Preliminary Investigation



Caltrans Division of Research, Innovation and System Information

Best Practices to Reduce Illness and Injury Rate in Heavy Duty Mechanics

Requested by Lisa Kunzman, Division of Equipment

February 9, 2015

The Caltrans Division of Research, Innovation and System Information (DRISI) receives and evaluates numerous research problem statements for funding every year. DRISI conducts Preliminary Investigations on these problem statements to better scope and prioritize the proposed research in light of existing credible work on the topics nationally and internationally. Online and print sources for Preliminary Investigations include the National Cooperative Highway Research Program (NCHRP) and other Transportation Research Board (TRB) programs, the American Association of State Highway and Transportation Officials (AASHTO), the research and practices of other transportation agencies, and related academic and industry research. The views and conclusions in cited works, while generally peer reviewed or published by authoritative sources, may not be accepted without qualification by all experts in the field. The contents of this document reflect the views of the authors, who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the California Department of Transportation, the State of California, or the Federal Highway Administration. This document does not constitute a standard, specification, or regulation. No part of this publication should be construed as an endorsement for a commercial product, manufacturer, contractor, or consultant. Any trade names or photos of commercial products appearing in this publication are for clarity only.

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Executive Summary

Background

Caltrans' Division of Equipment is interested in best practices for reducing illnesses and injuries among heavy duty mechanics as well as data on the effectiveness and return on investment (ROI) for such practices. Heavy duty mechanics are critical to sustaining transportation agency fleets, including complex mobile equipment such as snowplows, graders, buses and rail systems. Illness and injury are higher for heavy duty mechanics than for other transportation agency staff, and the heavy duty mechanic workforce has long experienced difficulties with recruitment and retention.

To assist Caltrans in identifying relevant best practices and ROI, CTC & Associates:

- Surveyed state departments of transportation (DOTs) and other organizations concerning their a) best practices and b) ROI for programs to reduce workplace illness and injury among their heavy duty mechanic workforce.
- Attempted to directly contact several other organizations, including the California Governor's Office of Emergency Services (Cal OES), UPS, California Department of Forestry and Fire Protection (CAL FIRE), FedEx, the California Department of Water Resources and three California transit agencies.
- Conducted a literature search on best practices for reducing injury and illness among heavy duty mechanics.

Summary of Findings

Survey of Current Practice

To determine the best practices that state DOTs are using to reduce injuries among heavy duty mechanics and whether they are evaluating the effectiveness or ROI of these practices, CTC surveyed DOT equipment personnel using both contacts provided by Caltrans and those in the 2012 AASHTO Equipment Reference Book. (See **Survey of Current Practice** in this report.) We received 16 responses to the survey. (See <u>Appendix A</u> for the full text of all responses.) Among the 15 transportation organizations represented, the most popular best practices were personal protective equipment and training in its use (14 respondents, 93 percent) and safety programs (13 respondents, 87 percent). Personal protective equipment was also the practice most often cited as particularly effective (seven respondents, 47 percent).

None of the respondents said they tracked the effectiveness or ROI of best practices. Manitoba alludes to tracking the effectiveness of procedures by tracking lost time, and Hawaii mentions tracking injuries through safety meetings and injury reports.

Consultation with Other Organizations

We were able to talk to representatives at the Los Angeles County Metropolitan Transportation Authority (LACMTA) and the San Luis Obispo Regional Transit Authority (SLORTA) about their best practices for reducing injuries among heavy duty mechanics. These organizations provided us with a number of documents related to their best practices; LACMTA documents are available in <u>Appendices B.1 to B.3</u> and San Luis Obispo Regional Transit Authority documents are available in <u>Appendices C.1 to C.18</u>.

Related Research and Resources

We found very little available information related to best practices for reducing injuries among heavy duty mechanics, either in the available research literature or DOT manuals and guides. Findings of note include the following:

- According to the Bureau of Labor Statistics, the median number of sick days per year for heavy duty mechanics is 12.
- The Texas Department of Transportation's Maintenance Management and Safety Guide (see Equipment Maintenance Manuals with Safety Practices in this report) includes general information about safety for mechanics and recommends safety training for new mechanics.
- Several reports include information about health and wellness programs for DOT employees.

Gaps in Findings

- We found very little available information related to best practices for reducing injuries among heavy duty mechanics, either in the available research literature or DOT manuals and guides.
- No survey respondents provided documentation of best practices for reducing injuries among heavy duty mechanics, and no respondents said their agencies tracked the effectiveness or ROI of best practices.
- We attempted to contact a number of additional organizations that employ heavy duty mechanics to maintain their fleets. (Please refer to the Contacts section of this report.) However, we have not yet received responses to these requests. These organizations may have additional information that would be useful to Caltrans.

Next Steps

Moving forward, Caltrans could consider:

- Following up with survey respondents concerning available documentation of best practices for reducing injuries among heavy duty mechanics.
- Following up with representatives at organizations that CTC attempted to contact directly.

Detailed Findings

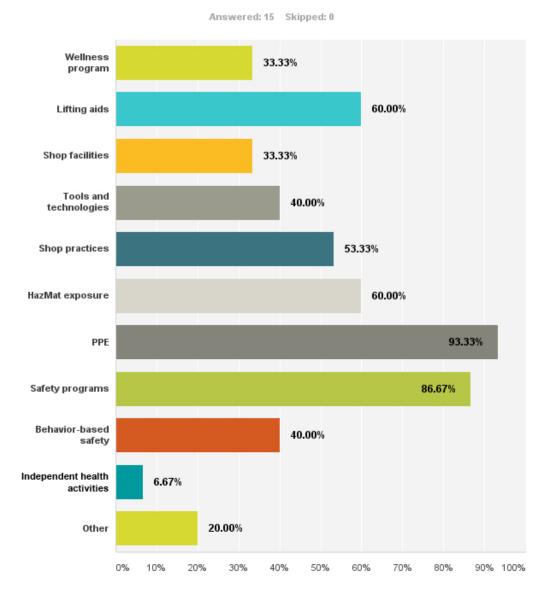
Survey of Current Practice

To determine the best practices that state DOTs are using to reduce injuries among heavy duty mechanics and whether agencies are evaluating the effectiveness and ROI of these practices, CTC surveyed DOT equipment personnel using both contacts provided by Caltrans and those in the 2012 AASHTO Equipment Reference Book (<u>https://www.pavementpreservation.org/wp-content/uploads/2012/08/AASHTO_Equipment_Reference_Book_2012.pdf</u>). We asked contacts to reply to an online survey, which consisted of the following questions:

- 1. Which of the following policies or practices (whether formal or informal) has your organization implemented to reduce illness and injuries among your heavy duty mechanics? Please check all that apply.
 - a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet, possibly including access to exercise facilities and regularly distributing supporting nutritional and other information in paychecks.
 - b. A daily stretching or exercise routine.
 - c. Lifting aids.
 - d. Shop facilities design.
 - e. Tools and technologies to improve ergonomics.
 - f. Shop practices and supervision.
 - g. Practices to mitigate exposure to hazardous materials.
 - h. Personal protective equipment and training in its use.
 - i. Safety programs, including efforts to increase compliance to safety practices.
 - j. Behavior-based safety procedures.
 - k. Integrating traditionally independent health protection and health promotion activities.
 - I. Other information technologies and resources available to mechanics, such as tool balancers and Google glasses.
- 2. For the practices selected above, please comment on those you have found to be most effective.
- 3. What other practices, policies or equipment/technologies have you implemented or considered to address illnesses and injuries among heavy duty mechanics?
- 4. Does your organization document or track the effectiveness, cost-effectiveness or return on investment (ROI) of any of the practices, policies or equipment/technologies you have implemented to address heavy duty mechanic illness and injury?
- 5. Please provide documents or links with details about the practices, policies and tools you have used to address illnesses and injuries, along with any information on effectiveness or ROI.

6. Please provide any additional comments about your experience with addressing illness or injury among heavy duty mechanics that you think may be useful to Caltrans.

We received 16 responses to the survey (see <u>Appendix A</u> for the full text of all responses), including two from Washington State DOT: one from the equipment superintendent and one from the assistant equipment superintendent. For the purpose of analyzing survey results, we have excluded the assistant equipment superintendent's responses, leaving a base of 15 responses. (The Washington State DOT assistant equipment superintendent's responses are included in <u>Appendix A</u>.) The survey responses are summarized in the following bar graph.



Policies and Practices Used to Reduce Injury among Heavy Duty Mechanics

Results from the 15 included respondents follow:

- The most popular best practices were personal protective equipment and training in its use (14 respondents, 93 percent) and safety programs (13 respondents, 87 percent). Personal protective equipment was also the practice most often cited as particularly effective (seven respondents, 47 percent).
- More than half of respondents also cited the use of lifting aids (nine respondents, 60 percent); practices to mitigate exposure to hazardous materials (nine respondents, 60 percent); and shop practices and supervision (eight respondents, 53 percent).
- Other cited practices in order of popularity were tools and technologies to improve ergonomics (six respondents, 40 percent); behavior-based safety procedures (six respondents, 40 percent); shop facilities design (five respondents, 33 percent); other information technologies and resources (three respondents, 20 percent); and integrating traditionally independent health protection and health promotion activities (one respondent, 7 percent).
- None of the respondents cited a daily exercise or stretching routine as a best practice.
- None of the respondents (except for the Washington State assistant equipment superintendent, whose response has been excluded for the purpose of this analysis) said they tracked the effectiveness or ROI of best practices. Manitoba alludes to tracking the effectiveness of procedures by tracking lost time, and Hawaii mentions tracking injuries through safety meetings and injury reports.

When asked about other policies and practices in use, respondents cited:

- Safety meetings, inspections and planning (five respondents, 33 percent):
 - Routine safety meetings (Idaho conducts them monthly using visual aids and videos; West Virginia uses occupational safety specialists to conduct monthly or bimonthly meetings).
 - Mandatory safety inspections as routinely as possible to pinpoint at-risk areas (Alaska).
 - A Pre-Activity Safety Plan that is designed by the individual employee (Washington State).
 - Safety culture plan (Pennsylvania).
- Equipment and environment (five respondents, 33 percent):
 - Proper equipment use and an emphasis on three points of contact when getting in and out of certain equipment (Arkansas).
 - Heavy metal testing (New Hampshire).
 - Heavy duty mobile lifts (North Dakota).
 - Aqua wash systems, job hazard analyses (JHAs) in place with regular review for common jobs, and reduction or elimination of toxic chemicals (Oregon).
 - Corrected ventilation issues, improved lighting, trip hazard elimination and housekeeping in general (Washington State).
- Training (three respondents, 20 percent):

- Mandatory training whenever new tools, vehicles and equipment are issued (Hawaii).
- Keeping all employees informed (Idaho).
- Mechanic education (Washington State).

When asked to comment on the most effective policies and practices, respondents mentioned personal protective equipment (seven respondents, 47 percent) as the most effective practice. Other practices cited as most effective included (in order of popularity):

- Tools and technologies to improve ergonomics (Hawaii, Idaho and New Hampshire).
- Lifting aids (Hawaii, Washington State and West Virginia).
- Shop practices and supervision (North Dakota and Oregon).
- Statewide wellness program (Ohio and Rhode Island).
- Safety programs (Alaska and Rhode Island).
- OSHA 10- and 30-hour training (Ohio; Alaska also noted that OSHA advisors had been helpful).
- Facilities design (Idaho).
- Practices to mitigate exposure to hazardous materials (Washington State).
- Fostering a culture of attentiveness (New Hampshire).
- Current JHAs in place with regular review for common jobs (Oregon).
- Material data safety sheets (Rhode Island).
- Mechanic education (Washington State).
- Regular safety meetings (West Virginia).

Consultation with Other Organizations

We talked to representatives from LACMTA and the San Luis Obispo Regional Transit Authority about their best practices for reducing injuries among heavy duty mechanics.

Los Angeles County Metropolitan Transportation Authority

Contact: Vijay Khawani, Executive Officer, Corporate Safety, Los Angeles County Metropolitan Transportation Authority, 213-922-4035, <u>khawaniv@metro.net</u>.

According to Vijay Khawani, LACMTA employs the following practices (corresponding to the options in question #1 of the state DOT survey):

- a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet.
- c. Lifting aids.
- d. Shop facilities design.
- e. Tools and technologies to improve ergonomics.
- f. Shop practices and supervision.
- g. Practices to mitigate exposure to hazardous materials.
- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- j. Behavior-based safety procedures.

Khawani said LACMTA has a pretty good training program that is task-focused. It also has a personal protective equipment (PPE) program describing all the PPE and training about how it is used. There is also observation and feedback: Supervisors conduct random inspections and observations of employees, making sure they are following procedures and wearing the proper PPE. Khawani provided a policy on conducting random observations of employees to determine the level of compliance with PPE use and other rules (see <u>Appendix B.1</u>). When an incident does occur, the organization conducts an in-depth investigation into why the incident occurred, and the results are communicated to employees.

LACMTA also has a substantial ergonomics program and conducts monthly facilities inspections to identify shop hazards. Every location has a site safety coordinator who is responsible for completing monthly inspections. Khawani provided a form that any employee can use to report hazards that may cause an injury (see <u>Appendix B.2</u>) and a facility inspection checklist that is completed each month by the assigned site safety coordinators (see <u>Appendix B.3</u>).

LACMTA also has a wellness program that is not specifically targeted toward mechanics.

LACMTA does not track the effectiveness or ROI of these practices, and Khawani was unable to say which practices were most effective, but endorsed a combination of them all.

San Luis Obispo Regional Transit Authority

Contacts: David Roessler, Manager, Maintenance & Facilities, San Luis Obispo Regional Transit Authority, 805-781-4835, <u>droessler@slorta.org</u>.

Patricia Grimes, Manager, Safety & Training, San Luis Obispo Regional Transit Authority, 805-781-4836, pgrimes@slorta.org.

We talked briefly to David Roessler, who referred us to Patricia Grimes. She said SLORTA employs the following practices (corresponding to the options in question #1 of the state DOT survey):

- a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet.
- c. Lifting aids.
- d. Shop facilities design.
- e. Tools and technologies to improve ergonomics.
- f. Shop practices and supervision.
- g. Practices to mitigate exposure to hazardous materials.
- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- j. Behavior-based safety procedures.
- k. Integrating traditionally independent health protection and health promotion activities.

SLORTA has a wellness program not specifically targeted to mechanics. This includes credits for exercising, a training room with workout videos, and appreciation dinners and awards and rewards for employees.

The organization also has an extensive injury prevention program, including training classes; policies and procedures; employee recognition awards; and rewards for safety, including a certificate of appreciation and \$100 Visa card for one year without any safety incidents.

Grimes said the most effective practices are continued training and supervision as well as hiring personnel who care about safety and providing them with the right tools.

SLORTA does not track effectiveness or ROI of safety practices.

Grimes provided a number of documents related to SLORTA's safety best practices, attached as <u>Appendices C.1 to C.18</u>.

Related Research and Resources

Injury Data

Nonfatal Occupational Injuries, Bureau of Labor Statistics, 2013. <u>http://www.bls.gov/news.release/osh2.t04.htm</u> See "Bus and truck mechanics" for data. The median number of sick days per year is 12.

Related Resources:

"Heavy Vehicle and Mobile Equipment Service Technicians," Occupational Outlook Handbook, Bureau of Labor Statistics, January 8, 2014.

http://www.bls.gov/ooh/installation-maintenance-and-repair/heavy-vehicle-and-mobileequipment-service-technicians.htm

This summary provides occupational information for heavy vehicle and mobile equipment service technicians.

"Diesel Service Technicians and Mechanics," Occupational Outlook Handbook, Bureau of Labor Statistics, January 8, 2014.

http://www.bls.gov/ooh/installation-maintenance-and-repair/diesel-service-technicians-and-mechanics.htm

This summary provides occupational information for diesel service technicians and mechanics.

Work-Related Fatalities Involving Trucks, Australia, 2003 to 2012, Safe Work Australia, May 2014.

http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/854/Work-related-fatalities-involving-trucks.pdf

This report looks at all fatal incidents that involve a truck in a working environment. Repair and maintenance activities accounted for 55 (7 percent) of 787 total fatalities.

Equipment Maintenance Manuals with Safety Practices

Maintenance Management and Safety Guide, Texas Department of Transportation, March 2003.

https://www.dot.state.tx.us/PTN/documents/mgmtguide.pdf

Pages 21-25 address personnel safety issues, including:

- PPE.
- Tool use and technique.
- Eye protection.
- Hearing protection.
- Hand protection.
- Lifting technique.
- Chemical and waste management.

The manual also recommends good housekeeping as key to safety (page 18).

Pages 11-12 outline required safety training:

Facility safety training should include additional information on the following:

- Fire safety training, the proper use of all fire/life safety equipment.
- Location of shop power emergency disconnect.
- First aid.
- Shop layout and egress routes.
- Hazard communication.

New mechanics should receive safety training and be assigned to a senior mechanic for a certain period of time prior to performing their job. Beyond this initial orientation and training, mechanics should be continuously trained to ensure that their skills are kept up-to-date.

All training should be documented and the effectiveness of the training program evaluated periodically.

Maintenance Manual, Great Dane, undated.

http://www.greatdanetrailers.com/documents/10162/c5aef142-ec88-462f-bcd7-102cc9579a7b This bus maintenance manual includes safety recommendations throughout.

Heavy Duty Mechanics Apprenticeship Training, Module One, Volume I, British Columbia Department of Education, 1980.

http://eric.ed.gov/?id=ED246299

See page 25 for shop safety. The manual also includes safety recommendations throughout.

Health and Wellness Programs

Stretch and Flex Program for TxDOT Office and Field Workers, Texas Department of Transportation, September 2014.

http://library.ctr.utexas.edu/ctr-publications/0-6805-1.pdf

This document does not specifically address injuries among heavy duty mechanics, but notes that at Texas DOT, strain and sprain-related injuries accounted for 40 percent of total injuries, with lower back injuries the most common. Fifty percent of lower back injuries are related to lifting. The guidebook includes "ergonomic recommendations for common TxDOT workplace tasks and a Stretch and Flex program designed to reduce strain/sprain-related incidents." It recommends strengthening core muscles as the best preventive strategy.

Review of Workplace Wellness Program Options to Reduce Musculoskeletal Disorders in Laborious Work, Minnesota Department of Transportation, January 2011.

http://www.lrrb.org/media/reports/201107.pdf

This report does not address heavy duty mechanics specifically, but outlines the components of a health and wellness program for Minnesota DOT. A survey of agencies found that overexertion and back injuries were the primary concerns, followed by slips, trips, and falls (from page 15 of the report):

For reducing over-exertion and back injury concerns, subjects reported a variety of responses ranging from education (safety lifting, pre-shift stretching or exercises) to "fit for work" policies (or specific hiring of well-fit workers) to "no-lift policies" (or hiring-out 'riskier' work). For dealing with slips/trips/falls, subjects reported education and proper selection and use of footwear.

Evaluation of Workforce Perceptions as a Means to Identify and Mitigate the Causes of Musculoskeletal Disorders, Minnesota Department of Transportation, January 2010. http://www.lrrb.org/media/reports/201001.pdf

From the abstract: An analysis of workers' compensation data showed that five job classifications accounted for over 93% of all cases. This analysis also showed that 48% of the cases resulted in sprains and strains, and 70% of those cases were caused by over-exertion and/or awkward work postures. Based on these findings, a research proposal was created to investigate worker perceptions of potential musculoskeletal injury factors and possible corrective actions. Fifty randomly-selected Minnesota Department of Transportation (Mn/DOT) transportation generalists and mechanics from District 1 were interviewed via telephone. Interviews were voice recorded, transcribed, and analyzed by shortening and separating responses. Each of the six questions produced between 15 to 21 response categories and total response counts between 63 to 123. The most frequently cited safety concern was exposure to public traffic on road projects; followed by heavy or awkward lifting, "rushing" to get a job done and exposure to typical construction site hazards. Overall, workers felt management and coworkers were committed to safety on the job. Possible safety improvements revolved around: general awareness, watching out for each other, planning ahead, taking time to do the job right, and proper use of personal protective equipment. Most of the workers interviewed indicated interest in participating and promoting a workplace wellness program to improve their health and fitness. Efforts to reduce musculoskeletal injuries need to incorporate the concerns and ideas of workers, building off of what was learned in this study.

Employee Wellness Programs: How UPS Improved Productivity & Reduced Injuries,

Professional Safety, Vol. 53 Issue 8, August 2008.

Abstract at: <u>http://connection.ebscohost.com/c/articles/33803841/employee-wellness-programs-how-ups-improved-productivity-reduced-injuries</u>

From the abstract: The article offers information on the development of the employee wellness programs by the United Parcel Service Inc. (UPS) in Petaluma, California. The program has focused on different topics in educating employees in all aspects of their health. It reveals that the program has established an improvement in productivity and morale as well as reduction in on-the-job injuries. It also indicates the role of the program in helping the employees to understand that their employer cares on their health. It also highlights the success of the program.

Contacts

In addition to requesting survey responses from transportation agencies, CTC & Associates contacted or attempted to contact the organizations below to gather information for this report.

California Agencies

Alameda-Contra Costa Transit District

Clarence Johnson Manager of Media Relations 510-891-4745

California Department of Forestry and Fire Protection

Jeff Cranfill Forestry Equipment Manager, Mobile Equipment Management Unit 530-757-2407, jeff.cranfill@fire.ca.gov

California Department of Water Resources

Ted Thomas Chief, Media and Public Information Branch 916-653-9712, ted.thomas@water.ca.gov

Ryan Keith Staff Services Analyst Sacramento Safety Office 916-574-0304, ryan.keith@water.ca.gov

California Governor's Office of Emergency Services

Stephen Hart Deputy Chief Fleet Operations 916-845-8711, <u>stephen.hart@caloes.ca.gov</u>

Los Angeles County Metropolitan Transportation Authority

Antonio Chavira Executive Director, Maintenance 213-922-4980, <u>chaviraan@metro.net</u>

Vijay Khawani Executive Officer, Corporate Safety 213-922-4035, <u>khawaniv@metro.net</u>

San Luis Obispo Regional Transit Authority

David Roessler Maintenance and Facilities Manager 805-781-4835, <u>droessler@slorta.org</u>

Patricia Grimes Manager, Safety & Training 805-781-4836, pgrimes@slorta.org

Other Organizations

FedEx Media Relations 901-434-8100, <u>mediarelations@fedex.com</u>

UPS

Media Relations 404-828-7123, modom@ups.com

Appendices

Appendix A: Complete Survey Responses

Alaska

Contact: Diana Rotkis, State Equipment Fleet Manager, Alaska Department of Transportation and Public Facilities, 907-269-0787, <u>diana.rotkis@alaska.gov</u>.

1. Implemented policies and practices:

- c. Lifting aids.
- g. Practices to mitigate exposure to hazardous materials.
- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- j. Behavior-based safety procedures.
- 2. **Most effective policies and practices:** PPE and safety programs that are mandatory each year and supervisor's follow through with enforcement.
- 3. **Other policies and practices:** Mandatory safety inspections as routinely as possible to pinpoint areas that are at risk.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. **Additional comments:** We can request OSHA to come in to the shops as advisors (no risk) to help us with insure we are compliant with standards and practices. It has been very helpful in addressing concerns.

Arkansas

Contact: Ken Jordan, Section Head, Training & Safety, Arkansas State Highway and Transportation Department, 501-569-2236, <u>ken.jordan@ahtd.ar.gov</u>.

- c. Lifting aids.
- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- I. Other information technologies and resources available to mechanics, such as tool balancers and Google glasses.
- 2. **Most effective policies and practices:** In certain situations, any type of aides can be beneficial.
- 3. **Other policies and practices:** Trying to put emphasis on usage of the proper equipment for the proper job.
- 4. Documents effectiveness/ROI? No.

- 5. Documents and links: No response.
- 6. Additional comments: Putting additional emphasis on properly using the "three points of contact" when getting in and out of certain equipment certainly can help curtail certain injuries.

Delaware

Contact: Lawrence J. Hardy, Equipment Manager, Delaware Department of Transportation, 302-760-2405, <u>lawrence.hardy@state.de.us</u>.

- 1. Implemented policies and practices:
 - h. Personal protective equipment and training in its use.
 - i. Safety programs, including efforts to increase compliance to safety practices.
- 2. Most effective policies and practices: No response.
- 3. Other policies and practices: None.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. Additional comments: No response.

Hawaii

Contact: Llewellyn Honda, Equipment Superintendent/Safety Coordinator, Hawaii Department of Transportation, 808-587-2628, <u>llewellyn.honda@hawaii.gov</u>.

- c. Lifting aids.
- d. Shop facilities design.
- e. Tools and technologies to improve ergonomics.
- f. Shop practices and supervision.
- g. Practices to mitigate exposure to hazardous materials.
- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- j. Behavior-based safety procedures.
- I. Other information technologies and resources available to mechanics, such as tool balancers and Google glasses.
- Most effective policies and practices: Lifting aides, Tools and technologies to improve ergonomics, PPE - the combination of these practices have been very effective in reducing injuries.
- 3. **Other policies and practices:** Mandatory training whenever new tools, vehicles, and equipment are issued, as mandated by OSHA and HIOSH.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.

6. **Additional comments:** Reduction of injuries is tracked through safety meetings and injury reports.

ldaho

Contact: Vic Parrish, Employee Safety and Risk Manager, Idaho Transportation Department, 208-334-8038, <u>vic.parrish@itd.idaho.gov</u>.

