

INSTRUCTIONS FOR COMPLETING
MONTHLY OPERATION REPORT
FOR SURFACE WATER TREATMENT PLANTS

This form, properly completed, is required to be submitted to the South Carolina Department of Health and Environmental Control each month by Section 44-55-40, paragraph e, South Carolina Code of Laws, 1976, as last amended by Act 658 of 1976. Its purpose is to assure the safety of water supplies served to the public with respect to bacteriological and chemical quality and to further efficient processing through adequate tests and records.

Operating data should be entered on the report daily. While in many plants this may be the only form required, some plants will wish to develop additional daily log sheets to reflect the operation and control of specific functions of the plant such as pumps, filters, etc. This record should be prepared in duplicate, the original to be forwarded to the Division of Water Supply, South Carolina Department of Health and Environmental Control no later than the 10th of the following month. A copy should be filed with other records of the operating plant.

- Description

Instruction
- A. Operator on duty

Enter name of chief operator on duty.
- B. Hours plant in operation

Enter number of hours (to nearest half-hour) the plant is in actual operation.
- C. Thousand gallons raw water pumped

Enter, in thousand gallon units, the amount of raw water pumped daily.
- D. Thousand gallons finished water pumped

Enter in thousand gallon units the amount of finished water pumped daily.
- E. Operation of Filters
- (1) Number Washed

Enter number of filters washed during a given day.
- (2) Average time in service

Enter average service time (in hours) of all filters operated during a given day.
- (3) Average time backwash

Enter average time (in minutes) each filter was backwashed during a given day.
- (4) Average time rewashed

Enter average time in minutes each filter was rewashed during a given day.
- (5) Thousand gallons washwater used

Enter, in thousand gallon units, the total washwater used during a given day.
- F. Chemical and Physical Analyses

Enter, in the units specified, the values for each column heading for raw, coagulated and finished water analyses. All tests must be performed as listed in Standard Methods for the Examination of Water and Wastewater, 14th Edition. If more than one test per day is performed, enter the average daily concentration.
NOTE: All tests must be performed daily except finished water distribution.
- G. Treatment Chemicals
- (1) Pounds Chemicals used

Enter the amount of chemical, in pounds, added to the water on a given day.
- (2) Chemical Dosages

Enter, in parts per million the calculated concentration for each chemical addition based on lbs chemical added per day (lbs./day = ppm x MGD x 8.34) and raw water pumped.

 $\text{ppm} = \frac{\text{lbs./day} \times \%}{\text{MGD} \times 8.34}$

% - % available compound
- H. Bacteriological Analyses
- (1) Raw Water
- (a) Agar Plate Count (35°C)

Enter the number of organisms counted per 1 ml.
- (b) Number positive 5-10 ml tubes

Enter the number of positive tubes (with gas production) noted in the multiple tube test.
- (c) Membrane Filter Coliform per 100 ml

Enter the average number of coliform colonies counted per plate.
- (2) Finished Water

(Same as raw water.)
- I. This section is an indication of the amount of water lost through the plant.
- J. This section is for use in determining treatment efficiency.

NUMBER	SAMPLING INFORMATION					Date Analyzed	Coliforms Per/100ml	NO POSITIVE 5-10ML TUBES	CONFIRMED BY	RESIDUAL CHLORINE	NUMBER	SAMPLING INFORMATION					Date Analyzed	Coliforms Per/100ml	NO POSITIVE 5-10ML TUBES	CONFIRMED BY	RESIDUAL CHLORINE	
	Sample Location	Date Collected	Time (military) Collected	Person Collecting Sample	Lab or Person Performing Analysis							Sample Location	Date Collected	Time (military) Collected	Person Collecting Sample	Lab or Person Performing Analysis						
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2											72											
3											73											
4											74											
5											75											
6											76											
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Remarks: