

**City of Houston
Health and Safety
Program Evaluation**

for

Department of Public Works
and Engineering

Prepared By:
Aon Risk Services, Inc



CONFIDENTIAL AND PRIVILEGED



TABLE OF CONTENTS

Executive Summary

Evaluation Statement

Scoring

Evaluation Data Sheet

Health and Safety Program Evaluation Profile

Audit Questionnaire

I. Management Support and Leadership

II. Medical Program

III. Accident Recording System

IV. Employee Orientation

V. Department Supervision



VI. Safety Committees

VII. Specialized Training

VIII. Accident Investigation

IX. Department Hazard Evaluation

X. Safety Communication

XI. Occupational Illness Analysis

XII. Emergency Preparedness

XIII. OSHA Standards

XIV. Motor Vehicles

XV. Field Observations



EVALUATION STATEMENT

The purpose of the Health and Safety Program evaluation is to provide a basis for each department to establish or reinforce its own program.

Loss prevention is a key ingredient in your overall risk control program. Being able to identify hazards unique to your department will enable you to build your program with the ultimate goal of reducing the costs and frequency associated with occupational injuries.

Completion of this program will indicate those strong areas of your health and safety program and will also show those areas that need additional attention to make your program complete.

This Aon Global Risk Consulting's evaluation is purely advisory and intended to assist our clients in health and safety procedures. The adoption and implementation of changes is the responsibility of the client. Observations of Aon Global Risk Consulting are based on practices and conditions observed, and information provided at the time of our visit. They do not imply or guarantee compliance with local, state or federal regulations applicable to such practices and/or conditions.

SCORING

The scoring of the health and safety evaluation profile is based on a percentage scale. The scale is zero to two, with zero being the lowest possible score and two being the highest. The zero represents the range of zero to forty-nine percent or none complete. The one represents a score between the fifty and ninety-ninth percent. The two represents a score of one hundred percent or exceptionally done.

All Aon Global Risk Consulting' inspections, reports and recommendations are purely advisory and for the purpose of assisting clients and insureds in risk control and safety procedures. Observations and recommendations are the result of practices and conditions observed and information made available to us at the time of our visit and do not purport to refer to or guarantee compliance with local, state or federal regulations which may be applicable to such practice and conditions. This report should not be considered a definitive listing of all existing hazards nor an absolute solution to all indicated hazards. No responsibility for the implementation, management and operation of risk control and safety procedures is assumed by Aon.

EVALUATION DATA SHEET

Date Evaluated:	April 27-29 & May 4-5, 2009
Department/Location Name and Address:	Public Works Department
Present Employee Count:	3,900
Contact's Name:	Dana Doan
Contact's Title:	Human Resources Safety Supervisor
Contact's Phone:	713-837-9303
Evaluation Performed By:	Nancy Bendickson, CSP, CDS, ARM, ALCM

HEALTH AND SAFETY PROGRAM EVALUATION PROFILE

Description	Elements	Possible Points	Actual Points	Score %
I. Management Support and Leadership	10	28	25	89%
II. Medical Programs	8	20	18	90%
III. Accident Recording System	4	14	14	100%
IV. Employee Orientation	5	12	12	100%
V. Department Supervision	7	18	15	83%
VI. Safety Committees	7	14	14	100%
VII. Specialized Training	3	54	54	100%
VIII. Accident Investigation	8	18	18	100%
IX. Department Hazard Evaluation	9	24	23	96%
X. Safety Communication	5	10	10	100%
XI. Occupational Illness Analysis	8	22	22	100%
XII. Emergency Preparedness	12	36	36	100%
XIII. OSHA Standards	13	122	99	81%
XIV. Motor Vehicles	8	14	14	100%
TOTALS	107	406	374	92%

I. MANAGEMENT SUPPORT AND LEADERSHIP

(28 Points)

