

Section 01060

Special Provisions for Contractor

Safety and Health on WLSSD Projects

1. GENERAL

Workmen involved in the removal, renovation, or installation of equipment within the treatment plant may be exposed to disease-producing organisms in wastewater. The CONTRACTOR shall require its personnel to observe proper hygienic precautions.

Solvents, gasoline, and other hazardous materials enter the plant with incoming sewage, and therefore, certain areas are hazardous to open flame, sparks, or unventilated occupancy. The CONTRACTOR shall take measures to assure CONTRACTOR'S personnel observe proper safety precautions when working in these areas.

CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work as specified in this Section and in Section 00700. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to all persons on the work site or who may be affected by the work.

This specification is intended to call attention to safety hazards which may be unique to this facility. The CONTRACTOR must have a Safety Policy in effect. When a conflict exists, the CONTRACTOR shall follow Contractor's own Safety Policy, the contract or this specification (whichever is more rigorous).

2. FAILURE TO COMPLY

Failure to comply with the safety and health requirements of this section and Section 00700 shall be cause for work site eviction and/or termination of contract at the OWNER's discretion.

3. SAFETY AND HEALTH REGULATIONS

The CONTRACTOR shall comply with Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act, as set forth in Title 29, C.F.R. Copies of these regulations may be obtained from Labor Building, 14th and Constitution Avenue N.W., Washington, DC 20013.

The CONTRACTOR shall also comply with the provisions of the Federal Occupational Safety and Health Act, as amended.

4. WORK SITE SAFETY REQUIREMENTS

CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. **CONTRACTOR** shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to all persons on the work site or who may be affected by the work.

This document is intended to call attention to safety hazards which may be unique to this facility. The **CONTRACTOR** must have a Safety Policy in effect. When a conflict exists, the **CONTRACTOR** shall follow their own Safety Policy, the contract or these procedures (whichever is more rigorous).

Safety Needs

The Western Lake Superior Sanitary District its pumping stations, manholes and pipelines can be an extremely hazardous area, in terms of potential accident-causing situations.

Before starting to work, contact the operator of the area you will be working in, to notify him, or her of where you are working and what you will be doing. Operators can be contacted at the phone extensions listed below.

| <u>Area of Work</u> | <u>Operator</u> |
|-------------------------------|-----------------|
| Collection | 879-5929 |
| Building #2, #3, | Ext. 301 |
| Building #4, #5, #6, #12, #13 | Ext. 301 |
| Building #8 | Ext. 301 |
| Building #9 | Ext. 301 |
| Building #10 | Ext. 301 |
| Building #11 | Ext. 301 |
| Building #19 | Ext. 301 |
| Building #20 | 725-9113 |
| Building #22 | 878-0874 |
| Building #23 | Ext.301 |

Potential Hazards

1. Some areas (the O₂ production and dissolution areas of Bldg. 2 & 3) may have enriched oxygen, which greatly increases the risk of fire. Use of flame or spark producing equipment is not allowed unless the air is constantly monitored with an oxygen meter.

2. All tank, channel, vessels and spaces which contain or have contained wastewater or biosolids in the plant may not contain enough oxygen to support life. Be sure that the atmosphere in these areas is monitored prior to and during entry.
3. Ferric Chloride is present in building # 19 it is a very corrosive material with a PH less than 1.
4. Digester gas in building # 19, #11 and #10 is flammable, and has a potential of being explosive, hot work permits are required when working in these areas.
5. Pipeline, manholes and wet wells are considered confine space entries and must be monitored and ventalated if possible.
6. There is a possibility of dangerous fumes in the liquid waste stream. These fumes include, but are not limited to, gasoline, methane and hydrogen sulfide. These areas shall be monitored.
7. Sodium bisulfite, which may release sulfur dioxide gas, is used in the wastewater process. These chemicals can be extremely hazardous. Extreme caution shall be used when working around these chemicals.
8. Sodium Hypochlorite in building #23. This is a corrosive material (pH>12) and will cause severe burns if it comes in contact with skin or clothing. If contaminated with acid it will release toxic chlorine gas. Sodium hypochlorite will react with certain metals (such as iron, zinc, and tin) to give decomposition products that include oxygen, which can develop great pressures when confined between valves.
9. **CONTRACTORS** shall not use District Equipment without special permission from that areas Supervisor.
10. **CONTRACTORS** shall not tamper with or alter District electrical equipment. **CONTRACTOR** shall provide proper electrical plugs or adapters to fit District receptacles. Proper welding equipment plugs for District receptacles are Appleton, 4 pole, 4 wire, Style 600VAC, 60 amp, Cat no. ACP 6044 BC or equivalent.
11. **CONTRACTORS** working in the wastewater facility may be exposed to polluted water and refuse. The most important factor in promoting good health is to observe the standard hygiene principles of washing properly, not eating or smoking except after washing hands. While working in areas where you could be exposed to wastewater or refuse contractor shall wear proper protective equipment such as gloves, masks, eye protection and other protective body clothing.
12. **CONTRACTOR** shall note that all areas of the plant have been surveyed to determine noise levels. Length of exposure have been posted outside of these work areas. **CONTRACTORS** shall wear hearing protection in these areas, as indicated on posting.
13. If an emergency exists in the plant it will be announced over the intercom. The **CONTRACTOR** shall listen to announcement and follow instructions given. Specific information is available in the District Emergency Plan.

