vehicles shall be securely blocked before employees go under them.
5. Do not allow anyone to remain in a vehicle being raised on a lift.
6. Do not overload the lift.
7. Keep your hand on the control valve when the lift is being raised or lowered. Do not prop it open.
8. Do not allow anyone to walk under the lift when it is being raised or lowered.
9. Report immediately to your supervisor any faulty operation of the lift. Do not use the lift until the defect has been corrected. A jumpy lift usually means low oil -- have it filled or repaired. Tag lift until repaired to warn others.
10. When using the lift, observe the following precautions:
  - A. Center the vehicle over the lift.
  - B. Adjust the adapters to make proper contact with the vehicle.
  - C. Raise the lift slightly off the floor almost making contact with the vehicle.
  - D. Look under the vehicle, making sure that the gas line, muffler, tail pipe, or other parts of the car will not be damaged by contact with the lift.
  - E. Raise the lift until contact is made and vehicle begins to rise slightly.
  - F. Look under the vehicle, checking that proper contact is being made, and if satisfactory, continue raising the lift to the proper height.
  - G. When fully raised, inspect contact points to make certain that the vehicle is firmly positioned.
  - H. Do not open the doors of vehicle that is raised on a frame contact lift.
  - I. After lowering, check to ensure that there is adequate clearance under the vehicle before moving it off the lift.
  - J. When not in use, the lift shall be lowered completely to avoid accidents.
  - K. Lift areas shall be cleared of objects from prior jobs. Oil absorbent material shall be used to remove excess oil and grease before a new job is started.
11. Vehicles shall be properly positioned and automatic chocks shall be operative on all lifts.
12. Safety legs or pins shall be operative to prevent dropping of lifts in event of pressure failure.



13. Do not work under vehicles or other equipment supported by jacks or chain hoists without protective blocking or stands that will prevent injury if jacks or hoists should fail.
14. Hoods, dump sections of dump trucks and similar movable parts shall be blocked to keep them stationary during repairs. (See [Lockout/Tagout](#) section of Safety Manual.)

### Air Compressors

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1. Turn off the main switch before oiling, wiping, or working on the air compressor.
2. Test safety valve weekly to be sure that it operates properly.
3. Never tamper with the safety valve or controls. All adjustments and repairs should be made by qualified mechanics.
4. Do not pile objects near the compressor, nor hang them above it in such a way that they could fall into the mechanism.
5. See OSHA compressed air standard [29 CFR 1917.154](#).

### Special Fire Prevention - Protection

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1. No petroleum products or solutions containing petroleum shall be poured into any drain or sewer.
2. Never use gasoline for cleaning purposes under any circumstances.
3. Put all oily waste in covered metal containers. Approved and properly marked storage containers shall be provided for waste, oily rags, etc. Empty them frequently to prevent spontaneous combustion.
4. Welding and brazing shall be done away from flammable or explosive substances. Appropriate fire extinguisher shall be located nearby.
5. Smoking shall not be permitted in any maintenance shop area in the vicinity of flammables.
6. The correct type, proper size and adequate number of clearly marked and easily accessible extinguisher shall be provided.
7. Fire exits shall be properly marked and kept clear at all times. During working hours all exit doors must be kept unlocked.
8. Employees shall be instructed in the safe handling of flammables. (See Hazard Communication Section)
9. Only approved and properly marked cans shall be used for flammable liquids.
10. Fire authorities should be given information about the premises to enable them to respond to an emergency.
11. Employees shall be instructed in evacuation procedures.

### What to Do In Case of Fire

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1. Know the location of firefighting equipment and how to use it.
2. Call 911 to contact the Fire Department.
3. When a fire starts, lose no time in using firefighting equipment at hand to try to control the fire before it spreads. Call, or have someone call the Fire Department immediately.



4. When a gasoline spill catches fire, attack the flame at its base. When using a dry chemical or carbon dioxide extinguisher, use a rapid side-to-side motion. Be sure that all of the fire is put out or it will reflash.
5. Notify your supervisor and the Risk Manager as soon as possible after a fire has occurred.
6. Consult Fire Fighting Equipment Section of Safety Manual pg 6.

## Closing of Vehicular Service Building

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1. Turn off air compressor at main control switch and air valves at the tanks.
2. Check control setting of heating equipment, and be sure it is working properly
3. Lock all windows and doors.
4. Disconnect all coffee makers and appliances except refrigerators.

## FUEL DISPENSING SAFETY

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### General

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1. Good housekeeping shall be maintained in the entire service area.
2. Gasoline, diesel and other fuel dispensing pumps shall be properly labeled.
3. Shut off the pump immediately if a fire occurs while the nozzle is still in the tank. Do not remove the nozzle until the fire has been put out.
4. Report unsafe gasoline nozzle i.e. faulty automatic shut-off.
5. Smoking is not permitted in any fuel dispensing area.
6. Stand in a safe position at the pump. Do not cross in front of moving vehicles.
7. Before delivering fuel into the fuel tank, make certain the engine is off.
8. Good metallic contact shall be made between the nozzle and tank before filling the tank. Use particular care when topping off, so as to avoid spillage of gasoline.
9. Always replace fuel tank cap immediately after delivery.
10. Be sure hose nozzle is hung securely on the pump after delivery.
11. Keep pump hose exactly placed within island limits so it will not catch on bumpers or fenders.
12. Keep hose, nozzles, and connections in good condition.
13. Report immediately any leakage near a fuel pump. Do not use the pump until the leak is fixed. This work shall be done only by a qualified mechanic.
14. Fuel spillage on driveways should be reported immediately. If the spill is large enough to create a risk of the fuel reaching drains, immediate measures should be taken to stop the flow of the fuel. Dumping sand on and in the way of the flow is recommended.
16. Remove clothing wet with gasoline immediately and be sure that it is cleaned before it is worn again. Do not go near a heater or open flame wearing gasoline soaked clothing. When the skin has been wet with gasoline, wash the affected part thoroughly with soap and water to prevent skin inflammation.
17. Deliver gasoline into fuel tanks of properly labeled metal containers only. Never deliver gasoline into glass bottles, open containers, or food, drug, or cosmetic containers. The Federal Hazardous

Substances Labeling Act requires that any container that is filled with gasoline, kerosene or other hazardous substances must be labeled in an approved manner. (In private service stations, if the container does not have such a label, the dealer must apply one before filling it.)

18. Employees shall not siphon gas with a hose or tube, particularly where the mouth is used to create suction.
19. The location of shut-off switch should be clearly marked, and all employees should know where it is and how to use it.

### Automatic Nozzles

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1. Use only automatic nozzles which have been approved by Underwriters Laboratories, Inc. and the City Fire Department.
2. In situations where the nozzle cannot be secured to prevent it from falling out, remain by the nozzle and fill the tank on manual control.
3. Observe the nozzle frequently while gasoline is being delivered so any mechanical failure will be noticed immediately.
4. Check the automatic nozzle regularly and keep it in good repair.

### Receiving and Storing Gasoline

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1. Fill pipes of underground tanks shall be plainly marked by color code, tags, or other methods on the installation to show the contents of the tank. Always take precautions to prevent the mixing of products as a result of delivery into the wrong tank.
2. Keep fill caps tight between deliveries to keep water or dirt from entering. The use of grease on threads will aid in keeping fill caps watertight.
3. Gauge tanks with calibrated sticks in gallons or inches, before ordering, and again before receiving deliveries to be sure the quantity being delivered will not overflow. Be sure also that the correct tank chart is used.
4. Clear fill pipe areas of parked cars prior to the time of delivery of gasoline. Do not allow parking in those areas where it will interfere with absentee deliveries. A car parked near or over a fill pipe may be a serious fire hazard.
5. Make sure that gasoline vapor discharged from vent pipes does not enter buildings. Do not strike matches or permit other sources of ignition near vent openings. (It is especially important when tanks are being filled because an equal volume of flammable vapor is being discharged into the air through the vents.)
6. Report to the immediate supervisor on duty at once if liquid gasoline should discharge from vents at any time.
7. Consult OSHA standard [29 CFR 1917.156](#) Fuel Handling and Storage.

## REFUSE COLLECTION

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### Introduction

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1. Drive your vehicle on the right hand side of street unless operating on one-way streets or specifically directed otherwise by supervisor.
2. Never activate packing mechanism on rear loaders unless turn-buckles are properly fastened, except when unloading packer.
3. Collection crews shall haul only the type of refuse they have been assigned.
4. Crew members shall handle refuse in such a manner as not to increase the hazard to themselves from broken or flying glass.
5. Never manipulate anything in or near the hopper while packer is in operation.
6. Do not manually push refuse into hopper while packer is in motion.
7. Never put any part of your body in the hopper area while the packer blade is in motion.
8. Never activate packing controls while any portion of the body is in the hopper area.
9. Make sure there are no objects on the edge of the hopper, such as lumber or pieces of glass, which would fly out and injure someone when packer is in motion.
10. No one will ride in the hopper. Ride only in prescribed locations. At no time shall any part of the body extend into the hopper.
11. Never put refuse in hopper when truck is full.
12. Use caution when moving heavy wheeled containers.
13. Each rear load truck should carry a broom and shovel to clean up rubbish spills.
14. Containers used in carry out service, when left unattended, should be out of driveways and walkways, off sidewalks, and near curb.

### Unloading Operations

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1. All refuse collected shall be delivered to the designated disposal point where the complete load must be discharged.
2. Directions from disposal site attendants shall be followed.
3. Be alert at the disposal site and watch out for sharp objects and wire that may puncture tires or tangle drive line.
4. Wait until vehicle is completely stopped at the disposal area before unfastening turnbuckles or latches.
5. Use caution when manually operating rear doors on trucks.
6. Employees not operating the dumping controls shall stand clear of the vehicle until the load is completely discharged.
7. Never raise the tailgate or operate the push plate in a jerking manner.
8. When tailgate is in raised position, never have any part of body between vehicle body and raised tailgate unless proper blockage is installed.
9. Stop all engines and remove the key before getting into the packer body to clean it.
10. While at the disposal site blades shall be cleaned of loose refuse in accordance with the guidelines of the truck.
11. Drivers of refuse collection vehicles shall inspect their vehicles for cracks, broken welds, etc., while at the disposal site.





## Hazardous Materials

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If refuse personnel come in contact with or identify suspected hazardous material, radio supervisor, City shops or 911. Advise them of your location and situation. If possible, do not touch, handle or remove the material from the original location where it was found.

## Vehicle Breakdowns

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1. Call your supervisor or City Shops to report breakdown. Give truck number, location and description of trouble.
2. If a vehicle stalls on roadway, warning triangles (reflectors) are to be placed in a manner conforming to D.O.T. vehicle code.
3. Stalled vehicles are not to be left unattended.

## Injuries

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1. Report all injuries, regardless of how minor, on the same day they occur.
2. Any serious injury shall be reported to supervisor immediately.
3. Any employee witnessing an accident shall immediately assist the injured and arrange for medical treatment if required.
4. In the event an employee is caught in hopper or packer: Stop operation of vehicle packer immediately. Check extent of injury. If help cannot be administered, summon help.
5. Use appropriate forms on the Intranet website to report injuries.

## Vehicle Fires

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1. For fires in the packer body of the truck, radio your supervisor, City shops or 911. Advise them of the fire and location of truck. Attempt to locate an isolated but accessible area to dump the load. Move truck away from burning refuse pile, and maintain radio contact if possible.
2. For fires in the engine or cab compartments, contact supervisor, City Shops, or 911. Advise them of the fire and location of the truck. If possible to do so without endangering yourself, move truck away from any structures and attempt to put out the fire with the fire extinguisher. Maintain radio contact if possible.

## OFFICE SAFETY

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1. Practice good housekeeping at all times in office areas.
2. Keep cords and other wiring covered so they do not become tripping hazards. Do not overload outlets by connecting too many items.
3. Keep equipment in good repair.
4. Do not block stairs, steps or doorways.
5. Clean up all spills immediately.
6. Use the proper ladder or stool for reaching high places do not stand on chairs or furniture.
7. Portable electric heaters should not be used in office spaces.
8. Follow proper lifting techniques when carrying large or awkward materials.
9. Practice sound electrical safety techniques when working with computers, typewriter, photocopiers, etc.
10. Report unsafe situations to your supervisor immediately.
11. Report accidents and injuries immediately to your supervisor.
12. Do not store food in desks, cabinets or other similar areas.
13. Know the **Emergency Evacuation Plan** for your particular office area.
14. Know the location of the nearest fire extinguisher, fire alarm, and first aid kit.

## TREE TRIMMING OPERATIONS

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### Tools and Equipment

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1. All tools and equipment shall be properly maintained.
2. Employees shall make daily inspections of all equipment, tools, etc. before using them.
3. Hand saws shall be kept sharp and properly set so they will not jump out of the cut and cause injury.
4. Ramp boards (used to load equipment into trucks) shall be kept smooth sanded and varnished to prevent splintering of boards. (Hinged ramps are recommended.)
5. Proper care of safety lines shall be taken at all times.
  - A. Safety line shall be protected against wetting or dampness. Completely dry and clean before storing.
  - B. Safety lines and hand lines shall be kept in a clean box by themselves. Do not store lines and tools together.
  - C. All ropes and lines shall be kept coiled when not in use and hung in a clean, dry, dark, well ventilated area.

Chipper blades shall be kept sharp. (Dull blades cause extra strain on the engine and may cause chippings to clog in the chute.)

## Fuels

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1. Fuels shall be dispensed and stored safely.
2. Stop gasoline powered equipment before fueling and wipe away spills before starting it.
3. Fuels shall be stored in approved flammable liquid containers only.
4. Fuel containers shall never be stored or carried in crew compartments.

## Personal Protective Equipment

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1. Appropriate [personal protective](#) equipment shall be used and maintained properly.
2. Safety goggles or face shield and hearing protection shall be worn when feeding a chipper.
3. Work gloves shall be worn when roping or handling equipment and tools.
4. Work boots should have ankle support and non-slip soles.
5. Safety equipment such as goggles, hard hats and gloves should be stored where they are readily available. Goggles and face shields should be kept clean, and should be replaced when cloudy or scratched.
6. First aid kits shall be carried on all trucks and kept well supplied.

## Work Area Protection

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1. [Traffic cones, barricades, high level warning devices](#), etc., shall be properly placed in the street after the truck stops at the work location. Flashing warning signals should be observed for a few minutes to assure they are working correctly. (See Safety Manual section on [Barricades and Work Area Protection](#) for further guidance.)

## Tree Trimming Operation - General Rules

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1. Safe procedures shall be observed when climbing and working trees. Never use a bull rope for climbing.
2. A climber should position themselves above the limb they are cutting off to prevent being struck by the limb as it falls.
3. All limbs shall be tested before the full weight of the body is allowed to rest on them. Keep one arm around the trunk or keep the hands on separate limbs. Branches are more apt to snap off on a cold day than on a warm day.
4. Only one person shall work in a tree at a time unless an additional person can work in the same tree safely.
5. Trees shall not be climbed or worked in when wet unless in an emergency. Use extreme caution when doing so.
6. Climbers shall keep hands and feet free from tight or binding positions where they can become entrapped where limbs meet the trunk of a tree.
7. Safety lines shall be used when climbing as well as in performance of work. Use safety line with a saddle and have the climber assisted up the tree by ground person when necessary.

8. The climber shall tie himself in with his safety tag-line while changing his safety line or re-crotching.
9. Knots tied to lines for prolonged periods or knots tied repeatedly at the same point in a line will cause kinking and excessive wear of the line. Avoid this practice.
10. The safety line should be crotched around the main trunk and only at a height that the trunk would support the climbers' weight.
11. Safety lines shall be examined for cuts and wear and tested before each day's use. Questionable lines shall be taken out of service at once.
12. Safety lines shall be at least 1/2" 3-strand Esterion, safety blue, polyester or nylon and from 120-150 feet in length when used in larger trees.
13. The working load of a line shall not exceed 1/5 the breaking strength of the line.
14. The climber should stay in his safety saddle until he is again safely on the ground.
15. When using a ladder, lashing or other tie lines should pass over side rails and the end of the rungs (not over the center of the rungs).
16. Ladders must be placed on sound footing (and not in the bed of a truck).
17. When using straight ladders at trees, to establish proper angle, the foot of the ladder should be moved out of the perpendicular by 1/4 the length of the ladder. If the ladder is 12 feet long, the foot should be 3 feet out from the base of the tree. Estimate the length of the ladder by counting rungs which are usually 1 foot apart.
18. Tools shall be raised or lowered by means of a hand line or the free end of the safety line.
19. Hand saws should be carried in a scabbard and securely fastened to the climber's belt.
20. Tree spurs shall be put on at the base of the tree and removed when reaching the ground.
21. A large tree limb that cannot be controlled by hand should have a line or lines attached for controlled lowering before the limb is cut off.
22. The trimmer shall place themselves in the tree so that the saw cannot fall against them if it is suddenly released.
23. When using the chain saw from the bucket, always have it attached by a safety line to the bucket.
24. Safety goggles or face shield and ear plugs or muffs shall be worn when operating chain saw.
25. Always give proper warning when about to drop something out of a tree, such as: "Timber"; "Heads up"; and "Look out below".
26. Not more than two people at a time should be allowed to work near the base of a tree which is being felled.
27. When trees must be cut flush to the ground, it is safest to make the first cut at stump height above the swell of the roots and cut the stump flush with the ground after the tree is down.
28. When felling trees on hillsides, try to drop the tree up the slope (and not down slope nor across the slope).
29. Make sure the area around you is clear before turning to the side with a chain running in your hands.
30. Never leave a saw or any other machine running unattended.
31. When bucking fallen logs on hillsides, wedge logs firmly first and then buck only from the high side.
32. Pruner poles must be made of non-conductive material and have a non-conductive pull line between the lever arm and the handle. This is a safeguard against electrical shock.
33. Only one person shall feed a chipper at a time. If other employees are available - they should prepare the bush for the person feeding the chipper. Stand to the side when feeding the chipper.
34. Safety goggles or a face shield and hearing protection shall be worn when feeding the chipper. No loose clothing or gloves with holes shall be worn when chipping or stump grinding.



35. The brush shall be cut small enough so that, if it is drawn into the chipper, it will not cause injury to the operator.
36. Under no circumstances shall tools such as scoops or forks be used to push brush and debris into the chipper. Such practice is extremely dangerous to the operator and the machine.
37. Pneumatic tools must be handled with care so that they will not be activated unexpectedly. Disconnect a pneumatic tool from the air hose before handing it to another person and before leaving it unattended.
38. When edging, a safety shield shall be worn by the operator to prevent rocks from striking themselves in the face. A face shield and shin guards shall always be worn when operating a lawn renovator.
39. To prevent head injuries, low hanging limbs shall be trimmed and hard hats shall be worn.
40. Safety goggles or a face shield shall be worn when operating the stump cutter.

## **TRENCHING AND SHORING OPERATIONS**

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All City trenching and shoring operations are to be conducted according to OSHA [standard 29 CFR 1926 Subpart P](#), including [1926.650](#), [1926.651](#), and [1926.652](#) and Appendices B through F. These standards are contained in a separate more manageable size field manual titled "Construction Standards for Excavations". This handbook should be available and in use by all work groups whose employees are required to enter excavations, even for short periods of time.

## **CELLULAR PHONE USE IN VEHICLES**

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Distracted drivers are more likely to make a driving error or react too slowly. As more City drivers are using cellular phones, it is important that they be used safely and courteously. Currently, there is no law or City policy against using a cellular phone while driving, but you could be charged with dangerous or careless driving if you cause an accident while using one, and cellular phone use is frequently cited by other drivers as an annoyance or hazard because distracted cell phone users often behave more erratically. It is important both for safety and for the image of City drivers that common sense and courtesy be followed in using Cellular phones while in City of Grand Junction vehicles.

### **Guidelines for Cellular Phone Use in Vehicles**

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1. Whenever possible, use your cellular phone when parked, or have a passenger use the phone.
2. If your position requires frequent cell phone use in a vehicle, you should have voice mail service and hands-free equipment for your phone, and use both to avoid distractions.
3. If your phone rings when you are driving – especially during hazardous conditions -- let your cellular voice mail service take the call and listen to the message later when you are parked, or pull over before answering, if traffic conditions permit.

4. Make sure the phone is easy to see and reach: Place your cellular phone in your vehicle where you can grab it without removing your eyes from the road.
5. Suspend conversations during hazardous driving conditions or situations.
6. Let the person you are speaking to know you are driving and that the call may need to be suspended at any time.
7. Do not take notes or look up phone numbers while driving. As a driver, your first responsibility is to pay attention to the road. Common sense dictates you do not read, look up an address or attempt to write or take notes while driving.
8. Attempt to dial and place all calls when you are not moving.
9. When possible, plan your calls before you begin your trip, or call when your vehicle is parked at a stop sign or red light. If you absolutely need to dial while driving, assess the traffic and dial only a few numbers at a time.
10. Learn and use the pre-programmed number dial features of your phone. Practice using this feature for commonly dialed numbers *before* driving so you are familiar with the procedures.
11. Do not engage in stressful or emotional conversations while driving. A stressful or emotional phone conversation while driving is distracting and potentially dangerous. If necessary, suspend the phone conversation.
12. Use your cellular phone to call for help or to help others in emergencies. Your cellular phone lets you be a "good Samaritan" in the community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 911 and give the exact location and information to fire, police or ambulance personnel.

## LPG - LIQUID PETROLEUM GAS (Propane)

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Mixtures of Propane, Methane, and Butane comprise Liquid Petroleum Gas (LPG), often referred to as simply Propane. It is used in a wide variety of operations, including fueling vehicles, as heat source for heating or melting materials, weed burning operations, cutting, soldering, and heating buildings or equipment.

Applicable OSHA standards for handling and storage of LPG are contained at [29 CFR 1910.110](#).

### Basic Precautions

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1. The material is extremely flammable. DO NOT smoke while using LPG.
2. Operate in only well ventilated areas.
3. Never puncture the container.
4. Keep the container away from sources of flame or heat.
5. Never incinerate the container.
6. Keep the container away from exposure to heat sources.
7. When changing propane cylinders, make sure that tank valves are closed before breaking connections. Check for leaks after change is complete using a soapy water solution.
8. Have a fire extinguisher or other firefighting equipment nearby when using propane.

9. Have a first aid kit nearby when using propane.
10. Use chemical goggles and leather gloves and cover extremities when working with propane, especially when lighting a pilot or burner on a propane system or changing system connections. Use of a Face shield is recommended while lighting pilot lights, especially when re-lighting after a pilot light has gone out.
11. Store excess cylinders securely and in a manner that protects the valve assembly from accidental blows. (Storage of liquefied petroleum gases shall be stored and handled in compliance with NFPA No. 58.[12] Taken from the "Handbook of COMPRESSED GASES second edition, Compressed Gas Association, Inc.)
12. NFPA hazard labels should be placed on all cylinders. (Part of 29 CFR 1910.1200)
13. Never store excess cylinders near walkways, exits, and general path of travel.
14. Never store excess cylinders under stairs, decks, ramps, etc.
15. Never store cylinders together with oxygen sources or strong oxidants.
16. Always secure the valve opening with a cap or similar device when storing excess cylinders.
17. Prior to each use, inspect cylinders for signs of damage and/or wear.
18. Damaged cylinders must be taken out of service and replaced or repaired.
19. Periodically check cylinders to assure that they are inspected and approved for use. This inspection should also be performed each time a cylinder is brought on-site from an outside source.
20. Never attempt to repair a propane cylinder. Refer all repairs to qualified propane service personnel.
21. Never refill a cylinder that has exceeded the certification date. (5 years)
22. Never improperly dispose of cylinders. Return them to an authorized propane dealership for proper disposal.
23. Immediately report unsafe conditions to your Supervisor or the Risk Manager.

## General Safe Work Practices

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### **These work practices shall be observed when using propane fired equipment:**

1. All employees using propane equipment must be adequately trained, and must carefully read and understand the Operator's Manual before using the equipment:
  - A. Read the igniting procedure before initiating the firing operation.
  - B. Learn the warning steps if the equipment does not ignite properly.
  - C. Be familiar with the specific purge cycles for each pilot light system.
2. Inspect the equipment before use.
3. Be sure that the equipment is adequately maintained.
4. Become familiar with the MSDS that applies to propane.
5. Stay alert for the smell of propane.
6. Never work on propane powered equipment near energized electrical equipment.
7. Never refuel or re-charge propane cylinders near flames or excessive heat.
8. If you have problems with a pilot light, immediately shut off the equipment and refer to the operator's manual or contact your Supervisor.
9. Never force any gas controls.

10. If you cannot operate knobs, switches, valves, etc. on a propane system, contact your fleet maintenance or your Supervisor for assistance.
11. Do not tamper with and/or alter any controls, valves, switches, etc.
12. Never use tools to turn valves, knobs, switches, etc. on a propane system.
13. Faulty propane equipment must be serviced immediately by qualified service personnel.
14. Be sure that NFPA hazard labels are attached to all cylinders.

### Health Considerations

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1. Propane can be both a heat and cold hazard to employees. Note that escaping propane gas can cause sudden freezing of exposed skin.
2. Know the basic first aid procedures for coming in contact with propane.
3. Be sure that an MSDS on propane is available in the area of operation.
4. Wear chemical goggles when working with propane.
5. Wear leather gloves and other protective clothing to cover extremities when working with propane.
6. Report injuries immediately.
7. Use propane in adequately ventilated work areas.

### Personal Protective Equipment (PPE)

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1. Wear chemical goggles when working with propane gas.
2. Wear leather gloves when working with propane gas.
3. Cover extremities with long sleeves when working with propane gas.
4. Wear a face shield if re-lighting a unit which has recently gone out.

### Emergency Gas Procedures

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If you smell gas or see escaping propane gas:

1. Shut off the main fuel supply.
2. Call 911, secure the area from approach by the public or other workers, and contact your supervisor.
3. Never touch electrical switches, light matches or use electrical or electronic equipment.
4. Be cautious about creating sparks from static or ferrous metals.