	Points	
	Possible	Actual
1. Does the department have a published safety policy?	2	2
2. Is it signed by a member of top management?	2	2
3a. Is there a full-time or <u>part-time person</u> responsible for safety? Full time – 25 people If part-time, what other duties does this person have?	2	2
4. How frequently does the senior leadership, manager, director, etc., perform safety inspections at your location? Monthly (2 pts.), Quarterly (1 pt.) or Less than Quarterly (0 pts)	2	2
5a. Is there a Department Safety Committee?	2	2
5b. If yes, how often do they meet? Monthly (2 pts.), Quarterly. (1 pt), or Less than Quarterly (0 pts)	2	2
5c. Are any of the top management officials' members of the safety committee?	2	2
5d. Is the committee task driving? i.e. find way to improve processes	2	2
6a. Does top management receive reports on safety performance activity?	2	2
6b. How often? Monthly (2 pts.), Quarterly (1 pt) or Less than Quarterly (0 pts)	2	2
7. Does top management visibly display their support for the safety program? Briefly explain: Executive Safety Committee established for department	2	2
8. Are there written standards concerning what management's responsibility should be in relationship to the safety/loss control program?	2	2
9. Is safety/loss control accountability clearly defined in job descriptions of management personnel? <i>Did not find safety clearly defined in job descriptions of managers</i>	2	0
10. Have all responsible individuals been provided a copy of this, and are they held accountable? <i>Accident prevention plan has safety accountabilities outlined and safety addressed in performance evaluations.</i>	2	1

II. MEDICAL PROGRAM

(20 Points)

	Points	
	Possible	Actual
1. Are prospective employees given a post-offer health examination?	2	0
2. Do you have an RN/LPN on duty? HR department has – 1FT/1PT	2	2
3. Have any supervisors/employees received certified first aid training? If yes, how many? When does the certification expire?245	2	2
4a. Have first aid facilities been established by a medical doctor and/or hospital/clinic?	2	2
4b. Have standing orders been provided and issued to the RN or LPN? Concentra Clinic	2	2
5. Is access to first aid supplies controlled and a first aid log maintained? No log kept	2	0
6. Are first aid supplies updated as to their shelf life? First aid kits supplied in trucks/shops First aid supplies approved by Medical Director	2	2
7. Are the services of a medical doctor retained? Yes	2	2
8a. Are annual health examinations given to any employees or employee groups? – yes <i>based on job category- those that wear respirators /do confined space entry</i>	2	2
8b. If yes, are procedures established to ensure that all employees subject to the physical actually get one?	2	2

III. ACCIDENT RECORDING SYSTEM

(14 Points)

	Points	
	Possible	Actual
1a. Is there an injury recording system being completed?	2	2
1b. Are injuries discussed with the other employees?	2	2
2a. Is someone in charge of the Workers' Compensation/claims program? If yes, title: Mary Ivanhoe, Division Manager – Case Management Section	2	2
2b. Have proper claims management techniques been implemented?	2	2
3a. Are frequency and severity rates computed for your department?	2	2
3b. If yes, indicate what the most recent rates are and how often are they calculated? Monthly (2 pts), Quarterly (1 pt) or Less than Quarterly (0 pts)	2	2
4. Does top management receive periodic analysis reports? If yes, please indicate their name(s) and title(s)? Various directors, deputy directors throughout public works departments	2	2

IV. EMPLOYEE ORIENTATION

(12 Points)

		Points	
		Possible	Actual
1.	Is there a formal safety orientation program for new employees?	2	2
2.	Is a specific individual responsible for new employee safety orientation? Title: <i>HR/Department Trainer/Supervisor/ Employees for OTJ training</i>	2	2
3a.	Is there a published booklet listing established safety rules and regulations? <i>Online</i>	2	2
3b.	Is this booklet reviewed with all new employees (including office and shop) during orientation? <i>Yes</i>	2	2
4.	Do supervisory personnel have department checklists concerning particular department hazards which must be pointed out to the new employee upon her/his arrival? <i>SOP's</i>	2	2
5.	Is the new employee evaluated periodically on her/his safety performance? If yes, please indicate how: <i>Done at 5 months part of performance plan evaluation</i>	2	2

V. DEPARTMENT SUPERVISION

(18 Points)