- 1. Implemented policies and practices:
 - a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet, possibly including access to exercise facilities and regularly distributing supporting nutritional and other information in paychecks.
 - c. Lifting aids.
 - d. Shop facilities design.
 - e. Tools and technologies to improve ergonomics.
 - f. Shop practices and supervision.
 - g. Practices to mitigate exposure to hazardous materials.
 - h. Personal protective equipment and training in its use.
 - i. Safety programs, including efforts to increase compliance to safety practices.
 - j. Behavior-based safety procedures.
- 2. Most effective policies and practices: Tools, facilities design, PPE.
- 3. Other policies and practices: No response.
- 4. Documents effectiveness/ROI? No.
- 5. **Documents and links:** No response.
- 6. Additional comments: No response.

Manitoba

Contact: Al Franchuk, COO, Vehicle and Equipment Management Agency, Province of Manitoba, 204-232-5179, <u>al.franchuk@gov.mb.ca</u>.

- c. Lifting aids.
- d. Shop facilities design.
- e. Tools and technologies to improve ergonomics.
- f. Shop practices and supervision.
- g. Practices to mitigate exposure to hazardous materials.
- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- j. Behavior-based safety procedures.

- 2. Most effective policies and practices: All.
- 3. Other policies and practices: No response.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: Track primarily lost time.
- 6. Additional comments: No response.

Nebraska

Contact: Janie R. Vrtiska, Fleet Manager, Nebraska Department of Roads, 402-479-4589, janie.vrtiska@nebraska.gov.

- 1. Implemented policies and practices:
 - a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet, possibly including access to exercise facilities and regularly distributing supporting nutritional and other information in paychecks.
 - c. Lifting aids.
 - h. Personal protective equipment and training in its use.
 - j. Behavior-based safety procedures.
- 2. **Most effective policies and practices:** Making sure all employees are informed is the key to keeping them safe from injuries that may affect their health.
- 3. **Other policies and practices:** Routine safety meetings monthly and on the spot if necessary.
- 4. Documents effectiveness/ROI? No.
- 5. **Documents and links:** Monthly safety meetings are conducted using visual aids and videos [no links provided].
- 6. Additional comments: No response.

New Hampshire

Contact: William Dusavitch, Administrator, Bureau of Mechanical Services, New Hampshire Department of Transportation, 603-271-3721, <u>wdusavitch@dot.state.nh.us</u>.

- 1. Implemented policies and practices:
 - a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet, possibly including access to exercise facilities and regularly distributing supporting nutritional and other information in paychecks.
 - e. Tools and technologies to improve ergonomics.
 - f. Shop practices and supervision.
 - g. Practices to mitigate exposure to hazardous materials.
 - h. Personal protective equipment and training in its use.
 - i. Safety programs, including efforts to increase compliance to safety practices.

- I. Other information technologies and resources available to mechanics, such as tool balancers and Google glasses.
- 2. **Most effective policies and practices:** PPE's, Tools and Technology and creating/promotion a culture of attentiveness.
- 3. **Other policies and practices:** Baseline heavy metal testing with bi-annual confirmation testing.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. **Additional comments:** We test the paint on all equipment purchased as part of the bid process. We have discovered some manufactures paint still tests positive for lead.

North Dakota

Contact: Shawn Hauck, Equipment Fleet Manager, North Dakota Department of Transportation, 701-328-2565, <u>smhauck@nd.gov</u>.

- 1. Implemented policies and practices:
 - c. Lifting aids.
 - d. Shop facilities design.
 - e. Tools and technologies to improve ergonomics.
 - f. Shop practices and supervision.
 - g. Practices to mitigate exposure to hazardous materials.
 - h. Personal protective equipment and training in its use.
- 2. **Most effective policies and practices:** The most effective would have to be shop practices and supervision. Everyone is in a hurry and that is when accidents happen. There needs to be a shop environment where safety is prioritized and proper time is given to use proper PPE and proper tools to get a job done safely.
- 3. **Other policies and practices:** The addition of HD mobile lifts to lift plow trucks and other heavy equipment. The use of these lifts has allowed mechanics to work comfortably underneath equipment as well as work more efficiently.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. Additional comments: No response.

Ohio

Contact: Marcia Disinger, Safety Coordinator, Ohio Department of Transportation, 614-752-6925, <u>marcia.disinger@dot.state.oh.us</u>.

1. Implemented policies and practices:

a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet, possibly including access to exercise facilities and regularly distributing supporting nutritional and other information in paychecks.

- i. Safety programs, including efforts to increase compliance to safety practices.
- 2. **Most effective policies and practices:** 1. The statewide wellness program is very effective. 2. OSHA 10 & 30 hour have been effective.
- 3. Other policies and practices: No response.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. Additional comments: No response.

Oregon

Contact: Bruce Erickson, Fleet Services Manager, Oregon Department of Transportation, 503-986-2734, <u>bruce.d.erickson@odot.state.or.us</u>.

1. Implemented policies and practices:

- c. Lifting aids.
- d. Shop facilities design.
- e. Tools and technologies to improve ergonomics.
- f. Shop practices and supervision.
- g. Practices to mitigate exposure to hazardous materials.
- h Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- j. Behavior-based safety procedures.
- k. Integrating traditionally independent health protection and health promotion activities.
- 2. **Most effective policies and practices:** Having current JHA's in place with regular review for common jobs. Shop practices and supervision, proper PPE.
- 3. **Other policies and practices:** Reducing exposure to hazards such as fibrous materials, using aqua wash systems and having current JHA's in place. Reducing or eliminating common chemicals used to other less toxic products.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. Additional comments: No response.

Pennsylvania

Contact: Penny Morgan, Safety Division Chief, Pennsylvania Department of Transportation, 717-787-3460, pemorgan@pa.gov.

- 1. Implemented policies and practices:
 - h. Personal protective equipment and training in its use.
 - i. Safety programs, including efforts to increase compliance to safety practices.
- 2. Most effective policies and practices: No response.

- 3. **Other policies and practices:** We just recently had a 6 month safety culture plan where districts needed to perform monthly activities.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. Additional comments: No response.

Rhode Island

Contact: Paul Pusyka, Assistant Administrator, Financial Management, Rhode Island Department of Transportation, 401-734-4833, <u>paul.pusyka@dot.ri.gov</u>.

- 1. Implemented policies and practices:
 - a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet, possibly including access to exercise facilities and regularly distributing supporting nutritional and other information in paychecks.
 - g. Practices to mitigate exposure to hazardous materials.
 - h. Personal protective equipment and training in its use.
 - i. Safety programs, including efforts to increase compliance to safety practices.
- 2. **Most effective policies and practices:** Wellness program by United Health has been thought provoking. Material Safety Data Sheet (MSDS) are extremely informative. Personal protective equipment has been distributed and used. Training of safety practices has been key.
- 3. Other policies and practices: None.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: <u>http://www.msdsonline.com/</u> <u>http://www.uhc.com/</u>
- 6. Additional comments: None.

Washington State

Response 1

Contact: Curt Dyk, Equipment Superintendent, Washington State Department of Transportation, 509-577-1974, <u>dykc@wsdot.wa.gov</u>.

- c. Lifting aids.
- g. Practices to mitigate exposure to hazardous materials.
- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- 2. **Most effective policies and practices:** Educating and re-enforcement to our Mechanics that we endorse and support the extra time needed to use lifting aides,

identifying and awareness of hazardous materials and PPE and training in its use. Also the positive re-enforcement for Techs to take time to use or ask for help instead of trying to do it all by themselves.

- 3. **Other policies and practices:** Correcting ventilation issues, improving lighting, solving tripping hazards, housekeeping in general.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. Additional comments: Please share results / findings with us.

Response 2

Contact: Kelly Heathman, Assistant Equipment Superintendent, Washington State Department of Transportation, 206-768-5822, <u>heathmk@wsdot.wa.gov</u>.

1. Implemented policies and practices:

- a. A wellness program or "good health" or "healthy living" initiative to promote the benefits of exercise and a healthy mind and diet, possibly including access to exercise facilities and regularly distributing supporting nutritional and other information in paychecks.
- c. Lifting aids.
- e. Tools and technologies to improve ergonomics.
- f. Shop practices and supervision.
- g. Practices to mitigate exposure to hazardous materials.
- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- j. Behavior-based safety procedures.
- k. Integrating traditionally independent health protection and health promotion activities.
- I. Other information technologies and resources available to mechanics, such as tool balancers and Google glasses.
- 2. **Most effective policies and practices:** A Pre-Activity Safety Plan that is designed by the individual employee.
- 3. Other policies and practices: Proper personal protective equipment.
- 4. Documents effectiveness/ROI? Yes.
- 5. Documents and links: This is done by our safety office.
- 6. Additional comments: No response.

West Virginia

Contact: David Brabham, Director, Equipment Division, West Virginia Department of Transportation, 304-472-1750, <u>david.e.brabham@wv.gov</u>.

- h. Personal protective equipment and training in its use.
- i. Safety programs, including efforts to increase compliance to safety practices.
- 2. **Most effective policies and practices:** We have Occupational Safety Specialists who conduct monthly or bi-monthly safety meetings with our employees to cover these types of topics.
- 3. **Other policies and practices:** Nothing major, just attempt to get the mechanics the proper lifting equipment (cranes, lifts, etc.) to help reduce the chance of lifting injuries.
- 4. Documents effectiveness/ROI? No.
- 5. Documents and links: No response.
- 6. Additional comments: No response.

Los Angeles County Metropolitan Transportation Authority



CORPORATE SAFETY Field Observation and Feedback

(SAF 3)

POLICY STATEMENT

Detailed performance information regarding safe and unsafe acts and work habits is critical to the Los Angeles County Metropolitan Transportation Authority's (LACMTA) efforts to protect the lives and health of employees and minimize injury costs. This Field Observation and Feedback (FOF) policy is established to provide the means to collect and disseminate such information.

It is the policy of LACMTA that all line managers and supervisors actively participate in FOF and that all work areas and shifts be included in regular observation sessions. The California Public Utilities Commission (CPUC) required efficiency testing program for train operators is equivalent to the FOF program and serves the same purpose. The results of the efficiency testing program are documented in the Vehicle Accident Monitoring System (VAMS).

Observations must focus on accurately recording observation data, constructively and positively reinforcing safe acts, gaining employee commitment to stop unsafe acts and encouraging two-way communication about safety related concerns. All unsafe behaviors observed must be addressed and acted on immediately.

Issues that do not require immediate action must be documented and forwarded to appropriate department for resolution and feedback given to the appropriate employees.

PURPOSE

The purpose of the observation program is to positively reinforce safe behaviors and constructively correct unsafe behaviors. This policy provides standards and guidelines for performing Field Observation and Feedback sessions and identifies methods by which the information will be communicated throughout the agency.

For details on compliance with this policy refer to the Guidelines for Conducting a FOF on Corporate Safety's Intranet site.

APPLICATION

This policy applies to all LACMTA line managers and supervisors responsible for overseeing the Operations and Maintenance of operators and maintenance staff.

Antill ent Head

Careanter G. Langston APPROVED: County Counsel or N/A

Effective Date

Date of Last Review: _

Los Angeles County Metropolitan Transportation Authority Metro CORPO

CORPORATE SAFETY Field Observation and Feedback

(SAF 3)

1.0 GENERAL

LACMTA's Safety Principles are:

- Safety is a 24/7 priority.
- Safety is everyone's responsibility.
- Accidents and injuries are preventable.
- Working safely is a condition of employment.
- Training is essential for good safety performance.
- Management is accountable for safety.

2.0 PROCEDURES

Field Observation and Feedback (FOF) sessions consist of scheduled time in the field when observers are solely focused on observing employees working and then discussing with them their safe and unsafe actions. To do this effectively, FOF sessions need to be planned, implemented and acted upon when there are follow-up issues. FOF sessions are powerful injury prevention tools because intervention occurs in a positive manner prior to an incident occurring.

2.1Scheduling FOF Sessions

Scheduled FOF sessions must be performed and documented by managers and supervisors whose primary duties are assigned in the field or who supervise employees in LACMTA facilities. Executive Management should also conduct or participate in periodic FOF sessions.

Each month, managers will establish a schedule in TRANSITSAFE for themselves and their direct reports.

The level of attention to any area will vary based on the work tasks. FOF sessions should be performed when the maximum number of employees are doing their jobs. Avoid performing FOF sessions at or just before lunchtime, breaks, or just prior to employees finishing their day's work. Los Angeles County Metropolitan Transportation Authority

Metro

CORPORATE SAFETY Field Observation and Feedback

(SAF 3)

Responsibilities for scheduling FOFs:

- The managers schedule FOFs for themselves and members of their staff at the beginning of each month.
- FOFs conducted should cover all operating divisions.
- Specific safety focus areas, identified during the analysis of the previous month's FOF sessions, are to be incorporated into the next month's schedule.
- The FOF schedule should reflect FOF sessions encompassing coverage of the various operating lines and Division Maintenance areas.

2.2 Frequency of FOF Sessions

The most critical factor in the success of the program is conducting FOF sessions on a consistent and reasonable frequency. Frequencies and lengths of sessions will vary based on the work environment. Sessions must be performed on all shifts to ensure all employees benefit from the program. At a minimum an FOF session should be 30 minutes in duration and should be focused 100% on safety. Managers should perform one FOF session every 2 weeks. Supervisors should perform one FOF session per week.

Individual supervisors will perform the majority of all FOF sessions. Groups or task teams may perform observation sessions together to engage more people and add valuable perspective. All employees are encouraged to participate in these sessions. Groups or task teams should be limited to 2-3 people and may consist of:

- Managers/Supervisors and employees
- Manager and Supervisor
- Manager/Supervisor and Senior Safety Specialist
- Members of Local Safety Committees
- Members of ad hoc teams chartered to focus on specific issues
- FOF teams from outside of the local operating area/division/department



CORPORATE SAFETY Field Observation and Feedback

(SAF 3)

3.0 DEFINITION OF TERMS

Field Observation and Feedback (FOF) – A structured process to ensure that LACMTA managers and supervisors visibly take responsibility for the safety of employees in the workplace by observing an employee at work and then discussing with the employee his/her safe and unsafe actions. This process is known as making a safety contact.

Observers – All managers and supervisors in the agency are considered "observers" when they are conducting an FOF session in the workplace.

Safety Contact – A process to reinforce safe acts or address unsafe acts in the workplace.

4.0 RESPONSIBILITIES

Corporate Safety provides oversight and overall administration of this policy.

Line Managers and Supervisors are responsible for setting standards of safety performance and for establishing, communicating, training and enforcing safety rules and procedures and training new Transit Operations Supervisors (TOS).

Local Safety Committees are responsible for the ongoing monitoring of the effectiveness of the FOF process in the division/department/area. Subcommittees audit and monitor the FOF program to ensure the quality of the observations and feedback.

Employees are responsible for performing their tasks and responsibilities in a safe manner in accordance with the established and approved rules and procedures.

5.0 FLOW CHART

Not Applicable

6.0 REFERENCES

Guidelines for Conducting a FOF.

7.0 ATTACHMENTS

Not Applicable

8.0 PROCEDURE HISTORY

10/01/03 New LACMTA policy.

Los Angeles County Metropolitan Transportation Authority Metro CORPO

CORPORATE SAFETY Field Observation and Feedback

(SAF 3)

- 12/23/08 Revised the frequency that FOF sessions need to be completed. New language added to include that Executive Management should also conduct or participate in periodic FOF sessions. Removed step by step process of how to conduct FOF sessions and replaced with "Guidelines for Conducting a FOF." Added FOF responsibilities for Corporate Safety and LACMTA employees. Updated General Managers and Local Safety Committees responsibility for monitoring the FOF program.
- 2/15/11 Added in Statement of Policy that CPUC required efficiency testing program for train operators is equivalent to the FOF program. Deleted reference to Members of Central Safety Committee. Also deleted reference to General Managers.

Metro Los Angeles County Metropolitan Transportation Authori

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Report of Unsafe Condition or Hazard/Near Miss (SAFE-7)

Yr

INSTRUCTIONS: SUBMIT THIS FORM TO YOUR SUPERVISOR/MANAGER. PRINT ALL INFORMATION. EMPLOYEE CAN ALSO SUBMIT THIS FORM ANONYMOUSLY IN THE SUGGESTION BOX. IF YOU DO NOT RECEIVE A RESPONSE FROM YOUR SUPERVISOR/MANAGER IN 30 DAYS, PLEASE SEND A COPY OF THIS SAFE-7 TO CORPORATE SAFETY, MAIL BOX 99-18-6. THERE IS NO REPRISAL OR DISCIPLINARY ACTION FOR SUBMITTING SAFE-7 FORM.

Name	Job Title		Badge No.
Department	Phone	Fax	Mail Stop
Division/Work Location	Vehicle No.	Line & Run	Direction

Location believed to have an Unsafe Condition or Hazardous Work Practice/Near Miss:

Description of the Unsafe Condition or Hazardous Work Practice/Near Miss:

Name or Signature of Employee:

Date:

MANAGEMENT INVESTIGATION AND RESPONSE

Name and title of person investigating this report:

Result of Investigation: (When was investigation conducted? What was found? Was the condition/practice Unsafe? If yes, what was the cause?)

Description of the Corrective Action:

<u>If corrected, give the actual date:</u>

If not corrected, give target date of Corrective Action. Provide department, person & name responsible for taking Corrective Action:

Was Management's Response provided to the employee reporting this condition? Yes \Box \qquad No \Box

Metro If the report was submitted anonymously, provide date the Response was posted on the bulletin board. Date:

Signature/Title of Person Investigating This Report: Date:

Note: The employee's Manager or Designated Person is responsible for investigating the unsafe condition/work practice. Management is also responsible for ensuring that this form is documented and tracked to resolution. A copy of this completed form will be provided to the employee who submits it with employee's name. For anonymous submission, a copy of this completed form will be posted on the bulletin board for 30 days after management signs off.



An inspection shall be performed monthly at all operating facilities. After review and signature of the Maintenance/Site Manager, a copy must be forwarded to the Senior Safety Specialist/Local Safety Specialist.

Most of the noted items are code and safety requirements. The "Notes" sections should be used to comment on any item checked "No".

FACILITY INSPECTED: _____

Date Of This Inspection:

Date Of Previous Inspection:

Name of Safety Coordinator/Personnel Conducting Inspection:

I. Equipment Maintenance Building

(1)	Administration	
	(a) Cal/OSHA Poster Displayed	Yes No
	(b) Injury & Illness Prevention Program Poster Displayed	Yes No
	(c) Posting of Manager's Name and Responsibility in Safety	Yes No
	(d) Posting of Safety Coordinator's Name and Responsibility in Safety	Yes No
	(e) Posting of Site specific Evacuation Plan	Yes No
	(f) Posting of Article 105 Hearing Conservation poster	Yes No
	(g) Posting of Monthly Training Materials	Yes No
	(h) Posting of Forklift Poster	Yes No
	(i) Posting of current SAFE-7 and SAFE-15	Yes No
	(j) Current Training & Inspections Records Available	Yes No
	(k) MSDS System available for employee use	Yes No
	(I) Cal/OSHA Summary of Work-Related Injuries and Illnesses Posted (Feb 1	through April 30)
		Yes No
	Notes:	

(2)	Personal Protection Equipment (PPE)	
	(a) PPE Worn & Enforced	Yes No
	(b) Head protection (Bump Cap for working under bus or equipment)	Yes No
	(c) Eye & Face Protection (Safety Glasses, Goggles, Face Shields)	Yes No
	(d) Body Protection (Uniforms, Aprons)	Yes No
	(e) Hand Protection (Approved Gloves for Specific Task)	Yes No
	(f) Foot Protection (Steel Toed Shoes, Steamer Boots)	Yes No
	(g) Respiratory Protection (Masks, Respirators)	Yes No
	(h) Reflective Safety Vests	Yes No
	(i) Fall Protection Equipment	Yes No
	(j) Proper storage and maintenance of PPE	Yes No

1 Revision 0 – 5/8/2014

Notes: _____

(3)	First Aid/Emergency Supplies (a) First Aid Kits Stocked (b) First Aid Kits Accessible (c) Plumbed Emergency Eye Wash/Shower Stations Unobstructed, Clean, Flow Weekly Inspection Card Sign-Off (ANSI Z358.1 –2004) (d) Supplies in Emergency Cabinet Checked and Signed Off Notes:	Yes□ Yes□ Tested Yes□ Yes□	No No with Dated No No
(4)	Work Environment (a) Work Areas Clean, Orderly & Uncluttered (b) Work Areas Free of Obstruction (c) Oil and Grease Spills Cleaned Up As They Occur (d) Slip/Trip/Fall Hazards Eliminated (e) Open Pit Policy Enforced (20 Minute Maximum.) (f) Earthquake Hazards Eliminated (g) Housekeeping Hazards Eliminated (including kitchen) (h) Disposable oily rags properly stored and the storage container covered	Yes Yes Yes Yes Yes Yes Yes Yes	No No No No No No No No No
(5)	Facility (a) Emergency Exit signs posted and visible (b) Fire Exit Doors kept clear at all times (c) Aisles and Walkways 3 feet clearance (d) Clear access to manual pull stations (e) No objects stacked to within 18 inches of fire sprinklers Notes:	Yes Yes Yes Yes Yes Yes	No No No No No No
(6)	Electrical (a) Electrical equipment maintained properly: tools, grounds, and accessories (b) 3' Foot Access 'Keep Clear' to all Electrical Systems maintained clear all time (c) All Guards in place to Protect from Potential Contact with "Live Parts or Syste (d) Electrical Shut-Offs Identified	Yes	No 🗌 No 🗌 No 🗌 No 🗌

	(e) Grounding Cords and Plugs Maintained in a Safe/Operable Condition(f) Cut Out Disconnected Switches Properly Tagged and Lock Out Requirement	Yes No
	 (g) Electrical Areas Protected, Doors/Gates Locked, Danger Identified (h) Electric cables and cords clean and free from kinks (i) No extension cord replacing fixed wiring 	Yes No Yes No Yes No Yes No
	(j) Only proper extension cords used	Yes No
	(k) No extension cords through holes in walls, ceilings floors, doorways or windo	ows Yes⊡ No⊡
	Notes:	
(6)	Machinery/Mechanical (a) "Eye Protection and Face Shield Required" Signs on all Bench Grinders & Dr	
		Yes No
	(b) Warning Signs on Automatically Controlled Machines	
	 (c) Hood Guards on Bench Grinders (d) Work Deate in place and adjusted to 1/0" on Death Grinders 	
	(d) Work Rests in place and adjusted to 1/8" on Bench Grinders(e) Abrasive Wheels and Wire Brush Wheels in good condition	Yes No Yes No
	(f) Guarding in place on Revolving/Reciprocating Parts around Brake Lathes	
	(g) Guarding in place on Projecting Shaft Ends	
	(h) Guarding in place on Belts and Pulley Drives	Yes No
	(i) Guarding in place on Gears and Sprockets	Yes No
	(j) Drill Bits removed from Drill Presses not in use	Yes No
	(k) Floor-Operated Material Handling Hoist inspected and signed off	Yes No
	(I) Audible and Visual Warning Devices on Overhead Cranes checked and sign	
	()	Yes No
	(m) Lifting capacities listed on overhead cranes	Yes No
	(n) Brake Room Crane Attachments in good condition	Yes No
	Notes:	
(7)	Bus Hoists	
	(a) In-ground Hoist Cover Plates installed and used	Yes No
	(b) Lifts operated per Manufacturer & Maintenance Department Operating Proce	
		Yes No
	(c) Hydraulic Systems free from leaks	
	(d) While operating, proper Extenders used for different types of buses	
	(e) All unattended vehicles on hoists lowered.	Yes No
	Notes:	

(8)	Steamer Rack (a) Proper PPE worn and enforced at all times while Steaming (rubber boots, rubber aprons, face-shield, safety glasses/goggles, steamer g (b) Steaming unit turned off when not in use (c) No Leaks and No overflow from the Steamer Tanks Notes:	Yes No loves) Yes No Yes No
(9)	Storage (a) Materials safely stored in Designated Storage Areas (b) Gas Cylinders stored in a chained upright position (c) Oxygen Cylinders stored away from Fuel Gas Cylinders & Flammable Materia feet (d) Back Flow Preventer installed on every Gas Cylinder (e) Protective Cap screwed on the Gas Cylinder when the Gas Cylinder is not in (f) Flammable and Combustibles stored a minimum of 10 feet apart (g) Hazardous wastes properly identified and stored (h) Flammable materials stored in Flammable Cabinet (i) Flammable Storage Cabinet grounded (j) Sharps Disposal Containers properly maintained	Yes No Yes No
	Notes:	
(10	(a) Forklifts and Tow Trucks maintained per code (b) Forklift Operators trained and carry licenses (c) Displayed Lifting Capacity visible on forklifts (d) Operating Instruction kept on each forklift and followed by users (e) Seat Belts available and in good condition on each forklift (f) Audible & visual Warning Devices working on forklifts (g) Roll-over Protective Structures on forklifts intact (h) Daily inspection of forklift performed on the inspection checklist per shift (i) All Bus Wheels chocked while parked on the apron to the maintenance bays into the shop area Notes:	Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No or partially pulled Yes No
(11) <u>Sanitation</u> (a) Kitchen/Food Areas clean (b) Potable Drinking Water available (c) Restrooms clean/stocked/function properly (i) Toilet Rooms	Yes No Yes No Yes No

