

Issued: January 2000
Supersedes All Previous Issues

**INSTRUCTIONS FOR COMPLETING THE PLANT -
DISTRIBUTION MONTHLY OPERATION REPORT (MOR)
EPA FORM 5002 (1/00)**

GENERAL

All community type public water systems, and those non-community type water systems designated by the district engineer, are required to make certain specific physical and chemical analyses of the water supplied to their consumers. The minimum required analyses and the frequency at which they are required are indicated on the attached sheet entitled "Minimum Required Chemical Analyses of Water for Community and Major Non-Community Water Systems". It is only necessary to report on the analyses required for your type of water system based upon the treatment being provided.

Please note that minimum required analyses required to be made and reported by the State may not be adequate for good operational control of the treatment process being provided. Consider this possibility very carefully when determining your operational control schedule.

All analyses are to be made in conformity to the methods listed in the most recent edition of "Standard Methods for the Examination of Water and Wastewater", or by methods acceptable to the Water Quality Section, Ohio EPA.

Analyses required "daily" are to be made based upon a seven (7) day week.

GUIDELINES

The results of the required analyses or determinations are to be entered upon the "Drinking Water Operational Report", EPA 5002, for the date the sample was collected. The completed report is to be forwarded to your local Ohio EPA District Office, Attention: Division of Drinking and Ground Waters, by the 10th of the month following the month being reported.

NOTE: Disinfection residuals on the distribution system are required daily whenever water is available to a consumer even though the system is not producing water.

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1. PUBLIC WATER SYSTEM INFORMATION

Print or type name of public water system (PWS) and name of source treatment unit (STU).

Enter the PWS ID number and the STU ID number.

2. LABORATORY INFORMATION

Enter month and year being reported.

Enter the name and ID number of the laboratory reporting the data.

3. ANALYTICAL INFORMATION

*For the purpose of this report, any analytical values obtained that are lower than your method detection limit should be reported at the detection limit value (i.e., < 0.1 would be reported as 0.1)

- (a) Plant Production - enter the day's quantity of water pumped to the distribution system in millions of gallons per day (MGD) to 3 decimal places.
- (b) pH - enter the result of the daily plant tap pH (Hydrogen Ion Concentration) to the nearest tenth of a unit (7.85 becomes 7.9 or 7.84 becomes 7.8).
- (c) Phenol - enter the result of the daily Phenolphthalein Alkalinity determination in milligram per liter (mg/l).
- (d) Total - enter the result of Total Alkalinity (Methyl Orange) in milligrams per liter (mg/l) for the date(s) sampled.
- (e) Stability - enter the result of the Calcium Carbonate Stability (Marble) test in milligram per liter (mg/l), or the calculated pH Saturation Value (the nearest tenth of a pH unit) when using Langelier's Index for calcium carbonate stability for the date sampled.
- (f) Hardness - enter the daily results of the plant tap Total Hardness determination by EDTA Titrimetric Method, or hardness calculation in milligram per liter (mg/l) as CaCO₃.
- (g) Phosphate as Total P - enter the result of the monthly plant tap Phosphate, as total P, analyses to the nearest tenth milligram per liter (mg/l) for the date sampled.
- (h) Iron - enter the results of the plant tap Iron analyses to the nearest tenth milligram per liter (mg/l) for the dates sampled.
- (i) Manganese - enter the result of the plant tap Manganese analyses to the nearest hundredth milligram per liter (mg/l) for the dates sampled.