		Points	
		Possible	Actual
1.	Have supervisory personnel ever received any formal safety/loss control training? i.e. OSHA 10 hour, 30 hour CAPS leadership program, NSC Supervisor Safety, AP2-2 training If yes, indicate subject covered and date: various dates	2	2
2.	Do supervisory personnel conduct the job training of all new employees?	2	2
3.	Do supervisory personnel use an employee contact program or five-minute safety talks to communicate safety to employees? Tailgate meetings- minimum every 2weeks	2	2
4a.	Are supervisory personnel required to make periodic hazard identification inspections of their department? Done by safety representatives, supervisors typically not involved	2	0
4b.	If yes, how frequently is this done? Monthly (2 pts), Quarterly (1 pt), or Less than Quarterly (0 pts)	2	2
5a.	Is a written report made of their inspection findings? If yes, to whom: Safety Section- David Buster, Division Manager	2	2
5b.	Is the inspection followed up routinely? Monthly review, written reports document action taken - 30-60-90 day follow-ups	2	2
6.	Are staff supervisors evaluated and held accountable for their department safety performance? If yes, how: # injuries/# vehicle accidents, following case management workability guidelines, holding tailgate meetings, do incident investigations Could get field supervisors to be responsible for periodic field safety inspection and get supervisors in plants –water/wastewater treatment to be responsible for validating safety hazard identification correct in SOP, assist with developing SOP with safety representative, and participate in periodic facility inspection with safety representative, also report and investigate “near-miss” incidents	2	1
7.	Have supervisory personnel been trained in how to investigate accidents and make meaningful reports?	2	2

VI. SAFETY COMMITTEES

(14 Points)

		Points	
		Possible	Actual
1.	Do you presently have any active safety committees at your department? If no, please indicate if there ever has been and why it was disbanded:	2	2
2.	What types of safety committees are presently active at your department? <input checked="" type="checkbox"/> Executive Safety Committee for senior management <input type="checkbox"/> Departmental Safety Committee <input checked="" type="checkbox"/> Group Safety Committee have employee safety committee with representatives from various public works divisions <input type="checkbox"/> Management/Employee Safety Committee <input type="checkbox"/> Other (explain briefly)	2	2
3.	Are minutes taken and distributed for each safety committee meeting?	2	2
4.	Can employees volunteer to serve on the safety committee? Elected by peers	2	2
5.	Are safety committee members rotated on/off on a regular basis?	2	2
6.	Can you list some of the accomplishments of the safety committee for the past year?	2	2
7.	Are goals established for the safety committee?	2	2

Accomplishments: obtaining signs warning that mowers are working ahead, increasing number of signs for high speed work zones, and documenting action taken on safety suggestions submitted by safety representatives via minutes

VII. SPECIALIZED TRAINING

(54 Points)

				Points	
				Possible	Actual
1.	Has an inventory been made of job procedures to determine those with high risk potential requiring special training?			2	2
2.	What types of safety training are given at your department?				
	<input checked="" type="checkbox"/> Forklift Training	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Lifting Protect Your Back	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Hoist Safety	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Trench/Shoring Flagging, Chain saw, Chlorine training, etc HazWoper-40 hour, 32 hour, & 8 hr refresher training	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Confined Space	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Hazard Communication	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Accident Investigation	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Lockout/Tagout	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> First Aid/CPR	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Personal Protective Equipment	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Emergency Evacuations	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Bloodborne Pathogens	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Hearing Conservation	0 pts	1 pt 2 pts	2	2

Public Works Department offers many specialized classes based on job classification

VII. SPECIALIZED TRAINING

(54 Points)

				Points	
				Possible	Actual
3.	For each category of specialized training given at your facility, can you indicate the person giving the training and date? Yes have training database				
	Forklift Training	0 pts	1 pt 2 pts	2	2
	Lifting	0 pts	1 pt 2 pts	2	2
	Hoist Safety	0 pts	1 pt 2 pts	2	2
	Trench Shoring, Flagging, Chain Saw, Haz Woper	0 pts	1 pt 2 pts	2	2
	Confined Space	0 pts	1 pt 2 pts	2	2
	Hazard Communication	0 pts	1 pt 2 pts	2	2
	Accident Investigation	0 pts	1 pt 2 pts	2	2
	Lockout/Tagout	0 pts	1 pt 2 pts	2	2
	First Aid/CPR	0 pts	1 pt 2 pts	2	2
	Personal Protective Equipment	0 pts	1 pt 2 pts	2	2
	Emergency Evacuations	0 pts	1 pt 2 pts	2	2
	Bloodborne Pathogens	0 pts	1 pt 2 pts	2	2
	Hearing Conservation	0 pts	1 pt 2 pts	2	2

Public Works has a computerized tracking system for all training. Database contains dates of training, topic, attendee names and instructor. Randomly selected topic for training and found documentation that training was done. Verbally confirmed that training done for each of these topics listed above

VIII. ACCIDENT INVESTIGATION

(18 Points)