## HAZARD COMMUNICATION PROGRAM

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### Introduction

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The following introduction describes the purpose and scope of Hazard Communication programs as defined by OSHA standard 1910.1200. It is intended to assist in educating safety representatives and employees concerning hazardous substances, and provide guidance in implementing facility-specific Hazard Communication Programs. Each facility which deals with hazardous substances must have a Hazard Communication Program conforming to these general guidelines. Following the Introduction is the section which includes the hazard communication safety regulations for use throughout the City, and in facilities without a facility-specific program.

The basic goal of a Hazard Communication Program is to provide information to City employees about the chemical hazards they work with and how to protect themselves. This knowledge, in turn, should help to reduce the incidence of chemical source illnesses and injuries.

About 32 million workers are potentially exposed to one or more chemical hazards. There are an estimated 575,000 existing chemical products, and hundreds of new ones are being produced annually. Chemical exposure may cause or contribute to many serious health effects. Also, chemicals may present safety hazards and have the potential to cause fires, explosions and other serious accidents. Due to these hazards the Occupational Safety and Health Administration (OSHA) issued a rule in 1983 called Hazard Communication. The scope of this rule was expanded in 1987 to include employers in the non-manufacturing sector. To underscore the pertinence of Hazard Communication for municipalities, a partial list of hazardous chemicals often associated with municipal operations includes:

Formaldehyde	Hydrochloric acid	Nitric acid	Sulfuric acid	Stoddard Solvent
Mercury	Sodium hydroxide	Acetone	Toluene	Isopropanol
Trichloroethane	Lead	Hydrazine	Ammonia	Ethylene glycol
Phenol	Ethyl acetate	Pesticides	Crystalline Chlorine	Sulphur
Carbon monoxide	Asbestos	Freon	Hydrogen sulfide	
Nitrous oxides	Asphalt	Mineral Spirits	Portland cement	
Sulphur Dioxide	Ferrous Sulfide	Silica	Ferric Chloride	

Please note that the above is only a **partial** listing.

Given that cities such as Grand Junction have exposure to these or other hazardous chemicals, it is prudent for all facilities using chemicals to have a program based on the Hazard Communication rule CFR 1910.1200. The following outlines the requirements of such a program and explains the various elements.

There are five basic requirements under the OSHA Hazard Communication Standard:

1. A written plan must be established explaining how the Hazard Communication Program works for the facility and who is responsible for various items in the implementation of the program.
2. An inventory of on-site chemicals must be assembled on a list that identifies each one of them consistently with the label.
3. A procedure must be developed for inspecting, creating, and maintaining container labels.

4. Safety Data Sheets (SDS) must be collected for all products containing more than one percent of a hazardous chemical. These sheets must be accessible to employees, contractors and medical personnel. The designation "Safety Data Sheet" is replacing the older designation "Material Safety Data Sheet" and the terms may be used interchangeably.
5. Employees must be trained regarding the possible chemical hazards specific to their worksite. This training should also include procedures for safe handling of chemicals and protective devices that should be worn to limit exposure in the event of a spill or release.

### Written Program

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The Hazard Communication Standard requires a **written program**, whether or not the City introduced the hazard in the workplace. The written program must address the following items:

### Labeling

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1. The designation of the person(s) responsible for ensuring labeling of containers within the facility.
2. Designation of person(s) responsible for ensuring labeling on shipped containers. For the City, this responsibility generally relates to DOT regulations with regard to hazardous waste which is not a part of the Hazard Communication Standard. The City seldom ships hazardous products that are not in the form of waste.
3. Description of the labeling system used.
4. Description of written alternatives to labeling of facility containers, where applicable.
5. Procedures to review and update label information when necessary.

### Material Safety Data Sheets (MSDS) (or just SDS)

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1. Designation of person responsible for obtaining/maintaining the MSDS.
3. How such sheets are to be maintained (e.g., in notebooks in the work area, via a computer terminal, in a pick-up truck at the jobsite, via telefax) and how employees obtain access to them.
4. Procedures to follow when the MSDS is not received at the time of the first shipment from the supplier.

### Training

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1. Designation of the person(s) responsible for conducting training.
2. Format of the program to be used (audiovisuals, classroom instruction, etc.).
3. Elements of the training program - (discussed in the following).
4. Procedures to train new employees at the time of their initial assignment and when a new **hazard** is introduced into the workplace.
5. Procedures to train employees of new hazards they may be exposed to when working on or near another employer's worksite (i.e., hazards introduced by other employees).

## Other Items of Discussion

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1. Does a list of the hazardous chemicals exist, and if so, is it compiled for each work area or for the entire worksite and kept in a central location?
2. Are methods the employer will use to inform employees of the hazards on **non-routine** tasks outlined?
3. Are employees informed of the hazards associated with chemicals contained in unlabeled pipes in their work areas?
4. Does the plan include the methods the employer will use at multi-employer worksites to inform other employers of any precautionary measures that need to be taken to protect their employees?
5. For multi-employer workplaces, are the methods the employer will use to inform the other employer(s) of the labeling system used described?
6. Is the written program made available to employees?

## The Chemical Inventory

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An inventory of the **hazardous chemicals** present at the facility should be assembled. It is prudent to keep this list near the front of every book of MSDS with product names as they appear on the MSDS. This can be used as a cross reference which allows the user of a chemical to readily find needed information.

A hazardous chemical is any chemical that presents a physical and/or health hazard as shown by at least one study where the hazard was recognized at a level showing statistical significance. If OSHA has published a Permissible Exposure Limit (PEL), or the American Conference of Governmental Industrial Hygienists (ACGIH) has established a Threshold Limit Value (TLV) for the chemical, the chemical is automatically deemed hazardous. With the exception of highly toxic or cancer-causing chemicals, all chemicals present in quantities greater than one percent in a product must be listed in the inventory. Chemicals that are more toxic (e.g., benzene) must be listed if in a product at greater than 0.1 percent.

The chemical inventory should include the manufacturer's product name, location, and telephone number, and the work area where the product is used. Hazardous chemicals that may be generated in the work operation by the municipality must also be listed (e.g., welding fumes). After the inventory is assembled, a central coordinating department, such as Purchasing, should be consulted to determine whether all hazardous chemicals purchased are on the list. A procedure should be developed to keep the list current when new substances are purchased and used. It is very helpful to use the Purchasing Department to approve all purchases of hazardous chemicals and track the inventory in a data base. If any product containing a hazardous chemical is used in greater frequency or quantity than typical consumer use, the product or chemical should be included on the chemical inventory.

A helpful way to organize the chemical inventory is to separate the chemicals and/or products into various classifications (e.g., flammable, highly toxic, carcinogenic, etc.). The National Fire Protection Association (NFPA) has a system that classifies chemicals having acute effects into certain groups in accordance with similar characteristics. These classifications are helpful to train workers on the types of hazards in the workplace. However, the classifications are based on how the chemicals react in the event of a fire. This may or may not be indicative of how the chemicals behave at room temperature.

Until a standardized labeling and classification system is developed, a combination of communication measures may be appropriate.

### Labeling

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The standard requires that any container, bag, barrel, box, bottle, etc. be labeled if it contains hazardous materials and is not used merely by one person during one work shift. Given these criteria, a pail or beaker of hazardous material must be labeled if used to transfer material from a larger receptacle such as a 55 gallon drum. The labels on both the larger receptacle and the container used for transfer must have the same information. The chemical or trade name and the labels should be the same as that on the Safety Data Sheet.

Labels must include the following:

1. The chemical or mixture's trade name.
2. The name and address of the manufacturer.
3. A warning with regard to the potential health effect or hazard - NFPA labels can be used for this in most cases.

Optional information – which may be helpful

4. The Personal Protective Equipment (PPE) appropriately worn during the product's use.
5. The organ(s) affected by exposure to the chemical or mixture (e.g., blood, liver, kidneys, etc.) This is referred to as the target organ.

### Material Safety Data Sheets

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Note: Under the new Globally Harmonized System, these sheets will be called “Safety Data Sheets or “SDS”. In this manual, most references are to MSDS. Both designations convey the same chemical information. Regardless of designation as SDS or MSDS, the sheets may be kept together in the same location.

If a product is purchased containing more than one percent of a hazardous chemical, an MSDS should accompany the shipment of the product. If an MSDS is not attached, a system to ensure that the appropriate MSDS is received should be put in place. The purchasing department also has the option to implement a policy which will refuse all shipments of hazardous materials not accompanied by an MSDS. Hazardous products bought at the hardware store that are used with greater frequency or amounts than typical consumer use must also have an MSDS. However, these items will not typically be bought with an MSDS. Therefore, the hardware store should be contacted to determine the supplier who sold the product. This supplier should then send an MSDS upon request.

After obtaining the MSDS, the data sheet should be checked to determine whether all the necessary items are included. The following is a list of required items:

1. Product or chemical identity used on the label.
2. Manufacturer's name and address.
3. Chemical and common names of each hazardous ingredient (including CAS numbers).

4. Name, address, and phone number for hazard and emergency information.
5. Preparation or revision date of the MSDS.
6. The hazardous chemical's physical and chemical characteristics, such as vapor pressure and flashpoint.
7. Physical hazards, including the potential for fire, explosion, and reactivity.
8. Known health hazards, including signs and symptoms of exposure or any medical conditions aggravated.
9. OSHA Permissible Exposure Limit (PEL), ACGIH Threshold Limit Value (TLV), or other exposure limits.
10. Emergency and first aid procedures.
11. Whether OSHA, NTP or IARC lists the ingredient as a carcinogen.
12. Precautions for safe handling and use.
13. Control measures such as engineering controls, work practices, hygienic practices or personal protective equipment required.
14. Primary routes of entry.
15. Procedures for spills, leaks, and clean-up.

One quick way to check the MSDS is to see if all blocks/spaces are filled out as is required by the standard. The MSDS can be in any format as long as it has the above information. If the MSDS does not give adequate information, it may be best to contact the supplier for a more complete MSDS or to send the product back and refuse to use that vendor unless an adequate MSDS can be obtained.

The MSDS must be available to employees, their designated representatives, emergency personnel such as fire departments, and to appropriate government agencies.

The purpose of the MSDS is to communicate the chemical hazards, safe handling and emergency procedures, and contact information for further assistance if needed; for routine use as well as emergencies.

All the chemical ingredients of the product will be listed if in a percentage greater than one percent. Many times, manufacturers and suppliers will not disclose the ingredient for proprietary reasons. This is permissible for ingredients that are not considered hazardous.

The Chemical Abstract System (CAS) number, which is a unique number assigned to each chemical, should be included on the MSDS next to that chemical. The CAS number relates to a chemical registry which allows one to find a particular chemical and information regarding it in a computer data base. Chemicals can be known under a number of different synonyms so the number is assigned to ensure the chemical's accurate identity.

Some products during normal use or during heating may give off hazardous by-products even though they may not be hazardous in their original form. This information is important to protect against potential hazardous exposures. An MSDS must be made available for any material which may emit hazardous components when being formed, welded, sawed, etc. For example, bricks may require an MSDS if the bricks are sawed and present an exposure to silica dust (sand).

## Interpretation of the Standard Regarding MSDS

MSDS must be written in English, but can be translated into other languages for the purposes of training.

Hazardous chemicals need not be reported on the MSDS if it can be demonstrated that the hazardous components are bound in such a way that there is no potential for exposure to it. The standard defines exposure as potential as well as measurable exposure by any route of entry, either under normal conditions of use or in a foreseeable emergency. If there is no potential exposure given this definition, the chemical is not covered under the standard.

Computer generated MSDS do not have to include the fields that do not apply to the chemicals for which they are being used. In "standardized" forms where the information does not apply, this should be noted appropriately (e.g., N/A).

Where evidence indicates that a class or family of chemicals presents similar health hazards, it is appropriate to report those findings on the MSDS with respect to the entire class or family. NFPA classes of chemicals can be used in such a way.

The standard requires readable MSDS or electronically accessible MSDS to be maintained on site. This may be accomplished by the use of computers with printers, and/or fax machines. The key issue in compliance is that no barriers to access needed information exist during the work shift. For highly toxic chemicals, it may be helpful to have MSDS (available within 15 minutes) at each job site. For less hazardous chemicals, accessibility during the work shift is appropriate.

Communication of the hazard information via telephone does not satisfy the requirements of the standard. However, if employees are working at remote stations (trucks, construction trailers, etc.), vital information related to an emergency can be communicated via telephone, CB radio, etc. with subsequent sending of hard copy MSDS via mail, fax or delivery. In this scenario, a person must be stationed whenever appropriate at the central location to disseminate information to those at remote locations.

A system for retrieval of MSDS should not require that a supervisor be contacted. The locations where the MSDS books or computer terminals having the same information are kept should not be locked up preventing access. If computers or fax systems are used exclusively to communicate hazard information, all employees must be trained on their proper use. On multi-employer jobsites with contractors, municipalities must provide contract personnel foremen/supervisors with MSDS of products or chemicals that they may contact either routinely or in a foreseeable emergency in the scope of their work. If the contract employer(s) bring hazards to the municipality's worksite, they must submit MSDS to the appropriate City personnel and any other contractor's foreman if their employees were subject to exposure.