(ii) Washing Facilities(iii) Changing Rooms	Yes□ No□ Yes□ No□
Notes:	
 12)Ladders & Work Platforms (a) All Portable Step Ladders and Extension ladders in good condition (b) Mobile Work Platforms and Platform Ladders in good condition (c) Powered Elevating Work Platforms in good condition 	Yes□ No□ Yes□ No□ Yes□ No□
(d) No Unsafe Work Practices for Elevated Work observed	Yes No
Notes:	
 13)Battery Room (a) Ventilation System Operating at All Times (b) Battery Handling PPE available and in good condition (c) Emergency Eyewash and Safety Shower Unobstructed and Flow Tested (d) All loose batteries stored properly in the battery room (e) All proper Signage installed in the Battery Room 	Yes No Yes No Yes No Yes No Yes No Yes No
Notes:	
Notes	
 14)<u>Tools</u> (a) Jack-stands, transmission jacks, wheel jacks in good condition (b) Safe wiring on employee's personal electric hand tools 	Yes No
(c) Job-built tools and Jack-stands safety certified and in good condition	Yes No
Notes:	
 15)<u>CNG in Shops</u> (a) CNG contact information in supervisors' office 	Yes□ No□ Yes□ No□
(b) MSA Orion 4 Gas Monitor in supervisors' office	Yes No
(b) MSA Orion 4 Gas Monitor in supervisors' office(c) CNG Incident Log updated and correct	Yes No
(b) MSA Orion 4 Gas Monitor in supervisors' office	Yes No

(16		<u>mics</u> Lifting poster in place vibration gloves available for power tool mechanics	Yes□ Yes□	No No
	Notes: _			
	-			
	-			
Eucl Jolon	d/Duo \	Nach Araa		
<u>ruei isian</u>	a/bus v	<u>Nash Area</u>		
(1)	Work En	<u>vironment</u> k Areas clean & orderly	Yes	No
		Trip/Fall Hazards eliminated	Yes	
		k Areas free of Obstructions	Yes	No
	(d) Seis	mic Hazards eliminated	Yes	No
		sekeeping Hazards eliminated	Yes	No
		and Oil Spills cleaned up as they occur	Yes	
	(U)	Flammable and combustible materials stored nbed Emergency Eye Wash/Shower Station at Bus Wash Unobstructed,	Yes Clean F	
		Dated Weekly Inspection Sign-Off (ANSI Z358.1 –2004)	Yes	
	Notes: _			
	-			
(2)	<u>CNG Fu</u>	el Island Safety		
	F-1 I	Eye Protection signs in place and rule enforced	Yes	No
		Evacuation Plan posted	Yes	No
		No Smoking signs posted and enforced	Yes	No
		No Flammable within 50 feet of CNG Dispenser' sign posted	Yes	
		Nozzles damaged or leaking Dispenser hose cracked, kinked or damaged	Yes Yes	No No
		Emergency Shutdown Devices (ESD) clearly marked with signs	Yes	
		All CNG Safety Signage visible and clean	Yes	No
		(a) Stop your engine		
		(b) No smoking or open flame		
		(c) Emergency call numbers		
		(d) CNG shutoff	Vac	
		No Drive-Off' sign posted and enforced Area around the dispenser clear of debris	Yes Yes	
		Dispenser housing in good condition (no dents or cracks)	Yes	No No
		Fueling instruction decals in place and legible	Yes	

- Dispenser housing in good condition (no dents or cracks) Fueling instruction decals in place and legible Inspection Mirrors present and operational for high floor buses F-12 F-13
- F-14 Exterior Gas Leak Detection Indicator/Alarm lights operational

Yes No

Yes No

Notes:

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(3)	Personal Protective Equipment (PPE)(a) PPE worn & enforced(b) Hearing protection (Ear Plugs or Muffs)(c) Eye & Face Protection (Safety Glasses for or CNG Fueling and Goggles for E	Yes Yes Blowing Yes	No No Out Buses No
	 (d) Body Protection (proper uniform) (e) Hand Protection (specified gloves) (f) Respiratory Protection (respirator for Blowing out Buses) (g) Reflective Safety Vests 	Yes Yes Yes Yes	No No No
	Notes:		
(4)	 <u>Electrical</u> (a) 3 foot access ("keep clear") to all electrical systems maintained clear at all tin (b) All Guards in place to protect from "Exposed Energized Conductors" (c) Electrical Shut-Offs identified (d) Grounding Cords and Plugs maintained in a safe/operable Condition 	nes Yes Yes Yes Yes	No No No No
	Notes:		
(5)			
(3)	 (a) Bus Cleaning Machinery maintained & operated per Manufacturer Instruction (b) Fuel Nozzles and Hoses in good condition (c) Emergency Shut Down accessible (d) No tampering with Bus Blowing Wands (Ends not Crimped) 	Yes Yes Yes Yes	No No No No
	Notes:		
(6)	<u>Designated Storage Areas</u> (a) Combustible Materials and Refuse not stored in Designated Storage Areas	Yes	No
	Notes:		

III. Yard and Parking Lots/Parking Structure

(1) Yard and Parking Lots/Parking Structure Condition/Safety

- (a) Ground Traffic Markings/Signs in place
- (b) Surface intact and Free of Potholes
- (c) Surface clean/Free of Spilled Petroleum Products
- (d) Fire Lanes marked and maintained clear
- (e) Ladders for Windshield Cleaning & Mirror Adjustment in good condition
- (f) Designated Walkway marked and maintained clear
- (g) Emergency Staging Areas identified
- (h) Lights are working and in good condition

Notes:

(2) CNG Compressor

- (a) Emergency Contact Signage in Place
- (b) Flammables/Combustibles away at least for 50 feet
- (b) Enclosure clean and orderly
- (c) CNG System Area secured and locked



Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No Yes No

Yes No

Yes No

Yes No

Yes No

Notes:			

(3) CNG Defueling Area

DF-1 Defueling nozzle in good operational condition (not damaged)

DF-2 Emergency Shutdown Devices (ESD) clearly marked with appropriated signs and accessible with bus parked Yes No Yes No

- DF-3 Defueling instruction posted
- DF-4 Grounding wire strap available
- DF-5 Safety signage such as no smoking or sources of ignition posted
- DF-6 Defueling panel appropriately marked
- DF-7 Wind sock present

Notes: _____

IV. Fire Protection and Automatic External Defibrillators (AED)

(1) Portable Equipment (Fire Extinguishers) - all to be inspected

(a) Fire Extinguishers located in designated locations	Yes No
(b) No obstructions to access or visibility (3 ft. clearance)	Yes No
(c) Operating Instructions displayed to the front and legible	Yes No
(d) Fire Extinguishers stored properly	Yes No
(e) Pressure gauge indicates fire extinguishers properly charged	Yes No
(f) Fire Extinguishers safety pin installed	Yes No
(g) Fire Extinguishers tamper-proof seal intact	Yes No
(h) Fire Extinguishers free from obvious signs of damage	Yes No
(i) Annual Service performed within last twelve months	Yes No
(j) Hydrostatic testing label present and legible	Yes No
(k) Inspection Tag affixed to cylinder	Yes No
(I) Inspection Tag checked off and dated each month	Yes No
(m) Fire Extinguisher Placards posted above all fire extinguishers	Yes No
	 (b) No obstructions to access or visibility (3 ft. clearance) (c) Operating Instructions displayed to the front and legible (d) Fire Extinguishers stored properly (e) Pressure gauge indicates fire extinguishers properly charged (f) Fire Extinguishers safety pin installed (g) Fire Extinguishers tamper-proof seal intact (h) Fire Extinguishers free from obvious signs of damage (i) Annual Service performed within last twelve months (j) Hydrostatic testing label present and legible (k) Inspection Tag affixed to cylinder (l) Inspection Tag checked off and dated each month

Note each violation identified with the location and solution administered below

(2) Automatic External Defibrillator(AED) - all to be inspected

(a)	Supply kit inspected (ensure razor, scissors, wipe pads, CPR ma	sk and gloves are present and
	in good condition)	Yes No
(b)	AED properly stored (free from dirt and moisture)	Yes No
(C)	Free from obvious damage	Yes No
(d)	Battery charge indicator functioning	Yes No

Yes No Yes No Yes No

Yes No

Yes No

(d)	Battery charge indicator functioning
(e)	Battery functioning properly

Notes: _____

(f)	Service	indicators	func	tionin	g properly
(1)		maicators	Turic		g property

(g)	Electrode	pads within	manufacturer's	expiration date

- (h) Monthly inspection card attached to AED cabinet
- (i) Monthly inspection checked off, initialed and dated

I have conducted this inspection for location ______.
Safety Coordinator/Personnel: ______ Badge: _____

Date

Signature _____

I have reviewed this inspection report and concur with the findings. Corrective actions have been taken as described above or I have initiated actions to mitigate the noted findings.

Site/Maintenance Manager:	Badge:	
Signature	Date	

SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY'S *FIRE PREVENTION PLAN* To be Enacted as of Summer 2008

1. <u>PURPOSE</u>

- a. The Fire Prevention Plan (the Plan) establishes those practices, and safeguards that the San Luis Obispo Regional Transit Authority (the transit system) may take to:
 - 1) Prevent fire in and around property.
 - 2) Control a fire in the event that one should start.
- b. This Plan is written in accordance with the California Code of Regulations, Title 8, Section 3221, which establishes the elements that are required in the Plan.
- c. These practices are intended to protect lives and property and maintain continuity of operations in accordance with the transit system's Injury & Illness Prevention Program policy that:

No function is so critical as to justify or require a compromise of safety.

2. <u>SCOPE</u>

The requirements of the Plan apply to:

- a. All transit system employees.
- b. All transit system facilities whether owned, rented, or otherwise occupied.

3. <u>RESPONSIBILITIES</u>

The transit system commits the following resources to the development and implementation of the Plan:

- a. The transit system manager or designee is responsible for:
 - 1) Coordinating the maintenance of facility fire prevention and suppression equipment and systems. This effort entails the maintenance of equipment and systems installed in the workplace to:
 - a) <u>Prevent</u> accidental ignition of flammable and combustible materials.

- b) <u>Suppress</u> fires in all transit system facilities to include the annual service of all fire extinguishers and the ongoing service and testing of fire sprinkler systems.
- 2) Providing new employees with fire prevention and suppression information via New Employee Safety Orientation and annual refresher training via unit safety meetings.
- b. <u>Managers and Supervisors</u> are responsible for:
 - 1) Ensuring their employees receive initial training and annual refresher training on fire prevention and suppression techniques.
 - 2) Maintaining a fire safe work environment.
 - 2) Implementing the Plan's fire prevention and suppression standards as directed by the transit systems coordinator.
 - 3) Working with their respective employees to identify, evaluate and control fire ignition sources.
- c. <u>Employees</u> are responsible for working with their managers and supervisors in complying with the mandates of this Plan.
- d. <u>The Safety Coordinator</u> is responsible for providing safety topics and materials on the subject of fire prevention and suppression for all departments to use in their safety meetings. Such topics are presented at least annually.

4. <u>TRAINING</u>

- a. As noted above under the subject of Responsibilities, the transit system manager or designee ensures all employees receive initial training during New Employee Orientation and annual refresher training via unit safety meetings regarding the fire hazards of the materials and processes to which they are exposed.
- b. In coordination with the subject of emergency preparedness, the transit system manager or designee ensures that employees receive initial training during New Employee Orientation. Annual refresher training on the subject of what to do in the event of a fire is also given via departmental/division safety meetings. The transit system provides additional training whenever there is a change to the Plan.

- c. The transit system trains and only permits authorized employees to transfer or withdraw flammable liquids. Such employees are trained on chemical safety, bonding, grounding and fire prevention.
- d. All training is documented.

5. <u>POTENTIAL FIRE HAZARDS</u>

Examples of potential fire hazards within transit system facilities include:

- a. Overloaded electrical circuits.
- b. Incorrectly wired electrical circuits.
- c. Use of electrical extension cords as permanent wiring.
- d. Inadequate protection of electrical cords from damage.
- e. Accumulation of trash and waste.
- f. Storage of combustible materials close to water heaters, furnaces, space heaters, hot lamps, hot plates, hot irons, or outside close to buildings.
- g. Improper storage of flammable liquids to include storing such liquids in unapproved containers, unapproved storage cabinets and in areas where ignition sources reside, such as in rooms with natural gas-operated water heaters.
- h. Lack of preventive maintenance and lubrication of machinery and equipment.
- i. Inadequately maintained heating, ventilation and air conditioning systems.
- j. Open flames during welding, cutting or brazing.
- k. Lack of a hot work permit program for times when hot work is done outside of the approved hot workshop.
- 1. Smoking in unauthorized facilities and/or near flammable liquid storage or dispensing systems.
- m. Static electricity build up during dispensing of flammable liquids.
- n. Use of space heaters without tip-over shut off protection.
- o. Lack of explosion-proof electrical apparatus in areas where there can be a build up of flammable vapors.

6. <u>PREVENTIVE MEASURES - HOUSEKEEPING</u>

The transit system controls accumulations of flammable and combustible waste materials and residues so they do not contribute to fire ignition and conflagration. Housekeeping procedures include such activities as:

- a. Daily disposal of trash from waste containers.
- b. Immediately cleaning up and proper environmental disposal of all spills of flammable liquids.
- c. Maintenance of electrical equipment to include:
 - 1) Keeping electrical circuits from becoming overloaded.
 - 2) Requesting additional electrical outlets and power if needed.
 - 3) Avoiding the use of electrical extension cords except for temporary usage (24 hours maximum).
 - 4) Identifying problems with electrical wiring and outlets and making the necessary repairs.
 - 5) Ensuring that flammable vapors are kept away from electrical ignition points.
 - 6) Not placing anything on top of electrical cords.
- d. All use and storage locations (including tanks) of flammable liquids are properly posted, warning people in the area of the fire and explosion dangers.
- e. Keeping the quantity of flammable liquids to a minimum to reduce the risk of fire. Only quantities of flammable liquids, permitted by the local Fire Marshal, are allowed to be stored within transit system buildings without being stored in a flammable liquids cabinet or a flammable liquids storage room.
- f. Storing flammable liquids in UL-approved safety cans (made of heavy-duty metal construction with a self-closing spout and a flame arrester in the spout) and/or UL-approved flammable liquid cabinets, and in areas where there are no ignition sources.
- g. Keeping all containers of flammable liquids closed when not in use to prevent potential release of flammable vapors that could ignite.
- h. Storing oily rags in UL-approved safety cans and in areas where there are no ignition sources.
- i. Daily emptying of oily-rag containers.
- j. Not storing anything in Heating Ventilation and Air Conditioning (HVAC) utility rooms.
- k. Not storing any combustible materials within 36 inches of water heaters, furnaces, space heaters, hot lamps, hot plates, and hot irons.
- 1. Not storing pallets outside within 25 feet of any structure. Storing pallets no higher than six feet high.
- m. Only using space heaters that have automatic *tip-over* devices that shut off the units in the event they should topple over.

- n. Enforcement of the *no smoking* rule in all transit system facilities. Smoking is permitted only in designated areas.
- o. Enforcement of the *no smoking* rule in areas where flammable liquids are stored or where flammable liquids are dispensed.
- p. Maintenance of *smoking* areas to include placement of adequate receptacles.

7. <u>PREVENTIVE MEASURES - MAINTENANCE</u>

In accordance with established procedures, the transit system manager or designee coordinates the proper maintenance of equipment and systems installed in the workplace to prevent accidental ignition of combustible materials and the immediate suppression of an incipient fire. Examples of such maintenance include:

- a. A regular schedule of ongoing preventive maintenance of machinery and equipment (including HVAC systems) to ensure inspection, maintenance and proper lubrication.
- b. Maintenance of sufficient electrical power to handle each facility's and function's electrical needs, including areas where space heaters are used.
- c. Checking electrical outlets and circuits to ensure they are correctly wired.
- d. Ongoing maintenance of the transit system's Hot Work Permit Program to include a fire watch at all times that open flames are present.
- e. Following all safety precautions when welding, cutting and/or brazing.
- f. Repair of identified electrical wiring and outlet problems.
- g. Ensuring all electrical fixtures, switches, and circuits inside flammable liquid storage rooms are explosion-proof devices.
- h. Maintaining all flammable liquid storage rooms with ventilation systems that meet National Fire Protection Association (NFPA) codes.
- i. Maintaining a protected and ventilated dispensing area for filling containers with flammable liquids.
- j. Dispensing flammable liquids from drums using either a laboratory-tested hand pump or acceptable methods of gravity dispensing.
- k. Installation and maintenance of explosion-proof electrical apparatus in areas where there is a potential build up of flammable liquids.
- 1. Grounding of flammable liquid dispensing drums.
- m. Bonding of flammable liquid dispensing drums to smaller flammable liquid containers to reduce the build up of static electricity.
- n. Using closed piping systems when pumping large quantities of flammable liquids.
- o. Only using machines that produce sparks (such as machines used for grinding, cutting, drilling and sanding operations) in areas where there are no flammable or combustible materials.

8. <u>TYPES OF FIRE PROTECTION EQUIPMENT OR SYSTEMS</u>

Transit system facilities are either sprinkled and/or have fire extinguishers in place for use at the start of a fire. Depending upon the facility, there are various fire and smoke detection systems used.

9. <u>MAINTENANCE OF EQUIPMENT AND SYSTEMS</u>

Fire protection systems within the transit system are inspected and tested by authorized service contractors on a schedule established by the transit system manager or designee. Action is taken immediately if any system or part of a system is not working properly.

10. INSTRUCTIONS TO EMPLOYEES: WHAT TO DO IN THE EVENT OF A FIRE

In accordance with the transit system's Emergency Action Plan, employees call 911 <u>first</u> in the event they spot an incipient fire and then initiate the transit system's emergency evacuation system.

Fire extinguishers are installed in transit system facilities in accordance with local fire code requirements, but employees are encouraged not to attempt to fight a fire. They are instructed to let Fire Department personnel fight the fire.

11. AVAILABILITY OF THE PLAN

The Plan is available for review by all employees at the office of the transit system manager or designee.

12. MAINTENANCE OF THE PLAN

The transit system manager or designee periodically reviews the Plan for completeness and accuracy, and makes any necessary revisions to the Plan.

End

CalTIP/SSPP/SLORTA/Fire Prevention Plan — 2007.doc

Note: Please refer to the SSPP's *Introduction*, paragraph 5, entitled <u>Notice - Basis for the System Safety Program Plan</u> for the background, parameters, and conditions under which this document was prepared.

SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY'S GENERAL CODE OF SAFE PRACTICES

CalTIP/SSPP/SLORTA/General Code of Safe Practices - 2007.doc

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Note: Please refer to the SSPP's *Description & Introduction*, paragraph 5, entitled Notice - <u>Basis for the System Safety Program Plan</u> for the background, parameters, and conditions under which this document was prepared.

CODE OF SAFE PRACTICES CAL-OSHA INSPECTION PROCEDURES

1. Equipment needed:

- a. A camera, if at all possible.
- b. Paper and pen.
- 2. When a Cal-OSHA inspector (Compliance Engineer) arrives on site, the following procedures are to be followed:
 - a. Ask to see the Compliance Engineer's (CE) identification card.
 - b. Request that the Manager in Charge and/or Safety Coordinator meet with the CE and to act as the organization's <u>management representative(s)</u>.
 - c. Ensure that an employee representative (NON-EXEMPT) is included during <u>all</u> meetings and inspections that the CE is involved in.
 - d. Be cordial and polite to the CE. The CE is there to help the organization in its safety efforts. Refrain from creating an adversarial relationship with the CE.
 - e. The Manager in Charge and/or Safety Coordinator does the following:
 - 1) Takes notes detailing the work site, including tools, equipment, work location and activities.
 - 2) Accompanies the CE at all times without hindering the inspection or investigation.
 - 3) Secures all evidence of unsafe practices and/or conditions that are noted.
 - 4) Duplicates samples taken (if possible), requests copies or duplicates any photos taken.
 - 5) Photographs all conditions noted by the CE.
 - 6) Answers all questions as truthfully and directly as possible. Does not speculate or express opinions.
 - Requests to be included in all meetings that the CE has with employees.
 The CE is entitled by law to speak privately with employees.
 Consequently, the CE does not have to grant the Safety Coordinator access to such meetings.
 - f. Ensure that all information from the inspection process is recorded and maintained. At the Closing Conference, request as many details from the CE as possible including an estimate of when a report will be forthcoming.

GENERAL DRIVING SAFETY

Take the follow precautions when driving on organization business:

- 1. Be sure you have permission to use the vehicle.
- 2. Have the following documents with you:
 - a. Your driver's license for the particular type of vehicle you are driving.
 - b. Vehicle registration form.
 - c. Proof of vehicle insurance.
- 3. Conduct a safety check prior to driving the vehicle:
 - a. Walk around the vehicle to make sure everything is in order, especially the lights and tires.
 - b. Check the operation of the brakes, steering mechanism, signals, headlights, and horn.
 - c. Be sure you have good visibility all around.
- 4. Ensure that you and your passenger compartment occupants buckle your safety belts.
- 5. Obey all State and local traffic regulations with special emphasis on:
 - a. Obeying the speed limit.
 - b. Using turn signals.
 - c. Backing. Use care and caution and walk around the vehicle to make sure no person or thing is in your rearward path.
 - d. Staying a safe distance behind the vehicle in front of you using the 3-second rule.
 - e. Driving defensively - letting the other driver go ahead.
- 6. Keep valuables out of sight from passersby.
- 7. Store tools and similar loose equipment in secure compartments to prevent them from becoming flying objects.
- 8. When departing the vehicle, set the hand/foot brake and remove the keys.
- 9. Report any problems to your supervisor immediately.
- 10. In the event of an accident:
 - a. Call the Police
 - b. Call your supervisor
 - c. Cooperate with accident investigators
 - d. Admit blame to no one
 - e. Talk with authorities only

ELECTRICAL SAFETY

- 1. Check equipment, cords and attachments before each use to ensure they are safe to use and operate.
- 2. Keep electrical cords up and out of the way so that no one steps on the cords, a potential shock or fire hazard.
- 3. Report any damaged electrical equipment promptly to your immediate supervisor.
- 4. Make sure equipment is properly grounded and plugged into grounded circuits.
- 5. If flammable or corrosive chemicals are nearby, use extreme caution with electricity. Follow procedures for operating electrical equipment in these areas.
- 6. Use lockout/tagout procedures and equipment to ensure that power is completely off during maintenance and repairs of hard-wired equipment.
- 7. Stay clear of energized parts whenever possible. If you must work with energized parts, always use protective equipment such as rubber gloves, sleeves, blankets, mats and nonconducting tools.
- 8. Keep conductive materials away from sources of electricity. Such materials include steel wool, metallic cleaning cloths and some chemical solutions.
- 9. Keep in place original equipment guards that protect electrical equipment.
- 10. Use only electrical equipment in wet or damp locations that is designed for such use. All electrical equipment in these areas must be grounded and the use of ground fault circuit interrupters (GFCI) is required.
- 11. Remove damaged equipment from service. Only use such equipment that you know is safe to use.
- 12. Keep electrical panel doors on and closed.
- 13. Keep access to electrical panels clear with at least a 36" clearance.
- 14. Ensure all circuit breakers in electrical panels are correctly labeled so you know which circuits to shut off in an emergency.
- 15. Attempt to plug electrical equipment directly into a nearby outlet so that electrical extension cords do not have to be used. Add additional electrical outlets as needed.
- 16. Rearrange furniture or install additional electrical outlets where the power is needed so that electrical cords do not have to be run across aisle ways.

EYE AND FACE PROTECTION Personal Protective Equipment

- 1. Always wear the correct eye and face protection if you work with: metals, liquid chemicals, hazardous gases, flying particles or injurious light rays.
- 2. Never rely on regular glasses or contact lenses to protect your eyes.
- 3. Where there is a specific requirement to wear safety glasses or goggles for complete eye protection, face shields by themselves are not permitted.
- 4. Wear safety glasses or goggles under face shields for added protection whenever possible.
- 5. Wear tinted or shaded lenses to protect you from glare when working in a bright environment.
- 6. Ask your supervisor if contact lenses are safe to wear for the kind of work that you are doing.
- 7. Always keep your safety eye protection equipment in good repair, replacing if scratched or cracked.
 - a. Keep lenses clean.
 - b. Keep goggles in a case or pouch when not in use.
- 8. Management ensure that:
 - a. Previously used equipment is disinfected before reissuing to another employee.
 - b. First-aid instructions are posted close to potential danger spots.

FIRE SAFETY

- 1. Ensure good housekeeping is maintained, keeping work areas clean and free of debris.
- 2. Make sure all electrical equipment is protected.
- 3. Store flammable materials in approved safety cans and/or cabinets.
 - a. Keep smoking and flames/sparks away from areas where flammables are present.
 - b. Clean or report all spills of flammable liquids.
- 4. Maintain all electrical circuits so they do not become overloaded.
- 5. Use only space heaters that have:
 - a. An automatic "tip-over" device that shuts the unit off if the device should topple over.
 - b. Sufficient electrical power on the circuit to handle the space heater's electrical needs.
- 6. Keep fire exits and escape routes clear and well marked.
- 7. Know the evacuation routes from your work area.
- 8. Know where alarm boxes are located.
- 9. Know the procedures for reporting fires and using fire extinguishers.
- 10. Know where fire extinguishers are located and what type to use on each kind of fire:
 - a. Type A Wood, paper, cloth, rubbish
 - b. Type BFlammable gas/liquids, oil, grease, oil-based paint
 - c. Type CElectrical
 - d. Type D Combustible metals
- 11. Maintain a fire watch at all times that open flames are present, and follow all safety precautions when welding, cutting and/or brazing.

TOP 10 GENERAL SAFETY PRACTICES

The following practices are designed to help you work in a safe manner. All practices are to be followed. Managers and supervisors enforce them for the good and welfare of everyone.

- 1. No function of this organization is so critical as to justify or require a compromise of safety and health.
- 2. Learn everything you can about your job so you do each task in a safe manner.
- 3. Work at a pace whereby you get the job done in a timely manner without hurting yourself or fellow employees.
- 4. As time permits, keep your work area as clean as possible so you do not get hurt.
- 5. Take special care to watch where you are walking to avoid slipping or tripping and possibly falling.
- 6. Only use equipment and machines on which you have been trained to operate.
- 7. Bend your knees and use your legs to lift, push or pull objects.
- 8. Wear all the personal protective equipment appropriate for the work you are performing.
- 9. Take your job seriously and work diligently to ensure that you and everyone around you work in a safe manner. Ensure that safe performance matters in all that you do, and remember: alcohol and illegal drugs are prohibited in the workplace.
- 10. Report immediately to your supervisor:
 - a. On-the-job injuries or illnesses.
 - b. Hazards, unsafe practices, or policies and procedures that you believe could cause an accident.