		Points	
		Possible	Actual
1.	Do you have an accident investigation procedure?	2	2
2.	Are supervisors held accountable for the investigation of on-the-job accidents?	2	2
3.	Is follow-up made to ensure that causes of accidents are correctly identified and that corrective action has been taken? Yes via safety section management team and working with department management to get action taken If yes, who is responsible: see above	2	2
4.	Has a system been set up to investigate and correct situations which almost or could have caused an accident (near misses)? Track green/blue safety suggestions cards, followed up in safety committee and tailgate meetings	2	2
5a.	Does the safety committee help investigate or reviewing on-the-job accidents?	2	2
5b.	Are loss trends identified and acted upon?	2	2
6.	Is there an active job safety analysis (JSA) program at your department? Safety reps do JSA's and these used to help develop the SOP, saw many revised/newly developed JSA's at water treatment facility	2	2
7.	Are accident-repeaters identified so further training can be scheduled?	2	2
8.	Do any management members receive and review all accident reports?	2	2

X. SAFETY COMMUNICATION

(10 Points)

	Points	
	Possible	Actual
1. Are safety awards or other forms of incentives given to deserving employees for safety achievements? <i>Each division has budget for safety incentives- varies by division, could include safety certificates, safety team of year or employee of year, lunches, etc.</i>	2	2
2. Do you have an in-department newspaper or newsletter? On website- email links provided to divisions	2	2
3. Do you have a safety suggestion system? Green & blue cards, turned in by safety committee representative or to a supervisor	2	2
4. Do you use any of the following in your safety communication program? <input type="checkbox"/> Employee-of-the-Month Program <i>varies by division has included bulletin board, employee of month, posting minutes of safety committee</i> <input type="checkbox"/> Bulletin Board Safety Displays <input type="checkbox"/> Contests <input type="checkbox"/> Posters <input type="checkbox"/> Other (post copies of safety minutes)	2	2
5. Are you a member of the National Safety Council, ASEE, or any other safety organizations? If yes, please specify: ASSE, NSC, + several others -each safety rep. can choose a safety organization to join	2	2

XI. OCCUPATIONAL ILLNESS ANALYSIS

(22 Points)

		Points	
		Possible	Actual
1.	<p>Can you identify any potential health hazards in your department?</p> <p><input checked="" type="checkbox"/> Noise</p> <p><input checked="" type="checkbox"/> Chemicals/Solvents</p> <p><input checked="" type="checkbox"/> Respiratory Exposure</p> <p><input checked="" type="checkbox"/> Confined spaces</p> <p><input checked="" type="checkbox"/> Excavations</p> <p><input checked="" type="checkbox"/> Heat Stress</p> <p><input checked="" type="checkbox"/> Other (specify) TB, Meningitis</p>	2	2
2.	<p>Does your department perform periodic industrial hygiene tests for these hazards?</p> <p>If yes, for what substances? TB, Noise, meningitis, air quality studies – IH performed by HR Safety department</p>	2	2
3.	<p>Have steps been taken to address exposures identified as needing attention by the industrial hygiene tests? <i>Yes, varies by exposure but safety section puts action plan together to address issues</i></p> <p>If yes, please describe: see above</p>	2	2
4.	<p>Does your department maintain a file for records of industrial hygiene tests for known employee exposures?</p>	2	2
5a.	<p>Are any employees or group of employees given health examinations due to potential exposures to any suspected or confirmed health hazards such as hearing or respiratory?</p> <p>If yes, what type of examination? <i>Pulmonary function/health questionnaire for confined space entry workers or other employees required to wear respirators</i></p>	2	2
5b.	<p>Is their record documented? <i>Yes</i></p>	2	2
5c.	<p>Are the employees advised of the results of such examination? <i>At direction of Medical Director- Dr. Conti</i></p>	2	2
5d.	<p>Is this activity tracked to assure all employees are examined annually, who are required?</p>	2	2
6.	<p>What types of personal protective equipment are required at your department?</p> <p><input checked="" type="checkbox"/> Safety Shoes</p> <p><input checked="" type="checkbox"/> Safety Glasses</p> <p><input checked="" type="checkbox"/> Face Shields</p> <p><input checked="" type="checkbox"/> Hearing Protection</p> <p><input checked="" type="checkbox"/> Gloves</p> <p><input checked="" type="checkbox"/> Specialized Clothing - electrical exposure – must wear cotton</p> <p><input checked="" type="checkbox"/> Respirators</p> <p><input type="checkbox"/> Other</p>	2	2
7.	<p>Are training programs in place for the above-checked personal protective equipment?</p>	2	2