### Arrangement of MSDS Books

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Although there is no prescribed system for arranging the MSDS books, some suggestions are appropriate:

1. A comprehensive book having all the MSDS will be kept in one department such as Purchasing. This book shall be updated by one person. Copies of the new/revised MSDS should then be sent to the departments that are using that product or chemical. This is one reason why Purchasing or a central coordinator must be advised of any new hazardous chemical which enters the system.
2. Books for MSDS of chemicals/products that are used at a particular worksite should be kept within that worksite. These smaller MSDS books will more readily allow an employee to find the MSDS of concern.
3. A chemical inventory for that particular department should be kept at the front of each MSDS book, with an exhaustive inventory kept in the book discussed in suggestion (1).

4. The books should be divided in a logical manner. One way to separate the books is by class of chemical (e.g., acids, bases, flammables, carcinogens). Another way to separate the book is by type of use (e.g., lubricants, cleaning products, compressed gases, welding products, adhesives, paints). After these divisions are made, it is most helpful to compile the products/chemicals alphabetically by trade name.
5. After organizing the book, it is helpful to use the chemical inventory as an index, noting the page number or section in which the MSDS for the chemical resides. There should be some method to update the index as new MSDS are placed in the book.
6. It is highly recommended that the Hazard Communications Written Program be placed near the front of each MSDS book.
7. The MSDS books at each location must be periodically updated by a designated person.

### CITY-WIDE HAZARD COMMUNICATION REGULATIONS

1. Review the site-specific **Hazard Communication Program** of your department or facility before working with any chemicals. Check material safety data sheets of chemicals prior to use.
2. Wear appropriate personal protective equipment as recommended by material safety data sheets when working with chemicals.
3. All personnel working with chemicals shall be adequately trained in potential hazards of the chemicals they are using.
4. Report all injuries or accidents immediately.
5. Clean up all minor spills.
6. If a major spill of hazardous materials occurs, evacuate and cordon off the area, call 911, and contact **your supervisor** DO NOT attempt to clean up a hazardous materials spill alone.
7. Properly store chemicals in such a way that chemical incidents do not result.
8. Properly label all containers containing flammable, poisonous, toxic, or otherwise dangerous materials.
9. Store insecticides, pesticides, herbicides, flammables, and strong acids in storage that is locked from public access.
10. Post signs informing personnel that hazardous chemicals are located in cabinets, lockers, closets, etc.
11. Employees required to wear respiratory equipment must be qualified to do so. This includes but is not limited to training, medical qualifications, and fit testing of respirators.
12. Only approved solvents will be used to clean parts and materials.
13. Gasoline, kerosene and other potentially dangerous materials will not be used as cleaning solvents.
14. Employees will wear gloves and safety goggles when working with cleaning solvents.
15. Maintain adequate ventilation when working with chemicals.
16. Employees should know the location of the nearest fire extinguisher, first aid kit, emergency eyewash, emergency shower and telephone when working with chemicals.
17. For guidance on Hazard Communication, consult OSHA Standard [29 CFR 1910.1200](#).



## HEARING CONSERVATION PROGRAM

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1. Check to see if elevated noise levels are present, and as appropriate, review the **Hearing Conservation Program** of a department or facility before working in those areas.
2. Certain areas may be identified as "**High Noise Areas.**" Personnel working in these areas will wear approved hearing protection.
3. When requested by supervisors, employees shall wear approved hearing protectors even if the area is not marked. Employees who are concerned about noise levels should request hearing protection be provided.
4. Personnel will be adequately trained in the use of hearing protection and will be familiar with the hazards related to elevated noise levels.
5. Hearing protection will be made available to anyone working in areas where elevated noise levels exist.
6. Personnel routinely exposed to elevated noise levels above 85 decibels shall be included in a Hearing Conservation Program. Contact your supervisor if you have questions regarding such a program.
7. Remember- people do not get accustomed to loud noises - **THEY LOSE THEIR HEARING!**
8. For guidance on hearing safety, consult [OSHA Noise and Hearing Conservation Standards](#).

## RESPIRATORY PROTECTION PROGRAM

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### INTRODUCTION

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This program will provide City of Grand Junction employees with the criteria for compliance with the OSHA Respiratory Protection Standard [29 CFR 1910.134](#).

### SCOPE

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**David L Roper, Risk Manager**, has been designated as the person responsible for coordinating this program. Each supervisor will ensure that their employees will meet governmental requirements and all elements of the Respiratory Protection Program.

### PURPOSE

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It is the responsibility of the City to provide a safe and healthful workplace for its employees. In an effort to meet these requirements, all departments will conduct various surveys to determine whether the need for a Respiratory Protection Program exists. The employees who work in selected areas will be covered by this program. This program will dictate what steps must be taken to reduce employees exposure to nuisance dust, respirable dust, toxic chemicals, etc.





## COVERED EMPLOYEES

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The following employee job classifications will be covered by the **Grand Junction Respiratory Protection Program**. These employees were selected based upon workplace observations, total dust, respirable dust, and other known workplace chemical evaluations. Covered employees will be evaluated annually.

The following job classifications have been identified:

1. **Fire Department personnel**
2. **Parks and Recreation Pesticide/Herbicide Applicators**
3. **Persigo Wastewater Treatment personnel**
4. **Maintenance personnel who weld periodically**
5. **Maintenance personnel who paint periodically**
6. **Water treatment personnel working with chlorine in emergency situations.**
7. **Street Sweeper department personnel**

A list of covered employees will be maintained by the respective department.

## PERSONAL PROTECTIVE EQUIPMENT

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The selection of respirators is based upon several factors. These factors include but are not limited to workplace air contaminants, employee fit test results, employee comfort and ease of use in the workplace. Employees are fit tested using the "Rainbow Passage". This passage is discussed in Section on Fit Testing Procedure and Results. It has been determined through site inspections and surveys that the primary type of respirator required is either Air-Purifying Respirators or Air Supplied Respirators.

Each department will list the types and models of respiratory equipment available at their respective facilities. That pertinent information will be found in this section of the **Grand Junction Respiratory Protection program**

## RESPIRATOR CARE AND MAINTENANCE

---

Respirators containing filters will be changed on a daily or shift basis. Employees will be furnished these types of respirators if they desire. These employees will be responsible for the care and maintenance of these respirators. Employees using respirators will use the following procedure to adequately clean their respirators.

1. Remove used or spent filter.
2. Examine all parts of the respirator (ie. straps, inhalation valve, exhalation valve, etc.)
3. Wash the entire respirator in warm soapy water. The use of a mild disinfectant is recommended.
4. Shake or gently wipe all excess water from the respirator. Allow the respirator to air dry.
5. Re-examine the respirator when installing the new cartridges.
6. Report any damage or defects to your immediate Supervisor.
7. Do not make repairs on respirators.

Additional respirators will be available upon request. These respirators will be inspected monthly. These respirators will be stored in clean, dry locations. These respirators will be stored in their original



containers or clean containers. Disposable dust respirators will be discarded at the end of the day or sooner if necessary.

Supervisors will periodically inspect the condition of respirators.

Air supplied respirators will be inspected periodically by qualified individuals. The air used in these systems shall meet "Grade D" specifications. Compressors used to fill tanks will be tested every six (6) months. Guidelines developed by the Compressed Gas Association for "Grade D" specified air shall be met.

## EMPLOYEE TRAINING

---

City of Grand Junction employees will be adequately trained in the use of Air-Purifying Respirators or Air-Supplied Respirators. These employees will be trained in all aspects of these respirators. During this training session employees will also be fitted with an approved respirator. The results of fit testing are included in the Fit Testing Procedure and Results section. Records of employee training will be kept in this section of the **Grand Junction Respiratory Protection Program**.

A training outline used to discuss Respirators is given below, it may be used as a suggested guideline for air purifying and air supplied respirators. It is strongly recommended that a training outline be prepared that is specific for each respective department.

### *Suggested Outline*

---

#### I. INTRODUCTION

- A. Uses
- B. Advantages
- C. Disadvantages
- D. Limitations
- E. Fit Testing
- F. OSHA Eleven Point Program
- G. Employee Qualitative Fit Test

#### II. TYPES OF RESPIRATORS

- A. Dust
- B. Mist
- C. Fume
- D. Organic Vapor
- E. Supplied Air

#### III. APPLICATION

- A. Nuisance Dust
- B. Total Dust
- C. Respirable Dust
- D. Silica
- E. Welding Fumes
- F. Degreasing Vapors
- G. Acids/Bases
- H. Toxic Chemicals

#### IV. ADVANTAGES

#### V. DISADVANTAGES

#### VI. LIMITATIONS

- A. Air Purifying

#### B. Air Supplied

#### VII. FIT TESTING

- A. Negative Test
- B. Positive Test
- C. Banana Oil Test
- D. Irritant Smoke Test

#### VIII. OSHA ELEVEN POINT PROGRAM

- A. Written Program
- B. Equipment Selection
- C. Care and Maintenance
- D. Medically Fit
- E. Knowledge of Hazards
- F. Recordkeeping

#### IX. EMPLOYEE FIT TEST EXERCISE

- A. Irritant Smoke Test
  - 1. Fit Mask
  - 2. Close Eyes
  - 3. Negative Test
  - 4. Positive Test
  - 5. Read "Rainbow Passage"

#### X. QUESTIONS AND ANSWERS

- A. Equipment
- B. Fit tests
- C. Applications
- D. Advantages/Disadvantages



## FIT TESTING PROCEDURE AND RESULTS

---

During the training phase of the **Grand Junction Respiratory Protection Program**, employees will receive fit testing of their respective respirators. Employees will be assured of a positive fit.

The following procedure will be used:

1. Properly don an air purifying respirator.
2. Conduct a Negative Pressure Test.
3. Conduct a Positive Pressure Test.
4. Close their eyes.
5. Irritant smoke will be passed over the respirator.
6. Employees will read the "Rainbow Passage."
7. If a leak is found, the test will be repeated.
8. After the test, a form will be completed describing the test and the type of respirator that was used for the test.

The "Rainbow Passage" is a phrase that is used to show that an adequate seal can be maintained when wearing a respirator. The passage requires the jaw to move various positions that could result in a leak. The employee will repeat the "Rainbow Passage" while wearing a respirator during the test. The "Rainbow Passage" reads as follows:

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long, round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow.

Copies of each employee's fit test results will be kept in this section of the **Grand Junction Respiratory Protection Program**. A sample form has been included at the end of this section.

### GRAND JUNCTION RESPIRATOR FIT TEST

---

1. DATE: \_\_\_\_\_
  2. EMPLOYEE TESTED: \_\_\_\_\_
  3. EMPLOYEE SSN: \_\_\_\_\_
  4. SIGNATURE: \_\_\_\_\_
  5. TYPE OF RESPIRATOR: \_\_\_\_\_
  6. RESPIRATOR MODEL: \_\_\_\_\_
  7. POSITIVE FIT TEST: \_\_\_\_\_
  8. NEGATIVE FIT TEST: \_\_\_\_\_
  9. QUALITATIVE FIT TEST: \_\_\_\_\_  
(IRRITANT SMOKE)
  10. TEST CONDUCTED BY: \_\_\_\_\_
  11. SIGNATURE: \_\_\_\_\_
-



## RECORDKEEPING REQUIREMENTS

---

There are several records that shall be maintained in accordance with 29 CFR 1910.134, OSHA Respiratory Protection Standard. Those records are listed below:

1. Documentation to demonstrate employee medical fitness to wear a respirator.
2. Care and maintenance schedule of all air purifying and air supplied respirators.
3. Proof of training.
4. Employee fit test results.
5. Documentation to show that annual reviews have been made on the Grand Junction Respiratory Protection Program.

The **Grand Junction Respiratory Protection Program** was written by W-H Interscience of Colorado. This program shall be reviewed on an annual basis. The following individuals endorse the **Grand Junction Respiratory Protection Program**:

Mr. Greg Lanning \_\_\_\_\_ Public Works Director

Mr. Bob Kelley \_\_\_\_\_ Safety Coordinator

## EMPLOYEE RESPIRATORY PROTECTION PROGRAM ACKNOWLEDGEMENT

---

It has been shown that on this day you have received the following information regarding the **Grand Junction Respiratory Protection Program**:

1. Respirator Training
2. Respirator Fit Test
3. Respirator Examination
4. Personal copy of the **Grand Junction Respiratory Protection Program**

It is understood that employees covered by this program will comply with all aspects of the **Grand Junction Respiratory Protection Program**. Covered employees shall maintain a personal copy of this program and use it when necessary. Failure to follow all sections of the **Grand Junction Respiratory Protection Program** may lead to disciplinary action up to and including termination. This form shall be maintained in your training records.

## EMPLOYEE RESPIRATORY PROTECTION PROGRAM ACKNOWLEDGEMENT

---

Employees Signature \_\_\_\_\_ Date \_\_\_\_\_



## STATEMENT OF EMPLOYEE RESPONSIBILITY

---

As an employee of the City of Grand Junction, it is your responsibility to be aware of all safety rules and regulations that apply to your job. You are encouraged to ask your supervisor if you are not sure how to complete a task safely. City of Grand Junction Management wants to provide you with a safe and healthy workplace. It is your responsibility to work safely, use equipment and training provided, and to comply with these safe work practices.