GUARDING

Machine guards are meant to protect you from harm:

- 1. When Operating Machines:
 - a. Never remove or bypass a guard or other safety device.
 - b. Never operate a machine if a guard is missing, modified or not working right.
 - c. Make sure guards removed for maintenance are replaced and working right before operations resume.
 - d. Never remove a guard to increase your productivity. If you believe a guard is making it hard for you to work efficiently, talk to your supervisor or Organization Manager. Don't sacrifice your safety to get a job done faster.
 - e. Always keep guards in place to protect you from pinch points, crush points, amputation injuries and dangerous energy sources (electrical, mechanical, pneumatic, hydraulic, gravity, chemical or thermal) that can harm you.
- 2. Kinds of Guards:
 - a. Enclosures most common type
 - b. Remote control
 - c. Removal devices
 - d. Two-handed tripping devices
 - e. Interlocking devices
 - f. Electronic safety devices
 - g. Moving barriers

HAND TOOLS

1. Basic Rules

- a. Select the right tool for the job.
- b. Inspect the tool and ensure the tool is in good condition.
- c. Wear eye protection at all times.
- d. Use the tool in the correct and safe way.
- e. Concentrate your full attention on the task at hand.
- f. Use tools in a professional manner; they are not toys.
- g. After use, store the tool in a safe location.
- 2. Handsaws
 - a. Ensure all saws are sharp and properly set.
 - b. Select the proper saw for the material being cut.
 - c. Move the saw in a straight line, without twisting or binding.
 - d. Hold the material being cut firmly so that it will not bind or stick.
- 3. Hammers
 - a. Select the correct hammer for the job; only soft hammers should be used to drive hardened drills or chisels or to adjust dies.
 - b. Hammer handles must fit tightly, and not have any cracks or splinters.
 - c. Grip the hammer handle near the end; do not choke the handle.
 - d. Look at the striking end of the hammer when delivering the blow, to avoid hitting your hand or fingers.
- 4. Punches, Drills and Chisels
 - a. Dress flat the ends of struck tools such as cold chisels, star drills, and punches.
 - b. Grind or file a small radius around the edge of the striking surface to reduce spilling and subsequent danger of flying steel chips.
- 5. Keep Cutting Edges Sharp.
- 6. Use Pliers or Tongs to Hold a Tool and To Avoid Hand Injury, Where Possible.

HOUSEKEEPING

- 1. Arrange furniture and equipment so it is easy to use and move around.
- 2. Keep tables and shelving units from becoming overloaded.
- 3. Keep chairs squarely on the floor; make sure coasters are securely attached.
- 4. Check furniture corners for rough edges and sharp points. Try to keep corners round and smooth.
- 5. Store heavier items at waist level for ease of lifting.
- 6. Open one file or storage drawer at a time.
- 7. Turn off office machines when finished using them.
- 8. Keep electrical circuits from becoming overloaded; request additional outlets and power if needed.
- 9. Check electrical cords for frayed or worn spots.
- 10. Keep electrical, telephone, computer and other cords out of aisle ways. The optimum approach is to rearrange furniture and/or install additional outlets where the power is needed.
- 11. Store sharp tools down and away; use cardboard sheaths to cover such tools.
- 12. Keep all bottles and containers clearly labeled as to their ACTUAL contents.
- 13. Box and label supplies.
- 14. Keep a step stool or ladder on hand for reaching hard to reach objects.
- 15. Maintain good, sufficient lighting.
- 16. Clean up spills immediately.

ILLUMINATION

- 1. Inspect your work place to identify areas that need improved illumination for more work efficiency, safety, and security.
- 2. Work only with protected light sources (no bare bulbs) wherever possible to reduce glare and improve focusing power; keep lighting needed for just your work area, shielded so that others are not bothered by direct light.
- 3. Keep bulbs and reflectors clean to reduce glare and eliminate shadows. Your work area should have direct light.
- 4. To improve work efficiency while doing computer work, take one or more of the following actions that may help you reduce glare:
 - a. Dim office lights
 - b. Control brightness of the screen
 - c. Move the screen so that direct light doesn't shine on your eyes.
 - d. Install a glare reducer on the screen.
- 5. Stop, and adjust your eyes when entering an area that has reduced lighting.
- 6. If you work in a poorly lit area where you need to concentrate on detailed work, try to improve the illumination if possible. If it is not possible to do so, take periodic breaks from the detailed work and focus your eyes on distant objects to give your eyes a rest break.

OFFICE SAFETY

1. Use extreme caution when using stairs; hold on to handrails as you descend or ascend.

2. Open doors slowly, other people may be on the other side of doors as you enter or leave.

- 3. Maintain an orderly and clean work environment:
 - a. Keep desk and file cabinet drawers closed when unattended.
 - b. Keep open only one filing cabinet drawer at a time.
 - c. Close drawers on desks when they are not being used.
 - d. Keep boxes and supplies out of aisles.
 - e. Keep cords out of aisles; strap or tape them to desks or walls.
 - f. Put office supplies away when finished with a specific task.
 - g. Dispose of food and drink after use to keep pests away from the office.
 - h. Wipe up spills.
- 4. Keep personal items (such as purses, umbrellas, jackets, sweaters) off the floor, and in drawers, closets or on coat racks to avoid creating tripping hazards.
- 5. Take note of unfamiliar people in the office environment. Report suspicious people to your supervisor.

PORTABLE LADDER SAFETY

1. All ladders:

- a. Select the right ladder for the job.
 - 1) The ladder should be tall enough so that you can reach the required objects without standing on the top or second-to-the-top rung/step of the ladder or putting the ladder on some other object to reach the required objects.
 - 2) The ladder should be made of a material that is conducive for the work to be performed, e.g., a wood or fiberglass ladder for working around electrical equipment rather than a metal ladder.
- b. Use ladders for only their intended purpose, i.e., climbing up and down.
- c. Maintain ladders in good condition. Ladders in disrepair should be either disposed or fixed.
- d. Before climbing any ladder, check its condition:
 - 1) Nuts and bolts tight?
 - 2) Rungs secure?
 - 3) Spreaders working?
 - 4) Safety feet working right?
- e. Always face the ladder when ascending or descending, holding on with both hands.
- f. While working and whenever possible, hold on to the ladder with one hand.
- g. Use a tool belt or a bucket attached to a hand line to pull tools up.
- h. The trunk of your body should not extend past the side of the ladder. Move the ladder if you have to reach outside of this area.
- i. Wear slip-resistant footwear.
- j. Keep the ladder rungs free of oil and grease.

2. Step Ladders

- a. Make sure the spreaders are locked open before climbing.
- b. Place a ladder only where it is safe to do so. For example, it is not safe to put a ladder in front of doors opening toward the ladder unless the door is blocked open, locked or guarded.
- c. Keep at or below the <u>second rung</u> from the top.
- 3. Straight Ladders
 - a. Use the 4 to 1 rule. Position the base of the ladder one foot out from the wall for every four feet of the ladder's height up to the support point. For example, the base of a 16-foot ladder should be four feet out from the wall.
 - b. Place the base of the ladder so that the ladder will not slip.
 - c. Ensure that the ladder extends at least 3 feet above the elevated surface to which you are climbing.
 - d. Lash the ladder at the top to hold it in place.
 - e. Adjust extension ladders while standing at the base, not while standing on the ladder or from a position above the ladder.
 - f. Keep at or below the <u>third rung</u> from the top on a straight ladder.

PORTABLE POWER TOOLS AND EQUIPMENT

- 1. Install Cal-OSHA required safety guards and shields on grinders, saws and similar equipment.
- 2. Equip circular saws with guards above and below the base shoe.
- 3. Check circular saw guards to assure they are not wedged up, leaving the lower portion of the blade unguarded.
- 4. Guard all rotating or moving parts of equipment, such as belts, pulleys, chains, and sprockets.
- 5. Effectively ground all cord-connected, electrically-powered tools and equipment, or use double-insulated type tools.
- 6. Only use grounded tools in wet conditions.
- 7. Use ground-fault circuit interrupters (GFCI) on all temporary electrical 15 and 20 ampere circuits used during periods of construction and anywhere near water.
- 8. Use hoisting equipment for lifting heavy objects; ensure hoist ratings and characteristics are appropriate for the task.
- 9. Check regularly all pneumatic and hydraulic hoses on power-operated equipment for deterioration or damage. Replace if necessary.
- 10. Ensure portable fans have full guards or screens having openings of not more than 1/2 inch.

TOP 10 SAFETY RESPONSIBILITIES FOR MANAGERS AND SUPERVISORS

- 1. No function of this organization is so critical as to justify or require a compromise of safety and health.
- 2. Maintain a safe and healthy work environment for all your employees.
- 3. Coach the new employee on what is required and expected.
- 4. Train all employees to be aware of the hazards in their work environment and to take appropriate action to prevent injury to themselves and others.
- 5. Enforce safety practices:

a. Recognize employees who comply regularly with the safety rules for their jobs.

- b. Correct employees who do not comply.
- 6. Continually inspect your work areas to identify potential safety hazards or unsafe work practices.
- 7. Correct problems as quickly as possible after they are identified.
- 8. Keep aware of current and new occupational safety & health standards.
- 9. Obtain employee input to improve the safety effort.
- 10. Always set the safety example yourself.

SLIPS, TRIPS AND FALLS Same Level

Avoid Slips, Trips and Falls By:

- 1. Looking before you walk; making sure your pathways are clear.
- 2. Wearing slip-resistant and well-fitted footwear.
- 3. Keeping materials <u>off</u> the floor.
- 4. Storing everything in its proper place.
- 5. Closing drawers immediately after each use.
- 6. Cleaning up debris, tools and equipment after each job.
- 7. Reporting accidental spills immediately.
- 8. Bundling and strapping wires, cords and cables together, and securing them up and outof-the-way.
- 9. Posting WARNING signs to make sure others are aware of a slip or trip hazard.
- 10. Inspecting the area around you for slip and trip hazards.
 - a. Correcting those problems that you can fix yourself.
 - b. Reporting those hazards that require funds or more skilled people and equipment to fix.
- 11. Carrying a flashlight when you know you will be working in an area with low lighting or where you will be walking where there is insufficient lighting.
- 12. Walk, don't run!

SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY'S HAZARD COMMUNICATION PROGRAM

The San Luis Obispo Regional Transit Authority's (the transit system) *Hazard Communication Program* is an important part of management's desire to provide employees with a safe working environment. This program is designed to mitigate exposures to employees to hazardous chemical substances. Most of these hazardous substances by definition are most frequently industrial-oriented substances. Substances that do not come under the labeling requirements of this program are listed under the heading, <u>Exceptions</u>, at the end of this Program.

Hazardous Substance

Definition: Any substance that is a physical hazard or health hazard or is included in the *List of Hazardous Substances* prepared by the Director pursuant to Labor Code section 6382.

Health Hazard

Definition: A substance for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees.

Physical Hazard

Definition: A substance for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

Responsible Persons

The Program Administrator (Maintenance Manager) is responsible for the implementation and maintenance of the transit system's *Hazard Communication Program*.

Responsibilities include:

- 1. Coordination of Hazard Communication with:
 - a. Internal departments and external contractors to ensure that all facets of the program are properly handled.
 - b. The internal departments to ensure that all employees are adequately trained on their "right-to-know," the specific hazardous substances with which they have to work, and the communication of potential hazards of non-routine tasks.
- 2. Compliance with the acquisition and maintenance of Material Safety Data Sheets (MSDSs).

- 3. Implementation of labeling procedures.
- 4. Communication of Hazard Communication information to outside contractors.

Hazard Determination

The transit system relies on the manufacturers' hazard determination as indicated by the information given in their Material Safety Data Sheets.

Hazardous Substances Inventory

The transit system has compiled and continues to maintain an inventory of all hazardous substances used in the transit system's facilities. A current inventory can be found at the end of this program.

Each department has a current inventory and Material Safety Data Sheets that relate to the inventory for the specific department.

Labels and Warnings

The transit system ensures all hazardous chemicals in the facility are properly labeled and updated as necessary.

Labels are required to have the following information:

- 1. Chemical identify
- 2. Appropriate hazard warning
- 3. Name and address of the manufacturer, importer, or other responsible party

Management or supervision refers to the corresponding MSDS to assist employees in verifying label information.

Whenever an employee transfers chemicals from a labeled container to a portable container, it is necessary to label the new container with the chemical or common name (whichever is used on the list of hazardous substances and the MSDS) and appropriate warnings including protective measures to be taken when using the chemical.

<u>Training</u>

All employees working with, or who are potentially exposed to, hazardous chemicals receive initial training on the Hazard Communication standard and the safe use of hazardous substances during new employee orientation. When a new hazardous substance is introduced, additional training is provided at that time prior to employees working with the new substance.

In general, training includes the following information:

- 1. Summary of the Hazard Communication standard to include employee right-to-know information. According to Section 5194(h) (2) (G), *employees have the right:*
 - *a.* To receive personally information regarding hazardous substances to which they are exposed.
 - b. For their physician or collective bargaining agent to receive information regarding hazardous substances to which the employee may be exposed.
 - c. Against discharge or other discrimination due to the employee's exercise of the rights afforded pursuant to the provisions of the Hazardous Substances Information and Training Act.
- 2. Review of any operations in their work area where hazardous substances are present or used.
- 3. Location and availability of the written Hazard Communication program including the list(s) of hazardous substances and Material Safety Data Sheets.
- 4. How to read labels and MSDSs.
- 5. Labeling requirements.
- 6. Chemical and physical properties of the hazardous materials.
- 7. Methods that can be used to detect the presence or release of these chemicals (such as monitoring conducted, continuous monitoring, visual appearance, or odor of hazardous substances when being released, etc.).
- 8. Physical hazards of chemicals (potential for fire, etc.).
- 9. Health hazards, including signs and symptoms of exposure associated with exposure to the chemicals and any medical condition known to be aggravated by exposure.
- 10. Procedures to protect against hazards; personal protective equipment required and proper use of this equipment; work practices and procedures for emergency response.

The Program Administrator annually reviews the training program. Department heads are asked for their recommendations and their employees' input for improving the training program's content.

An *annual* refresher course is given to all employees who are directly or indirectly involved in the use of hazardous substances.

Employees are retrained on a given hazardous substance whenever a new MSDS is received and the new MSDS indicates significantly increased risks to, or measures necessary to protect, employee health as compared to those stated on the previously provided MSDS. Such training is conducted within 30 days of receipt of the new MSDS.

All training is fully documented and maintained for three years.

Non-Routine Tasks

If an employee is asked to perform a task that he or she normally does not perform and the use of a hazardous substance is part of that task, that employee is trained by the affected department manager or supervisor on the specifics of that chemical prior to the commencement of work. Such training includes the specific chemical training as discussed above under <u>Training</u>.

Contractors

The Program Administrator is responsible for ensuring that contractors or vendors are knowledgeable of the hazards of substances that they may encounter in the normal course of their work while working at the transit system. This communication includes being informed of the transit system's labeling system, protective measures, safe handling, and emergency actions to be taken in the event of an exposure.

This communication is given to the contractor or vendor in *written* form and the contractor or vendor *signs* that he/she has received this documentation prior to starting work at any transit system location.

In addition, *prior* to a contractor or vendor bringing chemicals on site, the contractor or vendor *must provide* the transit system's management with the appropriate hazard information regarding these substances, including the labels used and the precautionary measures to be taken in working with these chemicals.

Additional Information

Managers, supervisors, and employees may obtain further information regarding chemicals used within the transit system from their superiors.

Exceptions

The standards do not require labeling of the following substances under the *Hazard Communication Program* because these substances fall under other regulations:

1. Pesticides when subject to the labeling requirements issued under the Federal Insecticide, Fungicide, and Rodenticide Act (EPA).

- 2. Foods, food additives, color additives, drugs or cosmetics that come under the Federal Food, Drug and Cosmetic Act labeling requirements.
- 3. Any distilled spirits that are subject to the labeling requirements of the Federal Alcohol Administration Act.
- 4. Any consumer product or hazardous substance defined by the Consumer Product Safety Act and the Federal Hazardous Substances Act when they are subject to the labeling requirements of those acts.

Record Keeping

To ensure the transit system has information about all chemicals that have ever been used in each facility, the following record keeping procedures are complied with:

- 1. All medical, exposure, monitoring, inspection, MSDS, and relevant program information are maintained for 30 years (Title 8, Section 3204).
- 2. Upon receiving a new MSDS, it is dated.
- 3. Upon taking an old MSDS out of service, it is dated, and filed for 30 years.

In this way, the transit system is able to know exactly what date range a specific chemical was used and who may have been affected by it during that time.

End

CalTIP/SSPP/SLORTA/Hazard Communication - 2007.doc

Note: Please refer to the SSPP's *Introduction*, paragraph 5, entitled <u>Notice - Basis for the System Safety Program Plan</u> for the background, parameters, and conditions under which this document was prepared.

Hot Work Permit (Not for Confined Spaces) CalTIP/SSPP/SLORTA/Hot Work Permit Form - 2007.doc

This Hot Work Permit is required to be completed anytime the transit system's employees or contractors perform hot work away from the approved hot-work shop. This Permit must be fully completed prior to the start of any hot work project and in accordance with the transit system's Hot Work Permit Program. Please Print.

a.	Name of the Hot Work Permit Program Manager for this Job:			
b.	The Hot Work is being performed by (check): Employee	Cont	ractor	
c.	Name(s) of the employee(s)/contractor who is/are going to be doing the hot work:			
d.	Location of where the hot work is going to be performed:			_
e.	Description of the hot work that is going to be done:			
	<u>Required Precautions Checklist</u> If you answer "No" to any of the following questions, do <u>not</u> perform the hot work until the condition has been corrected.			
Q	uestions*	Yes	No	N/A
1.	Are only trained and competent employees going to perform the hot work?			
2.	Are combustible materials (things that will burn) located at least 35 feet away from the hot work area or guarded with a fire-retardant cover to prevent hot sparks from contacting them?			
3.	Has the floor in the hot work area been swept to remove all combustible materials?			
4.	Have openings in the floor or in adjacent walls (within 35 feet of the hot work area) been guarded with a fire-retardant cover to prevent hot sparks from getting into the walls or beneath the floors?			
	Does a fire-resistant curtain or shield surround the hot work area?			
6.	If hot work must be performed in an area where flammable substances are used or stored, are the following actions being taken to prevent the accumulation of flammable or explosive vapors and gases that could be ignited by the hot work:			
	a. Initial and continuous monitoring of the work area atmosphere for flammable vapors?			
	b. Ongoing mechanical or fresh air ventilation in the work area?			
7.	If hot work must be performed in an area where flammable substances are used or stored:			
	a. Has an employee (other than the hot work operator) been designated as the Fire Watch? If yes, who by name:			
	b. Is the proper type and size fire extinguisher immediately available?			
	c. Where appropriate, is the facility's sprinkler system operational while the work is done?			1
*	In accordance with this transit system's <i>Hot Work Permit Program</i> , coordination with the local Fire Department is an integral part of establishing and maintaining a fire safe work			

Permission Statement: The above location has been examined. The precautions checked on the Required Precautions Checklist have been taken to prevent fire. Permission is granted for this work.

area.

Signature of Hot Work Permit Program Manager	Issue Date	AM/PM Issue Time
The Hot Work Permit expires (at the end of the work shift)	Expiration Date	AM/PM Expiration Time

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WARNING!

HOT WORK IN PROGRESS WATCH FOR FIRE!

In Case of Emergency Call:

911

Location of Work:

HOT WORK IN PROGRESS WATCH FOR FIRE!

WARNING!

CalTIP/SSPP/SLORTA/Hot/Work/Permit/Warning/Sign/-/2007.doc

SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY'S HOT WORK PERMIT PROGRAM (Not for Confined Spaces)

The San Luis Obispo Regional Transit Authority (the transit system) has a Hot Work Permit Program that requires the issuance of a Hot Work Permit whenever any type of work process which requires heat or open flame is performed away from the approved hot-work shop.*

Hot work procedures include, but are not limited to, torch cutting, brazing, welding, flame soldering, and other work where there is a risk of fire associated with the work. The objective is to prevent the initiation of an accidental fire, and to safeguard both employees and property.

1. <u>Hot Work Permit Program Manager</u> The Hot Work Permit Program Manager is the Maintenance Manager.

It is the Hot Work Permit Program Manager's responsibility to ensure that the Program is implemented and maintained by <u>employees</u> and to ensure that <u>contractors</u> adhere to the Program when they are on site doing hot work.

- 2. <u>Hot Work Permit Process</u>
 - a. A Hot Work Permit must be <u>issued whenever</u> hot work is performed away from the hot-work shop.*
 - b. To perform hot work, employees are required to <u>obtain</u> Hot Work Permits from the Hot Work Permit Program Manager.
 - c. The Hot Work Permit Program Manager <u>reviews</u> with the employee the work that is going to be done using the transit system's Hot Work Permit (see attachment). The hot work <u>Required Precautions Checklist</u> section of the Hot Work Permit includes the required criteria for performing such work. All items on the checklist must be answered "Yes" <u>prior</u> to such work being initiated.
 - d. A Hot Work Permit is authorized for only one shift. In the event that the hot work must continue into another shift, a new Hot Work Permit must be issued.

3. <u>Flammable Substances</u>

Hot work <u>cannot be performed</u> in any area where there are <u>flammable</u> substances being stored or used unless adequate safeguards are employed to prevent ignition.

- a. Program safeguards that include input and approval from the local fire department.
- b. Work procedure safeguards that include:
 - 1) Continuous monitoring of the atmosphere for flammable vapors, such as natural gas, solvents, gasoline, and hydrogen.
 - 2) Continuous ventilation in and around the hot work area.
 - 3) Having another employee act as the <u>Fire Watch all the time</u> that the hot work is being performed.
 - a) The Fire Watch conducts a pre-hot work inspection to reduce the possibility of fire ignition once the work begins.
 - b) The Fire Watch stands by with the appropriate fire extinguisher, ready to extinguish a potential fire.
 - c) If the Fire Watch must leave the area, the hot work <u>stops</u> until the Fire Watch returns.
 - d) <u>After</u> the hot work is completed, the Fire Watch thoroughly inspects the area where the hot work was done to ensure there are no remaining hot spots in or around the area, especially where such hot spots could cause ignition of a fire.
 - e) Depending upon the potential for fire, the Fire Watch may remain at the hot work site for up to 30 minutes to ensure that no hot spots ignite.
 - f) In addition, depending upon the potential for fire, the Fire Watch may conduct a follow-up inspection 60 minutes after the work is completed.
 - g) The Fire Watch is trained on:
 - (1) Fire extinguisher use.
 - (2) Fire issues within the facility.
 - (3) Emergency procedures including sounding the fire alarm, calling 911, and employee evacuation.
- 4. <u>Ignition Sources</u>

No source of ignition may be introduced into the area where the hot work is going to be done until the implementation of appropriate provisions have ensured that dangerous air contamination, due to flammable and or explosive substances, does not exist.

5. <u>Fire Hazards</u>

Actions that need to be taken to ensure a fire-safe work environment for doing hot work:

- a. Remove at least 35 feet away from the hot work any combustible materials such as scrap wood, cardboard boxes paper, rope, and rags. If such materials cannot be moved 35 feet away, guard such materials with fire-retardant covers.
- b. Sweep the floor in the hot work area to remove all combustible materials.
- c. Guard with a fire-retardant covering any openings in the floor or in adjacent walls (within 35 feet of the hot work area) to prevent hot sparks from getting into the walls or beneath the floors.
- d. Position an approved portable welding (hot work) curtain around the work area to:
 - 1) As much as possible, keep sparks from the hot work from igniting anything on the outside of the welding (hot work) curtain.
 - 2) Block access to the area from any employee not authorized to be in the area and who is not wearing the appropriate personal protective equipment for the work that is being done.
- e. Provide suitable fire extinguishing equipment based on the nature of the flammable and/or combustible substances that are present and the fires that may be expected to occur.
- f. Post a Hot Work In Progress warning sign at the location where the work is being performed (see attachment).
- 6. Respirator Use

If toxic substances are generated by the hot work, an appropriate respirator is worn in accordance with the transit system's Respirator Protection Program.

- 7. Recordkeeping
 - a. While each hot work project is being done:
 - 1) The Hot Work Permit Program Manager keeps <u>one copy</u> of the Hot Work Permit.
 - 2) The employee in charge of the hot work project keeps <u>one copy</u> of the Hot Work Permit.
 - b. At the completion of the hot work project, all of the completed copies of the Hot Work Permit forms are returned to the Hot Work Permit Program Manager and are filed for a minimum of one year plus the current year.
- * If there is not a hot-work shop that meets Cal-OSHA requirements, a Hot Work Permit must be issued at all times that such work is performed.

Cal-OSHA Title 8 Reference Sections

1536: Ventilation Requirements for Welding, Brazing and Cutting

- 1740: Storage and Use of Cylinders
- 4794: Installation and Operation of Gas Welding and Cutting Systems
- 4845: General Precautions Welding
- 4848: Fire Prevention and Suppression Procedure
- 4850: General Electric Welding, Cutting and Heating
- 4853: Inert Gas, Metal Arc Welding
- 5150: Ventilation and Personal Protective Equipment Requirements for Welding, Brazing and Cutting

Enclosures

- 1. Hot Work Permit form
- 2. Hot Work in Progress sign

End

CalTIP/SSPP/SLORTA/Hot Work Permit .- 2007.doc

Note: Please refer to the SSPP's *Introduction*, paragraph 5, entitled <u>Notice - Basis for the System Safety Program Plan</u> for the background, parameters, and conditions under which this document was prepared.

SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY'S LOCKOUT, BLOCKOUT AND TAGOUT PROGRAM

1. <u>PURPOSE</u>

a. This Lockout, Blockout and Tagout Program (the Program) has been instituted to safeguard employees, who maintain, service or repair equipment in accordance with the San Luis Obispo Regional Transit Authority's (the transit system) Injury & Illness Prevention Program policy that:

No function is so critical as to justify or require a compromise of safety.

- b. The dangers involved in this type of work include potential electrocution, amputation, or crushing of arms, legs, hands or fingers, and injuries from being caught in between machinery or hit by such machinery due to accidental energizing of the equipment. Energy sources include electrical, mechanical, pneumatic, hydraulic, gravity, chemical or thermal.
- c. The Program is designed to provide as close to a fail-safe system as possible. Even though Cal-OSHA permits exceptions to the lockout procedures (see references at the end of this Program), the transit system does not.

2. <u>SCOPE</u>

The Program applies to all of the transit system's facility and field operations.

3. <u>RESPONSIBILITIES</u>

- a. Program Manager The Contract Maintenance Manager is the Program Manager.
- b. Employees Affected employees are responsible for using the procedures outlined in the Program during the normal course of regular operations and during emergencies, as needed.

4. TRAINING

- a. The Program Manager <u>initially</u> trains the above-subject employees on the Program's requirements <u>prior</u> to these employees doing work or taking action associated with activities involving hazardous energy sources.
- b. The Program Manager conducts <u>annual</u> refresher training for all associated employees.
- c. Training records are maintained for three years and include the:
 - 1) Date of each training session
 - 2) Program curriculum
 - 3) Names of those who attended
 - 4) Name of the instructor
 - 5) Handouts that were provided.
- d. Most importantly, the training includes:
 - 1) Why the transit system has a lockout, blockout, and tagout system.
 - 2) The equipment and energy sources that must be locked or blocked out.
 - 3) The required procedures.
 - 4) The lockout and tagout equipment that are used.
 - 5) The blockout and tagout equipment that are used.
 - 6) What is done in the event of an accident.

5. <u>ENFORCEMENT</u>

All involved personnel are required to comply with the requirements of this Program. Employees who fail to comply are subject to the disciplinary procedures as established by the transit system.

6. <u>CONTRACTORS</u>

The Program Manager is responsible for informing outside contractors of the purpose and procedure for energy control through lockout, blockout, and tagout. Contractors are required to comply with the transit system's Program or their own equivalent program when doing work associated with the aforementioned energy sources.

7. <u>INSPECTIONS</u>

- a. The transit system performs an annual inspection of the Program. The purpose of this inspection is to:
 - 1) Assure that the procedures are being implemented properly.
 - 2) Check that authorized employees know their responsibilities.
 - 3) Review training records.
 - 4) Ensure that all required equipment is included in the Program.
 - 5) Ensure that the program complies with current Cal-OSHA requirements and general good safety practices.
- b. The inspection is documented, filed for a minimum of three years, and includes the:
 - 1) Date of the inspection.
 - 2) Name of the person performing the inspection.
 - 3) Identity of the equipment being reviewed.
 - 4) Names of the employees' that were interviewed.
 - 5) The status of the Program.
 - 6) Suggestions for improvement.

* * *

8. <u>ELECTRICAL LOCKOUT AND TAGOUT</u>

- a. De-energize Equipment (Non-Emergency Situations) When regular maintenance, service, or repair is required on equipment or machines that are directly connected to their power source, the trained authorized employee, who is going to initiate the lockout, follows these procedures:
 - 1) <u>Assures approval</u> from the respective first-line manager or supervisor to proceed with the lockout.
 - 2) <u>Evaluates</u> the piece of equipment and establishes the magnitude of the energy source or sources that must be locked out.
 - 3) <u>Notifies</u> everyone in the vicinity of the equipment that the machine is going to be de-energized for servicing or maintenance, and the machine is going to be locked out for a specified period of time, unless otherwise notified. If the de-energizing of a specific piece of equipment affects others that are not in the immediate vicinity of the equipment, they are also informed.
 - 4) <u>Shuts down</u> the equipment, if it is operating. The shut down is completed using the equipment's normal stopping procedure (depress STOP button, open switch, etc.).
 - 5) <u>Follows</u> the steps for <u>blockout</u> as noted below under the heading, <u>Blockout</u> <u>and Tagout</u>, if the machine that needs to be locked out must also be blocked out due to other types of energy sources, such as mechanical, pneumatic, hydraulic, gravity, chemical or thermal.
 - 6) <u>Deactivates</u> the energy isolating device(s) so that the equipment is isolated from its electrical energy source(s).

b. Lockout Devices

When equipment does not already have equipped lockout devices, it may be necessary to devise methods of lockout such as:

- 1) A sliding rod that can be locked in place to secure a control handle or switch.
- 2) Use of a lockout bracket that can be padlocked.
- 3) A common hasp may be secured to an access door or panel to lock them out.
- 4) A stationary perforated disk to cover the top of a start button.
- c. Recheck

Recheck that the equipment is disconnected from the energy sources(s) by:

- 1) First ensuring that no personnel are exposed.
- 2) Then verifying the isolation of the equipment by operating the push buttons or other normal operating controls or by testing to make certain the equipment does not operate.

WARNING

<u>Return</u> operating control(s) to neutral or OFF position after verifying the isolation of the equipment.

Status: The equipment is now locked out.

d. Accident Prevention Tag

Place an accident prevention tag at the location where the energy is turned on. Include on the tag the following information (write legibly):

- 1) Reason for placing the tag.
- 2) Name of the authorized person and how that person can be contacted.
- 3) Date tag was placed.
- 4) Other pertinent information regarding the situation.
- e. Maintenance, Service, and Repair Different Time Periods The following procedure is not normally required for transit system operations, but in the event that work must continue into the evening, and other employees are going to be doing the work, the lockout system must remain in use.
 - 1) Authorization for the security and removal of the locks or tags is passed on to the person responsible on the next work segment.
 - 2) Locks are exchanged to ensure that new employees' locks are in place and former employees' locks are removed. This exchange occurs at the same time.
 - 3) A detailed report by the previous authorized person is given to the oncoming responsible person regarding the need for the isolation device and the status of the maintenance, service, or repair that is being done.
 - 4) Documentation of this transfer of responsibilities must be in writing.
- f. Re-Energize the Equipment (After Maintenance, Service, or Repair Has Been Performed)
 - 1) Check the equipment and the immediate area around the equipment to ensure that nonessential items have been removed and that the equipment components are operationally intact.
 - 2) Check the work area to ensure that all employees have been safely positioned or removed from the area.
 - 3) Verify that the controls are in neutral or OFF.

- 4) Remove the lockout devices.
- 5) Re-energize the equipment.
- 6) Remove accident prevention tags.
- 7) Notify affected employees that the equipment is ready to use.
- Note: In the event that an employee, whose lock is being used as a lockout, is incapacitated or unavailable for some reason, and the equipment is ready to be re-energized, the lock can be removed with cutters, as long as the other parts of the procedures are complied with.

* * *

9. <u>BLOCKOUT AND TAGOUT</u>

a. De-energize Equipment (Non-Emergency Situations)

When regular maintenance, service, or repair is required on equipment or machines that have energy sources that could injure the involved employees, the trained authorized employee, who is going to initiate the blockout, follows these procedures:

- 1) Assures <u>approval</u> from the respective first-line manager or supervisor to proceed with the blockout.
- 2) <u>Evaluates</u> the piece of equipment and establishes the magnitude of the energy source or sources that must be blocked out.
- 3) <u>Notifies</u> everyone in the vicinity of the equipment that the machine is going to be de-energized for servicing or maintenance, and the machine is going to be blocked out for a specified period of time, unless otherwise notified. If the de-energizing of a specific piece of equipment affects others that are not in the immediate vicinity of the equipment, they are also informed.
- 4) <u>Shuts down</u> the equipment, if it is operating. The shut down is completed using the equipment's normal stopping procedure (depress STOP button, open switch, close valve, etc.)
- 5) Follow the steps for lockout as noted above under the heading, Electrical Lockout and Tagout, if the machine that needs to be blocked out must also be locked out due to electrical energy.
- 6) <u>Dissipate</u> or <u>restrain</u> stored or residual energy (such as that found in capacitors, hydraulic systems, and air, gas, steam, or water pressure systems) by methods such as grounding, repositioning, blocking, bleeding down, etc.
- 7) <u>Use</u> a chain and padlock if the energy-isolating device is a valve that must be locked out. Check to see that the valve cannot be turned.

- 8) <u>Take</u> steps, when necessary, to assure that mechanical equipment, which may move or slip, is blocked out by:
 - a) Bleeding down steam, air, or hydraulic cylinders.
 - b) Blocking gears, dies or other mechanisms.
 - c) Releasing coiled springs, spring-loaded devices, and securing arms.
 - d) Putting blocks under raised dies or any equipment that might descend, slide, or fall.
 - e) Using blocks or special stands under raised vehicles or hydraulic equipment to prevent failure or slippage of the hoist or elevating device.
- b. Lockout Devices

When equipment does not already have equipped blockout devices, it may be necessary to devise methods of lockout such as:

- 1) A sliding rod that can be locked in place to secure a control handle or switch.
- 2) Use of a lockout bracket that can be padlocked.
- 3) A common hasp may be secured to an access door or panel to lock them out.
- 4) A stationary perforated disk to cover the top of a start button.
- c. Recheck

Recheck that the equipment is disconnected from the energy sources(s) by:

- 1) First ensuring that no personnel are exposed.
- 2) Then verifying the isolation of the equipment by operating the push buttons or other normal operating controls or by testing to make certain the equipment does not operate.

WARNING

<u>Return</u> operating control(s) to neutral or OFF position after verifying the isolation of the equipment.

Status: The equipment is now blocked out.

d. Accident Prevention Tag

Place an Accident Prevention tag at the location where the energy is turned on, and, if necessary, where the energy is being blocked out. Include on the tag the following information (write legibly):

- 1) Reason for placing the tag.
- 2) Name of the authorized person and how that person can be contacted.
- 3) Date tag was placed.
- 4) Other pertinent information regarding this situation.
- e. Maintenance, Service, and Repair Different Time Periods

The following procedure is not normally required for transit system operations, but in the event that work must continue into the evening, and other employees are going to be doing the work, the blockout system is required to remain in use.

- 1) Authorization for the security and removal of blockout devices or tags is passed on to the person responsible on the next work segment.
- 2) Blockout devices, when necessary, are exchanged to ensure that new employees' blockout devices are in place and former employees' blockout devices are removed. This exchange occurs at the same time.
- 3) A detailed report by the previous authorized person is given to the oncoming responsible person regarding the need for the isolation device and the status of the maintenance, service, or repair that is being done.
- 4) Documentation of this transfer of responsibilities is put in writing.
- f. Re-Energize the Equipment (After Maintenance, Service, or Repair Has Been Performed)
 - 1) Check the equipment and the immediate area around the equipment to ensure that nonessential items have been removed and that the equipment components are operationally intact.
 - 2) Check the work area to ensure that all employees have been safely positioned or removed from the area.
 - 3) Verify that the controls are in neutral or OFF.
 - 4) Remove the blockout devices.

Note:

The removal of some forms of blocking may require re-energizing before

safe removal. Consequently, extra care must be taken in these cases.

- 5) Re-energize the equipment.
- 6) Remove accident prevention tags.
- 7) Notify affected employees that the equipment is ready to use.

* * *

10. <u>GENERAL REFERENCES</u>

All information in this Program comes from Cal-OSHA Title 8 references (see below) and the National Safety Council's Accident Prevention Manual for Business & Industry (Engineering & Technology Edition), 1992, pages 395-397.

11. <u>Cal-OSHA REFERENCES</u>

Electrical safety is part of the California Code of Regulations (Title 8), Electrical Safety Orders. Special emphasis on electrical lockout and tagout is found in the following sections:

- a. Section 2320.4De-energizing Equipment or Systems
- b. Section 2320.5Re-Energizing Equipment or Systems
- c. Section 2320.6Accident Prevention Tags

Current information is found on the Internet at www.dir.ca.gov.

End

CalTIP/SSPP/SLORTA/LOBOTO - 2007.doc

Note: Please refer to the SSPP's Description & Introduction, paragraph 5, entitled Notice - Basis for the System Safety Program Plan for the background, parameters, and conditions under which this document was prepared.



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1.0 PURPOSE

This emergency response plan is developed to provide procedures for dealing with an earthquake emergency. Dam failures due an earthquake will be covered in the Flooding Contingency Plan.

2.0 SCOPE

This response plan applies to all Regional Transit Authority (RTA) personnel working at any RTA facility or operating any RTA owned vehicle.

3.0 GENERAL

Like other areas of California, there are a number of active or potentially active fault systems throughout San Luis Obispo County. Small earthquakes, in the range of magnitude 2.0 – 2.7 and smaller, occur quite often throughout and near the county. Larger earthquakes do occur occasionally, as indicated by the magnitude 6.5, December 2003, San Simeon Earthquake and the 6.0, September 2004, Parkfield, earthquake centered just of Monterey County line.

The central California coast has a history of damaging earthquakes, primarily associated with the San Andreas Fault. However, there have been a number of magnitude 5.0 to 6.5 earthquakes on other faults that have affected large portions of the Central Coast. San Luis Obispo County is located in a geologically complex and seismically active region.

This type of earthquake may cause fires, building damage, hazardous material releases, dam failures/flooding, need for evacuation, utility disruptions, (gas, electric, water, sanitation), transportation system disruptions, communication disruptions, ground settling, surface buckling, equipment damage, tsunami warnings, hazardous material release warnings, and a need for emergency public information. Any injury to personnel would be caused indirectly from falling debris, building damage, fire or explosion.

Pre-planning, preparation, and practice are key elements in dealing with a severe earthquake. The RTA facility might be impaired to some degree by an earthquake. It is imperative to inspect a facility immediately following an earthquake to locate and troubleshoot problems so that operations can be restored.

A major area-wide earthquake may leave RTA personnel at a facility without assistance for some time, possibly even days. There are not enough emergency personnel in the County to deal with all the problems that might be simultaneously created by large earthquake. Therefore, RTA must be earthquake prepared.



4.0 PREPARATION FOR AN EARTHQUAKE

Because earthquakes cannot be predicted and provide minimal advance warning, the greatest impact on human safety is through preparation .

RTA's earthquake response plan must include, at a minimum, the following:

- a. Checking each facility to ensure that structures are stable;
- b. Ensuring that water heaters and heavy equipment are secured, as appropriate, to walls or the foundation to prevent toppling;
- c. Checking that heavy or breakable items are located on bottom shelves;
- d. All containers should have firmly fitting lids on them at all times.
- e. Materials such as gasoline, pesticides, and paint thinners should be stored on a low level and away from areas where they might cause significant problems if spilled.
- f. Materials that would be dangerous if mixed should be stored in separate places. For example, bleach should not be stored close to ammonium-containing materials, such as detergents, or halide-containing materials
- g. Maintain "Material Safety Data Sheets" (MSDS) on regulated chemicals
- h. Keep a first aid kit and eyewash cup near materials that could expose humans to chemicals.
- i. Checking that shelves and cabinets are braced or secured;
- j. Ensuring that hazardous materials and wastes are secured;
- k. Practicing shutting off gas, electricity and water services;
- I. Establishing communication procedures;
- m. Establishing a plan to stockpile key items at the facility;
- n. Establishing a plan to account for staff; and
- o. Conducting appropriate earthquake response training.



5.0 EMERGENCY PROCEDURES

When an Earthquake Starts

<u>Always stay *calm*</u>. You may have a few seconds to get yourself and others to safety.

- 5.1 If Indoors
 - 1. Stay indoors. Do not run outside.
 - 2. Stand or crouch in a supported doorway, or get under a sturdy table or desk, or brace yourself in an inside corner of the building.
- 5.2 Avoid
 - a. Windows, light fixtures and other glass that may shatter.
 - b. Bookcases, file cabinets, and other furniture that may topple.
 - c. Spaces that may be blocked by falling debris.
 - d. Areas with hazardous materials, natural or compressed gases, or high voltage electrical lines.
 - e. Shop areas with tools, equipment and overhead items.
- 5.3 If Outdoors
 - a. **Stay outdoors**. Get into an open area. <u>Do not attempt to enter a</u> <u>building</u>.
 - b. Move away from any building or structure with a potential for falling debris.
 - c. Move away from power lines and light poles.
- 5.4 If Driving
 - a. Carefully pull over and stop.
 - b. Stay in the vehicle since it is a safe place.
- 5.5 Avoid



- a. Stopping under overpasses, or on bridges or on overpasses.
- b. Stopping near buildings or other structures.
- c. Overhead power lines

Be prepared for aftershocks. Aftershocks are usually less severe but may cause already weakened buildings and structures to fail.

6.0 AFTER AN EARTHQUAKE

- 1. Be prepared for aftershocks, they could cause additional damage.
- 2. <u>Check for injuries</u>. Do not move anyone unless he or she is in immediate danger of more injury.
- 3. Refer to the earthquake information section of the First Aid and Survival Guide portion in the white pages of the SBC telephone book. The First Aid and Survival Guide is in the "B" section of the SBC telephone book white pages.
- 6.1 Check Building For Damaged Utilities
 - a. Gas Meter is located at the South-West corner (Rear) of the building
 - **b.** *Electrical System* is located outside on the East wall door, marked "Electrical Room." The key is located in the shop area in the vehicle key case mounted in the supply room.
 - **c.** Water Meter is located at the front of building (North) on Cross Street. No tools are needed to shut off the main water supply; the meter is equipped with a "ball valve."
 - **d.** Automatic Sprinkler System shut off switch is located outside on the East wall door, marked "Electrical Room" where the main shut off to all electrical is located.
 - 1. *Leaky gas lines* inspect by smell or vision only. DO NOT use candles, matches, or other open flames and <u>DO NOT turn lights off and on</u> <u>until you have determined whether or not there is a gas leak.</u>



If you smell gas or otherwise suspect a gas leak, open windows and doors so the gas can escape, and shut off the Gas meter. Leave/evacuate the building immediately.

- 2. *Electrical System*, if damage is suspected turn off electricity at the main breaker, located outside on the East wall door, marked "Electrical Room." Some indications of electrical damage include frayed wires, sparks, or smell of hot insulation. Check for downed power lines or exposed live electrical wires.
- 3. Water: if water pipes are broken, shut off the main valve that carries water into the building. The water supply cannot be deemed safe to drink until qualified water department personnel verify it to be safe.
- 4. With extreme caution, check building and structures for cracks and damage, including roof and foundation. Be prepared to take cover in case of aftershocks while inspecting the building. Stay out of damaged buildings. Post warnings or place barricades at hazard areas.
- 5. Replace all telephone receivers. Keep the phone lines clear.
- 6. Check above ground oil containers for leaks.

7.0 HAZARDOUS MATERIALS SPILLS

Most injuries to people in earthquakes result form building collapse and falling objects. Secondary injuries result from spliiage of hazardous materials, gas escape and fires.

In the event of a chemical spill, first decide if you are trained, knowledgeable and equipped to handle the incident. Refer to the RTA's Spill Containment and Countermeasures for more detailed guidance.

Immediately eliminate the source of the spill:

7.1 Priorities

Dam around all floor drains and other sewer inlets. Dam doorways to contain spill in rooms or buildings. Dam driveways to prevent spill from running into street. Attempt to surround spill with socks and/or absorbent dams.

7.2 Clean-Up Procedures

Chemicals will be picked up with absorbent materials by trained employees using proper protective clothing and equipment. Absorbents are located in steel drums located in the Oil Container Room and in the maintenance service area .between bus bay one (1) and bus bay two (2). Refer to the MSDS for safety procedures and advice on personal



protective equipment and devices that will protect you from a particular chemical during the clean up process.

- a. Pick up saturated pads with tongs or other device that minimizes direct contact with a gloved hand or use a broom and scoop. Absorbent materials which have become saturated will be managed as hazardous waste. These materials will be stored in a properly labeled sealed container.
- b. Contaminated clothing must be removed immediately and the skin flushed with water for no less than fifteen minutes. Clothing must be laundered before reuse.
- c. After initial clean up, area will be decontaminated with the ride on scrubber.
- d. All tools and equipment that was used during spill cleanup will be thoroughly cleaned and decontaminated at the wash rack and restowed in appropriate areas.
- e. All spill materials used must be logged in the "Use Log" in the Emergency Response Handbook in the Oil Container Room. Replenish all supplies used in the spill control station to full levels. Inventory levels are listed on the top of the Use Log.
- 1. Check machinery and equipment.
- 2. Check facility road surfaces for usability.
- 3. Check that the sewerage system is functioning.
- 4. Listen for emergency bulletins on a battery-operated radio, if necessary. Additional information will be broadcast when it is available.
- 5. Do not use your vehicle unless there is an emergency. Keep the streets clear for emergency vehicles.
- 6. Stay clam and assist others
- 7. If the building occupants evacuated, post an informational message telling family members where the employees can be found.

8. Do Not use 9-1-1 except for emergencies



9. If you are <u>not</u> at work when an earthquake occurs, do <u>not</u> telephone RTA. No matter how well intentioned, telephone calls from dozens of people will be disruptive to emergency work in progress and adds to the problems at the facility. Instead, <u>RTA will contact you if you are needed</u>.

Management will be notified through the RTA "Call-Tree." Others will be contacted on an as-needed basis.

8.0 CHAIN OF COMMAND

In general, the ranking RTA person at the facility will assume command of the situation unless, by consensus, a more qualified person is available at the scene. More specifically, the senior (or most qualified) person assumes the role of the **Emergency Coordinator** whose duties include:

- 1. Assessing the situation and determining whether an emergency exists that requires activating this emergency response plan;
- 2. Directing the efforts in the area including evacuating personnel;
- 3. Ensuring that outside emergency services such as the fire department and medical aid are called when necessary; and
- 4. Directing the shutdown of facility operations when necessary.
- 5. Establishing an Emergency Response Center (ERC) in a safe and appropriate location.
- 6. Account for all on-duty staff. If personnel are unaccounted for, dispatch a two-person search and rescue team, if safe to do so.
- 7. Ensuring the issuance of all necessary safety equipment (gloves, flashlights, portable radios).
- 8. Assigning personnel to check gas, electrical, storage tanks, water and sewer systems, and report their damage assessments. Checking facility roads and surfaces.
- 9. Checking the telephone communications system status. Ensuring that the phone lines are clear unless it is absolutely critical to use it.
- 10. Calling off-duty personnel to report for duty.



- 11. After a facility damage assessment has been compiled, relay the information up the chain-of-command.
- 12. Maintaining an accurate and complete chronology including reports and logs. Ensuring that pictures are taken of the damage.
- 13. As off-duty personnel arrive for duty, allowing on-duty staff to go home to check on their families.

Note: On-duty staff will want to ensure the safety of their families by communicating with them. A failure to allow this after a severe earthquake may cause anxiety in staff. The telephone system may be down or it may be so jammed with calls that staff is unable to communicate using the telephone. Alternative communication avenues may have to be explored

In a severe earthquake emergency, the local fire department will respond when they are able to. Upon their arrival, the fire department or other responders will assume command. In that instance, RTA staff will serve in a support role and will not be executing responses and operations except as directed by the ranking responder.

Where the local fire department is in control, RTA staff will introduce themselves to the ranking responder and offer assistance, and provide any important information that they may have regarding the incident.

9.0 EARTHQUAKE EMERGENCY PROCEDURES

In the event of a **minor** earthquake, the responsible manager or supervisor may not need to not call "911" or notify the appropriate fire department unless there are medical assistance needs.

Once a severe earthquake has begun, a bus must be stopped as soon as it is safe to do so. Passengers may need to be evacuated depending upon the circumstances, and if safe to do so.

The determination to evacuate a bus is the responsibility of the bus operator. In the event of a severe earthquake, the fire department may need to be contacted, depending upon the RTA's need for assistance, by calling "911' stating:

a. The earthquake has caused damage (structural, injuries, fire, hazardous material spill), and RTA is requesting an immediate response



- b. Exact facility location
- c. Exact area at the facility where assistance is needed
- d. Response required: Fire Department Ambulance Police Utilities
- e. Facility entrance directions and precautions
- f. Status of personnel (injuries, personnel unaccounted for, or all staff evacuated)
- g. Information regarding the status of the earthquake damage

Senior staff at the facility must also be immediately contacted to determine what, if any, RTA response activities should be undertaken. The RTA "call-tree" must be activated to inform management regarding the status and assistance needs of the facility and includes, at a minimum, the following:

Edward King, Executive Director	(805) 781-4465	(805) 540-0765
Jason Gillespie, Director Service Delivery	(805) 781-4467	(805) 540-9329
Tania Arnold, Director, Finance & Administratic	on (805) 781-4397	(805) 471-8268
Omar McPherson, Grants Administrator	(805)781-1171	(805) 540-9135
Patricia Grimes, Manager Safety & Training	(805) 781-4836	(805) 550-0845
David Roessler, Manager of Fleet Maintenance	e (805) 801-8616	(805) 781-4835
Dave Guerrero, Maintenance Supervisor	(805) 781- 1329	(805) 458-6984
Shelly Kubel, Lead Supervisor	(805) 781-1332	(805) 458-5267
Carrie Brown, Lead Supervisor	(805) 781-1338	(805) 540-4388
External Assistance		
LOCAL EMERGENCY RESPONSE	9-1-1	
State Office of Emergency Services (OES)	(800) 852-7550 or (916) 262-1621	
SLO County Hazardous Materials	(805) 781-5544 or 911	
Fire Department	(805) 781-7308	
Police Department (Hazardous Material Unit)	911- (805) 781-7308 ex 2	
Pacific Gas & Electric Emergencies	(800) 743-5000 24 Hr	
Natural Gas Leaks, Southern California Gas	(800) 427-2200	
Water/Sewer Utilities Services	(800) 781-7312	
Certified Unified Program Agency (CUPA)Jeff Poel (805) 781-5544San Luis Obispo County Env. Health San Luis Obispo		



- 9.1 CommunicationSystem Use cell phones if possible to communicate with employees state;
 - a. The damage status at the facility
 - b. Information regarding any needed RTA responses
 - c. The safest evacuation route(s)
 - d. The staging area(s) to report to
- 9.2 Accounting for Personnel

Once personnel are evacuated to the safe staging area(s), staff must be accounted for. A responsible person must determine which staff are safe and which, if any, are believed to be missing. This information must be conveyed to the emergency responders.