8. Is a disciplinary system used to enforce the use of personal protective equipment? <i>PPE is listed on matrix for discipline</i>	2	2

XIII. OSHA STANDARDS /BEST PRACTICES

(122 Points)

				Points	
				Possible	Actual
1.	Hazard Communication Standard				
	Have the following elements been completed?				
	<input checked="" type="checkbox"/> Chemical Inventory	0 pts	1 pt	2 pts	
	<i>Outdated chemical inventories found in several divisions. Policy states it must be updated annually.</i>				
	<input checked="" type="checkbox"/> Material Safety Data Sheets (MSDSs)	0 pts	1 pt	2 pts	
	<i>MSDS books contained data sheets from 90's and early 2000, need to be reviewed and non-current data sheets removed/stored per city policy</i>				
	<input checked="" type="checkbox"/> Employee Training	0 pts	1 pt	2 pts	
	<input checked="" type="checkbox"/> Written Program	0 pts	1 pt	2 pts	
	<input checked="" type="checkbox"/> Labeling	0 pts	1 pt	2 pts	
2.	Lockout/Tagout Standard				
	Have the following elements been completed?				
	<input checked="" type="checkbox"/> Written program for isolating energy- part of SOP, JSA,	0 pts	1 pt	2 pts	
	<i>Suggest that equipment specific LOTO be developed for group lockout, and equipment with multiple energy sources – validate that existing SOP adequately address this issue and assign tasks for this to safety representatives & supervisors</i>				
	<input checked="" type="checkbox"/> Use of lockout/tagout devices – <i>sludge plant water- centrifuge</i>	0 pts	1 pt	2 pts	
	<i>Being repaired – did not see evidence of lockout at main shut-off</i>				
	<input checked="" type="checkbox"/> Periodic inspections – no formal system in place	0 pts	1 pt	2 pts	
	<input checked="" type="checkbox"/> Training	0 pts	1 pt	2 pts	
	<input checked="" type="checkbox"/> Machine Specific Process – see comments above	0 pts	1 pt	2 pts	
3.	Confined Space Standard				
	Have the following elements been completed?				
	<input checked="" type="checkbox"/> Identification of confined spaces and inventory	0 pts	1 pt	2 pts	
	<input checked="" type="checkbox"/> Determinants of Permit system	0 pts	1 pt	2 pts	
	<input checked="" type="checkbox"/> Periodic inspections	0 pts	1 pt	2 pts	
	<i>Informal process- field safety surveys could be used to validate adherence to process. Suggest that periodic inspection of confined space entry be documented quarterly basis.</i>				
	<input checked="" type="checkbox"/> Atmospheric testing/Equipment	0 pts	1 pt	2 pts	
	<input checked="" type="checkbox"/> PPE and emergency response plan	0 pts	1 pt	2 pts	
	<input checked="" type="checkbox"/> Training (Entrants, Attendants and Supervisors)	0 pts	1 pt	2 pts	

				Points	
				Possible	Actual
9.	Process Safety Management				
	Have the following elements been completed? <i>No chemicals at level where PSM required. Do have SOP's for handling chemicals like chlorine, sodium bisulfite, sodium hypochlorite. Reviewed SOP for chlorine rail car transfer- safety hazards identified with specific control measures outlined. Do have a Risk Management Plan for Chlorine.</i>				
	<input checked="" type="checkbox"/> Materials Identified	0 pts	1 pt 2 pts	2	2
	<input type="checkbox"/> Formal Program NA	0 pts	1 pt 2 pts	NA	
	<input type="checkbox"/> Process Hazard Analyses	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Operating Procedures	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Emergency Plans	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Training	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Contractor Awareness	0 pts	1 pt 2 pts	2	2
	<input type="checkbox"/> Pre-start-up Safety Reviews No	0 pts	1 pt 2 pts	2	0
	<input type="checkbox"/> Work Permit System - no	0 pts	1 pt 2 pts	2	0
10.	Personal Protective Equipment				
	Have the following elements been completed?				
	<input checked="" type="checkbox"/> Hazard Assessment <i>Not updated annually</i>	0 pts	1 pt 2 pts	2	1
	<input checked="" type="checkbox"/> Training	0 pts	1 pt 2 pts	2	2
11.	Respiratory Protection				
	Have the following elements been completed?				
	<input checked="" type="checkbox"/> Identification of Substances as Hazardous Exposures	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Respiratory Selection	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Health Evaluation and Surveillance	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Employee Training	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Fit Testing	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Respiratory Cleaning, Maintenance and Storage	0 pts	1 pt 2 pts	2	2
	<input checked="" type="checkbox"/> Respiratory Program Evaluation	0 pts	1 pt 2 pts	2	2

XIII. BEST PRACTICES/OSHA STANDARDS

(122 Points)

				Points	
				Possible	Actual
12.	Electrical Safety-related Work Practices				
	Have the following elements been completed?				
	<input checked="" type="checkbox"/> Training	0 pts	1 pt	2 pts	2
	<input type="checkbox"/> Use of Personal Protective Equipment	0 pts	1 pt	2 pts	2
	<input type="checkbox"/> Protective Tools	0 pts	1 pt	2 pts	2
	<input type="checkbox"/> Written Program	0 pts	1 pt	2 pts	2
	<p><i>NFPA 70E – This is a program that is being addressed. Ready to begin doing surveys of MCC. Need to assure that PPE and protective tools are appropriate for exposures. For example –conduct a new PPE hazard assessment to assure that all exposures for 70E are evaluated: clothing, gloves, for arc flash exposures.</i></p> <p><i>Assure that the MCC (motor control centers) are closed, access to MCC's is maintained – minimum of 36 inches. Basic electrical training has been done, but will need to update this training to reflect NFPA 70E control measures.</i></p>				
13.	HAZWOPER (Hazardous Waste Operations)				
	Have the following elements been completed?				
	<input checked="" type="checkbox"/> A Written Program	0 pts	1 pt	2 pts	2
	<input checked="" type="checkbox"/> Employee Training	0 pts	1 pt	2 pts	2
	<input checked="" type="checkbox"/> Communication	0 pts	1 pt	2 pts	2
	<input checked="" type="checkbox"/> Documentation	0 pts	1 pt	2 pts	2

XIV. MOTOR VEHICLES

(14 Points)

	Points	
	Possible	Actual
1. Please indicate your total vehicle count Owned <u>4000</u> Leased _____		
2. Do employees drive company vehicles home at night? Limited number driven home	2	2
3. Is a written procedure in place to verify the current status of the driver's license of each employee who has access to company owned/leased vehicles?	2	2
4. Do you perform an annual review of the driving record of those employees who have access to company owned/leased vehicles?	2	2
5. Have all employees at your department been informed that owned/leased vehicles are only to be used for authorized company activity and/or according to personal use guidelines?	2	2
6. Are monthly safety inspections performed on all company owned/leased vehicles?	2	2
7. Are employees required to use safety belts while driving company owned/leased vehicles?	2	2
8. Do you require all drivers to take defensive driving course when assigned driving duties and require refresher training every 3 years for accident free driver and as remediation post accident?	2	2

CDL drivers have responsibility to keep DOT physical card updated. Divisions do maintain qualification records on CDL drivers.

DEPARTMENT OBSERVATIONS

Public Works & Engineering Department has had success in reducing both severity and frequency of vehicle losses and employee injuries. Their loss costs are below the city average. This is a testament to the support for safety demonstrated by the management team, supervisors, safety team, and employees. This is a large diverse department with 3,900 employees working in six divisions.

Identified safety strengths for the Public Works & Engineering Department include: safety communication; comprehensive safety policies – developed and implemented; comprehensive accident prevention plan; management support; safety department with 25 representatives and division manager; and well documented safety activities: accident investigation follow-up, facility inspection follow-up, and well-documented site safety survey checklists.

The field supervisors were able to identify how they are held accountable- number of accidents, doing accident investigations, enforcing PPE, marking of job sites.

The accident prevention plan outlines clear expectations for safety within the department. Focus group results were positive for employee and management. The assessment score was 92%. The findings listed below outline refinements to safety systems that will help the department maintain the reduction in loss frequency and loss costs.

It was noted that during the safety assessment, there was very limited engagement of the supervisory teams from the water and wastewater treatment plants. The exception to this was the lab manager who led the safety walk-through of the water plant lab. The success of safety initiatives in these facilities will be improved if there is increased engagement in the safety process for supervisors.