## INDEX

---

### —A—

accidents.....	5, 9, 22, 24, 30, 37, 43
acid .....	23, 24, 37
attendant.....	21, 22

### —B—

backing.....	9, 10
barricades .....	12, 31
battery .....	23

### —C—

carcinogen .....	41
chain saw .....	32
chemical.....	19, 24, 26, 37, 38, 39, 40, 41, 42, 43, 44
combustible .....	16
compressed gas .....	17, 42
cranes .....	23

### —D—

DOT.....	8, 38
----------	-------

### —E—

electric .....	10, 11, 17, 19, 20, 30, 32, 35, 36
Electric .....	20
<b>Entry Permit</b> .....	22
evacuation .....	6, 25
excavation.....	18
eye protection .....	6, 11, 15, 17, 24



eyewash.....43

**—F—**

fire

fire extinguisher..... 5, 6, 17, 25, 29, 30, 43  
flammable..... 16, 19, 25, 27, 31, 39, 43  
first aid..... 5, 21, 30, 35, 36, 41, 43  
flammable..... **16**  
forklift .....5  
fueling .....31  
fuse .....15

**—G—**

gasoline.....25, 26, 27, 31  
gloves.....17, 31, 32, 35, 36, 43  
goggle .....5, 17, 31, 32, 33, 43  
Goggle.....31

**—H—**

hard hat .....15, 21, **31**, 33  
Hazard Communication .....25, 37, 38, 43  
hazardous material ..... 29, 40  
hazardous waste ..... 38  
Hazardous waste ..... 5  
hearing.....6, 20, 31, 32, 44  
hoist .....14

**—L—**

label .....16, 27, 37, 38, 40, 43  
ladders .....**10, 11, 12, 32**  
lifting.....5, 15, 24, 30  
lubrication.....24

**—M—**

Material Safety Data Sheets ..... 6, 38, 40  
motor vehicle .....**8**  
MSDS.....38, 39, 40, 41, 42, 43  
MUTCD ..... **13**

**—O—**

oily rags .....**25**  
oxygen .....16, 17, 19, 21, 22, 35

**—P—**

personal protective..... 5, 6, 8, 14, 15, 22, 31, 41, 43



petroleum ..... 19, 25, 35  
propane ..... 34, 35, 36  
Propane ..... 34

**—S—**

scaffold ..... 11, 12  
seat belts ..... 8

**—T—**

training..... 6, 8, 22, 38, 41, 43, 46, 48

**—V—**

vehicle.....8, 9, 24, 28, 29

**—W—**

welding .....6, 16, 17, 19, 39, 42  
work zone ..... 13

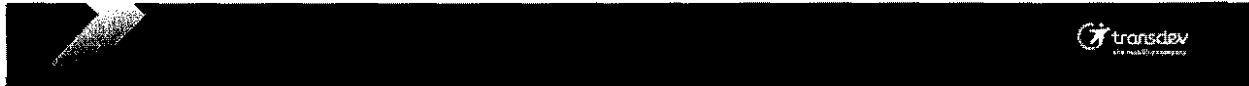


# Appendix D- Transdev Safety Training Table of Contents

## Behind-The-Wheel : Table of Contents

le	
About this BTW Guide .....	5
We come.....	2
How the P.O.D.P Works.....	3
Training Part One: Get to Know the Bus.....	7
1. Bus Systems.....	8
2. Bus Inspections.....	9
Use of Signals and Horn.....	14
3. Seat Adjustment .....	10
4. Mirror Adjustments .....	11
5. Reference Points & Blind Spots .....	12
6. ....	
7. Use of Accelerator and Braking.....	15
8. Forward - Backward Judgement Stop .....	17
9. Air Brake Test.....	18
10. Hydraulic Brake Test .....	20
Training Part Two: Closed Course Exercises .....	21
1. Diminishing Lane.....	22
2. Right Turns.....	23
3. Left Turns .....	24
4. Backing Judgement Stop .....	25
5. Parallel Parking.....	26
6. Railroad Crossing .....	27
7. Service Stops .....	28
Training Part Three: Lift Operations and Mobility Device Securement .....	30
8. Drive Through, Back Through Serpentine .....	29
Training Part Four: BTW/Observation/LLLC .....	33
1. Lift Operations .....	30

2. Mobility Device Securement.....	32
1. LLC Defensive Driving.....	34
2. Use of Signals and Horn.....	36
3. Following Distance.....	37
4. Backing.....	38
5. Right Turns.....	39
6. Left Turns.....	41
7. Intersections.....	43
8. Pedestrian & Cyclist Awareness.....	44
9. Entering Traffic/Merging.....	46
10. Lane Changing & Passing.....	47
11. Crossing Railroad Tracks.....	48
12. Narrow Bridges/Underpasses.....	49
13. Mountain Driving & Grades.....	50
14. Adverse Conditions.....	51
15. Limited Visibility.....	52
16. Road Failures.....	53
17. Accident Procedures.....	55
Training Part Five: Cadetting.....	57
Appendices.....	1-IX



# Table of Contents

Welcome To The Professional Operator Development Program ..... 3

## Classroom Lessons

1.	HR Orientation.....	13
2.	Welcome To Transdev .....	15
3.	How To Succeed .....	21
5.	Fire Prevention & Evacuation (Location Specific) .....	29
4.	Emergency Action Plan (Location Specific).....	27
6.	Local Policies .....	31
7.	Bus Orientation.....	33
8.	Vehicle Inspections.....	39
15.	LLLC Driver Certification: Understanding Safety & Risk .....	45
16-17.	LLLC Driver Certification: LLLC For Drivers and Commentary Driving .....	57
18.	Vehicle Dynamics .....	67
19.	Attentive Driving .....	77
20.	Following Distance .....	85
21.	Safe Backing .....	91
22.	Intersections & Turns .....	97
23.	Drugs & Alcohol .....	105
24.	Injury Prevention.....	119
36.	Preventing Pedestrian And Cyclist Collisions.....	137
35.	Lane Changing, Merging and Passing .....	125
37.	Adverse Conditions .....	147
38.	Customer Service .....	159
	Emergency Procedures.....	179
39.	Passenger Sensitivity .....	171
40.		
41.	Active Shooter .....	189
42.	Paddles & Fare Boxes.....	191



# Micro-Learning Modules Schedule

## PROFESSIONAL OPERATOR DEVELOPMENT PROGRAM

The following schedule lists all Micro-Learning-Modules (MLMs) and on which day they are supposed to be shown to the trainees. These MLMs are to be shown in or around the bus on your issued tablets during Get to Know the Bus, Closed Course and BTW instruction. Of course you should never show any MLM while the trainees are on the road or the bus is in motion.

A more detailed MLM schedule is also found in your BTW Instructor Guide with a breakdown of which MLMs to show according to the exercise or standard you're demonstrating to your trainees.

Please do your best to follow the schedule that's in your BTW Instructor Guide. It is very important to show the MLMs and complete the exercises and performance standards in the order they appear.

<p><b>I</b></p> <ol style="list-style-type: none"> <li>1. Injury Prevention 1 - Slips, Trips and Falls</li> <li>2. Injury Prevention 2 - Avoiding Back Injuries</li> <li>3. Pre-Trip Inspection: Steps 1-3</li> <li>4. Pre-Trip Inspection: Steps 4-5</li> <li>5. Pre-Trip Inspection: Step 6 - Check Brake Systems (Paratransit Only)</li> <li>6. Pre-Trip Inspection: Step 6 - Air Brakes Test (Transit Only)</li> <li>7. Seat Adjustment</li> <li>8. Mirror Adjustment</li> <li>9. Reference Points - Centering</li> <li>10. Reference Points - Six Inch</li> <li>11. Reference Points - Four Foot</li> <li>12. Reference Points - Backing</li> <li>13. Reference Points - Intersection</li> <li>14. Use of Signals and Horn</li> <li>15. Use of Accelerator</li> <li>16. Use of Brakes and Anticipated Stops</li> </ol>	<p><b>II</b></p> <ol style="list-style-type: none"> <li>17. Diminishing Lane</li> <li>18. Right Turns</li> <li>19. Left Turns</li> <li>20. GOAL</li> <li>21. Using A Spotter</li> <li>22. Parallel Parking</li> <li>23. Railroad Crossing</li> <li>24. Service Stops</li> <li>25. Serpentine</li> </ol>	<p><b>DAY 4</b></p> <ol style="list-style-type: none"> <li>26. Properly Securing Your Passengers</li> <li>27. Safe Lift Operations</li> <li>28. 4 Point Anchor System</li> <li>29. 3 Point Passenger Securement System</li> <li>30. Dropping off Your Passengers</li> <li>31. Back Safety</li> </ol>	<p><b>DAY 5</b></p> <ol style="list-style-type: none"> <li>32. Understanding Safety &amp; Risk 1 - What is Safety?</li> <li>33. Understanding Safety &amp; Risk 2 - What is Risk?</li> <li>34. Understanding Safety &amp; Risk 3 - What are Accidents?</li> <li>35. Understanding Safety &amp; Risk 4 - Why do Accidents Happen?</li> <li>36. Understanding Safety &amp; Risk 5 - 300:29:1</li> <li>37. Look Ahead</li> <li>38. Look Around</li> <li>39. Leave Room</li> <li>40. Communicate</li> <li>41. Commentary Driving</li> </ol>
<p><b>GET TO KNOW THE BUS</b></p>	<p><b>CLOSED COURSE</b></p>	<p><b>GET TO KNOW THE BUS</b></p>	<p><b>LLLC - BTW</b></p>
<p><b>DAYS 6-10</b></p> <ol style="list-style-type: none"> <li>42. Use of Signals &amp; Horn</li> <li>43. How to Calculate Following Distance</li> <li>44. Minimum Safe Following Distance</li> <li>45. Vehicle Dynamics 1 - Centrifugal Force</li> <li>46. Vehicle Dynamics 2 - Kinetic Energy</li> <li>47. Vehicle Dynamics 3 - Inertia</li> <li>48. Vehicle Dynamics 4 - Friction</li> <li>49. GOAL</li> <li>50. Using a Spotter</li> <li>51. Intersections &amp; Turns 1 - LLLC at Intersections</li> <li>52. Intersections &amp; Turns 2 - Left Turns</li> <li>53. Intersections &amp; Turns 3 - Right Turns</li> <li>54. Intersections &amp; Turns 4 - Pedestrians &amp; Cyclists at Intersections</li> <li>55. Attentive Driving</li> </ol>	<ol style="list-style-type: none"> <li>56. Preventing Pedestrian &amp; Cyclist Collisions 1 - Driving Through an Intersection</li> <li>57. Preventing Pedestrian &amp; Cyclist Collisions 2 - Turns</li> <li>58. Preventing Pedestrian &amp; Cyclist Collisions 3 - Service Stops</li> <li>59. Preventing Pedestrian &amp; Cyclist Collisions 4 - Passing Cyclists</li> <li>60. Look Ahead</li> <li>61. Look Around</li> <li>62. Changing lanes, Merging and Passing 1 - Proper Vehicle Positioning</li> <li>63. Changing Lanes, Merging and Passing 2 - Changing Lanes</li> <li>64. Changing Lanes, Merging and Passing 3 - Passing</li> <li>65. Changing Lanes, Merging and Passing 4 - Merging Onto a Highway</li> <li>66. Changing Lanes, Merging and Passing - S - Exiting a Highway</li> <li>67. Railroad Crossing</li> <li>68. Leave Room</li> <li>69. Adverse Conditions 1 - Rain</li> </ol>	<ol style="list-style-type: none"> <li>70. Adverse Conditions 2 - Snow</li> <li>71. Adverse Conditions 3 - Ice &amp; Sleet</li> <li>72. Adverse Conditions 4 - Limited Visibility</li> <li>73. Emergency Procedures 1 - Breakdowns</li> <li>74. Emergency Procedures 2 - Emergencies Inside the Bus</li> <li>75. Emergency Procedures 3 - Accidents</li> <li>76. Emergency Procedures 4 - Evacuations</li> </ol>	

BTW The following are the MLMs that should be shown during the 20 hour minimum BTW training. You should show each MLM before you have your trainees practice the corresponding Performance Standard. Try to follow the BTW Guide as close as possible. You will show some MLMs more than once and please feel free to show other MLMs as you see fit.