General

1. Confined space entry requirements in accordance with OSHA 1910.146 shall be followed anytime CONTRACTOR'S personnel are in a confined space as defined by OSHA 1910.146. OWNER'S representative shall be notified prior to any confined space entry.
2. **CONTRACTOR** shall wear safety glasses, steel toed shoes and hats (hard hats in areas that have the potential of falling objects) at all times while on District property.
3. The **CONTRACTOR** is required to notify all of his employees that smoking is not permitted on District property.
4. **CONTRACTOR** shall comply with their own or the District's Lock Out/Tag Out procedures. These procedures will be discussed with the District's representative prior to starting job. If the **CONTRACTOR** wishes to use their lock out/tag out procedures they must meet or exceed the District's procedures.
5. The **CONTRACTOR** assumes full responsibility for all injuries to persons and for damages to property and services of WLSSD, and for all claims, losses or expenses which may in any way arise out of or result from the **CONTRACTOR'S** performance of this contract unless caused by the negligence or willful misconduct of the District's agents, or employees, and the **CONTRACTOR** shall indemnify and save the WLSSD harmless from all such claims, losses or suits for injuries, death or damage and from all liens, losses, expenses or claims of any sort arising therefrom and shall defend on behalf of the WLSSD any suit brought against WLSSD for any such damage, injury or death and shall reimburse the WLSSD for attorneys' fees and for all other expenses incurred by the WLSSD in connection with or as a result of any such suit.
6. All **CONTRACTORS** shall notify District of any and all accidents or incidents which have caused injury.
7. Fire extinguishers have been placed throughout the plant for anyone's use. Fire doors within the District shall be closed at all times.
8. All aisles, stairways, passageways, exits and access areas to building or equipment shall be kept open and passable.
9. Oil, water, and other liquid spills shall be cleaned up immediately or covered with absorbent material.
10. All compressed gas cylinders shall be stored and used in an upright, vertical position in properly designated racks. They shall be secured by a chain to prevent them from falling over.

Final

Failure to comply with these safety requirements shall be cause for work site eviction and/or termination of contract at the District's discretion.

Hot Work Procedures

A hot work permit will be issued for all electric or gas welding, cutting, brazing, or similar flame or spark producing operations anywhere in the plant.

For work that is to be conducted within a confined space, there are special procedures that are to be followed. These procedures are outlined on the confined space entry policy that should be reviewed before entry (also refer to lockout/tagout procedures), and include:

1. That all necessary work and emergency equipment are gathered prior to entry.
2. After calibration of monitor, the area is tested prior to entry by trained personnel.
3. Before any work begins, adequate ventilation equipment must be set up and started.
4. A water hose of minimum 5/8" dia. will be at the site, and used to wet down all areas within the confined space.
5. Close all mud valves, and other ports of potential hazards.
6. DO NOT do any digging of sand, gravel, or other debris as it may produce dangerous atmospheres.
7. Before performing hot work, retest the air throughout the confined space, and at the point where the work is to be performed.
8. Conduct continuous monitoring of the confined space, as well as maintaining wet surfaces throughout the confined space.
9. Open flames are to be used only for welding, cutting, brazing, etc. DO NOT use open flames for cleaning debris off surfaces, or other non hot work procedures.

The permit is kept on file until the hot work is completed.

WESTERN LAKE SUPERIOR SANITARY DISTRICT

HOT WORK PERMIT

A. Date of the Hot Work: _____ B. Time Issued: _____
C. Location of Hot Work: _____ D. Specific Area: _____
Start Time: _____ F. Time Finished: _____
G. Signature of person issuing permit _____ X _____

Personnel:

Person supervising Hot Work: _____
Individuals assigned to do Work: _____
Welder(s): _____
Attendants (Firewatch) _____

Work Description:

J. Work to be done _____

Hazards

K. Description of known hazards present at Hot Work location: _____

L. Special Equipment required: _____

Signatures:

M. Signature of Supervisor: X _____
N. Signature of Welder(s): X _____
O. Signature of Attendants: X _____

HOT WORK CHECKLIST

- _____ The area must be ventilated either by natural drafts or forced ventilation.
- _____ Clean all fuel and combustibles from beneath and around the area to a sufficient distance to prevent sparks from falling on combustible materials.
- _____ Have a fire hose with a minimum size of 1.5 inch available on site, operational, pressurized, and ready to use.
- _____ Wet down the area around and beneath the work site.
- _____ Have a fire watch person continuously on duty while work is in progress.
- _____ Carefully inspect the area for fire, smoke, or hot spots after work is complete.
- _____ Inspect the work area for one hour for smoke and fires upon completion of hot work.

LOCATION OF HOT WORK

EQUIPMENT BEING WORKED ON

DATE

WLSSD REPRESENTATIVE

CONTRACTOR REPRESENTATIVE