The department has a written Lockout/Tagout program in place; however, additional written equipment specific lockout procedures are needed to standardize how equipment is locked out. The lack of a specific lockout procedure was found for cleaning table saw. Employee did not have this equipment locked out – guard was removed and power cord still connected. Specific lockout procedures should be developed for fixed equipment like the silk screen presses, lathe, mills, & drill presses.

Establish more formal/documented pre-use inspections of equipment used in the field – like backhoes, dump trucks, and air compressors.

Conduct a review of field operations manager job descriptions to determine whether there are clearly defined safety goals included in the job description. The accident prevention plan does a good job of outlining responsibilities. A review of 3 field manager job descriptions was made during the assessment and safety accountabilities were not well defined in actual job descriptions.

Material Safety Data Sheet books were sampled during the assessment. Many of these books lacked an annual update for chemical lists and many of the books have not

had outdated MSDS purged from the books. Several Material Safety Data Sheets were found with dates from 1990's to early 2000. The Traffic sign shop and paint shop did have updated chemical lists and MSDS book. Complete revisions to MSDS books and developing annual updated chemical list throughout the department.

Review current PPE hazard assessments and validate that there is a PPE Hazard Assessment prepared for jobs that require use of PPE.

Develop Arc Flash program to address exposures related to operation of motor control centers throughout the department. Conduct training specific to 70 E and update the PPE hazard assessment related to electrical safety related work practices. Validate that appropriate PPE- clothing, gloves, footwear are identified and provided for employee use.

Department Wide:

Pre-trip/Post trip inspections of trucks are not consistently documented nor performed. Your department is not exempt from documenting/performing inspections on commercial motor vehicles. The department that had the best documented inspection system for commercial vehicles was Traffic.

Water plant:

1. Improve Subcontractor controls at water sludge plant. Two subcontractor employees were found to be working without wearing hard hat or hearing protection. We found a non-rated ladder standing in water and leaning on an elevated electrical panel. Panel did not have a tag, so it was not known if it had been locked out.
2. Another lockout related issue was found, Centrifuge 2 was out of service at sludge plant – no evidence of lockout on this equipment.
3. The sludge plant did not have high noise area signs posted. Even though this area has been identified as a high noise area.
4. Remove outdated inspection tag from emergency shower on first floor of sludge plant. The tag listed that it had last been inspected in 2006.
5. Establish a system to assure that all fire extinguishers are inspected annually within the sludge plant. A CO2 fire extinguisher was last serviced in 2007.
6. A tractor parked at the rear of the sludge plant was not provided with Rollover Protective system (ROPS) and the seatbelt had been removed. Provide ROPS for the tractor and replace the seatbelt.
7. Remind truck drivers that they must wear PPE (hard hats) when standing outside their trucks at the loadout area.
8. Reduce exposures to walking on elevated surfaces by the weigh station attendant. The attendant must take readings at the top of several bulk storage tanks each shift. Consideration should be given to connecting these tanks to the SCADA system.

McCarty:

1. Conduct a review of the dump truck tailgate reattachment process to identify best practices to utilize to reduce exposures present by falls, caught between hazards, material handling hazards, and struck against hazards. We observed several unsafe behaviors while these dump truck tailgates were being reattached. These included: employee at ground level in danger zone of heavy gate striking them – no hard hats worn, potential for pinching hands/arms, strains while replacing pins in gate, riding forks of forklift to access gate, and gates not matched to trucks which increased the effort to fit gate in truck.
2. Secure acetylene cylinder in welding shop
3. Secure the new bench press not secured to floor.

Wastewater Sludge plant

1. Provide gates at the top of fixed ladders and install fall arrest tie-off system for fixed ladders located on roof of sludge plant. These actions will help control fall hazards associated with accessing fixed ladders.
2. Repair doors for Motor Control Centers (MCC) in maintenance shop – MCC doors were loose / open on DH 2, DH 8; wires exposed in a broken panel for MCC area.
3. Maintain clear access to MCC panels near hydraulic press. A tripping hazard is created by 2 metal bars that extend on the rear of the hydraulic press. The press is located in potential arc flash zone in front of the MCC panel. It is suggested that this press be moved from it's current location.

Milling job

1. Provide hard hats for the employees that walk next to the milling machine. The two employees that work adjacent to the milling machine were not wearing hard hats. During the jobsite survey, we observed pieces of asphalt being thrown out of milling machine.