INSTRUCTIONS FOR COMPLETING THE PLANT - DISTRIBUTION MOR PAGE 3

- (j) Copper - enter the result of the plant tap Copper analyses to the nearest tenth milligram per liter (0.1 mg/l) for the dates sampled.
 - (k) Chlorine Dioxide - enter the results of the daily plant tap Chlorine Dioxide residual analyses to the nearest tenth milligram per liter (mg/l) for the date sampled.
 - (l) Chlorite - enter the result of the daily plant tap Chlorite analyses to the nearest tenth milligram per liter (mg/l) for date sampled.
 - (m) Free Chlorine (Plant) - enter the result of the minimum plant tap Free Chlorine residual to the nearest tenth milligram per liter (mg/l) for date sampled.
 - (n) Combined Chlorine (Plant) - enter the result of the minimum plant tap Combined Chlorine residual to the nearest tenth milligram per liter (mg/l) for date sampled.
 - (o, p) Distribution System Free and Combined Chlorine - residual analyses are required daily from representative points on the distribution system. When more than one free and combined chlorine residual test is made per day, report the minimum free and combined chlorine residual to the nearest tenth milligram per liter (0.1 mg/l).
 - (q) Sodium - enter the sodium results to the nearest tenth milligram per liter (mg/l) for the date(s) sampled.
 - (r) TOTAL - enter the total value of all samples for each column.
 - (s) MAX. - enter the maximum value of all samples for each column.
 - (t) MIN. - enter the minimum value of all samples for each column.
 - (u) AVG. - enter the average value of all samples for each column.
4. Name and Certification Number of Operator in Charge, the signature of the responsible official, and the date the report is completed.
 5. Return completed report to your district office no later than 10 days after the end of the month you are reporting.



Division of Drinking and Ground Waters



PLANT -- DISTRIBUTION MONTHLY OPERATION REPORT

PUBLIC WATER SYSTEM INFORMATION:

PWS Name: _____

STU Name: _____

PWSID #: _____ STU #: _____

LABORATORY INFORMATION:

Reporting Period: _____

Analytical Lab: _____ ID: _____

NOTICE: This report is required under Sections 6109.04 and 6109.12, Ohio Revised Code.
Non-compliance may result in civil penalties up to a maximum of \$25,000 per violation per Sections 6109.31 and 6109.33.

ANALYTICAL INFORMATION:

| Date | Plant Production (MGD) | PLANT TAP (all units mg/l except pH) | | | | | | | | | | | DISTRIBUTION SYSTEM | | | | |
|------|------------------------|-----------------------------------------|------------|-------|-----------|----------|----------------------|------|-----------|--------|------------------|----------|---------------------|----------|--------|-----|-----|
| | | pH | Alkalinity | | | Hardness | Phosphate as Total P | Iron | Manganese | Copper | Chlorine Dioxide | Chlorite | Chlorine | | Sodium | | |
| | | | Phenol | Total | Stability | | | | | | | | Free | Combined | | | |
| (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | (q) | | |
| 1 | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | (q) |
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PLANT – DISTRIBUTION-Continued MONTHLY OPERATION REPORT

| Date | Plant Production (MGD) | PLANT TAP (all units mg/l except pH) | | | | | | | | | | | DISTRIBUTION SYSTEM | | | | |
|-------|------------------------|-----------------------------------------|------------|-------|-----------|----------|----------------------|------|-----------|--------|------------------|----------|---------------------|----------|----------|----------|--------|
| | | pH | Alkalinity | | | Hardness | Phosphate as Total P | Iron | Manganese | Copper | Chlorine Dioxide | Chlorite | Chlorine | | Chlorine | | Sodium |
| | | | Phenol | Total | Stability | | | | | | | | Free | Combined | Free | Combined | |
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| 31 | | | | | | | | | | | | | | | | | |
| TOTAL | (r) | | | | | | | | | | | | | | | | |
| MAX. | (s) | | | | | | | | | | | | | | | | |
| MIN. | (t) | | | | | | | | | | | | | | | | |
| AVG. | (u) | | | | | | | | | | | | | | | | |

I certify under penalty of law that I have personally examined and am familiar with the data submitted in this MOR; that the data in this report is true, accurate and complete; and I am aware that falsification thereof could result in the imposition of fines and penalties including revocation of my certification as a public water system operator.

| | | |
|-----------------------------------------------------|-----------------------------------|------|
| Name of Certified Operator and Certification Number | Signature of Responsible Official | Date |
|-----------------------------------------------------|-----------------------------------|------|