



# TCEQ FORM 00690 INSTRUCTIONS

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TCEQ Water Supply Division  
Revised April 2021

## Instructions for Completing the Chlorine Dioxide Monthly Operating Report for Public Water Systems

### Abbreviations

ClO<sub>2</sub>: Chlorine dioxide

CLO2MOR: Chlorine Dioxide Monthly Operating Report

EP: Entry Point to the distribution system. Basically, a sample-tap on the water main that leaves the water treatment plant

### Instructions

The TCEQ webpage, [Public Water Systems Using Chlorine Dioxide or Ozone](#)<sup>1</sup> has additional information and the *Monitoring, Analyzing and Reporting Chlorine Dioxide and Chlorite* regulatory guide (RG-503). [Texas Drinking Water Watch](#)<sup>2</sup> (DWW) is a database that drinking water operators and the public can use to find information about public water systems. It may be used to find your system and plant information.

These instructions are provided for the use of the Microsoft Excel Chlorine Dioxide Monthly Operating Report (TCEQ Form 00690). The fillable form will perform the needed calculations and compliance determinations once you have entered the appropriate raw data. These instructions are also included in the form, simply click on a cell and instructions will appear. The CLO2MOR should be organized in the following sections and should be completed in this order:

- PWS Information and Reporting Period
- RAW DATA
- Disinfection and Violation Information, General Remarks
- DATA SUMMARY
- Operator and Report Submission Information

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<sup>1</sup> [www.tceq.texas.gov/drinkingwater/chemicals/dbp/dbp\\_risk.html](http://www.tceq.texas.gov/drinkingwater/chemicals/dbp/dbp_risk.html)

<sup>2</sup> [dww2.tceq.texas.gov/DWW/](http://dww2.tceq.texas.gov/DWW/)

## PWS Information and Reporting Period

CHLORINE DIOXIDE MONTHLY OPERATING REPORT FOR PUBLIC WATER SYSTEMS				
PWS NAME:			TREATMENT PLANT NAME:	
PWS ID Number:			TREATMENT PLANT NUMBER:	
Report Month:		Year:		

**Figure 1. PWS Information and Reporting Period Section of CL2MOR**

**PWS NAME:** Enter the name of your public water system.

**PWS ID Number:** Enter the public water system’s 7-digit PWS identification number.

**Report Month:** Using the drop-down list, select the month that the data was collected. Do not enter the month that you are sending the report. Once the Report Month is selected, the RAW DATA section will populate the appropriate number of rows (for the days in the month) for your raw data.

**TREATMENT PLANT NAME:** Enter the name of the water treatment plant. Each treatment plant that uses ClO<sub>2</sub> must complete a separate CLO2MOR.

**TREATMENT PLANT NUMBER:** Enter the name of the water treatment plant.

### RAW DATA

RAW DATA									
DATE	ClO <sub>2</sub> Used?	ClO <sub>2</sub> EP	ClO <sub>2</sub> Distribution			Chlorite EP	Chlorite Distribution		
			First	Sec.	Third		Near	Mid	Far
1									
2									

**Figure 2. RAW DATA Section of CLO2MOR**

**ClO<sub>2</sub> Used?:** Use the dropdown list, select “Yes” or “No” to indicate whether ClO<sub>2</sub> was used on a given day . You must select “Yes” before you can enter any daily data. The form will always automatically show 31 rows for the table but not all months have 31 days. The form will grey out date rows depending on the month selected. You do not need to select “Yes” or “No” on greyed out date rows. Once you make the selection the form cells in the next columns will change shading to remind you to enter data in those cells, see Figure 3.

Note: We incorporated a feature that allows you to record data (especially distribution system data) on a day that you did not use your generator. To use this feature, you must use the following data entry sequence:

- First select “Yes”
- Then enter any of the data that you collected
- Finally, change the selection to “No”

**ClO<sub>2</sub> EP:** Record the ClO<sub>2</sub> residual level in milligrams per liter (mg/L) at the EP for each day the ClO<sub>2</sub> generator is used. All EP ClO<sub>2</sub> data is used to determine the Maximum Residual Disinfectant Level (MRDL) ClO<sub>2</sub> compliance. Failure to collect ClO<sub>2</sub> data is a monitoring and reporting (M/R) violation. When more than one test was conducted, report the highest test result for the day. You may leave all other cells blank if no ClO<sub>2</sub> was not used on that date. Input of results  $\geq 0.8$  mg/L will change shading in subsequent cells (Figure 3).

