

CHAPTER VIII

UTILITIES

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A. GENERAL

The utilities serving the waste-water treatment facility play a major role in the proper operation of the facility. Even on systems which have standby or alternate service, frequent or prolonged interruptions of service can have significant effects. It is essential that the utilities used by the plant be reliable. In the case of emergency operations, contact men within each utility company should be notified.

B. ELECTRICITY

1. Name of Utility Company

The wastewater treatment plant is electrically served by the Southwest Central Rural Electric Cooperative Corporation with the main business offices located at R.D. #4, Airport Road, Indiana, Pennsylvania 15701. Telephone 412-349-4800. This number should also be used to request repair services.

2. Contact Men

Coordination with the electrical utility company is essential during power failures and other electrical problems. Provisions should be made by the plant operator with the contact men such that they may be reached during emergencies. Advanced arrangements should include suitable priority for restoration of normal service following an area wide power outage.

3. Reliability of Service

The wastewater treatment facility is served by lines which also serve the nearby municipalities. Past history of power loss in the area has revealed an average outage frequency of one (1) time per year with an average duration of one (1) hour.

4. Power Cost

Estimated power costs for the wastewater treatment facility are three and one-half (3-1/2) cents per kilowatt hour used. This is based upon demand, quantity and total concepts of the plant complex.

5. Adjacent Voltage

The utility company service coming to the plant site is 7200 volts.

6. Plant Voltage (Reduced)

The electrical service entering the plant is 480 volts, 3 phase 60 hertz.

7. Standby Power

The utility company does not have two (2) independent sources of power for the wastewater treatment plant. Because of the frequency and duration of utility outages in the area, an emergency power source has been included in the plant facilities. The local power source is designated "standby" or "emergency" and must be treated in this manner to be most cost effective.

The standby power is achieved by a 565 KW electrical generating set. The set will produce 480 volts, 706 kilo-volt-amperes, 60 hertz, 3 phase, 4 wire electricity.

8. Break Point for Electric Service

The break point for responsibility for electric service facilities between the power company and the wastewater treatment plant owner is the main service disconnect located in the motor control center.

C. TELEPHONE

1. Name of Utility Company

The wastewater treatment plant is served with a telephone system owned and operated by the Bell Telephone Company of Pennsylvania with business offices at 712 Church Street, Indiana, Pennsylvania 15701. Telephone 412-465-5501.

2. Contact Men

Since there are "failsafe" and alarm features dependent upon the telephone communications system, the specific contact men should be noted and their telephone numbers recorded. Repair service can be obtained by contacting the business office at 412-463-9161 or 412-349-5353 (during non office hours).

D. WATER

The wastewater treatment facility is served by a privately owned water system which also serves the nearby the municipality. The operation of the plant processes is not dependent upon the public water supply.

1. Owner of Utility Company

The water system that serves the Borough of Creekside also serves the plant. It is a privately owned system, owned and operated by Angelo Romanie. His telephone number is 412-463-8310.

2. Waterline Size & Pressure

The water line comes to the facility via a 2" PVC pipeline that was installed during the time of the plant construction. The normal city water pressure at the wastewater treatment plant is 20 psig. Due to the low water pressure a booster pump is located in the Wastewater Treatment Plant.

3. Backflow Prevention

A backflow prevention valve is installed at the plant service entrance to assure that no contamination of the public water supply will be made. Sometimes hose connections to the faucet in the laboratory will be made with chemicals or compounds which could cause contamination. With the backflow preventer, this contamination cannot be transferred to the public water system. There are no on-site fire hydrants that are supplied by the potable water system.

4. Reliability of Service

The water system is pumped to a 168,000 gallon storage tank which is then fed to the distribution system by gravity with the only treatment being disinfection. The source is deep wells. Some areas of the water system are out of service when there are waterline breaks and system leaks. These are rare and usually are of short duration (24 hours or less).

E. FUEL OIL

Fuel oil is needed at the wastewater treatment plant to operate the emergency generator. Fuel oil requirement is number two (2) diesel fuel.

1. Fuel Oil Tank

A 1000 gallon underground fuel oil tank is located underground near the control building entrance.

2. Oil Supply

The emergency generator is not used except for exercising and for emergency power. If there are no power failures, the fuel oil consumption will be about 15 gallons per week (750 gallons per year). If the fuel tank is full the generator will have sufficient fuel to operate about one day on a continuous basis. The generator will consume approximately 30 gal/hr for exercising and approximately 45 gal/hr under full load.

The tank should be kept three-fourths full or more. To do this a semi annual delivery should be made unless usage dictates a more frequent delivery.