

CITY OF SASKATOON

Water and Sewer Section

<http://www.topwalls.com>

Tool Disinfection Trainee Manual

CITY OF SASKATOON

Tool Disinfection Trainee Manual

© City of Saskatoon

Table of Contents

INTRODUCTION.....	1
PROCEDURAL OVERVIEW.....	1
DISINFECTION.....	2
RESOURCES REQUIRED	7
PEOPLE	7
EQUIPMENT.....	8
MATERIAL	8

Introduction

The objective of this manual is to train staff on how to disinfect tools and equipment in a timely and efficient manner while, minimizing disruption in service.

Disinfection is one of the most important water treatment processes, because it ensures that consumers are supplied with drinking water, which is free of disease causing microorganisms. At present chlorination is by far the most common method of disinfection. It is economical, convenient and effective.

Procedural Overview

Supervisor IV will coordinate, select and acquire all required equipment and materials. Before any work begins all staff must be wearing the safety equipment required. WHIMS procedures must be followed. Any item that has come into contact with a sewer repair will be disinfected prior to use on the water distribution system.

Remove debris from tools and equipment before disinfection. Spray each item completely with a minimum 5% sodium hypochlorite solution. Ensure a 7 to 10 second contact-time, longer if the solution is cooler than 24° C (75° F). Do not allow sodium hypochlorite solution to dry during the 7 to 10 second contact time. Scrub items thoroughly with a clean rag. Rinse each item clean with a minimum 5% sodium hypochlorite solution. Allow tools and equipment to air dry before putting into storage or returning to work. Once tools are completely dry, they may be oiled or greased with biodegradable oil. Ensure proper cleaning methods are adhered to. Inspect to ensure work area is clean, safe and tidy during and at the completion of the tool disinfection. Refill disinfectant applicator.

Methods and Techniques

Disinfection

All tools must be disinfected prior to use on the water distribution system.

Notes:



Figure 1 - Hand Tools

Tools used on a sewer repair carry harmful bacteria.

Notes:

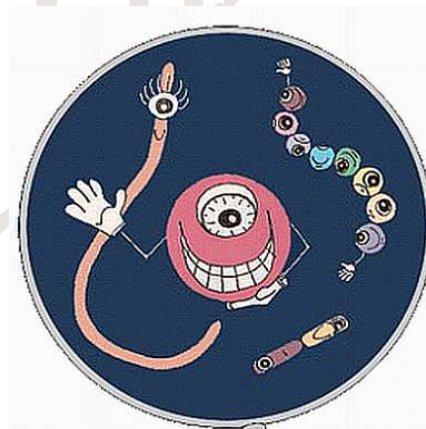


Figure 2 - Bacteria

Disinfectant is used to kill bacteria and minimize the risk of cross contamination of the water distribution system.

Notes:



Figure 3 - Glass of Water

The MSDS sheet for the disinfectant must be followed. The MSDS sheet is located at public works stores.

Notes:



Figure 4 - MSDS Centre

A face shield must be worn when handling the disinfectant solution.

Notes:

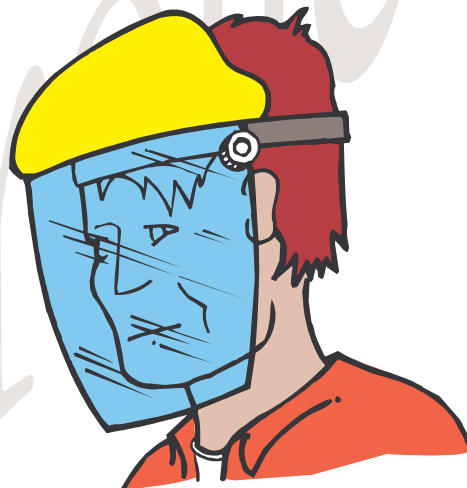


Figure 5 - Face Shield

Ensure that the proper disinfectant applicator is used.

Notes:



Figure 6 - Disinfectant

Clean off excess dirt with a rag and wire brush prior to soaking with disinfectant.

Notes:



Figure 7 – Wire Brush

Spray items with disinfectant solution (Min 5% Sodium Hypo-chlorite solution)

Notes:



Figure 8 - Spraying Disinfectant

Let item soak for a minimum of 7 seconds.

Notes:



Figure 9 – Pipe Wrench

Scrub item with a clean rag, rinse with disinfectant solution.

Notes:



Figure 10 - Clean with Cloth

Let tools dry before use.

Notes:



Figure 11 - Hanging Tools

Pipes and fittings installed on the water distribution system will be disinfected prior to installing.

Notes:



Figure 12 - Pipe Fittings

Swab or spray the interiors of all pipe and fittings, particularly couplings and sleeves used in making the repair with a (Min 5% Sodium Hypo-chlorite solution) before they are installed.

Notes:



Figure 13 -Repair Clamp

Fill the disinfectant applicator when required.

Notes:



Figure 14 - Disinfectant at Public Works Stores

The disinfectant solution can be found at a Public Works Stores.

Notes:



Figure 15 - Public Works Stores

Oil tools after they have dried. A food grade lubricant must be used.

Notes:



Figure 16 – Food Grade Oil

Resources Required

People

- 1 – Supervisor IV
- 1 – Labourer



Equipment



Figure 17 - Wire Brush

Notes:



Figure 18 – Disinfectant

Notes:

Material



Figure 19 - Cleaning Rag

Notes:



Figure 20 - Food Grade Oil

Notes:

Table of Figures

FIGURE 1 - HAND TOOLS	2
FIGURE 2 - BACTERIA	2
FIGURE 3 - GLASS OF WATER	2
FIGURE 4 - MSDS CENTRE	3
FIGURE 5 - FACE SHIELD	3
FIGURE 6 - DISINFECTOR	3
FIGURE 7 - WIRE BRUSH	4
FIGURE 8 - SPRAYING DISINFECTANT	4
FIGURE 9 - PIPE WRENCH	4
FIGURE 10 - CLEAN WITH CLOTH	5
FIGURE 11 - HANGING TOOLS	5
FIGURE 12 - PIPE FITTINGS	5
FIGURE 13 - REPAIR CLAMP	6
FIGURE 14 - DISINFECTANT AT PUBLIC WORKS STORES	6
FIGURE 15 - PUBLIC WORKS STORES	6
FIGURE 16 - FOOD GRADE OIL	7
FIGURE 17 - WIRE BRUSH	8
FIGURE 18 - DISINFECTOR	8
FIGURE 19 - CLEANING RAG	8
FIGURE 20 - FOOD GRADE OIL	8

Index

Bacteria	2	Disinfector	3, 8
Clamp	6	Wire Brush	4, 8
Disinfectant	3, 4, 5, 6		