

STANDARD PROCEDURES

OF

THE WASHINGTON SUBURBAN SANITARY COMMISSION

ORIGINATOR	DEPT. & NUMBER	APPROVED BY DATE	EFFECTIVE DATE	PAGE
RICHARD KESSLER CHEMIST	PATUXENT LABORATORY 81-10	WAYNE W. FALLIN WATER OPERATION DIV HEAD	JULY 1981	1
SUBJECT				OF
STANDARD PROCEDURES FOR APPLYING COPPER SULFATE FOR ALGAE CONTROL				11

**PURPOSE:** To provide a guide in applying copper sulfate to the reservoirs in controlling algae for the purpose of preventing taste and odors in Patuxent Plant finished water.

**NOTE:** A permit is required for the application of Copper Sulfate to the WSSC reservoirs, T. Howard Duckett and Triadelphia Lake. The permit is secured through the Maryland Department of Health and Mental Hygiene.

**CRITERIA FOR APPLYING COPPER SULFATE TO T. HOWARD DUCKETT RESERVOIR.**

1. Total algae count is high. >1000 organisms per ml in Patuxent Plant raw water.
2. A specific type of taste and odor producing algae count is high. >200 organisms per ml in Patuxent Plant raw water.
3. A high threshold odor number is detected in Patuxent Plant raw water.
4. A taste or odor is detected in Patuxent Plant tap water
5. Algae blooms are visible in T. Howard Duckett reservoir.
6. Filter clogging algae count is high. >500 organisms per ml in Patuxent Plant raw water. (diatoms)

**CRITERIA FOR APPLYING COPPER SULFATE TO TRIADELPHIA LAKE.**

1. Visual inspection shows algae blooms floating over portions of the lake or in coves.
2. Special samples collected show total algae count is high >3000 organisms per ml.