Water crew on Main on way to White Oak job

1. While traveling to a jobsite, the safety assessor observed an employee not wearing vest while working on White Oak job site. The vest was put on, however we passed this crew again and observed the employee working on manhole cover in intersection. He was nearly struck by car coming from the cross street. The crew had cones at back of vehicle; they were working in front of the truck in intersection. Remind crews to assess traffic hazards from all sides of exposure and provide warning cones/signs to reduce potential of being struck by vehicles.

Meter shop:

1. Repair the electrical cable for forklift battery charger in the meter shop. Cable sheathing was cut and wiring was exposed.

Focus Group Findings:

Crosstimbers Right of Way:

- Positive: Safety communicated via 2x month tailgates, held accountable wearing PPE, setting up work zones, placing cones around vehicle on street

- Concerns: would like hand sanitizer near time clocks, sometimes need more signage materials, newer laborers don't always realize importance of not keep using defective equipment

McCarty focus group

- EE: responsibility of safety- wear PPE, protect work zone, watch out for fellow employee
- Safety Committee- members feel given info to do tasks, feel committee is effective as action is being taken on safety concerns raised by ee, know they need to communicate back to their work areas, positive comments

Wastewater-69th street-Maintenance mechanic focus group

- Accountability- wear PPE, safety first, work with caution, OK to safe not safe to work, safety meetings held every other week, not sure about maintenance shop inspections, discussed lockout- call operations control room, they lock/shut down equipment, then they put own lock on, none of focus group were certified to do confined space entry in group interviewed, hot work permit asked about- not much discussion provided on it

Bridge EE focus group:

- Accountable for vests, watching for traffic, marking job, being aware/visible, flaggers can't talk cell phones, working around big equipment- must watch themselves look overhead hazards, would be interested in annual class on overhead-power line safety- sometimes they don't ask for insulators for power lines enough, tailgate meetings held 2x mo., monitor PPE use, seems no one challenges general public on jobs, vests are very hot- could PWE consider T-shirt type reflective garment, tailgates should be more work-related not so much on home safety or off-the-job safety

Bridge Supervisor focus group:

- Role- PPE enforcement, tailgate at least 2x /month sometimes weekly, safety contact 1-1 in welding shop, work zone set-up evaluated,
- Measures- had trouble responding how they were exactly measured- based on vehicle accidents/employee injuries, safety meetings
- Supervisors said they have not been formally documenting near misses
- Excavations- able to slope or step back in bridge work,
- Cranes- only allow EE's certified- 40 hour class crane safety to operate crane, new EE's since that time that do ironwork, work with more experienced ironworker – **consideration should be given to taking some key points from certification class and developing a checklist for ironworker orientation process-help standardize process**
- New supervisor able to site setting up work zone, key issues to watch for on-site
- Very strong feedback provided by this supervisory group

UMB focus group:

- Asked about excavations- able to answer properly on sloping, stepping, trench box shoring over 4 feet deep, none of group surveyed did man hole entry, meetings 3 x per week- so each group of employees has 2 per week- including 1 on Sunday.
- Accountable for putting cones out on site, securing job site, biggest hazard – traffic, felt sometimes need for more flaggers
- Safety committee – not used much by this group. Safety committee rep did not talk at all in focus group
- Least amount of discussion/ hard to get information from group

Meter Shop / Meter Field – Supervisory focus group:

- Key injury types- twisted ankle, dog bites, stepped on nail-employee wearing a safety boot that was not puncture resistant
- Larger vaults- 2 person job, commercial meters – use jib crane in truck to lift, don't excavate deeper than 4-5 feet for vault, deeper go to UMB.
- Have 2-3 week OTJ training temp to hire employees, several reviews done in orientation- focus on production & error rates- limited documentation of safety review items in follow-up evaluations- could be area for growth
- Vehicles inspected weekly- lights working, overall condition checked- driver instructed to do daily walkaround- not documented
- Forklift- not documenting daily pre-shift inspection
- Meter shop- test areas safe guards in place
- Housekeeping- rear of shop –a corner had scrap metal etc stacked- partially obstruction electrical panel
- Key issue in shop- orange forklift charging station had damaged wires for charger- electrical hazard- needs correction.

Field Surveys:

- Field safety- water leak job 3718 Mt. Pleasant- site well marked, PPE worn, gas lines being marked, foreman scoping out shut-offs before beginning work- site well managed
- Field employees strong in responses on safety at sites, concerns raised about sometimes flaggers using phones and hard to keep general public out of work sites.