

MUNICIPAL WATER AND WASTE WATER SYSTEMS SAFETY AUDIT/SURVEY TOOL

Injury prevention and loss control during sewer and water system maintenance operations

Instructions: This is a scored pro-active safety auditing tool designed for periodic use to reduce high risk behaviors and increase safe behaviors. “Yes” answers should be scored at (1) and “No” answers should be scored at (0). In the corrective action column, either a time frame for completing the correction or the actual date corrective action was completed should be noted. Check the “NA” column if this item is not applicable. Total and track audit scores over time to track up or down trends along with tracking the number of incidents, accidents and injuries sustained.

Municipal water and waste water systems operations involve many high risk activities and situations including heavy equipment lifts, road closures and work zones in traffic, trenching operations, and liability risks due to flooding from sewer back-ups and water leaks. It is important to have operation systems and policies in place emphasizing safety first. Liability risks can be reduced through proper maintenance and proper maintenance record keeping.

Task/Job Part – Proper Training & Training Records	Yes	No	Corrective action date	NA
All training completed with passing scores in a timely manner				
New employee safety orientation completed				
New employee job-specific safety training completed such as use of heavy equipment, waste water maintenance equipment, and pumping equipment				
Employee job-specific refresher safety training completed				
All training records current and complete				
Other				

Task/Job Part – Human Resources	Yes	No	Corrective action date	NA
Employees have reviewed personnel policy manual				
Personnel policies applied in a consistent manner				
Fairness – all employees treated the same				
Progressive discipline in place with emphasis on worker integrity and accountability				
Sexual harassment prevention training				
Other				

Task/Job Part – Completion of all Certifications & Licenses	Yes	No	Corrective action date	NA
All licenses and certifications, such as Commercial Drivers' License completed and current				
Past course completion or current First Aid/CPR				
Annual blood-borne pathogen exposure and use of universal pre-cautions certification				
Hazardous Materials Awareness (24 Hour course)				
Defensive Driving Course (Nat'l Safety Council or other)				
Other				

Task/Job Part – Equipment Checklists	Yes	No	Corrective action date	NA
Completed all equipment inspection checklists				
Completed any notification or corrective action needed				
Equipment properly repaired and maintained				
Other				

Task/Job Part – Proper lifting technique	Yes	No	Corrective action date	NA
Proper position				
2 or more workers if load is more than 50# (50# or less per person)				
No lift above waist level				
Assistive lifting devices properly used for heavy equipment and piping				
When possible, heavy lifts engineered to eliminate lift or reduce risk of injury				
Other				

Task/Job Part – Use of Personal Protective Equipment (PPE) and Hygiene	Yes	No	Corrective action date	NA
Use of long sleeves, pants or coveralls (Level D).				
Use of heavy leather or Kevlar work glove <ul style="list-style-type: none"> ✓ Nitrile under glove when handling bio-waste ✓ Rubber gloves with Nitrile under-glove and proper PPE when handling hazardous wastes, working with waste water 				
Use of Heavy work boots, 8" for ankle protection				
Use of eye protection, splash protection as needed				

Task/Job Part – Use of Personal Protective Equipment (PPE) and Hygiene	Yes	No	Corrective action date	NA
Use of hearing protection if needed (noise level above 80 decibels)				
Use of N-95 or N-99 Hepa filter dusk mask				
Use of communication device – radio, pager, or cell phone				
Use of sun block and insect repellent				
Use of hard hats in traffic areas and around heavy equipment				
Use of orange safety vest in traffic areas and on dump grounds				
Proper clean up and hygiene practices				
Other				

Task/Job Part – Disease Prevention and Hygiene	Yes	No	Corrective action date	NA
All employees have proper vaccinations <ul style="list-style-type: none"> ✓ Hepatitis A and B ✓ Tetanus 				
All employees practice proper hygiene/clean up after work periods				
Other				

Task/Job Part – Systems Operations	Yes	No	Corrective action date	NA
Communications <ul style="list-style-type: none"> ✓ Public notified of road closures, work areas ✓ Other city departments notified about hazards or repairs needed, work areas and road closures 				
Record keeping – complete records of all operations kept <ul style="list-style-type: none"> ✓ Water system repairs, installations, operations, trouble calls ✓ Sewer system maintenance, pipe replacement, trouble calls ✓ Street openings, road closures, trouble calls 				
Contracts – use of State certified and approved independent contractors only <ul style="list-style-type: none"> ✓ Municipal permit to open public streets and roads <ul style="list-style-type: none"> ✓ Require proof of insurance in permit ✓ Require compliance with State & Federal safety regulations in permit ✓ All contracts reviewed/approved by city attorney 				

Task/Job Part – Systems Operations	Yes	No	Corrective action date	NA
Proper use of personal protective equipment at all times				
Heavy Equipment & heavy truck operations <ul style="list-style-type: none"> ✓ Proper egress with three point contact and no jump- off upon exiting ✓ 100% seat belt use, back belt use when on rough terrain ✓ Equipment parked safely with proper traffic control, work zone set up, or street closure ✓ Park equipment to minimize backing ✓ On all digging operations utility locates called in 				
Heavy Equipment design and maintenance <ul style="list-style-type: none"> ✓ Heavy items stored waist high or lower ✓ Hydraulic pull-down lifts for overhead ladders, piping – enables lift from waist/shoulder level ✓ Heavy equipment stored on “lazy susan” style moveable tray for easy access and safer lifts ✓ Vacuum trucks have vibration unit for unloading ✓ All equipment properly maintained 				
Work zones <ul style="list-style-type: none"> ✓ Set up properly ✓ Street closures properly barricaded ✓ Openings safety fenced during operations ✓ Openings covered at end of work day 				
Trenching operations <ul style="list-style-type: none"> ✓ Trench box used for hole four feet deep or more ✓ Soils assumed to be “Level C” and dangerous ✓ All other safety precautions and rules followed ✓ Collaborative trench rescue training with the Fire Department, EMS and public works involved ✓ Proper work zones, proper barricades and covers on openings ✓ Ground thawing equipment used in winter conditions ✓ Openings and pavement removal done with saws and tractors to minimize jackhammer use 				

Task/Job Part – Systems Operations	Yes	No	Corrective action date	NA
Sewer system maintenance <ul style="list-style-type: none"> ✓ Records complete and up to date ✓ Periodic maintenance of problem and normal lines completed in timely manner ✓ Routine maintenance schedule established and followed ✓ All equipment properly maintained ✓ Proper use of PPE, especially heavy gloves when handling root cutting equipment ✓ Proper lifting with use of assistive devices <ul style="list-style-type: none"> ✓ Use of new lighter weight manhole covers (less than 90# ea.) ✓ Teamwork for lifts of more than 50# ✓ Proper work zones and road closures 				
Water system maintenance <ul style="list-style-type: none"> ✓ Records complete and up to date ✓ System maintenance and hook ups done with assistive lifting devices to minimize heavy, manual lifts ✓ Measures taken to manage excessive water to prevent improved property flooding 				
Bypass pumps and emergency lighting equipment available				
Other				

Task/Job Part – Proper use of incident reporting forms & logs	Yes	No	Corrective action date	NA
All worker injuries reported to supervisor and recorded				
All worker accidents involving property, chemicals reported and recorded				
All “near misses” reported to supervisors and recorded				
If a reporting program was in place, all hazards and potential hazards reported and recorded				
A workers compensation claim was filed if a) an injury involved lost time, b) medical care with costs, or c) the worker requested a claim be filed				

TOTAL SCORE

Signature _____
 Print Name _____
 Date _____