9.3 Communications

During severe earthquake emergency services such as water, electricity and telephones may be interrupted. Yet the need to communicate remains. RTA must use alternate communication means such as phones/two-radios.

Portable telephones, public address systems and radios can be used to facilitate communications during an earthquake emergency. A portable radio or telephone must be delivered to the responsible person at the evacuation staging area(s) so that the emergency responders can receive updates regarding any missing persons.

9.4 RTA Response Activities

Under direction, RTA staff may be required to respond to earthquake damage in a variety of ways. RTA staff may be assigned support roles by the local fire department to assist them in their response activities. RTA staff must not take unauthorized actions that might imperil their lives or the lives of others.

9.5 Preventative Actions

Considering the safety of the responders first, preventative actions should be taken to minimize property damage including isolating gas lines, turning off electrical power to the affected area, removing combustible materials, removing chemicals, including compressed gas cylinders, that might explode or generate toxic fumes, and initiating any appropriate equipment or machinery shutdown procedures.



9.6 Fire Department Responses

Once "911" has been activated, facility personnel must be stationed at the appropriate entrance(s) and along the safest route to guide the fire department and other responders to the exact location of the emergency. Responsible RTA personnel must identify themselves to the ranking responder.

9.7 Security

Access to the damage area must be limited to essential personnel. RTA facility personnel or security services personnel may be called upon to install barriers and/or signage to prevent inadvertent intrusion into the damage area, provide traffic control, and actively limit access to the incident area.

9.8 Personnel Rescue

A severe earthquake incident may result in the injury or isolation of personnel. <u>Personnel rescue is a very high priority but must be accomplished safely</u>. If a person is down or isolated, the fire department or other responders will attempt to affect a rescue. Under certain conditions, and under direction from senior staff, RTA staff may be directed to affect a rescue. A timely rescue must be made that moves a downed person(s) or isolated person(s) out of the danger area and into an uncontaminated atmosphere and far enough away from the emergency site to prevent negative effects such as from smoke inhalation, fire or explosion.

9.9 Emergency Medical Measures

Priority must be given to anyone requiring emergency medical measures. Other aspects of this response plan may be delayed in order to treat an injured person(s). Under normal circumstances, staff will do what is safe and practical to do to make the victim(s) safe and comfortable while emergency medical help arrives. However, if a person is not trained to give medical aide, he/she is advised to wait for qualified medical assistance.

9.10 Documentation

Document all phases of the incident. Take videotape or photographic evidence, as directed, and file them with a copy of the final incident report that will be retained by the department on-site; originals to the RTA Manager, Safety & Training.

9.11 Miscellaneous



The earthquake may generate interest by local news agencies. All media contacts are to be handled as outlined below. It is important to remember to defer all media inquiries to RTA Directors.

Do not release investigative results or incident reports to anyone outside RTA unless you are specifically authorized to do so.

The incident will be reviewed and evaluated by RTA management staff. The Excutive Director & Director, Service Delivery will call an incident de-briefing meeting to develop possible earthquake response plan improvements.

10.0 RESPONSES TO A STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS) MAJOR INCIDENT

A detailed response plan is not necessary in this scenario since RTA will be following the SEMS command system wherein decisions are made outside RTA.

When SEMS is invoked, there will be multi-agency responders on the scene and RTA staff is placed in a support role. The exact nature of the support role will depend on the severity of the incident and upon the directives given by the SEMS **Incident Commander**.

The Incident Commander is typically the ranking fire department member. This may vary depending on the incident. In any case, RTA personnel must give full and complete cooperation to the Incident Commander, while providing valuable input into the decision making process where possible.

11.0 MEDIA RELATIONS AND PUBLIC INFORMATION

Any major earthquake may generate media interest depending on its newsworthiness. It is RTA's intention to provide all necessary information to the public in an accurate and timely manner. It is clearly in RTA's interest that the information comes from one source to avoid inaccurate information and uninformed opinions.

To this end, RTA will have a **Public Information Officer (PIO**) representing RTA at all newsworthy events. This person will normally be the Marketing and Community Relations Coordinator or his/her designee, or other designated person.

Restated, the PIO is the <u>only</u> authorized RTA representative that will respond to the media. No other RTA employee is authorized to give information to the media. If an employee is approached by the media for information, the recommended response should be,"Please speak to RTA's Public Information Officer." The employee may then help direct the media person to RTA's designated supervisor, director, or the PIO.



Note that if SEMS is activated, RTA's PIO may become an incident command system staff person, under the direction of the Incident Commander. In that case, RTA's PIO will have all press bulletins and briefs approved by the Incident Commander prior to their release. In the SEMS scenario, the PIO would hold routine and periodic press conferences at or near the incident command post.

12.0 DOCUMENTATION

Agencies responding to a major earthquake incident will generate their own incident reports. In this scenario, the Safety Manager is charged with obtaining the various incident reports and preparing a file. A copy of the complete file will be retained on-site by the department with the originals retained by the Safety Manager.

RTA Safety Manager will review and evaluate the RTA's response activities to suggest possible improvements. Depending on the severity of the earthquake, the Manager Safety & Training will prepare a findings and recommendations report to Management.

13.0 TRAINING

The responsible supervisors will conduct training on this response plan every two years. This response plan is the primary training curriculum, although enrichment materials may be added to training sessions. Each training session will be documented using an RTA training attendance form.

14.0 RECORDKEEPING

Copies of all records pertaining to this contingency response plan will be retained on-site by the department with originals retained by the Manager Safety & training.



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6.0 EMERGENCY COORDINATOR RESPONSIBILITIES

1.0 PURPOSE

This emergency response plan is developed to provide procedures for dealing with an explosion. In order to reduce hazards to employees, property and the environment in the event there is an incident involving hazardous waste materials at Regional Transit Authority (RTA).

2.0 SCOPE

This response plan applies to all Regional Transit Authority (RTA) personnel working at any RTA facility or operating any RTA owned vehicle.

3.0 GENERAL

This contingency plan will be implemented in a fire, explosion, or release of hazardous material or waste that threatens public health or the environment occurs at RTA.

4.0 EXPLOSION PROCEDURES & SHUT DOWN PROCEDURES

- a. Gas Meter is located at the South-West corner (Rear) of the building
- **b.** *Electrical System* is located outside on the East wall door, marked "Electrical Room." The key is located in the shop area in the vehicle key case mounted in the supply room.



- **c.** *Water Meter* is located at the front of building (North) on Cross Street. No tools are needed to shut off the main water supply; the meter is equipped with a "ball valve."
- **d.** Automatic Sprinkler System shut off switch is located outside on the East wall door, marked "Electrical Room" where the main shut off to all electrical is located.
- 1. *Leaky gas lines* inspect by smell or vision only. DO NOT use candles, matches, or other open flames and <u>DO NOT turn lights off and on until you have determined whether or not there is a gas leak.</u>

If you smell gas or otherwise suspect a gas leak, open windows and doors so the gas can escape, and shut off the Gas meter. Leave/evacuate the building immediately.

- Electrical System, if damage is suspected turn off electricity at the main breaker, located outside on the East wall door, marked "Electrical Room." Some indications of electrical damage include frayed wires, sparks, or smell of hot insulation. Check for downed power lines or exposed live electrical wires.
- 3. *Water:* if water pipes are broken, shut off the main valve that carries water into the building. The water supply cannot be deemed safe to drink until qualified water department personnel verify it to be safe.
- 4. With extreme caution, check building and structures for cracks and damage, including roof and foundation. Be prepared to take cover in case of aftershocks while inspecting the building. Stay out of damaged buildings. Post warnings or place barricades at hazard areas.
- 5. Replace all telephone receivers. Keep the phone lines clear.
- 6. Check above ground oil containers for leaks.

5.0 EMPLOYEE RESPONSIBILITIES

The following procedures should be followed in the event of a fire or explosion:

- 1. Take cover
- 2. Pull fire alarm.
- 2. Call 911.
- 3. Proceed to the nearest available exit by following exit signs.
- 4. Close doors (unless there is a natural gas leak) as you leave.
- 5. Do not smoke or use elevators while exiting.
- 6. Do not return for any reason once you are clear of the building.
- 7. Assemble with other building occupants at the designated evacuation area.
- 8. Do NOT re-enter the building until the authorized personnel inform you the building is safe.

6.0 EMERGENCY COORDINATOR RESPONSIBILITIES

When a hazardous substance/waste emergency has been identified, one of the RTA emergency coordinators should be contacted immediately.

The emergency procedures which the RTA emergency coordinators will follow in case of a fire, explosion or chemical spill:

- 1. Activate internal facility alarms and communications systems if necessary.
- 2. When safe follow RTA's Spill Containment and Countermeasures plan, notification and associated requirements.
- 3. If facility personnel cannot contain the release of hazardous material, notify San Luis Obispo HAZMAT Team by calling 911.
- 4. If a release has occurred, identify the source; characterize the amount and extent of any released material by record review or chemical analysis.



5. Assess the hazards to human health and the environment, considering all direct and indirect effects.

If it is determined that the facility has had a fire, explosion or release which could threaten human health or the environment outside the facility:

- 1. Determine if local evacuation may be necessary, and if so, notify the appropriate local authorities and be available to assist local authorities with evacuation measures.
- Take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste or chemicals at the facility. These measures will include, if safe, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
- 3. If the facility stops operations in response to a fire, explosion, or chemical release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate.
- 4. Immediately after the emergency, the RTA emergency coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soils, or surface water, or any other material that results from a release, fire, or explosion at the facility.
- 5. Ensure that in the affected areas of the facility, no waste that may be incompatible with the release material is stored until the cleanup procedures are completed and all emergency equipment is cleaned and restored to a usable condition.



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 - a) Gas Meter is located at the South-West corner (Rear) of the building
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 - d) Automatic Sprinkler System shut off switch is located outside on the East wall door, marked "Electrical Room" where the main shut off to all electrical is located.

6.0 ALL EMPLOYEE'S PROCEDURES

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1.0 PURPOSE

This emergency response plan is developed to provide procedures for dealing with a flood emergency. Dam failures due an earthquake will be covered in the Dam-Tsunami Contingency Plan.

2.0 SCOPE

This response plan applies to all Regional Transit Authority (RTA) personnel working at any RTA facility or operating any RTA owned vehicle.

3.0 GENERAL

The RTA facility located on Cross Street is not in a 100-year flood zone. However, during a flood hazardous material that can contaminate floodwaters or pose hazard to employees, emergency personnel or the environment must be considered.

4.0 PREVENTATIVE PROCEDURES

Preventative planning by manage chemical products and wastes before a flood.

Purchase the smallest amounts; keep only small stocks of hazardous materials on site.

- a. Use up what is stored to eliminate stocks.
- b. Use the safest products or alternatives available.
- c. Dispose of waste accumulations, or as soon as possible.
- d. Work with vendors and suppliers to reduce storing drums If not secured, they will float in floods.
- e. Know what hazardous materials you are storing, their hazards, safe handling, disposal, and clean-up procedures.
- f. Take advantage of services to reduce stock of hazardous materials.
- g. Work with suppliers and hazardous waste vendors to evaluate what is needed to keep onsite.
- h. Maintain an up-to-date inventory of hazardous materials to assist responders or with post flood clean up



- i. Avoid stockpiling hazardous materials.
- j. Store hazardous materials properly.
- k. Label all containers
- I. Keep products and wastes in the original containers, sealed and in good condition.
- m. Secure equipment, supplies and containers so that they do not float away or break open, endangering structures or people.
- n. If practical and safe, store materials inside above flood levels.
- o. Use waterproof containers,
- p. Store hazardous materials on second story/mezzanine if feasible.

5.0 CHECK BUILDING FOR DAMAGED UTILITIES & SHUT OFF LOCATIONS:

- a) Gas Meter is located at the South-West corner (Rear) of the building
- **b)** *Electrical System* is located outside on the East wall door, marked "Electrical Room." The key is located in the shop area in the vehicle key case mounted in the supply room.
- **c)** Water Meter is located at the front of building (North) on Cross Street. No tools are needed to shut off the main water supply; the meter is equipped with a "ball valve."
- d) Automatic Sprinkler System shut off switch is located outside on the East wall door, marked "Electrical Room" where the main shut off to all electrical is located.

In the event of flooding, turn off all electrical equipment in the area. Turn off the main switch of the circuit breaker serving your area.

DO NOT TOUCH WET ELECTRICAL EQUIPMENT.

Do not attempt to turn equipment on again until the problem is resolved and the equipment is thoroughly dried and checked out.



Regardless of how a flood or flash flood occurs, the rule for being safe is simple: **head for higher ground and stay away from floodwaters.** Even a shallow depth of fast-moving floodwater produces more force than most people imagine. The most dangerous thing you can do is to try walking, swimming, or driving through floodwaters. Two feet of water will carry away most automobiles.

6.0 ALL EMPLOYEE'S PROCEDURES

- a. REMAIN CALM AND STAY IN YOUR WORK AREA
- b. Turn off all electrical appliances to avoid electrocution
- c. Do not touch wet electrical equipment
- d. Do not evacuate unless told to do so by emergency coordinator or a responding agency (fire/police)
- e. Do not turn back on any electrical appliances until directed to do so by maintenance
- f. Do not use the telephone or elevators
- g. If evacuated, avoid re-entering any building before local officials have said it is safe to do so
- h. Listen to a battery operated radio for information
- i. Stand by to receive directions from RTA Emergency Coordinator or responding agency
- j. Move empty hazardous material drums or any other hazardous material deemed necessary to the second story/mezzanine.
- k. If a fire has occurred in the building, evacuate immediately, if it cannot be contained using the fire extinguishers on site.



7.0 ^{III}SANDBAGS

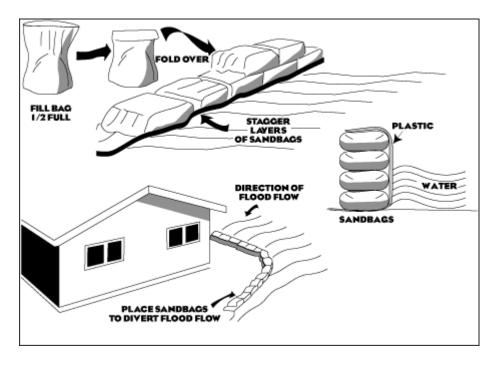
Sandbags can push flowing water around your property rather than through it - which is the objective.

A few tips for using sandbags:

- a. Fill bags only half full.
- b. Fold over the empty top of the bag to prevent sand from leaking out.
- c. Place each bag over the folded top of the preceding bag and stamp each bag into place before placing the next bag.
- d. Always finish one complete layer of sandbags before starting the next layer.
- e. Stagger the second layer of bags, stamping each bag into place before placing on the next bag.

Remember, sandbags have absolutely no effect - or very little, at least - on standing water. And, unfortunately, they can't be prepared ahead of time because, they'll rot.

Allow plenty of time to fill them, which you'll be doing right before or during a storm.





During storm season, sandbags can be filled at four <u>city locations</u>.

SAND BAG INFORMATION	
Where do I buy sand bags?	Where do I fill my sand bags?
Home Depot	City Corporation Yard parking lot 25
1551 Froom Ranch Way, SLO:	Prado Road
596-0857	
Farm Supply Co.	Laguna Lake Golf Course parking lot
224 Tank Farm, SLO: 543-3751	11175 Los Osos Valley Road
Pacific Coast Home and Garden	Santa Rosa Park parking lot
2034 Santa Barbara, SLO: 543-2191	190 Santa Rosa Street
	Sinsheimer Park parking Lot
	900 Southwood Drive

8.0 ^{iv} CLEAN UP INTRODUCTION

During flooding, systems for heating, ventilating, and air conditioning (HVAC) can become submerged in flood waters. As a result, these systems may contain substantial amounts of dirt and debris and may also become contaminated with various types of microorganisms such as bacteria and fungi. The following recommendations will help ensure that HVAC systems contaminated with flood water are properly cleaned and remediated to provide healthy indoor environments.

Microorganisms may grow on all surfaces of HVAC system components that were submerged in flood waters. In addition, moisture can collect in HVAC system components that were not submerged (such as air supply ducts above the water line) and can promote the growth of microorganisms. Therefore, all components of the HVAC system that were contaminated with flood water or moisture should be thoroughly inspected, cleaned of dirt and debris, and disinfected by a qualified professional. The following recommendations will help ensure that HVAC systems contaminated with flood water are properly cleaned and remediated to provide healthy indoor environments.

These recommendations will be reassessed periodically and updated as appropriate.

- 8.1 Steps Before Cleaning and Remediation
 - a. If the building is to remain partly occupied (for example, on upper floors not affected by flood waters), isolate the construction areas where HVAC systems will be cleaned and remediated by using temporary walls, plastic sheeting, or other vapor-retarding barriers. Maintain the



construction areas under negative pressure (relative to adjacent nonconstruction areas) by using blowers equipped with HEPA filters (highefficiency particulate air filters) to exhaust the area. To ensure complete isolation from the construction areas, it may be necessary to pressurize the adjacent non-construction areas and temporarily relocate the outdoor-air intake for the HVAC system serving the occupied areas.

- b. Take precautions to protect the health of workers who are cleaning and remediating the HVAC system. Make sure that workers wear at least an N-95 NIOSH-approved respirator to protect against airborne microorganisms. Increased levels of respiratory protection (for example, powered, air-purifying respirators equipped with HEPA filters) may be appropriate depending on the level of visible contamination. In addition, when using chlorine bleach or other disinfectants in poorly ventilated environments, it may be necessary to use appropriate chemical cartridges in addition to the particulate filters to protect workers from breathing the chemical vapors.
- c. Employers must implement a complete respiratory protection program that meets the requirements of the OSHA respiratory protection standard (29 Code of Federal Regulations 1910.134). The minimum requirements for a respiratory protection program include a written standard operating procedure for the following: selecting and using respirators; the medical evaluation of workers to determine whether they are physically able to wear the respirator selected for use; training and instructions on respirator use; the cleaning, repair, and storage of respirators; the continued surveillance of work area conditions for worker exposure and stress; and a respirator fit-testing program. For tight-fitting respirators, fit-testing is necessary to help ensure that the respirator fits tightly, reducing the potential for leakage of outside air from around the edge of the mask. In addition, employers must provide workers with appropriate skin, eye, and hearing protection for the safe performance of their jobs.

8.2 **HVAC** Cleaning and Remediation

Remove all flood-contaminated insulation surrounding and within HVAC system components. Discard these contaminated materials appropriately following applicable Federal, State, and local regulations.

a. Remove contaminated HVAC filter media and discard appropriately following applicable Federal, State, and local regulations.



- b. After removing any insulation and filters, clean all flood-contaminated HVAC system component surfaces with a HEPA-filtered vacuum cleaner to remove dirt, debris, and microorganisms. Pay special attention to filter racks, drain pans, bends and horizontal sections of air ducts where debris can collect.
- c. After removing any insulation or debris, disinfect all HVAC system component surfaces while the HVAC system is not operating. Use a solution of 1 cup of household chlorine bleach in a gallon of water. Do not mix bleach with other cleaning products that contain ammonia.
- d. Conduct the cleaning and disinfection activities in a clean-to-dirty work progression. Consider the use of auxiliary fans to supply "clean" air to the worker position and carry aerosolized contaminant and disinfectant in the clean-to-dirty direction, away from the worker's breathing zones and towards the point of filtration and exhaust.
- e. Follow the disinfection procedure with a clean water rinse. Depending on the amount of debris present, it may be necessary to mechanically clean the HVAC system component surfaces with a steam or a highpressure washer before using the disinfectant. Gasoline powered pressure washers should be used outside or with adequate exhaust ventilation to prevent carbon monoxide hazards. (See NIOSH topic webpage, "Carbon Monoxide Hazards from Small Gasoline Powered Engines" at: <u>http://www.cdc.gov/niosh/topics/co/</u>)

Note: Remove and discard HVAC system components that are contaminated with flood water, and cannot be effectively cleaned and disinfected. Replace them with new components.

- f. After cleaning and disinfecting or replacing the HVAC system components, replace the insulation preferably with an external (i.e. not in the air stream) smooth-surfaced insulation to help prevent debris and microorganisms from collecting in the future.
- g. Make sure that the HVAC system fan has been removed and serviced (cleaned, disinfected, dried thoroughly, and tested) by a qualified professional before it is placed back into the air-handling unit.
- h. During the cleaning and remediation process, consider upgrading the HVAC system filtration to the highest efficiency filters practical given the static pressure constraints of the HVAC system fan. This step has



been shown to be one of the most cost-effective ways to improve the long-term quality of the indoor environment, since it reduces the amount of airborne dusts and microorganisms.

8.3 Resuming HVAC Operations

After cleaning and disinfecting or replacing HVAC system, have a qualified professional thoroughly evaluate its performance and correct it as necessary before the building is occupied again. The HVAC system performance should conform to the recommendations contained in ASHRAE Standard 62.1-2007, Ventilation for Acceptable Indoor Air Quality.

- a. Before the building is occupied again, operate the HVAC system continuously in a normal manner at a comfortable temperature for 48 to 72 hours. During this period, it may be beneficial to open the HVAC outdoor air dampers to the maximum setting that still allows you to provide the desired indoor air temperatures. If objectionable flood-related odors persist after this "flush out" period, reassess by looking for flood-contaminated areas that were not identified earlier and continue the flush-out process until odors are no longer apparent. Replace the HVAC filters used during the flush-out prior to building occupancy.
- b. After a building is occupied again, make frequent (for example, weekly) checks of the HVAC system to ensure that it is operating properly. During these checks, inspect the HVAC system filters and replace them when necessary. Gradually reduce the frequency of the HVAC system checks to monthly or quarterly inspections, depending on the routine operation and maintenance specifications for the HVAC system.
- c. If no routine operation and maintenance program is in place for the HVAC system, develop and institute such a program. At a minimum, include the following routine procedures: inspection and maintenance of HVAC components, calibration of HVAC system controls, and testing and balancing of the HVAC system.
- d. After the building is occupied again, maintain the interior temperature and relative humidity to conform with the ranges recommended in ASHRAE Standard 55- 2004, Thermal Environmental Conditions for Human Occupancy.
- 8.4 Additional Resources



Additional information about the cleanup and restoration of waterdamaged and mold contaminated HVAC systems is available from the Institute of Inspection, Cleaning and Restoration Certification (IICRC) and the National Air Duct Cleaners Association (NADCA). Their pertinent documents (Standard and Reference Guide for Professional Mold Remediation [IICRC S520] and Assessment, Cleaning and Restoration of HVAC Systems [ACR 2006]) are available for purchase at <u>www.iicrc.org/</u> and <u>www.nadca.com/publications/</u>, respectively. The University of Minnesota also has a document titled, "HVAC System Decontamination" available for free off the internet at <u>www.dehs.umn.edu/iag_hsd.htm</u>.

- ⁱⁱ National Institute for Occupational Safety Health
- iii City of San Luis Obispo, Winter Weather Guide
- ^{iv} National Institute for Occupational Safety Health

^{i i}City of San Luis Obispo, Winter Weather Guide



TRANSIT AUTHORITY SOUNTY AREA TRANSIT FLOOD –TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

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- b. A "Watch" alert
- c. A "Warning" is the most urgent announcement

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TRANSIT AUTHORITY SOUNTY AREA TRANSIT REGIONAL TRANSIT AUTHORITY FLOOD – TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

1.0 PURPOSE

ⁱThe primary purpose of this plan is to define emergency management organizational response and coordination in the event of a notice of a tsunami watch, warning, or an occurrence of an actual tsunami along the San Luis Obispo Coastline. The first priority of emergency management is the protection of life, precautionary measures to contain hazardous materials and property.

2.0 GENERAL

A. Tsunamis

Tsunamis are a series of ocean waves generated by vertical movement of the sea floor. The movement is typically caused by earthquake related faulting, but can also result from submarine landslides or volcanic eruptions. San Luis Obispo County could be affected by a tsunami caused by fault related ground displacement on a local, near or offshore fault, or on a more distant fault. The Central Coast of California has recorded few significant damaging incidents. The closest and largest major tsunami was recorded on the Gaviota/Santa Barbara coast and had a run-up of up to 50 feet above sea level. Other local tsunamis have been documented as causing lesser damage to docks, boats and near shore structures.

B. Dam Failures

Although failure of a dam after even a heavy damaging earthquake is unlikely, if a failure occurred, the rush of water and subsequent flood could pose a safety risk and a threat to property. Earthen filled dams predominant in the county are well constructed to survive the maximum credible earthquake from active fault systems.

The local threat of tsunami related damage is primarily confined to lowlying coastal areas less than 50 feet above mean sea level. If the gradient is shallow, tsunami waves can travel upstream into river channels. The primary effects of a tsunami can be widespread destruction and damage to coastal communities.