*(if* transdew  
the mobility company



# Course Syllabus

## PROFESSIONAL OPERATOR DEVELOPMENT PROGRAM

Day	Activity	Minutes	Day	Activity	Minutes	Day	Activity	Minutes	Day	Activity	Minutes
<b>DAY 1</b>	<b>CRW</b>		<b>DAY 2</b>	<b>Review Day 1 CRW</b>	10	<b>DAY 3</b>	<b>Review Day 2</b>	10	<b>DAY 4</b>	<b>Review Day 3 CRW</b>	10
	1. HR Orientation	60		15. Understanding Safety & Risk	45		Closed Course Diminishing Lane Right Turns	60 60 60 50 30 15 45 60		35. Changing Lanes, Merging & Passing	45
	2. Welcome to Transdev	20		16. LLLC For Drivers	30					36. Preventing Pedestrians & Cyclist Accidents	45
	3. How to Succeed	30		17. Commentary Driving	10					37. Adverse Conditions	55
	4. EAP	20		18. Vehicle Dynamics	45					38. Customer Service	45
	5. Fire Prevention & Evacuation	20		19. Attentive Driving	45					39. Passenger Sensitivity	45
	6. Local Issues	60		20. Following Distance	35					40. Emergency Procedures	45
	7. Bus Orientation	25		21. Safe Backing	15					41. Active Shooter	30
	8. Vehicle Inspections	20		22. Intersections & Turns	45					42. Paddles & Fare Boxes	30
	Get to Know the Bus			23. Drugs & Alcohol	60		Proficiency documented for every exercise	N/A		43. FINAL TEST	45
	Bus Systems	30		24. Injury Prevention	25					Get to Know the Bus	Minutes: 30
	Vehicle Inspections	30		SOS Homework						Lift Operations	
	Mirror & Seat Adjustments	20		25. The Transdev Professional	20					Mobility Device Securement	45
	Reference Points & Blind Spots	20		26. Sexual Harassment	15					Mirror & Seat Adjustments	10
	Use of Signals & Horn	5		27. Railroad Crossings	20					Reference Points	10
	Use of Accelerator	10		28. Federal Regulations	20					Air-Brakes ( <i>Transit only</i> )	60
	Braking	30		29. Event Video Recorder	15					Proficiency documented for every exercise	N/A
	Forward-Backward Judgement Stop	20		30. Wellness/Fatigue	30						
	Air Brakes ( <i>Transit only</i> )	60		<b>TOTAL MINUTES DAY 2</b>	<b>485</b>						
	SDS Homework			<b>TOTAL MINUTES DAY 3</b>	<b>455</b>						
	9. EAP	10									
	10. Fire Protection and prevention	5									
	11. Hazards Communication	15									
	12. Blood-borne Pathogens/PPE	15									
	13. LO/TO	10									
	14. Whistleblower	10									
	<b>TOTAL MINUTES DAY 1</b>	<b>545</b>									
<b>DAY 5</b>	<b>BTW</b>	90	<b>DAY 6</b>	<b>BTW</b>	240	<b>DAY 7</b>	<b>BTW</b>	240	<b>Ir.I</b>		
	OBS	90		OBS	240		OBS	240	<b>i&amp;:l</b>	BTW	240
	BTW&OBS (LLLC BTW 1hour BTW, 2Hours OBS)	180							OBS	OBS	240
	<b>TOTAL MINUTES DAY 5</b>	<b>360</b>		<b>TOTAL MINUTES DAY 6</b>	<b>480</b>		<b>TOTAL MINUTES DAY 7</b>	<b>480</b>		<b>TOTAL MINUTES DAY 8</b>	<b>480</b>
<b>DAY 9</b>	<b>BTW</b>	240	<b>DAY 10</b>	<b>BTW</b>	90	<b>m</b>	<b>Cadetting</b>	480	<b>DAY 12</b>	<b>Cadetting</b>	480
	OBS	240		OBS	90					<b>Proficiency Test (Included as part of Cadetting)</b>	60
				Proficiency Test ( <i>Included as part of BTW</i> )	60						
	<b>TOTAL MINUTES DAY 9</b>	<b>480</b>		<b>TOTAL MINUTES DAY 10</b>	<b>180</b>		<b>TOTAL MINUTES DAY 11</b>	<b>480</b>		<b>TOTAL MINUTES DAY 12</b>	<b>480</b>

COURSE LENGTH BY CATEGORY

SDS Homework	270 min or 4.5 hrs
CRW	1025 min or 17 hrs
Get to know the bus	380 min or 6.5 hrs
Clot O'd'ur c	360 min or 6 hrs
BiYV	1200 min or 20 hrs
OBS	1260 min or 21 hrs
Cadetting	960 min or 16 hrs

TOTAL LENGTH

5455 min or 91 hrs

NOTE: The BTW training follows a 2:1 operator to instructor ratio. If training more than 2 operators at a time, instructor must ensure each operator receives a minimum 20 hours of BTW training.





**Appendix E1- Transdev Accident Investigation Procedure**

**Transdev Services Inc**

**970 Grand Junction, CO**

**Accident Investigation Procedures**

**September 2020**

# Managing Accidents and Incidents

As an organization committed to safety, we aim to prevent accidents from happening in the first place. But when they do happen, we have protocols that help us handle them in the right way. Above all, we want to make sure everyone involved stays safe and, if anyone is injured, that they get the medical attention needed. We also want to minimize inconvenience for passengers.

From beginning to end, we manage accidents and incidents thoughtfully and thoroughly, focusing on four things:

- **Responding** quickly and appropriately
- **Investigating** to learn what happened, which includes documenting everything carefully
- **Reporting** the details to everyone who needs to know
- **Analyzing** what happened to determine if it was preventable, if employee retraining is necessary, and what can be done to prevent recurrence.

Each member of the team has a distinct set of responsibilities when an accident or incident happens. The Operations, Safety, and Maintenance Departments work together to ensure we coordinate our response with GVT and emergency personnel and minimize passenger disruption.

## Operator Responsibilities

- In the event of an accident or incident, the Operator will stop the vehicle and notify Dispatch immediately. They must do this if the vehicle collides or comes in contact with any type of object or pedestrian, no matter how slight or minor the accident, and whether or not damage occurs. The Operator will also place emergency triangles out to protect the accident scene where physically able.
- Operators are instructed to never admit fault or make statements to the media.
- Operators are not permitted to leave the scene of an accident or move the vehicle until released by the proper authority. Operators must take action to keep passengers and other involved parties protected from further injury and cooperate with law enforcement.
- Operators will pass out contact cards to all passengers /witnesses and later collect them.
- Operators involved in an FTA reportable accident must undergo post-accident drug and alcohol testing.

## Dispatcher Responsibilities

- Dispatch staff will determine the severity of the accident, number of injuries and location of accident in order to notify the appropriate emergency, fire, and police authorities.
- Dispatch staff will immediately notify the appropriate Road Supervisor, Safety Supervisor and/or General Manager. Depending on the severity, the Safety Supervisor and/or General Manager may also respond to the scene.
- Dispatchers will then track the progress of the response by noting in the dispatch log all actions and information available (time, location, who notified, actions taken to recover route)

## Road Supervisor Responsibilities

- Travel to the scene and conduct a thorough investigation of the accident
- Road Supervisors are issued a Critical Incident Protocol card defining a critical incident and offering handling advice and telephone contacts
- Complete a written report.
- Speak to Operator / Passengers -take statements
- Taking photos of the scene (All vehicles involved and surrounding scene).
- Sending Accident information to the Safety Supervisor and/or General Manager.

All vehicles are equipped with accident investigation materials. At a minimum, this includes:

- Reflective vest
- First aid kit
- Body fluids spill kit
- Accident forms
- Customer comment cards.
- Emergency triangles
- Fire extinguisher

Mesa County Regional Transportation Planning Office (RTPO) Notification

In the event of a major accident and/or one where injuries are involved, we will notify RTPO Director immediately and provide all the details available at that time. As we learn more details and take appropriate actions, we will provide updates. All accident documentation will be provided to RTPO for their records.

Critical Incident Reporting

An event involving a TDNA (Transdev North America) employee, contractor, passenger or vehicle or occurring on TDNA property involving one or more of the following:

- Fatality
- Any incident resulting in serious bodily injury or medical transport of one(1) or more persons.
- Pedestrian or Bicyclist incident
- Passenger incident/injury involving improper wheelchair securement
- Environmental spills (any quantity)
- Vehicle roll-over/lay-over
- Vehicle roll-away
- Vehicle fire
- Events with potential for negative public relations and/or news media coverage

- Events causing interruption of operations (e.g.: fires, cyber, strikes, riots, severe weather)
- Incidents where vehicle Operator drug and/or alcohol use may be involved
- Estimated property damage equal to or exceeding \$25,000

First Supervisor on site secures scene and calls GM and Safety Supervisor.

- General Manager calls Risk Management- Call the numbers below in order until one person in Risk Management/Safety is reached.
  - 1. Richard Freed (Dir. of Claims) 630-361-3687 (cell), 630-230-2636 (office)
- General Manager calls Safety Dept
  - Oscar Figueroa (Regional Safety Director) 504-252-2198 (cell). RSD will notify VP of Safety
  - Julie Peel (VP, Safety & Security) 301-404-4435 (cell)
  - Jack Neel (Legal) 312-961-2915 (cell)
- General Manager notifies Region Vice President as soon as possible. Initial notification should be made via phone call if possible.
- General Manager or Designated Senior Team Member directs Media Inquiries to:
  - Mitun Seguin (VP Marketing) 301-674-3733 (cell) 240-485-2117 (office)

**A quick response is critical because evidence is perishable.**

### **Accident Investigation**

The responding Supervisor will complete a thorough Vehicle Accident Report. This report will:

- Include the necessary forms, photographs, and statements—all of which will be submitted to the Safety Supervisor so that it can be uploaded to Transdev's WebRisk database.
- Be completed and submitted as soon as possible, but no more than 24 hours after the accident occurs
- Include comprehensive information about the accident and Operator involved, other vehicle(s), passenger conditions, and witnesses to the accident.

The investigating supervisor should evaluate the condition of the Operator. Not only to determine if he/she is chemically impaired but also to check the emotional effect the accident may have had on the individual.

- If the Operator appears to be impaired or states he/she is too "upset" to continue on the route, a replacement operator will be arranged. **THE OPERATOR WILL NOT BE ALLOWED TO CONTINUE ON THE ROUTE!**
- Using the Decision Maker form the supervisor will determine whether the Operator should be transported for a Drug and Alcohol test. Operator will not be allowed to drive until a confirmed negative result is received.

## Analyzing the Data

### Post-Accident Training

Our Manager reviews the accident details to determine if the accident was preventable. We complete this review as quickly as possible. We provide post-accident training to employees involved in a preventable accident, tailoring the training to address the root cause of the accident. This training includes, at a minimum, one hour of Behind The Wheel (BTW) instruction. Employees must complete post-accident training prior to returning to driving duties.

There are 3 classifications of Accidents

- Preventable- Operator failed to do everything he or she could have done, within reason, to avoid a collision. An error or oversight causing passenger injury is preventable.
- Non Preventable- No operator error
- Damage or injury- No operator error (Alleged injury, vandalism etc.)

Don't confuse "Fault" with "Preventability". Accidents are classified based on evidence collected at the scene and through review of onboard video.

All accident data regardless of severity is entered into the Transdev electronic file system (Webrisk). Transdev regularly analyzes accident data to spot trends, which may lead to specific accident reduction campaigns. The campaigns may include training materials for monthly safety meetings, videos for focus boards, analysis of particular routes, and increased Driver Evaluations.

In addition, on a monthly basis Corporate staff review accident data with the Regional Vice President. In the event of unacceptable accident trending the General Manager would be required to prepare and discuss action plans designed to reduce accidents.

## **Appendix E2-Mesa County Accident Investigation Procedures**

The following checklists (most recent version on Mesawave or obtained from Risk Management) shall be used in the case of an accident involving Mesa County employees:

### **Automobile Physical Damage- only involving a County vehicle, no third-party's vehicle or property is involved:**

- Notify the law enforcement office which has jurisdiction
- Notify Fleet Management of the incident as soon as possible at 244-1820
- Notify Risk Management of the incident as soon as possible at 244-1868
- Have the employee in charge of the vehicle complete a Vehicle Accident/Incident Report (Attachment A)
- Supervisor to review report and comment in the Director's and Supervisors Review area
- Send Vehicle Incident Report and any other paper work (tow invoices, police reports, etc.) to Risk Management for processing
- If employee was injured in the incident, turn to the Worker's Compensation section of this document.

### **Automobile Liability- Vehicle involved in an incident involving another party:**

- Notify the law enforcement office which has jurisdiction
- Notify Fleet Management of the incident as soon as possible at 244-1820
- Notify Risk Management of the incident as soon as possible at 244-1868
- Have the employee in charge of the vehicle complete a Vehicle Accident/Incident Report (Attachment A). This report will open both the auto liability claim and auto physical damage claim.
- Supervisor to review report and comment in the Director's and Supervisors Review area
- Send Vehicle Incident Report and any other paper work (tow invoices, police reports, etc.) to Risk Management for processing
- If employee was injured in the incident, turn to the Worker's Compensation section of this document.

**Property Damage-** Any loss or destruction of County equipment or property while performing job as a County employee. County property is covered under the County's property insurance. This does not include personal property which is generally insured through personal home owners insurance.

- Notify Risk Management of the incident within 48 hours if possible at 244-1868
- Employee involved with the incident to complete a Vehicle Accident/Incident Report (Attachment A) and send to Risk Management for Processing
- If employee was injured in the incident, turn to the Worker's Compensation section of this document (Attachment B and MesaWave).

# Attachment A



## Vehicle Accident/Incident Report

Risk Management (90) 244-1888  
Fax (90) 235-9394

541 Road Avenue  
PO Box 600095063  
Grand Junction CO 81502-9501

### (To be completed by the driver involved in an accident)

Employee's Name	Department/Division		
Job Classification	Date of Accident	Time of Accident	am/pm
Location	Unit #	Date of Last Diver Training	

#### 1. What happened?

Describe what took place or what caused your vehicle's accident or investigation.

