

**LaSalle Environmental Audit
Response to Request for Additional Information**

Index #: 016 **RAI #:** MH-01 **Category:** Microbiological Hazards

Statement of Question:

Section 4.5.2.3 of the ER states that water treatment additives are utilized for scale inhibition, silt dispersion, corrosion inhibition, and micro- and macro-biological control. Please provide a summary of Exelon's chlorination procedures for the circulating water and service water systems that includes the chlorine compounds used to treat each system as well as the concentrations and frequency of injection.

Response:

LSCS utilizes a 15 percent by weight Sodium Hypochlorite, NaOCl, solution to provide biocide to the Circulating Water (CW) and Service Water/Emergency Service Water systems.

CW biocide injection is performed twice daily per unit. Injection times are limited to 120 minutes per day per unit as outlined in the NPDES permit. The biocide is injected into the discharge piping of the operating CW pumps. Free Available Chlorine (FAC) is monitored 3 times per week at the outlet, (via Amertap system) of each unit's main condenser. The goal for FAC is to achieve a value between 0.05 and 0.2 ppm. Sampling is performed during the midpoint of the injection period.

Service Water/Emergency Service Water, biocide injection occurs in the Service Water "tunnel" located in the lower elevation of the Lake Screen House (LSH). The injection quills are installed in the six 36-inch lines that convey lake water from the fore-bay area of the LSH into the tunnel. Biocide injection for the tunnel is continuous, which allows for treatment of intermittently operated systems. Similar to CW, Service Water FAC is monitored 3 times per week with a goal value of 0.05 to 0.2 ppm.

List of Attachments:

None.