3.0 SCOPE

- a. To provide an overview of the threats posed by a tsunamis
- b. Define and explain initial organizational responses to the notice of a tsunami watch, warning, or an actual tsunami occurrence
- c. Provide initial response guidance to RTA employees



FLOOD –TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

The effects of a tsunami can range from essentially no damage to heavy damage with fatalities. A moderate to heavily damaging tsunami may cause the following problems:

- a. Mass Injuries
- b. Emergency Medical Services Disruptions, Including Hospitals
- c. Hazardous Materials Releases
- d. Fires
- e. Need for Short Term Evacuations
- f. Utility Disruptions: Gas, Electric, Water, Sanitation
- g. Transportation System Disruptions
- h. Traffic Management Problems
- i. Communication Disruptions
- j. Disease and Health Hazards
- k. Loss of County Resources

4.0 RISK AREAS

The areas most at risk from tsunami impact are those coastal communities, recreation and developed areas below 50 feet above mean sea level. Areas not protected by bluffs, wide beaches, dunes, large manmade structures, distance or other barriers to the tsunami surge and rising water levels are most at risk. Coastal developments most vulnerable to the tsunami hazards are those located near mouths of streams that drain into the Pacific Ocean, such as:

- a. San Simeon Creek in San Simeon;
- b. Santa Rosa Creek in Cambria;
- c. Cayucos Creek, Little Cayucos Creek, Old Creek and Willow Creek in Cayucos;
- d. Morro Creek and Alva Paul Creek in Morro Bay;
- e. Chorro Creek in Morro Bay and the South Bay area;
- f. San Luis Obispo Creek in Avila;
- g. Pismo Creek in Pismo Beach; and
- h. Meadow Creek and Arroyo Grande Creek in Oceano

5.0 FLOODING

In the event of flooding, turn off all electrical equipment in the area.

Turn off the main switch of the circuit breaker serving your area.

DO NOT TOUCH WET ELECTRICAL EQUIPMENT.

Do not attempt to turn equipment on again until the problem is resolved and the equipment is thoroughly dried and checked out.



COUNTY AREA TRANSIT REGIONAL TRANSIT AUTHORITY FLOOD –TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

Regardless of how a flood or flash flood occurs, the rule for being safe is simple: **head for higher ground and stay away from floodwaters.** Even a shallow depth of fast-moving floodwater produces more force than most people imagine. The most dangerous thing you can do is to try walking, swimming, or driving through floodwaters. Two feet of water will carry away most automobiles.

5.1 ALL EMPLOYEES

- a. REMAIN CALM AND STAY IN YOUR WORK AREA
- b. Turn off all electrical appliances to avoid electrocution
- c. Do not touch wet electrical equipment
- d. Do not evacuate unless told to do so by Emergency Coordinator or a responding agency (fire/police)
- e. Do not turn back on any electrical appliances until directed to do so by facility maintenance
- f. Do not use the telephone or elevators
- g. If evacuated, avoid re-entering any building before local officials have said it is safe to do so
- h. Listen to a battery operated radio for information
- i. Stand by to receive directions from RTA Emergency Coordinator or responding agency
- j. If a fire has occurred in the building, evacuate immediately if ti cannot be controlled by using the portable fire extinguishers.

5.2 TRAFFIC DISRUPTION

There could be problems with traffic management and flow as a result of tsunami flooding, a moderate to heavy damaging earthquake, or other damage; such problems might include:

- a. Difficultly in getting out of the area due to debris and damaged roadways/streets.
- b. Difficultly getting rescuers and other vital personnel into areas of extensive damage

6.0 ⁱⁱSANDBAGS

Sandbags can push flowing water around your property rather than through it - which is the objective.

A few tips for using sandbags:

- a. Fill bags only half full.
- b. Fold over the empty top of the bag to prevent sand from leaking out.
- c. Place each bag over the folded top of the preceding bag and stamp each bag into place before placing the next bag.

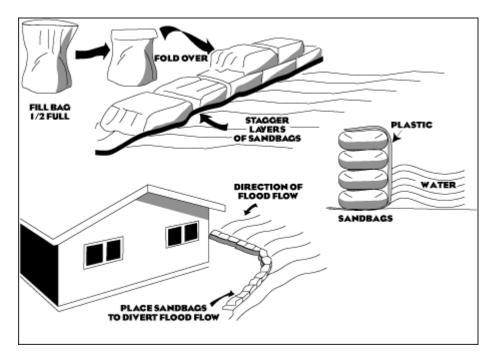


TRANSIT AUTHORITY SOUNTY AREA TRANSIT REGIONAL TRANSIT AUTHORITY FLOOD – TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

- d. Always finish one complete layer of sandbags before starting the next layer
- e. Stagger the second layer of bags, stamping each bag into place before placing on the next bag.

Remember, sandbags have absolutely no effect - or very little, at least - on standing water. And, unfortunately, they can't be prepared ahead of time because, they'll rot.

Allow plenty of time to fill them, which you'll be doing right before or during a storm.



During storm season, sandbags can be filled at four city locations.

SAND BAG INFORMATION	
Where do I buy sand bags?	Where do I fill my sand bags?
Home Depot 596-0857	City Corporation Yard parking lot 25
1551 Froom Ranch Way, SLO:	Prado Road
Farm Supply Co.	Laguna Lake Golf Course parking lot
224 Tank Farm, SLO: 543-3751	11175 Los Osos Valley Road
Pacific Coast Home and Garden	Santa Rosa Park parking lot
2034 Santa Barbara, SLO: 543-2191	190 Santa Rosa Street
	Sinsheimer Park parking Lot
	900 Southwood Drive



TRANSIT AUTHORITY COUNTY AREA TRANSIT REGIONAL TRANSIT AUTHORITY FLOOD – TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

7.0 PREPARATION

"Information Bulletins or Messages" are issued when the earthquake is less than 6.5 in Magnitude and not likely to trigger a tsunami that would result in significant impacts.

- c. An "Advisory" is a message issued when a major earthquake has occurred outside the area issued a Warning and is too far away to issue a Warning or Watch.
- d. A "Watch" is an alert issued to areas outside the areas issued a Warning and is essentially a notification to monitor the situation.
- e. A "Warning" is the most urgent announcement of an imminent tsunami and advises coastal locations in the warned area to prepare for flooding.

San Luis Obispo County will distribute urgent tsunami information through notifications to local public safety contacts and the media and will consider distributing it through use of the Emergency Alert System (EAS).

Additionally, should the immediate public notification of emergency protective actions be necessary, the County Office of Emergency can activate strategic coastal warning sirens to alert the public to tune into local radio and televisions stations for emergency information.

"Attention, attention...this is an Emergency message for the public along the coast of San Luis Obispo County. The National Weather Service has issued a Tsunami Warning. This could cause major flooding and risk to life in low-lying areas along the coast. The County Office of Emergency Services is advising residents, visitors and businesses in any low-lying areas along the coast to evacuate to high ground immediately. This includes areas of San Simeon, Cambria, Cayucos, Morro Bay, Los Osos/Baywood Park, Avila Beach, Shell Beach, Pismo Beach, Grover Beach and Oceano, Evacuate immediately.

8.0 Evacuation

Evacuations may become necessary if tsunami warning or related information is received or the occurrence of an actual tsunami endangers or potentially endangers life or property. Individuals located within an area designated for evacuation will most likely be recommended to evacuate a half-mile inland or to a pre-designated evacuation area. All individuals on beaches, at ocean vista points or traveling next to the coast in low-lying areas will be recommended to go to



REGIONAL TRANSIT AUTHORITY FLOOD – TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

high ground. Depending upon warning time, additional evacuation route information may be provided through the news media.

1) NORTH COAST AND SAN SIMEON EVACUATION PLAN

ROUTE 12

	LOCATION Move To Higher Ground Immediately Are:	EVACUATE TO
a.	All Low Lying Areas of The North Coast	
b.	Hwy 1 Beaches And Ocean Vista Points	USING HWY 1 NORTH
C.	All Areas Of San Simeon State Beach And Pier Area	TO THE HEARST
d.	San Simeon Acres	CASTLE VISITORS
e.	San Simeon State Park Camp Ground And All Private	CENTER OR SOUTH TO
	Residences West Of Hwy I	HWY 46
а.	IF YOU ARE LOCATED IN THE SAN SIMEON STATE	YOU MAY RELOCATE
	PARK CAMP GROUND	ON FOOT TO
		WASHBURN
		CAMPSITES

2) CAMBRIA EVACUATION PLAN ROUTE 12

	LOCATION Move To Higher Ground Immediately Are:	EVACUATE TO
a.	Leffingwell Landing, Moonstone Beach Drive, The Boardwalk, Shamel Park Inluding All Residents On Windsor Blvd, Park Hill And The West Ranch From Coastal Marine Terrace Trail To The Coast.	MOVE TO HIGH
b.	Main St From Hwy 1 To Santa Rosa Creek Rd And Santa Rosa Creek Rd To And Including The High School.	GROUND NOW OR
C.	Burton Drive and All Side Streets between Main St To And Including Village Lane.	LEAVE THE AREA
d.	Marine Terrace between Marlborogh And The Ocean To Ardath, Including Lampton Cliffs County Park And Private Residences At End Of Marlborogh.	USING HWY 1 SOUTH TO HWY 46



3) ESTERO BLUFF AND CAYUCOS EVACUATION ROUTE 12

LOCATION Move To Higher Ground Immediately Are: YOU MAY LEAVE THE AREA USING HWY 1 NORTH TO HWY 46		EVACUATE TO
а.	Estero Bluff Beach Areas And Highway Turnouts	MOVE TO HIGH GROUND NOW OR RELOCATE TO HARMONY
	N Ocean Ave At Hwy 1 To E St From Hwy 1 West, Including Ocean Front Lane, The Pier And The Beach	MOVE TO HIGH GROUND NOW OR
b.	E St From Ocean Ave West And 10th South To Hwy 1 From Cass Ave To The Beach	RELOCATE TO ST. JOSEPHS CHURCH
а.	Obispo/Studio Drive To Chaney Ave From Hwy 1 To The Beach, Including The Areas Of Ocean Ave Between Hacienda And Stuart And The Cemetery	MOVE TO HIGH GROUND NOW IN ADDITION TO MOVING TO HIGH GROUND

4) MORRO BAY EVACUATION

ROUTE 12

	LOCATION Areas Of Morro Bay That Need To Evacuate Or Move To Higher Ground Immediately Are:	EVACUATE TO
а.	North Morro Bay Between Hwy 1 And The Ocean, Including Morro Strand State Park And Beach, Cloisters, Morro Bay High School, Sewage Treatment Plant, Atascadero Rd And Morro Creek.	MOVE TO HIGH GROUND <u>EAST OF</u> <u>HWY 1</u> NOW
b.	All Trailer Parks And Associated Areas On Inland Side Of Hwy 1	
a.	Morro Bay Embarcadero And Morro Rock Area, Including Coleman Beach And Park And Tidelands Park And Boat Launch.	MOVE TO HIGH GROUND EAST OF MAIN ST NOW
b.	Bay Side Of Main St From Olive To State Park	
a.	Morro Bay State Park, Including Marina, Campground And Employee Housing	MOVE TO HIGH GROUND <u>ABOVE GOLF</u> <u>COURSE</u> NOW!



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5) LOS OSOS/BAYWOOD PARK AND MONTANO DE ORO EVACUATION

ROUTE 12

	LOCATION Move To Higher Ground Immediately Are:	EVACUATE TO
a.	All Residents Occupying The Bay Side Of 7th St, Mitchell Inlet Area, Cuesta By The Sea, The Bay Side Of Henrietta, Sunset Terrace And The Downtown Area Of Baywood Park.	MOVE TO HIGH GROUND NOW!
a.	Areas Of Montano De Oro State Park That Need To Evacuate Or Move To Higher Ground Immediately Are:	
а.	Hazard Canyon Area, Spooners Cove, Sand Spit, Horse Camp, Montano De Oro Campground And All Beaches And Bluff Trails.	MOVE TO HIGH GROUND OR RELOCATE TO SAND SPIT PARKING LOT OR PECHO VALLEY RD ABOVE HAZARD CANYON, ISLAY CREEK AND COON CREEK!

CONTINUED



REGIONAL TRANSIT AUTHORITY

FLOOD – TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

LOCATION Move To Higher Ground Immediately Are: Areas Of Port San Luis And Avila Beach That Need To Evacuate Or Move To Higher Ground Immediately Are:		EVACUATE TO	
a.	All Areas of Port San Luis, Including Pier, Beaches And Parking Lots.	MOVE TO HIGH GROUND NEAR UPPER BOAT STORAGE YARD NOW!	
а.	All Of Downtown Avila Beach Area, Including The Beach	MOVE TO HIGH GROUND OR RELOCATE TO CAVE LANDING AND/OR UNOCAL PARKING LOTS!	
а.	Avila Valley Community Properties, Including Mallard Green, Anna Bay, Coffee Berry, Lower Lupine Canyon And Lupine Cyn Intersection East, And All Of The Golf Course.	MOVE TO HIGH GROUND OR RELOCATE TO THE PG	
b.	All Residents And Properties Along Creeks That Flood, Including Sycamore Hot Springs, Avila Barn, Avila Valley Hot Springs, Ocean Canyon Pines Resorts And Avila Beach Drive.	& E COMMUNITY CENTER NOW!	
C.	Hidden Creek Canyon Road And Bellvue Orchard Drive Residents And Bellvue Sante Fe School.		

6) PORT SAN LUIS AND AVILA BEACH EVACUATION



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FLOOD – TSUNAMI – DAM FAILURE & EVACUATION GUIDELINES

	7) SHELL BEACH AND PISMO BEACH EVACUATION		
LOCATION Move To Higher Ground Immediately Are: Areas Of Shell Beach And Pismo Beach That Need To Evacuate Or Move To Higher Ground Immediately Are:		EVACUATE TO	
a.	Indio Drive To The Ocean From Encanto To The End Of Street, Shell Beach Road To The Ocean From Spy Glass To Dinosaur Caves And State Parks North Beach Campground	MOVE TO HIGH GROUND EAST OF HWY 101 NOW!	
a.	Hwy 1 To The Ocean From Franklin To Hinds And Hwy 101 To The Ocean From Hinds To Price Canyon, Including Water Treatment Facility, Base Ball Fields And Mobile Home Park.	MOVE TO HIGH GROUND OR RELOCATE TO JUDKINS MIDDLE SCHOOL NOW!	
a.	JAMES WAY TO THE OCEAN FROM PRICE CANYON TO 4TH STREET	MOVE TO HIGH GROUND OR RELOCATE TO LONGS PARKING LOT ON OAK PARK BLVD NOW!	

	8) GROVER BEACH EVACUATION		
	LOCATION Move To Higher Ground Immediately Are: Areas Of Grover Beach That Need To Evacuate Or Move To Higher Ground Immediately Are:	EVACUATE TO	
а.	Five Cities Drive/El Camino To Margarita From 4th Street to Oak Park Blvd	MOVE TO HIGH GROUND OR RELOCATE TO LONGS PARKING LOT ON OAK PARK BLVD NOW!	
a.	2nd Street to The Ocean, 6th Street To The Ocean From Brighton To Manhattan, And 14th Street To The Ocean From Manhattan To The Pike.	MOVE TO HIGH GROUND EASTWARD	
b	Grand Ave from 2nd Street To Oceano, Including La Sage Riveria.	TOWARDS OAK PARK BLVD. NOW!	

ⁱ San Luis Obispo County – Office of Emergency Planning <u>http://www.slocounty.ca.gov/OES.htm</u>

^{ii ii}City of San Luis Obispo, Winter Weather Guide



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1.0 PURPOSE

This emergency response plan is developed to provide procedures for dealing with a power outage. Establish a coordinated effort between RTA staff and local authorities and provide clear communication in the event of an extended power outage. In an effort to reduce hazards to employees, property and the environment in the event there is an incident involving hazardous waste materials at Regional Transit Authority (RTA).

2.0 SCOPE

This response plan applies to all Regional Transit Authority (RTA) personnel working at any RTA facility or operating any RTA owned vehicle.

3.0 GENERAL

Sudden power outages can be frustrating and troublesome, especially when they last a long time. RTA does not anticipate a risk of hazardous materials release due to a power outage.

In the event of a power outage, confusion can partially be avoided if employees remain calm and await the emergency coordinators decision and announcement regarding the need to evacuate and/or shut down operations. The decision not to evacuate or shut down operations during a power outage is equally important and will be announced to employees to prevent further confusion.

This contingency plan will be implemented in a power outage occurs.

4.0 POWER OUTAGE PROCEDURES

- 4.1 Main Power Supply
 - a. If the main supply of power fails, the facility has an electrical power supply inlet (PIGTAIL) specifically designed to plug in a back-up generator.
 - b. The RTA Emergency Coordinator will begin the process to rent a generator from a local supplier if needed.
 - c. Ensure the portable generator is proper size, installed correctly and operated safely, to prevent sending power back to the electrical lines.
 - d. The RTA Emergency Coordinator will follow the safety guidelines described in **5.0** and **6.0**.

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- **4.2** If You Suspect A Hazardous Materials Situation:
 - a. Look for signs that indicate hazardous materials may be present.
 - b. Do not walk into, touch, or inhale any material.
 - c. Stay uphill and upwind from a suspected release of hazardous materials
 - d. Request assistance or call 9-1-1
- 4.3 Maintenance Employees Are Responsible For:
 - a. Evaluating work areas for hazards created by the outage
 - b. If it is safe to do so, secure hazardous materials and shut down all operations working with hazardous materials
 - c. Shut down bus engines inside the shop. The exhaust air ventilation system will not be working
 - d. Turn-off and unplug non-essential electrical equipment, power tools, computer equipment and appliances. (Keep refrigerators and freezers closed throughout the outage to keep them cool.)
- **4.4** All Administrative and Operation's Employees Are Responsible For:
 - a. Staying clam.
 - b. Remain in place.
 - c. Prepare for an evacuation announcement.
 - d. Turn off all electrical equipment in their work area.
 - e. If visibility is impaired by a low light situation, remain still and wait for direction from your supervisor, emergency coordinator or other authorized personnel.
 - f. If evacuation is ordered and your visibility is impaired by low light situation, wait until someone with a flashlight arrives to direct a safe departure from the building.
 - g. Provide extra assistance to disabled individuals that may be in the building during evacuation.

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- h. Be aware that elevators will not work during a power outage.
- i. Check elevators, bathrooms, office areas, and hallways to ensure no disabled person is without assistance.
- **4.5** The Emergency Coordinator Is Responsible For:
 - a. Informing employees of the situation.
 - b. Verify the cause of the outage or contacting the appropriate city agency when necessary.
 - c. Monitor status contacting the appropriate city agency when necessary.
 - d. Check the fuse box to see if there is a blown fuse or a tripped circuit breaker.
 - e. Determines if a fuse or circuit breaker needs to be replaced, ensures that all electrical equipment is turned off or unplugged before replacing to avoid damage to the electrical system.
 - f. Determines if evacuation is necessary, RTA personnel facilitate the evacuation process.
 - g. Directing the orderly shutdown of operations when necessary.
 - h. Long term power outages, will check with the local water authorities to be sure the water is safe.

5.0 USE OF PORTABLE GENERATOR

- a. The Manager of Maintenance and Facilities or designee will determine if it is necessary to use a portable generator. The manufacturer recommendations and specifications must be strictly followed. If there are any questions regarding the operation or installation of the portable generator, a qualified electrician should be immediately contacted to assist in installation and start-up activities.
- b. If water has been present anywhere near electrical circuits and electrical equipment, turn off the power at the main breaker or fuse on the service panel. Do not turn the power back on until electrical equipment has been inspected by a qualified electrician.

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- c. Be sure that the main circuit breaker is OFF and locked out prior to starting the generator. This will prevent ("backfeed") public utility workers from possible electrocution.
- d. The Manager of Maintenance and Facilities will ensure the portable generator is properly sized. The generator will be stored adjacent to the shop area within a marked area with clear access. Instructions to install the generator correctly and operate safely, to prevent sending power back to the electrical lines will be attached to the generator with breakaway ties.
- e. The generator will be connected to the main server downstairs.
- f. For the Dispatch office and located in the server closet are base radios, two computers, two phones, two radios and temporary lighting. Are the lights located in the server room?
- g. Extension cords and multi-lights plugs will be used to deliver power where needed in the shop area. Stored and marked where?
- h. Extension cords used will be brightly colored and 18" trip cones will be used to prevent slip, trip and fall hazards.
- i. Maintenance will power two flood lights and a temporary air compressor.
- j. Generator fuel tanks are to be kept full while being stored, and extra fuel will be stored in the fuel-safe cabinet in the shop safely tagged "For Generator Use Only." Is it permitted to store the generator without draining the fuel?
- k. The generator should always be positioned outside the structure when in use.
- **6.0** When PG&E power is reestablished, the Emergency Coordinator is Responsible for:
 - a. Notifying on-duty RTA personnel.
 - b. Plugging all items back into wall outlets.
 - c. Return all items to the appropriate storage areas.

gstraw 2/28/12 9:48 AM

Comment: This seems to presume that we own a generator. If we are planning to rent a generator during an extended outage, is this statement necessary?

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7.0 TRAINING

- a. Administration and Operations supervisor personnel will receive initial training on RTA Power Outage Contingency Plan or when hired into the position within those departments.
- b. During a supervisor meeting, Administration and Operations personnel will receive annual refresher training on section 4.4; "All Administrative and Operation's Employees Are Responsible For", RTA Power Outage Contingency Plan.
- c. Maintenance and Facilities personnel will receive initial training on RTA Power Outage Contingency Plan or when hired into the position within that department.
- d. Maintenance and Facilities personnel will receive annual training and hands on application to carry out the duties personnel is responsible to perform outlined in the RTA Power Outage Contingency Plan.

8.0 RTA IS NOT UTILIZING A GENERATOR PLUGGED INTO A BUILDING CIRCUIT

8.1 IN THE EVENT A PORTABLE GENERATOR IS PLUGGED INTO A "HOUSEHOLD" OR BUILDING CIRCUIT THE FOLLOWING PROCEDURES APPLY

PUBLIC UTILITY WORKER SAFETY IN A POWER OUTAGE

When power lines are down, residents can restore energy to their homes or other structures by using another power source such as a portable generator. If the generator is plugged into a "household" circuit, the electrical current could reverse, go back through the circuit to the power grid, and then increase in voltage. If a worker attempts to repair power lines when this happens, the worker could be electrocuted. Following certain safety guidelines can reduce this risk.

When using a portable generator it is important to understand and prevent public electrocutions by undetected feedback of electrical energy.

If the portable generator is improperly sized, installed, or operated, it can send power back to the electrical lines. This problem is called **backfeed** or feedback in the electrical energy in power lines.

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gstraw 2/27/12 5:36 PM

Comment: I am confused by these two statements. Are we saying that we do not have a generator pigtail for emergency power?



 Backfeed can seriously injure or kill repair workers or people in neighboring buildings.

7.1 Effects of Backfeed

The problem of backfeed in electrical energy is a constant risk for electrical energy workers. Electrocutions are the fifth leading cause of all reported occupational deaths.

7.2 USING GASOLINE – AND DIESEL POWERED PORTABLE GENERATORS

When using gasoline- and diesel-powered portable generators to supply power to a building:

Switch the main breaker or fuse on the service panel to the "off" position prior to starting the generator.

This will prevent power lines from being inadvertently energized by backfeed electrical energy from the generators, and help protect utility line workers or other repair workers or people in neighboring buildings from possible electrocution.

If the generator is plugged into a "household" circuit without turning the main breaker to the "off" position or removing the main fuse, the electrical current could reverse, go back through the circuit to the outside power grid, and energize power lines or electrical systems in other buildings to, at, or near, their original voltage without the knowledge of utility or other workers.

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This form is intended to provide an incident investigator team a checklist of items to review, a way to document the investigation process, a way to track the approved follow up process, and a method for top management to review/sign off on the investigation and follow up when completed. It is intended to be used during the formal investigation process by the agency.

Information Reviewed During Investigation:

The formal investigation should have access to all information applicable to the incident. The checklist provides the review reminder. The investigator should check the boxes as they have obtained and reviewed the data noted.

All Causal Factors of this Incident:

This section is very important. The investigation must determine all the factors that caused this incident. Just remember that there is usually more than one cause to an incident. Some examples include, but are not limited to:

- Driver distraction
- Driver did not see the other party
- Passenger stood up before the bus stopped
- · Passenger walked on a slippery surface
- Speed of the bus
- Wheelchair not properly secured
- · Wheelchair passenger refused seat belt
- Driver was looking directly into the sun

Investigator's Recommendation on Preventability:

The accident/incident prevention team is not tasked with determining fault and/or recommending disciplinary actions.

Corrective Action Recommendations:

The investigation should develop recommendations to management to correct the causes of the incident. These recommendations should include, but are limited to:

- Training or Re-training of driver or staff
- New or replacement equipment
- Develop a new or modify existing policy or procedure

Do not be afraid to recommend something "outside the box" as you never know when a great idea will be accepted.

Approval Follow-up Activities:

This area documents the follow-up corrective action activities that are approved by management are listed and tracked to completion. This area will track each activity to ensure everything was done. It will document it for management and others who wanted to ensure corrective action was taken to prevent a repeat of the incident.

General & final Comments:

This area provides optional comment areas as needed.

SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY'S INJURY & ILLNESS PREVENTION PROGRAM

Safety Policy

No function at San Luis Obispo Regional Transit Authority is so critical as to require or justify a compromise of safety and health.

We believe that everyone benefits from a safe and healthy work environment. We are committed to maintaining a safe workplace and to complying with applicable laws and regulations governing safety.

To achieve this goal, the San Luis Obispo Regional Transit Authority (the transit system) has adopted an *Injury & Illness Prevention Program* (the Program). This program is everyone's responsibility as we work together to identify and eliminate conditions, practices, policies and procedures that compromise safety.