**ClO<sub>2</sub> Distribution (First, Sec., Third):** When any of the ClO<sub>2</sub> daily results at the EP is 0.8 mg/L or higher, you must collect three ClO<sub>2</sub> samples in the distribution system (Refer to RG-503 for further instruction). All three samples (first, second, third) must be collected at TCEQ approved sampling sites in the distribution system that are represented in the system's Monitoring Plan. These distribution system sample results will be used to determine ClO<sub>2</sub> MRDL compliance. Enter sample results in First, Sec., Third column in the form on date of sample collection in mg/L. When more than one sample was collected for each test, report the highest test result for the day. When EP results were below 0.8 mg/L, you do not have to sample for ClO<sub>2</sub> in the distribution system.

**Chlorite EP:** Enter the chlorite concentration in mg/L at the EP for each day the ClO<sub>2</sub> generator is used. Failure to collect chlorite data is a Monitoring and Reporting (M/R) violation. When more than one test was conducted, enter the highest test result for the day. You may leave all other cells blank if no ClO<sub>2</sub> was used on that date and chlorite was not tested.

**Chlorite Distribution (Near, Mid, Far):** This is your three sample-set for chlorite. Enter the number of samples in the Near (nearest the treatment plant), Mid (first service connection), Far (far reaches of the distribution system) cells that were collected at the approved chlorite sampling points in the distribution system. For example, if you collected 1 sample from each of three sampling sites (Near, Mid, Far) on the 10th, put a 1 in each of three cells for that day. You may leave all other cells blank if no sample was collected on that date.

RAW DATA									
DATE	ClO <sub>2</sub> Used?	ClO <sub>2</sub> EP	ClO <sub>2</sub> Distribution			Chlorite EP	Chlorite Distribution		
			First	Sec.	Third		Near	Mid	Far
1	Yes	0.50				1.50			
2	Yes	0.90							
3	No								
4	Yes	0.10							
5	Yes								
6									

**Figure 3. RAW DATA Section of CLO2MOR with Example Data and Shading**

## Disinfection and Violation Information, General Remarks

<b>Chlorite Stock Solution</b>	
	g/L chlorite
	g/L chlorate
<b>Booster Chlorination?</b>	
<b>Chlorite Distribution Monitoring</b>	
<b>Samples Collected</b>	

**Figure 4. Disinfection Section of CLO2MOR**

**(Optional) Chlorite Stock Solution:** The purity of the sodium chlorite feedstock can be reduced by high temperatures or exposure to sunlight. Each plant should test the purity of the chlorite solution in the bulk storage tank at least monthly. Enter the chlorite and chlorate concentrations, in grams per liter (g/L), of the sodium chlorite solution used to supply the ClO<sub>2</sub> generator. If you analyzed the stock solution more than once during the reporting month, record the average value of all the tests.

**Booster Chlorination?:** Using the drop-down list, select “Yes” if your system has booster chlorination facilities in the distribution system. If not, select “No”.

**Chlorite Distribution Monitoring Samples Collected:** This count will be calculated automatically based on how many samples were entered in the RAW DATA table for Near, Mid, Far.

<b>Chlorine Dioxide Violations</b>		<b>Chlorite M/R Violations</b>	
<b>Number of Violations</b>		<b>Number of Violations</b>	
Acute MRDL		Note: MCL Violations TBD by the TCEQ	
Non Acute MRDL		<b>Number of Violations</b>	
Monitoring		Monitoring	
TCEQ Notified?		TCEQ Notified?	
Date(s):	03/08/21	Date:	
Public Notified?		Public Notified?	
Date(s):		Date:	
<b>GENERAL REMARKS ABOUT ClO<sub>2</sub> GENERATOR</b>			

**Figure 5. Violation Section of CLO2MOR**

### Chlorine Dioxide Violations:

**Acute MRDL:** This will be calculated automatically. If you have an Acute Maximum Residual Disinfectant Level MRDL violation, you must notify both the TCEQ and your customers within 24 hours.