#### 2. What was the cause of the accident?

(Answer the questions *Why? What? Who? How?*)

#### 3. What could you have reasonably done to prevent this accident?

(Consider all aspects of Defensive Driving i.e. Did you make an error yourself; make an error; let someone else make an error for the road conditions and weather; make an error for the error of other driver's?)

Page 1 of 3

## Vehicle Accident/Incident Report

#### 4. What else could be done to prevent similar accidents in the future?

(Consider things such as: lighting vehicle type, loading training, a cycle of the factors and what you could do)

#### Additional Narrative Space

#### Director's and Supervisor's Accident Review

If a supervisor is involved with this supervisor and employee involved check the following comments

Date:  Name:  Position:





Vehicle Accident/Incident Report

Review Committee Decision

The Committee has reviewed this accident in accordance with Missourys Loss Control Program and has found that it should be judged

Preventable     **Unpreventable**

Conciliation of the facts indicates the following action should be taken

Date

Chairperson

[E-Mail](#)

[Print Form](#)

Please complete the form, save it, and then email the completed form to [RSMingmar@mscourty.us](mailto:RSMingmar@mscourty.us)

# Attachment B- Workers Compensation – Employee’s Packet

You have notified your supervisor that you have been injured on the job.

1. Your Supervisor will give you a Preliminary Accident Report to complete and return to them so the process of your claim can begin. This form is included in this packet

2. HB1176, the **Employee Choice of Physician law, requires Colorado Employers to designate more than one medical provider to treat employees who are injured on the job. Mesa County has designated these three for you to choose from.**

Please select a physician from the following list of Designated Providers. Once your selection is made, please call their office for an appointment. You will be given a form to acknowledge that you were given the list of authorized physicians. Please sign and return to your supervisor along with the Preliminary accident report.

If an employee wishes to switch designated physicians, they must notify Tristar/Risk Management in writing. This request must follow Division of Workers Compensation guidelines. Information on this can be obtained from Tristar Risk Management. Upon approval of their request, the employee must choose from the remaining providers on the list.

3. You will be given copy of the Sick Pay Policy Election form. Please sign it and return to your supervisor with the rest of your completed, signed forms.

4. If you need to have a prescription filled, you will be given a pamphlet from the designated physician to be used to fill your initial prescription.

**St. Mary’s Occupational Medicine**  
2686 Patterson Road  
Grand Junction, CO 81506  
(970) 298-2001  
Monday-Friday 8 a.m. to 5 p.m.

**Grand Valley Occupational Medicine**  
2004 N 12<sup>th</sup> Street  
Grand Junction, CO 81501  
(970) 256-6490  
Monday-Friday 8 a.m. to 5 p.m

**Work Partners**  
2646 Patterson Rd Suite A  
Grand Junction, CO 81506  
(970) 241-5585  
Monday-Friday 8 a.m. to 5 p.m

## Holidays, Weekends, & After Hours

Community Hospital  
2351 G Road  
Grand Junction, Co 81505  
(970) 644-3100 M-F 5 p.m.-8 a.m

## Holidays, Weekends, & After Hours

St Mary’s Hospital Emergency Room  
2635 North 7th Street  
Grand Junction, Colorado 81501  
(970) 298-2551 M – F 5 p.m. and 8 a.m.

**For emergencies and injuries needing immediate attention, go directly to either:**

**St Mary’s Hospital Emergency Room**  
2635 North 7<sup>th</sup> Street  
Grand Junction, CO 81501

or

**Community Hospital Emergency Room**  
2151 G Road  
Grand Junction, CO 81505

**Other than extreme emergency situations, if an employee chooses a medical provider other than those listed above, the cost will be at the employee’s expense.**

Mesa County is self insured for their workers comp coverage. For any questions, please contact Jean Boothe in Risk Management at 244-1868 or Norie Mayne at Tristar Risk Mgmt, at 888-538-9847.

Mesa County  
**Preliminary Accident Report for Workers' Compensation Injury**

This is not a First Report of Injury form.

**Please Print!**

**Employee Information**

Last	First	M.I.	Date of Injury / /	Time of Injury
Address			Social Security Number	Circle Male      Female
City		State	Zip Code	Work Ext: Home Phone: / /
Years of Education (Circle One) 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			Hours/Day	Date of Birth: / /
Date Hired / /		Title/Position		Hourly Rate
Department			Supervisor	

**Incident Description**

What were you doing when the incident occurred?	
Where (location) did the incident occur?	Injury Description (Include Body Part(s))
How did the accident/exposure occur?	
Witness Names:	
Incident Reported to:	
Supervisor's Name:	Telephone #:
Employee Signature:	Date of Report:

**Did the accident occur because of:**

<input type="checkbox"/> Failure to use safety device?	<input type="checkbox"/> Failure to obey safety rule/protocol?
<input type="checkbox"/> Intoxication or Drug Abuse?	<input type="checkbox"/> Other (explain below)?
ive details:	

Describe any Third Party Liability:

The above-signed employee declares that this is a true and correct statement of how the accident occurred and the extent

of his/her injury.

# Workers Compensation – Employee’s

You have notified your supervisor that you have been injured on the job.

1. Your Supervisor will give you a Workers Compensation Employee’s packet. It will contain any form you need to complete and return to your supervisor.
2. **HB1176, the Employee Choice of Physician law, requires Colorado Employers to designate more than one medical provider to treat employees who are injured on the job. Mesa County has designated these three for you to choose from.**  
Please select a physician from the following list of Designated Providers. Once your selection is made, please call their office for an appointment.

## Mesa County’s designated medical providers are:

**St. Mary’s Occupational Medicine**  
2686 Patterson Road  
Grand Junction, CO 81506  
(970) 298-2001  
Monday-Friday 8 a.m. to 5 p.m.

**Grand Valley Occupational Medicine**  
2004 N 12<sup>th</sup> Street  
Grand Junction, CO 81501  
(970) 256-6490  
Monday-Friday 8 a.m. to 5 p.m.

**WorkPartners**  
2646 Patterson Road Suite A  
Grand Junction, CO 81506  
(970) 241-5585  
Monday-Friday 8 a.m. to 5 p.m.

## Holidays, Weekends, & After Hours

Community Hospital  
2351 G Road  
Grand Junction, Co 81505  
(970) 644-3100 M-F 5 p.m.-8 a.m.

## Holidays, Weekends, & After Hours

St Mary’s Hospital Emergency Room  
2635 North 7th Street  
Grand Junction, Colorado 81501  
(970) 298-2551 M – F 4 p.m. and 8 a.m.

## For emergencies and injuries needing immediate attention, go directly to either:

**St Mary’s Hospital Emergency Room**  
2635 North 7<sup>th</sup> Street  
Grand Junction, CO 81501

or

**Community Hospital Emergency Room**  
2351 G Road  
Grand Junction, CO 81505

Other than extreme emergency situations, if an employee chooses a medical provider other than those listed above, the cost will be at the employee’s expense.

I have received the Employee’s packet.

Name \_\_\_\_\_

Date \_\_\_\_\_

Print Name \_\_\_\_\_

Department \_\_\_\_\_

Effective October 10, 2016 the Board of County Commissioners approved the following policy.

Section 5.07 (E): Job related Injury or Illness

(E) When an employee gets sick or is injured on the job, and is unable to perform the essential functions of his/her job as a result of such injury or illness, as determined by State law, the first three days of such absences will be charged to the employee's sick leave. If the employee is eligible for worker's compensation benefits, and the employee's inability to work extends beyond the three day period, the employee will be eligible for sixty-six and two thirds percent (66 2/3%) of the employee's regular pay from the County, with no state or federal tax withheld, for a period of up to six (6) consecutive months per injury.

**Employees receiving payments as a result of a work-related injury or illness may utilize their sick leave to subsidize their income up to 100% of their salary and benefits.** The employee's eligibility, and the length of such eligibility for pay continuation, is determined by State law through the worker's compensation authority.

If an employee has not been able to perform the essential functions of his/her job, with or without reasonable accommodation, for a period of six (6) consecutive months per injury due to work-related illness, injuries and/or disability, the employee's employment will cease. Nothing in this subsection prevents the employee from applying for other advertised Mesa County job vacancies.

This decision is not disciplinary and therefore not appealable under Section 7.08 nor is it subject to the problem solving process under Section 7.11.

\_\_\_\_\_ Yes I would like to use my accrued sick hours to supplement my work comp wages

\_\_\_\_\_ No I do not wish to use my accrued sick hours to supplement my work comp wages.

I understand that if I choose to make a change, I must submit that change in writing to HR.  
No changes will be retroactive.

Signature\_\_\_\_\_

Date\_\_\_\_\_

Print Name\_\_\_\_\_

## **Appendix E3- City of Grand Junction- Fleet Services Safety Event Investigation Process**

City of Grand Junction Fleet Services maintains all CNG buses under an MOU between Mesa County and City of Grand Junction.

In the case of a safety event at City of Grand Junction Fleet associated with transit, the attached forms must be filled out if there is an injury (Detailed Supervisor Investigation of Injury and Workman's Compensation form) and/or if there is Property Damage( Supervisor Investigation of Property Damage or Injury form) and submitted to Risk Management who will further investigate necessary actions to avoid future events.

Safety events are also reported and discussed at Fleet Services safety meetings.

City of Grand Junction Colorado  
DESIGNATED WORKERS' COMPENSATION PROVIDER LIST

You are receiving this notice because you are reporting a work-related injury that may require professional medical attention. Treatment must be arranged with one of the designated medical providers listed below. If you are now being treated by one of the Designated Providers, this notice is still required to comply with Rule 8 of Colorado statute.

Contact Risk Management (970.256.4024) if you have any questions about the City's Designated Providers, which are listed below. You are only authorized to see these Designated Providers for initial treatment related to Workers' Compensation, except for emergency situations.

Clinics: with evening and weekend hours -call ahead to confirm hours

Community Care of the Grand Valley, 1060 Orchard, Suite N. Phone: (970) 256-6345
Western Valley Family Practice, 2237 Redlands Parkway. Phone (970) 243-1707

Other Clinics: Monday - Friday, 8am - 5pm only

Grand Valley Occupational Health, 2004 N 12th St. Phone: (970) 256-6490 Ted Sofish MD MPH
St. Mary's Occupational Health, 2686 Patterson Rd, Entrance #41. Phone (970) 244-2001 Craig Stagg MD, Jim McLaughlin MD MPH, Erika Woodyard MD

The City of Grand Junction Risk Management contact and the administrator responsible for Workers' Compensation claims management (CIRSA) is listed here:

Erin Waite, Workers' Compensation & Benefits Specialist  
250 North 5th Street  
Grand Junction, CO  
Phone: 970-256-4024 and Fax: 970-256-4007

CIRSA  
3665 Cherry Creek North Drive  
Denver, CO 80209  
Phone: 303-757-5475

The Employee Report of Injury Form must be provided to Risk Management in order for your medical bills to be authorized under Workers' Compensation insurance. City policy requires all work related incidents to be reported within 24 hours regardless of severity. By signing below, you confirm receipt of the Designated Provider List.

Employee Name: (print) \_\_\_\_\_

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Read, sign and return this form to Risk Management. Please note that this form must be submitted for both Medical and Non-Medical reports of injury.

**You must also read, sign and date the next two pages to complete this form!**



**EMPLOYEE REPORT OF INJURY**

**COMPLETE WITHIN 24 HOURS OF INJURY/EXPOSURE, AND SUBMIT TO RISK MANAGEMENT**

**NOTE: You MUST ALSO SIGN a copy of the Designated Provider List (located on the 1<sup>st</sup> page).**

**CHECK ONE:**

**NON-MEDICAL**

**MEDICAL REQUIRED**

Employee Full Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Alt. Phone: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Email Address: \_\_\_\_\_

Department: \_\_\_\_\_ Division: \_\_\_\_\_

Job Classification: \_\_\_\_\_ Supervisor Name: \_\_\_\_\_

Job assignment when injured/exposed: \_\_\_\_\_

Regular Work Schedule Days: \_\_\_\_\_ Regular Hours: \_\_\_\_\_

Date of Injury/Exposure: \_\_\_\_\_ Time of Injury/Exposure: \_\_\_\_\_

Body Part(s) Injured: \_\_\_\_\_

Name of Witness(es): \_\_\_\_\_

Exact Place of Accident/Exposure: \_\_\_\_\_

Did you seek medical treatment?  Yes  No

If so, name of Medical Facility and/or Doctor: \_\_\_\_\_

How did the accident/exposure occur? Describe your activities causing the injury/exposure and include machinery, tools, substance, and/or object: \_\_\_\_\_



Supervisor Investigation and Comments:

*I hereby declare that the above information is true and accurate and that the injuries claimed resulted from an accident while performing my assigned duties as an employee of the City of Grand Junction, Colorado.*

*Workers' Compensation and the Family and Medical Leave Act (FMLA), when applicable, run concurrently. Absences resulting from illnesses or injuries covered by workers' compensation will be designated as FMLA leave when the absence qualifies for coverage under the FMLA.*

**IMPORTANT Notice for Sworn Firefighters: If this on-the-job injury/condition is due to a **cardiac event** or related to **cancer**, you may qualify to file a claim with the Colorado Firefighter Heart and Cancer Trust. The City of Grand Junction joined the Trust on January 1, 2020. Please go to: <http://www.cf htrust.com/> to get more information and to file a Claim ( <http://www.cf htrust.com/claims> ).**

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**DETAILED SUPERVISOR INVESTIGATION OF INJURY**

Employee Full Name: \_\_\_\_\_

Department: \_\_\_\_\_ Division: \_\_\_\_\_

Date and time accident was reported to you: \_\_\_\_\_

\_\_\_\_\_ Did employee leave work due to injury/exposure? **D** Yes **D** No

If yes, date employee left work: \_\_\_\_\_

Did employee go to a non-designated medical facility? **D** Yes **D** No

If yes, why?

Has employee returned to work? **D** Yes **D** No

If yes, date employee returned to work: \_\_\_\_\_

If no, probable length of disability: \_\_\_\_\_

Describe any act or condition which may have contributed to the injury/exposure:

(a) Failure to use safety device: **D** Yes **D** No

(b) Was a reasonable suspicion drug/alcohol test completed? **D** Yes **D** No

(c) Failure to obey safety rules: **D** Yes **D** No

(d) Willful misconduct: **D** Yes **D** No

Other human or mechanical factors that may have contributed to the injury; List corrective action expected:

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**NOTE:** This Investigation Report must be completed if medical care is required.

**CITY OF GRAND JUNCTION INVESTIGATION OF PROPERTY DAMAGE OR INJURY**

Reported By: Name \_\_\_\_\_

Phone: \_\_\_\_\_

DEPARTMENT: \_\_\_\_\_

DIVISION: \_\_\_\_\_

Exact location where accident occurred	Date of Occurrence	Time	Date Reported
<b>NON-EMPLOYEE INJURY</b>	<b>PROPERTY DAMAGE</b>		
Name	Property/vehicle damaged (include unit and license number)		
Occupation	Estimated Costs	Actual Costs	
Nature of Injury/exposure	Nature of damage		
Object/equipment/substance inflicting injury	Object/equipment/substance inflicting damage		
Person with most control of object/equipment/substance	Person with most control of object/equipment/substance		
<p><b>DESCRIPTION:</b> Describe clearly how the accident occurred. Attach accident diagram for all motor vehicle accidents; include police report number if applicable. (Note if actions were taken to mitigate damages and/or insure prompt reporting)</p>			
<p><b>ANALYSIS:</b> What human and or mechanical factors or conditions contributed most directly to this accident?</p>			
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Major <input type="checkbox"/> Serious <input type="checkbox"/> Minor	<input type="checkbox"/> Frequent <input type="checkbox"/> Occasional <input type="checkbox"/> Rare	
<b>Was employee using cell phone when the accident occurred?</b>	<b>Loss Severity Potential:</b>	<b>Probable Recurrence Rate:</b>	
<p><b>PREVENTION:</b> What action has or will be taken to prevent recurrence? Place a check by items completed.</p>			
Date preventative action(s) completed		Projected completion date for preventative actions:	
Investigated By:	Date:	Reviewed by:	Date:

***Distribution:*** Risk Management, Fleet Management, Department Files

# Appendix F- Resolution Adopting the PTASP

## RESOLUTION # 2020-008

### A RESOLUTION OF THE GRAND VALLEY REGIONAL TRANSPORTATION COMMITTEE FOR ADOPTION OF THE GRAND VALLEY TRANSIT PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

WHEREAS, Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule July 19, 2018, which requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and

WHEREAS, the rule applies to all operators of public transportation systems that are recipients and sub-recipients of federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307); and


WHEREAS, Mesa County receives funds from the FTA under 49 U.S.C. § 5307, § 5310, and § 5339 and is therefore required to comply with the PTASP Final Rule; and

WHEREAS, Mesa County Regional Transportation Planning Office (RTPO) staff worked with Mesa County, City of Grand Junction and the operations contractor to develop the PTASP for facilities, fleet maintenance and operations;

THEREFORE, be it resolved that the Grand Valley Regional Transportation Committee does hereby adopt the Public Transportation Agency Safety Plan as its official plan until superseded by a subsequent updated or amended plan and names the Grand Valley Regional Transportation Committee chair as the Accountable Executive;

Passed and adopted at the regular meeting of the Grand Valley Regional Transportation Committee held this 24th day of August 2020.

Grand Valley Regional Transportation Committee

  
\_\_\_\_\_  
Scott Mcinnis, Chair

Attest:

  
\_\_\_\_\_  
Recorder to the Committee

RESOLUTION # 2021-014

A RESOLUTION OF THE GRAND VALLEY REGIONAL TRANSPORTATION COMMITTEE FOR ADOPTION OF AN UPDATE TO THE GRAND VALLEY TRANSIT PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

WHEREAS, The Federal Transit Administration (FTA) requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and

WHEREAS, the rule applies to all operators of public transportation systems that are recipients and sub-recipients of federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307); and

WHEREAS, Mesa County receives funds from the FTA under 49 U.S.C. § 5307, § 5310, and § 5339 and is therefore required to comply with the PTASP Final Rule; and

WHEREAS, The Grand Valley Regional Transportation Plan adopted the Grand Valley Transit PTASP on August 24<sup>th</sup>, 2020.

WHEREAS, The FTA requires that the PTASP be reviewed and updated annually, including updated safety performance targets.

THEREFORE, be it resolved that the Grand Valley Regional Transportation Committee does hereby adopt the November 2021 update to the Public Transportation Agency Safety Plan including updated safety performance targets to be implemented for the year 2022 as its official plan until superseded by a subsequent updated or amended plan;

Passed and adopted at the regular meeting of the Grand Valley Regional Transportation Committee held this 15<sup>th</sup> day of November 2021.

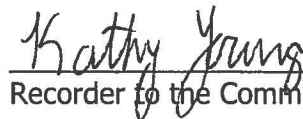
Grand Valley Regional Transportation Committee



---

Scott McInnis, Chair

Attest:



---

Recorder to the Committee



RESOLUTION # 2022-019

A RESOLUTION OF THE GRAND VALLEY REGIONAL TRANSPORTATION COMMITTEE FOR ADOPTION OF AN UPDATE TO THE GRAND VALLEY TRANSIT PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

WHEREAS, The Federal Transit Administration (FTA) requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and

WHEREAS, the rule applies to all operators of public transportation systems that are recipients and sub-recipients of federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307); and

WHEREAS, Mesa County receives funds from the FTA under 49 U.S.C. § 5307, § 5310, and § 5339 and is therefore required to comply with the PTASP Final Rule; and

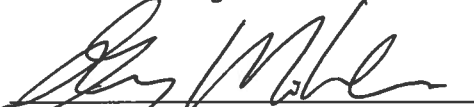
WHEREAS, The Grand Valley Regional Transportation Plan adopted the Grand Valley Transit PTASP on August 24<sup>th</sup>, 2020 and adopted an update on November 15, 2021.

WHEREAS, The FTA requires that the PTASP be reviewed and updated annually, including updated safety performance targets.

THEREFORE, be it resolved that the Grand Valley Regional Transportation Committee does hereby adopt the November 2022 update to the Public Transportation Agency Safety Plan including updated safety performance targets and additions in accordance with the Bipartisan Infrastructure Law to be implemented for the year 2023 as its official plan until superseded by a subsequent updated or amended plan;

Passed and adopted at the regular meeting of the Grand Valley Regional Transportation Committee held this 7<sup>th</sup> day of November 2022.

Grand Valley Regional Transportation Committee

  
\_\_\_\_\_  
Greg Mikolaj, Chair

Attest:

  
\_\_\_\_\_  
Recorder to the Committee

# Appendix G- TrAMS Certification

Records / TrAMS | Recipient Organizations

## County Of Mesa | MESA | 1139

[Summary](#) [Applications/Awards](#) [TrAMS Users](#) [Locations](#) [Designated Recipient](#) [Suballocations](#) [News](#) [Related Actions](#)

### Certifications & Assurances | FY 2020 C&A Affirmations

#### Recipient Details

**Recipient ID**

1139

**Recipient Name**

County Of Mesa

#### Certification and Assurance Information

**Fiscal Year** 2020

**Original Certification Date** 3/10/2020

**Assigned Date** 2/28/2020

**Latest Certification Date** 11/9/2020

**Due Date** 5/28/2020

#### Published Certifications and Assurances

FTA CERTIFICATIONS AND ASSURANCES

#### Public Transportation Agency Safety Plan (PTASP)

On or before December 31, 2020, applicants and recipients of Section 5307 grants and rail transit agencies that are subject to the State Safety Oversight Program must certify to Category 2: Public Transportation Agency Safety Plans. Due to the Coronavirus Disease 2019 (COVID-19) public health emergency, FTA has issued a Notice of Enforcement Discretion stating that FTA will refrain from taking enforcement action related to the PTASP regulation until January 1, 2021. While applicants and recipients are encouraged to certify by the original deadline of July 20, 2020, to the extent practical, those who do not certify compliance until December 31, 2020, remain eligible for Chapter 53 grant funds.

[List of All Applicable Agencies](#)

[PTASP Technical Assistance Center](#)

#### Certifications and Assurances

##### Certification History

Certification Date: 11/9/2020 | Official: Dana Brosig | Attorney: Patrick Coleman

Category	Title	Certified
01	Certifications and Assurances Required of Every Applicant	
02	Public Transportation Agency Safety Plans	
03	Tax Liability and Felony Convictions	
04	Lobbying	
05	Private Sector Protections	
06	Transit Asset Management Plan	
07	Rolling Stock Buy America Reviews and Bus Testing	
08	Urbanized Area Formula Grants Program	
09	Formula Grants for Rural Areas	



Category	Title	Certified
11	Grants for Buses and Bus Facilities and Low or No Emission Vehicle Deployment Grant Programs	<input checked="" type="checkbox"/>
12	Enhanced Mobility of Seniors and Individuals with Disabilities Programs	<input checked="" type="checkbox"/>
13	State of Good Repair Grants	<input checked="" type="checkbox"/>
14	Infrastructure Finance Programs	<input checked="" type="checkbox"/>
15	Alcohol and Controlled Substances Testing	<input checked="" type="checkbox"/>
16	Rail Safety Training and Oversight	<input checked="" type="checkbox"/>
17	Demand Responsive Service	<input checked="" type="checkbox"/>
18	Interest and Financing Costs	<input checked="" type="checkbox"/>
19	Construction Hiring Preferences	<input checked="" type="checkbox"/>
20	Cybersecurity Certification for Rail Rolling Stock and Operations	<input checked="" type="checkbox"/>

1 - 20 of 20

**Documents**

**Existing Documents**

Document	Description	Uploaded By	Date
<a href="#">PTASP-FINAL-10.27.20</a>	Mesa County-PTASP	Dana Brosig	10/27/2020

**Affirmation of Applicant**

**Affirmation of Applicant** BY SIGNING BELOW, on behalf of the Applicant, I declare that it has duly authorized me to make these Certifications and Assurances and bind its compliance. Thus, it agrees to comply with all federal laws, regulations, and requirements, follow applicable federal guidance, and comply with the Certifications and Assurances as indicated on the foregoing page applicable to each application its Authorized Representative makes to the Federal Transit Administration (FTA) in federal fiscal year 2020, irrespective of whether the individual that acted on his or her Applicant's behalf continues to represent it.

FTA intends that the Certifications and Assurances the Applicant selects on the other side of this document should apply to each Award for which it now seeks, or may later seek federal assistance to be awarded during federal fiscal year 2020.

The Applicant airms the truthfulness and accuracy of the Certifications and Assurances it has selected in the statements submitted with this document and any other submission made to FTA, and acknowledges that the Program Fraud Civil Remedies Act of 1986, 31 U.S.C. § 3801 et seq., and implementing U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR part 31, apply to any certification, assurance or submission made to FTA. The criminal provisions of 18 U.S.C. § 1001 apply to any certification, assurance, or submission made in connection with a federal public transportation program authorized by 49 U.S.C. chapter 53 or any other statute.

In signing this document, I declare under penalties of perjury that the foregoing Certifications and Assurances, and any other statements made by me on behalf of the Applicant are true and accurate.

**Official's Name** Dana Brosig

I accept the above

**Certification Date** Oct 27, 2020

**Affirmation of Attorney**

**Affirmation of Applicant's Attorney** As the undersigned Attorney for the above-named Applicant, I hereby airm to the Applicant that it has authority under state, local, or tribal government law, as applicable, to make and comply with the Certifications and Assurances as indicated on the foregoing pages. I further airm that, in my opinion, the Certifications and Assurances have been legally made and constitute legal and binding obligations on it.

I further airm that, to the best of my knowledge, there is no legislation or litigation pending or imminent that might adversely affect the validity of these Certifications and Assurances, or of the performance of its FTA assisted Award.

**Attorney's Name** Patrick Coleman

I accept the above

**Certification Date** Nov 09, 2020

CANCEL

BEGIN RECERTIFICATION