To this end, each and every manager, supervisor, and employee has the authority to take action to prevent mishaps.

It takes positive and genuine effort to assure a safe work environment. The alternative is wasted money and wasted time due to occupational injuries and illnesses and their associated pain and suffering.

Our expectations are that everyone will:

- 1. Do the right thing the first time.
- 2. Seek to integrate safety into all tasks.
- 3. Avoid taking short cuts.
- 4. Take time to assure a safe workplace.
- 5. Have a safe and healthy work experience.

Please join me in striving to achieve our ultimate goal of an injury-free organization.

Regional Transit System Manager

Date

Employee Signature

Date

Injury and Illness Prevention Program - Part of the Transit System's System Safety Program Plan (SSPP) Copyright © 2006 & 2007. CalTIP and its members, James E. Emerson and Robert A. Lapidus. All Rights Reserved. This SSPP may only be used by the copyright holders. Any other use of the SSPP is strictly prohibited. Page 1

Responsibilities

1. Regional Transit System Manager

The Regional Transit System Manager is responsible for overseeing that the IIPP is implemented.

Duties include, but are not limited to:

- a. Ensuring all managers actively support the IIPP.
- b. Providing the funding necessary to maintain an effective and compliant safety program.
- 2. Managers and/or Supervisors

Managers and/or supervisors have the responsibility of providing a safe place to work including facilities, equipment, standards and procedures, adequate supervision and recognition for a job done properly. They are responsible for training all of their employees to perform their jobs properly and safely. They teach, demonstrate, observe, and enforce compliance with established safety standards.

3. IIPP Administrator

The IIPP Administrator (the Transit Systems Coordinator or designee) has the responsibility for the implementation, maintenance, and update of this policy.

4. Employees

Employees have the responsibility of performing their tasks properly and safely. They are to assure themselves that they know how to do the job properly, and ask for additional training or assistance when they feel there is a gap in their ability, knowledge, or training. They should never undertake any task, job, or operation unless they are able to perform it safely.

Compliance

1. Management Responsibility

Management is responsible for ensuring that organizational safety and health policies are clearly communicated and understood by employees. Managers and supervisors are expected to enforce the rules fairly and uniformly.

2. Employee Responsibility

All employees are responsible for using safe work practices, for following directives, policies and procedures, and for assisting in maintaining a safe work environment.

3. Performance Evaluations

As part of employees' regular performance reviews, they may be evaluated on their compliance with safe work practices.

4. Employee Recognition

Employees, who make a significant contribution to the maintenance of a safe workplace, as determined by their supervisors, may receive written acknowledgment that is maintained in the employees' personnel files.

5. Employee Training

Employees who are in violation of correct safety and health procedures may be trained or retrained.

6. Employee Correction

Employees who fail to follow safe work practices and/or procedures, or who violate organizational rules or directives, are subject to disciplinary action, up to and including termination. Supervisors correct safety violations in a manner considered appropriate by organizational management.

A suggested pattern for normal correction is as follows.

- a. First Offense The employee is given verbal counseling with documentation in the personnel file.
- b. Second Offense The employee is given a written warning. The documentation outlines the nature of the offense, what action the employee must take to correct the problem, and warns the employee that another violation will result in suspension.
- c. Third Offense The employee may be given a one working day suspension with pay for considering whether s/he truly wants to be part of the organization. If yes, upon return, the employee completes an action plan for correcting his or her behavior, and for working within a positive safety culture. This type of suspension may only be given once for each employee.
- d. Termination When an employee is terminated, specific and documented communication as outlined above must have occurred.

Not withstanding the above, the organization reserves the right to correct in any fashion it deems appropriate, including the right to terminate immediately an employee for a safety violation.

Communication

1. Two-Way Communication

Management recognizes that open, two-way communication between management and staff on health and safety issues is essential to an injuryfree, productive workplace.

2. The Organization's System of Communication

The following system of communication is designed to facilitate a continuous flow of safety and health information between management and staff in a form that is readily understandable.

- a. An orientation program is given to all new employees and includes a review of the *Injury & Illness Prevention Program* and a discussion of policy and procedures that the employee is expected to follow.
- b. The transit system has regularly-scheduled safety meetings where safety is openly discussed by all present. All employees are expected to attend and are encouraged to participate in discussion.
- c. From time to time, written safety notifications may be included with paychecks or are posted on transit system bulletin boards.
- d. Other methods of communicating pertinent health and safety information are used as they are identified.
- 3. Safety Suggestions and Hazard Reporting
 - a. All employees are encouraged to inform their supervisors, or other management personnel of any matter which they perceive to be a workplace hazard, or a potential workplace hazard. They are also encouraged to report suggestions for safety improvement.

This reporting can be done orally or preferably in writing. If done in writing, the notification may be given directly to the supervisor, the

IIPP Administrator, or other management personnel, or placed in a suggestion box, if provided.

- b. An employee may report a hazard, safety suggestion, or other safety problem anonymously.
- c. No employee shall be retaliated against for reporting hazards or potential hazards, or for making suggestions related to safety.
- d. Management reviews all suggestions and hazard reports.

Hazard Identification & Evaluation

Inspection of the workplace is our primary tool used to identify unsafe conditions and practices. While we encourage all employees to continuously identify and correct hazards and poor safety practices, certain situations require formal evaluation and documentation.

1. Safety Inspections

Internal safety inspections are conducted annually for offices and monthly for shops. Hazards found are corrected on the spot or recommendations are submitted for future corrections.

2. Additional Inspections

Inspections are also conducted in accordance with Cal-OSHA requirements:

- a. Whenever new substances, processes, procedures or equipment present a new safety or health hazard.
- b. Whenever management/supervision become aware of a new or previously unrecognized hazard, either independently or by receipt of information from an employee.
- c. Whenever it is appropriate to conduct an unannounced inspection.

Injury/Illness Investigation

1. Investigation

All accidents resulting in injury or property damage are investigated to determine the primary and contributing causes. This investigation is completed within seven working days of the initial report. This information is documented and analyzed to assist in obtaining corrective actions to prevent similar accidents from occurring in the future. The responsibility to see that this investigation is performed rests with the IIPP Administrator.

2. Reporting

All facts, findings, and recommendations are documented on an accident investigation report. Management reviews accident investigation reports with a view towards determining adequacy of corrective action.

Correction of Hazards

When a hazard exists, it is corrected on a timely basis based on the severity of the hazard. If imminent danger exists to any employees, management and supervision remove these employees from the danger at once, and personnel who are provided with the necessary safeguards correct the hazard.

<u>Training</u>

1. Orientation - New Employees

The IIPP Administrator conducts the initial orientation on general safety within the first two days that the new employee is on the job.

2. Initial On-The-Job Training

When an employee first starts to work, a manager or supervisor trains the employee in all aspects of safety. This training is completed to ensure the new employee knows how to recognize the hazards of the work environment and the required safety procedures to mitigate those hazards.

The manager/supervisor conducts this training and documents it. The manager/supervisor and the employee sign off when the training is completed, and this documentation becomes a permanent part of the employee's personnel file.

All new hires are given a copy of the transit system's *Injury & Illness Prevention Program* and those rules and regulations (Code of Safe Practices) that apply to their work environment.

- 3. Specific Organizational-Wide Training
 - a. Disaster Preparedness

This training includes the organization's disaster preparation structure and how the employee fits into the structure, i.e., what the employee is to do under specific circumstances, such as fire, earthquake, medical emergency, and bomb threat. b. First Aid, CPR, and Bloodborne Pathogen Training

Designated employees receive first aid, CPR, and bloodborne pathogen training in accordance with the American Red Cross and/or American Heart Association requirements.

c. Defensive Driver Training

All employees who may drive on transit system business receive defensive driver training not less than every three years. Driving on organization business includes driving organization vehicles as well as personal vehicles.

d. Ergonomics

All employees receive ergonomic training for their specific jobs. As a minimum, each employee receives training on proper lifting techniques and, if necessary, computer workstation design.

- 5. Specialized Training
 - a. Supervisors are trained in their responsibilities for the safety and health of their employees. Such training includes both safety management and technical subjects.

Supervisors are trained in the hazards and risks faced by the employees under their immediate direction.

- b. Managers/supervisors/IIPP Administrator:
 - 1) Determine safety-training needs
 - 2) Implement new training programs.
 - 3) Evaluate the effectiveness of these programs.
- c. In addition, training is provided whenever:
 - 1) New substances, processes, procedures or equipment pose a new hazard and there is a lack of skill or knowledge to deal with the situation.
 - 2) Management, supervision, the IIPP Administrator become aware of a previously unrecognized hazard and there is a lack of skill or knowledge to deal with the hazard.

End

CalTIP/SSPP/SLORTA/IIPP - 2007.doc

Note: Please refer to the SSPP's Introduction, paragraph 5, entitled Notice - Basis for the System Safety Program Plan for the background, parameters, and conditions under which this document was prepared.



NO SMOKING SAFETY PRACTICE

EFFECTIVE DATE: August 2, 2009

SUBJECT: NO SMOKING SAFETY

1.0 PURPOSE

This safety practice provides safe work procedures for the use of lighted and smokeless tobacco products.

2.0 SCOPE

This safety practice applies to all Regional Transit Authority (RTA) personnel, contractors, visitors or any other persons when working for or on the property of RTA.

3.0 POLICY

It is the policy of the Regional Transit Authority to prohibit all uses of lighted and smokeless tobacco products at all RTA owned or operated buildings/facilities by all RTA personnel, contractors, visitors or any other persons.

Further, smoking or the use of smokeless tobacco products is prohibited by this policy in or within twenty (20) feet of doors and/or windows of all RTA owned or operated facilities, vehicles or conveyances; including buses, trolleys, trucks, and cars.

4.0 GENERAL

This safety practice concerns the use of all tobacco products whether cigarettes, cigars, pipes or smokeless.

Pursuant to Division 7 of Title 1, Chapter 32, Section 7597 of the Government Code law related to smoking, effective January 1, 2004.

"No public employee or member of the public shall smoke any tobacco product inside a public building, or in an outdoor area within 20 feet of a main exit,

entrance, or operable window of a public building, or in a passenger vehicle, as defined by Section 465 of the Vehicle Code, owned by the state".

RTA appreciates your cooperation in abiding by this law and the Regional Transit Authority's "No Smoking Practice" and disposing of cigarette butts or smokeless by-product waste in the appropriate places when off property.

Recent studies of environmental tobacco smoke (ETS) have shown consistent and compelling evidence that so called "second-hand" smoke causes health problems for non-smokers.

Exposure to ETS can cause lung cancer, an increased risk of heart disease, and increased respiratory diseases in children. ETS, according to the EPA, contains 4,000 chemicals, 43 of which are known to cause cancer.

To smokers that feel that the no-smoking practice violates their rights, consider this quote from the American Medical Association, "What rights do smokers have? Smokers have the same fundamental rights that are enjoyed by all employees, but when they intrude on the rights of others to a safe, healthful environment, the rights of the nonsmoker prevail."

Please Note: Each employee gets the same amount of break time; smokers are allowed no additional time to accommodate the use of lighted and/or smokeless tobacco products.

5.0 SAFETY INSTRUCTIONS

The use of lighted and smokeless tobacco products by all RTA personnel, contractors, visitors or any other persons is always <u>prohibited</u> as follows:

- All RTA owned or operated buildings/facilities and grounds inclusive of 179 Cross Street, the SCAT facility, the SBDAR facility and any and all remote parking areas where RTA vehicles are housed (including RTA-controlled employee parking areas);
- Indoors of any RTA building or facility;
- In or within twenty (20) feet of doors and/or windows of all RTA owned vehicles or conveyances including cars, vans, trucks, buses and trolleys;
- In any area posted "NO SMOKING;"
- At or near any fueling operation;
- At or near any fuel or natural gas piping or tanks;
- At or near any hazardous waste storage areas;
- At or near any vehicle battery charging area;

- Near any solvents or other flammable materials;
- Near any spray painting or coating operation;
- At or near any combustible materials;
- At or near any vehicle engine rebuilds;
- In any storeroom or warehouse;
- At or near any aerosol spray cans or other chemical containers;
- In any other area where there is any possibility of combustion.

Smoking materials (i.e., cigarette butts or tobacco by-product) must be properly disposed of in ash trays or other containers designed for their receipt. Tobacco debris is not to be randomly disposed of on the ground or on asphalt or concrete surfaces.

6.0 **RESPONSIBILITY**

It is the responsibility of the manager/supervisor to ensure that the provisions of this safety practice are strictly followed.

Tobacco users are responsible to follow the provisions of this safety practice.

7.0 RECORDKEEPING

All records pertaining to this safety practice will be maintained by the Manager, Safety and Training.



Objective:

E: To bring together employees from each department in a non-adversarial, cooperative effort to promote safety, communicate concerns and submit suggestions in all areas at RTA for all employees.

Employee Suggestion Committee:

1. The Safety Resource Committee is made up of department representatives, and chaired by the Manager, Safety & Training. Representatives typically serve for one year. The director/manager/lead supervisor makes appointments of the representatives from their department. Bus Operators and Mechanics may apply based on established criteria; or qualified applicants may be selected by a random draw.

The members are:

- Manager Operations
- Manager, Safety & Training
- Manager Maintenance
- Maintenance Supervisor
- SCT Lead Supervisor
- SCT Bus Operator

- Account Grant Administrator
- RTA Bus Operator
- RTA Para-transit Bus Operator
- RTA/ Paso Bus Operator
- Administrative
- Administrative
- 2. The committee regularly meets bi-monthly on the second Wednesday at 9 AM at a location determined by the Manager, Safety & Training. If any member is unable to attend a scheduled meeting, they should notify their supervisor so that an alternate may be sent in their place.
- 3. One week prior to each meeting the Manager, Safety & Training will send a reminder to all committee members as to the date and time of the next meeting.
- 4. The Manager, Safety & Training will prepare and make copies of an agenda and make copies of the previous meeting minutes to bring to each meeting. A template of the agenda and Word documents of all previous meeting minutes (beginning June 2010) can be found on the public G drive/ folder/ Safety Resource Committee.
- 5. The Manager, Safety & Training will chair the meeting by ensuring: attendance is taken, previous meeting minutes are reviewed and updated, each member is allowed to introduce new items, results of any inspections and/or inspections performed the previous month are reviewed. The committee is updated on any follow-up items and the focus of the meeting stays on the topic of safety, communicated concerns and submitted suggestions or health. The Manager, Safety & Training will also attempt to ensure meetings do not last longer than 2 hours.
- 6. At the conclusion of each meeting the Manager, Safety & Training shall thank the members for their participation.
- 7. Within 2 weeks after each meeting the Manager, Safety & Training will prepare the minutes of the meeting, send a draft to all committee members by e-mail or hard copies placed in employee mail slots, and allow 1 week for comments, corrections and suggestions. After the review period, the minutes shall be e-mailed to all RTA employees and hard copies shall be posted in areas where employees normally gather.
- 8. Following each meeting the Manager, Safety & Training will address or coordinate with the representative(s) all items needing follow-up prior to the next scheduled meeting.
- 9. Prior to newly appointed representatives attending their first committee meeting they will

Macintosh HD:CTC And Associates:Caltrans:DOE Heavy Duty Mechanics:Appendices:Appendix C.16 - SLORTA - Objectives - Employee Suggestion Committee July 2013.Docx July 2013 Pa



meet with the Manager, Safety & Training for an introductory meeting.

10. Suggestion Form Routing:

SCT

- a) Suggestions go to SCT Lead Supervisor (unless operator needs HR confidentiality)
- b) SCT Lead Supervisor logs the suggestion
- c) SCT Lead Supervisor copies Manager of Safety & Training and Operations Manager
- d) SCT Lead Supervisor (and/or team) takes timely action (ASAP)
- e) SCT Lead Supervisor writes response for Operations Manager review
- f) SCT Lead Supervisor issues response and copies the employee's file
- g) Provide a respectful follow through which tells our operators they make a difference and we care

RTA

- a) Suggestions go to Manager of Safety & Training (unless operator needs HR confidentiality)
- b) Manager of Safety & Training logs the suggestion
- c) Manager of Safety & Training copies appropriate department
- d) Team (department) takes timely action (ASAP)
- e) Team (department) leader writes response and gets it reviewed
- f) Team (department) leader issues response and copies the employee's file
- g) Provide a respectful follow through which tells our operators they make a difference and we care



The Safety Awards and Employee Recognition Program assist Regional Transit Authority (RTA) and South County Transit (SCT) to recognize employees and celebrate their success. It not only saves RTA/SCT money; it is also good for business when professional employees demonstrate good judgment, courtesy, exceptional customer service skills, reliability and proper defensive driving and safe working skills.

Safety Awards and Employee Recognition incentive programs keep employees involved with RTA/SCT. The simplest and easiest way to recognize a job well done is to say "Thank you", so never miss the opportunity to acknowledge someone's good work. Employee Recognition and Safety awards are terrific ways to reward RTA/SCT employees. It takes the individual commitment of each employee to ensure the safety of his own life as well as the lives of co-workers, customers and the public.

I. POLICY

With this policy RTA/SCT will recognize and reward employees for continuous superior employee performance and safety that is a major and integral element of the performance of the employees' job duties.

II. PURPOSE

The Employee Recognition and Safety Award Programs are designed to encourage employee performance, safety and awareness to support RTA/SCT operations, maintenance and driver training improvement programs.

SAFETY AWARDS

III. SAFETY AWARD ELIGIBILITY BUS OPERATORS & MAINTENANCE

The <u>Safety Award</u> Year is based on a <u>Fiscal Year</u> beginning on July 1 and ending on the following June 30th to coincide with the RTA/SCT budget year.

To be eligible for an award, an employee must permanently occupy a position that requires regular operation (driving) of a transit motor vehicle as a major and integral performance of their job duties. Also included are employees such as, but not limited to, fleet mechanics and bus washers.

ELIGIBILITY CRITERIA

To qualify for a safety award, eligible employees must meet the following standards:

- A. No write-up for any safety violations
- B. Complete one year of driving or work performance with no preventable (atfault) accidents or injuries during the entire recommendation period RTA/SCT



Management Accident Committee will determine when an accident is preventable or non-preventable

- C. No traffic citations outside of work in personal vehicles or while on duty, and score no points on their Motor Vehicle Record in the award year
- D. Remain on RTA/SCT payroll throughout the entire recommendation period
- E. Operate or maintain an RTA/SCT transit vehicle(s)
- F. Full-Time employees have driven/worked at least 1700 hours during the award year in addition to meeting all of the above criteria for that award period
- G. Part-Time or casual employees have driven/worked 960 hours during the award year in addition to meeting all of the above criteria for that award period

A Preventable vehicle/work accident is one where the bus operator/employee did not take all reasonable precautions to prevent the accident. A non-preventable vehicle/work accident is one that occurs in spite of all reasonable precautions taken by the bus operator/employee to prevent the accident.

An employee who drives or works without a preventable accident during the award year, but fails to work the required full time or part time hours due to a temporary assignment or work absences is not eligible for a safety award.

After receiving an award if an employee is not eligible for a future safety award year, the employee will lose safety credit for that award year only, but will not lose the safety record previously accumulated. The employee must then meet the eligibility criteria the following award year to earn the next safe driver/employee safety award.

IV. SAFETY AWARD

Safety Awards reward bus operators and employees who experience accidentfree driving and work performance for a minimum of one year.

- A. New bus operators are presented with a personalized six-month Safe Driving Certificate presented at the Employee of the Quarter B-B-Q.
- B. Qualified employees can earn safety awards each year, starting with a safety award package to include a personalized certificate and lapel pin.
- C. Yearly Safety Awards are presented at the Annual RTA/SCT "Safety Day" with management providing a breakfast and lunch for all employees on Safety Day occurring within the first two weeks of August.
- D. Award winners are publicized through RTA/SCT internal communications Website and employee bulletin boards.
- E. **Safety Awards** increase in value at five-year intervals to encourage continuous years of accident-free driving or work performance:



- 1) At each five (5) year interval the employee is recognized at a Board meeting with an award presentation from the Executive Director and a series of press releases to RTA/SCT media friends leading up to the Board meeting.
- 2) A personalized certificate and lapel pin.
- 3) At each five (5) year interval the employee(s) name(s) are engraved on a perpetual safe driver and maintenance employee safety plaque displayed prominently on the wall in the employee lunch room.
 - a) **5-YEAR** receives a \$150.00 check and section E, numbers 1-3.
 - b) **10-YEAR** receives a \$250.00 check; employee and a guest are invited to a recognition luncheon by the management team and one paid vacation day off and section E, numbers 1-3.
 - c) **15-YEAR** receives a \$350.00 check; personal plaque, employee and a guest are invited to a recognition luncheon by the management team and one paid vacation day off, and section E, numbers 1-3.
 - d) **20-YEAR** receives a \$450.00 check; personal plaque, employee and a guest are invited to a recognition luncheon by the management team and one paid vacation day off, and section E, numbers 1-3.
 - e) **25-YEAR** receives a \$550.00 check; personal plaque, employee and a guest are invited to a recognition luncheon by the management team and one paid vacation day off, and section E, numbers 1-3.
 - f) **30-YEAR** receives a \$1,000.00 check; personal plaque, employee and a guest are invited to a recognition luncheon by the management team and one paid vacation day off, and section E, numbers 1-3.

EMPOYEE RECOGNITION PROGRAM

V. EMPLOYEE OF THE QUARTER

Employee Recognition Program year is based on a <u>Calendar Year</u> beginning on Jan. 1 and ending the same year on Dec. 31, awarded to a group of four (4) employees per year.



ELIGIBILITY CRITERIA

Final selection of all nominees will consider their overall performance including safety, discipline, and attendance records.

AWARD

- A. A certificate
- B. Lapel pin
- C. \$200.00 check
- D. Shirt embroidered with "Year and Employee of the Quarter"
- E. Recognition at a Board meeting with an award presentation from the Executive Director and a series of press releases to RTA/SCT media friends leading up to the Board meeting.

VI. ELITE EMPLOYEE(S) OF THE YEAR

To be selected from the entire list of Employee of the Quarter nominees. There can be any number of employees selected for this award as long as the employee(s) meet the eligibility criteria.

ELIGIBILITY CRITERIA

- A. Perfect attendance as defined in the Collective Bargaining Agreement
- B. No write-ups for any reason
- C. Commendations recipient
- D. No preventable accidents or injuries
- E. No traffic citations outside of work in personal vehicles or while on duty, and score no points on their Motor Vehicle Record during the entire recommendation period
- F. Full-Time employees have driven/worked at least 1700 hours during the award year
- G. Part-Time or casual employees have driven/worked 960 hours during the award year

AWARD

- A. Lapel Pin
- B. Certificate
- C. Jacket embroidered with "Year and Employee of the Year"
- D. Recognition at a Board meeting with an award presentation from the Executive Director and a series of press releases to RTA/SCT media friends leading up to the Board meeting.
- E. Employee name engraved on a perpetual Employee of the Year plaque displayed prominently on a wall in the employee lunch room.



VII. RESPONSIBILITIES

Responsibilities for the Safety Awards and the Employee Recognition Program are established as follows:

1. EMPLOYEE RECOGNITION PROGRAM

- A. Committee will review departmental award recommendations for eligibility and compliance with established criteria.
- B. Follow quarterly/annual employee recognition check list.
- C. Departments may also be requested to submit other pertinent driver/employee records to help in determining eligibility for awards.
- D. Provide for the purchase of employee awards in the operating budget.

2. SAFETY AWARDS- MANAGER SAFETY AND TRAINING

- A. Administer the Safety Awards Program.
- B. Review departmental award recommendations for eligibility and compliance with established criteria. Send list of employees to Manager of Operations and Maintenance.
- C. Provide employee safety award certificates, lapel pins, check(s), and plaques as appropriate for employee presentations.
- D. Submit recommendations for safe driver awards to RTA Director of Finance by **July 8** of each year for the fiscal year completion date of June 30th. Departments may also be requested to submit other pertinent driver/employee records to help in determining eligibility for awards.
- E. By July 8 establish a date to host the Annual RTA/SCT "Safety Day" occurring within the <u>first two weeks of August.</u> Organize with management to provide a breakfast and lunch for all employees and for the presentation of the Safety Awards.
- F. Provide for the purchase of awards in the Safety and Training budget.



EMPLOYEE SUGGESTION FORM

RTA and SCT employees, please submit any and all suggestions regarding Operations, Safety, Security, Maintenance, Facilities, Training, Scheduling, Marketing, Human Resources, or any other areas of concern to management personnel with this form. Please make your observations and suggestions as specific as possible. For example, if you have a run time adjustment, include route, direction, bus stops, times, etc.

The forms should be submitted to the RTA Manager of Safety and Training, SCT, RTA Dispatcher or Supervisor. However, if the content is confidential, then please have the form sealed and deliver it by hand to Human Resources. The form will be forwarded to the appropriate employee or committee for evaluation and response.

Descriptior	n:	
Suggestion	ns for improvement:	
Use addition	nal pages or use back of form if needed.	
Print Name ((optional):	Date:
Return to:	<u>RTA</u> -Patricia Grimes, Manager of Safety and Training Phone: 781-4836, Fax: 781-1291, email: <u>pgrimes@slorta.or</u> <u>SCAT</u> - Coleen Kubel, Operations Supervisor Phone: 481-7801, Fax 481-3026, email: <u>ckubel@slorta.org</u>	g
Routing:	Operations Maintenance Human Resources Finance/Adn	nin

Note: Employees are required to inform management of any unsafe work practice or unsafe working Condition. RTA/SCAT will not take any action against an employee who participates in health and safety communications. *Injury and Illness Prevention Program (8CCR, Section 3202)* Location: Z:\FY 12-13\Forms Revised May 2014