**Non Acute MRDL:** This will be calculated automatically.

**Monitoring:** This will be calculated automatically.

**TCEQ Notified? Dates:** Use the drop-down list, select “Yes” if you had any ClO<sub>2</sub> violation and notified the TCEQ and public as required. Enter date(s). Select “No” if you failed to do the proper notification.

**Public Notified? Dates:** Use the drop-down list, select “Yes” if you had any ClO<sub>2</sub> violation and did the required public notification. Enter date(s). Select “No” if you did not have a ClO<sub>2</sub> violation that required public notification or failed to do proper notification. If you have already issued the notice, attach a copy of the notice and the Certificate of Delivery.

#### **You must contact the TCEQ’s Drinking Water Standards Section (DWSS) following an MRDL violation.**

- You must notify the DWSS of an Acute MRDL violation within 24 hours.
- You must notify the DWSS of a Non-acute MRDL by the end of the next business day.
- The DWSS may be contacted by email at [pdws@tceq.texas.gov](mailto:pdws@tceq.texas.gov) or telephone at (512) 239-4691.

### Chlorite M/R Violations:

**Monitoring:** The **Number of Violations** will be calculated automatically.

**TCEQ Notified?/Date:** Use the drop-down list, select “Yes” or “No” if the TCEQ was notified. Date and TCEQ notification is indicated by the submission of the MOR.

**Public Notified? / Date:** Use the drop-down list, select “Yes” if you had a chlorite M&R violation and have already issued the required public notice. Enter the date(s). Select “No” if you will issue the notice later. If you issued a public notice, attach a copy of the notice(s) and certificate of delivery.

**GENERAL REMARKS ABOUT ClO<sub>2</sub> GENERATOR:** Enter any required maintenance and feed adjustments made to the ClO<sub>2</sub> generator during the reporting month.

<b>Total water treated this Month</b>	<b>Sodium Chlorite used this Month</b>
MG	lbs.

**Figure 6. Water Treatment and Sodium Chlorite Section of CLO2MOR**

**(Optional) Total Water Treated this Month:** Enter the total amount of water, in million gallons (MG), treated during the reporting month.

**(Optional) Sodium Chlorite Used this Month:** Enter the total amount of sodium chlorite, in pounds (lbs.), used by the water treatment plant during the reporting month.

DATA SUMMARY					
	ClO <sub>2</sub> EP	ClO <sub>2</sub> Distribution			Chlorite EP
		No. of Sets:			
		First	Sec.	Third	
# > Limit					
Max.					
Min.					
Avg.					

**Figure 7. DATA SUMMARY Section of CLO2MOR**

**DATA SUMMARY:** All data in the DATA SUMMARY table will auto populate based on the data that is entered in the RAW DATA. Review the data that auto populates in the table to ensure accurate and complete data is reflected.

## Operator and Report Submission Information Section

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Operator's Signature: \_\_\_\_\_

License No. & Class: \_\_\_\_\_ Date: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Submit Report to TCEQ/Water Supply Division/Drinking Water Standards Section(MC-155), ATTN: Monthly Reports, P.O. Box 13087, Austin, TX 78711-3087  
The report is due the 10th of the following month

**Figure 8. Operator Information Section of CLO2MOR**

**Operator's Signature:** Sign your name By signing this report, you are certifying that to the best of your knowledge the information contained within this report is complete and accurate. The operator completing this report must hold a Class C or higher certification.

**License Number and Class:** Enter your valid Water Operator License number and class.

**Date:** Enter the date you completed and signed the report.

**Telephone Number:** Enter the best phone number to get in contact with a water operator familiar with the submitted CLO2MOR.

Reporting Requirements: Laboratory analytical test reports must be attached to the CLO2MOR. **Mail the CLO2MOR and distribution chlorite results to TCEQ by the tenth day of the following month.** Systems that did not use chlorine dioxide for one month are still required to mail a CLO2MOR. Send to:

**Regular mail:**

TCEQ  
MC-155, Attn: Chlorine Dioxide  
PO BOX 13087  
Austin, TX 78711-3087

**Certified mail:**

TCEQ  
MC-155, Attn: Chlorine Dioxide  
12100 Park 35 Circle  
Austin, TX 78753