11. Public Notification

Texas Rules require that you notify both your customers and TCEQ when certain situations or violations occur. PN requirements vary according to the violation type. This chapter explains the types of violations applicable to SWTPs and the requirements for notification.

Additional information related to PN is available on our webpages[9] .

> To ensure compliance with the PN deadlines described in this chapter, you should enter data in your MOR workbook daily. As you enter data, the workbook will alert you when violations occur. In some situations, you cannot wait until the end of the month to issue a PN or you will miss the deadline.

11.1 Violation Types

The types of violations addressed in this guidance are categorized according to its risk to public health as described in the following bullets:

- Acute, treatment technique violations are Tier 1 violations. These violations could have significant potential for serious, adverse effects on public health.
- Non-acute, treatment technique violations are Tier 2 violations. These violations also have the potential to have serious adverse effects on public health.
- M/R violations are Tier 3 violations. They do not have an immediate risk to public health but still require you to notify your customers.

> The PN requirements for Tier 1, Tier 2, and Tier 3 violations are defined in 30 TAC Chapter 290.122. The tier (or type) of the violation dictates how and when to issue a PN.

Treatment Technique violations

Acute Violations

As you enter daily operational and performance data into your MOR workbook, it identifies the acute violations defined in Table 11.1.

[9] www.tceq.texas.gov/drinkingwater/public_notice.html

Table 11.1. Acute Violations Requiring 24-hr PN

Violation	Description of Violation
Daily Turbidity – conventional and cartridge filters	The turbidity level of the CFE, or finished water, exceeds 5.0 NTU at the designated reporting times.
Daily Turbidity – multibarrier failure	The turbidity level of the CFE, or finished water, exceeds 1.0 NTU at the designated reporting time while any of the following situations occur: • IFE turbidity exceeds 2.0 NTU at one or more filters. • Inactivation ratio is below 2.0. • There is not enough IFE or CT data to evaluate one or both scenarios above.
Daily Turbidity – membrane filters	The turbidity level of the CFE, or finished water, exceeds 1.0 NTU at any time during any day that water is being sent to distribution.
Monthly Reporting – MOR	Failure to submit an MOR for two consecutive months.
Monthly Reporting – FPR, FAR or CPE Request	Failure to submit an FPR, an FAR, or a CPE Request form for two consecutive months when required.

You must notify your customers as soon as possible and no later than 24 hours after identifying an acute violation (see Section 11.3). You must also notify us within 24 hours (see Section 11.2). As a matter of practice, we request that you contact us first. That way, we can discuss immediate threats to public health and any needed actions before you notify your customers. Acute threats may exist under conditions other than those identified in Table 11.1. Additionally, you may be required to issue a BWN as part of your PN if there has been either a multiple barrier failure to filtration facilities; or we determine it is in the best interest to public health that customers boil their water prior to consumption.

> It is extremely important that you contact us immediately after identifying an acute violation to determine if a BWN is required. If you are not able to consult with us prior to issuing a PN of that magnitude, you are still required to notify your customers within 24 hours.

Non-acute Violations

Non-acute violations are treatment technique violations that do not pose an immediate risk to public health. These violations are defined in Table 11.2. Non-acute violations are based on treatment plant compliance monitoring data showing the failure of no more than one barrier of filtration or disinfection.

These violations are based on the understanding that even though a single treatment barrier exceeded a minimum compliance level, other treatment barriers at the plant did offer public health protection. An example of this is an inactivation ratio of 2.0 via disinfection means that the plant is inactivating twice the number of *Giardia* and viruses as required by our rules even if minimum combined filter effluent turbidity levels were exceeded.

Table 11.2. Non-acute Violations Requiring 30-day PN

Violation	Description of Violation
Daily Turbidity – conventional and cartridge filters	The turbidity level of the CFE, or finished water, exceeds 1.0 NTU at the designated reporting times.
Daily CT	Plant fails to meet inactivation requirements (for *Giardia* and viruses) for more than 4.0 consecutive hours.
Daily low residual	The disinfectant residual of the finished water entering the distribution system falls below the required minimum level for more than 4.0 consecutive hours.
Monthly turbidity	For the month, more than 5.0% of the CFE turbidity readings are above 0.3 NTU.
Monthly residual	For two consecutive months, more than 5.0% of the residuals in the distribution system falls below the minimum residual level (0.2 mg/L free chlorine or 0.5 mg/L total chlorine).

Non-acute violations are further broken down into daily and monthly, non-acute violations. Daily, non-acute violations are based on the results of only one or two measurements or readings obtained during a single day. Monthly, non-acute violations are based on data collected over a period of one or two months. You should report all instances of non-acute violations, both daily and monthly, to us within 24 hours of identification so we can discuss the proper method of PN. You must issue a PN to your customers for these violations as soon as possible after they are identified, but not later than 30 days. See Section 11.2 for additional information on daily and monthly, non-acute violations.

> You may identify monthly, non-acute violations in the middle. In other words, the violation becomes unavoidable independent of other data collected for the rest of the month. It is extremely important that you understand the 30-day timetable for notification starts at the point of identification; otherwise, you may not meet the time requirement and incur a violation.

M/R Violations

As you enter data into your MOR workbook throughout the month, it will identify M/R violations as specified in Table 11.3. These violations have a low public health risk; therefore, you have 12 months to notify your customers. You do not have to notify us when one of these violations is identified. The monthly submission of the MOR serves as our notification.

Table 11.3. M/R Violations Requiring 12-month PN

Violation	Description of Violation
MOR submission	Failure to submit the MOR by the 10th of the month following the reporting period, or at all.
CFE turbidity	Failure to monitor or report all the required CFE turbidity readings.
Daily CT data	Failure to monitor or report all CT data needed to evaluate microbial inactivations.
Disinfectant residual at entry point	Failure to monitor or report the disinfectant residual concentration of water entering the distribution system.
Disinfectant residual in distribution	Failure to monitor or report the required number of disinfectant residual measurements in the distribution system.
Maximum IFE turbidity	Failure to monitor or report the maximum daily IFE turbidity reading.
4-hr IFE turbidity	Failure to monitor or report one or more of the turbidity readings four hours after the start of a filter run.
FPR, FAR, CPE Request	Failure to submit an FPR, an FAR, or a CPE request when required.

11.2 Notifying TCEQ

This section describes the processes for notifying us of violations. Adherence to this guidance will ensure you both notify us; and issue the required level of PN, in a timely manner.

Treatment Technique Violations

Acute Violations

Process for Notifying TCEQ

The process for notifying us of acute violations requires you to take the following actions:

- Fill out a SWTR Violation Report Form. (See following subsection.)
- Call 512-239-4691 to notify us and consult with a SWTR Coordinator. Make this call as soon as possible after identifying the violation; and no later than 24 hours. (See text box below.)
- Send the completed SWTR Violation Report Form to us via fax at 512-239-6050, or email a scanned copy to SWTR@tceq.texas.gov.

> As specified in Section 11.1, you must contact both your customers and us within 24 hours after identifying an acute violation. It is important that you contact us first and as soon as possible, so we can discuss the situation before you notify your customers. We want to make sure you issue the correct type PN with all required language.

Note: The MOR workbooks only count readings that are above violation limits after rounding to the nearest 0.1. Readings of 1.001 NTU to 1.049 NTU are rounded down to 1.0 NTU. Readings from 1.050 NTU to 1.099 NTU are rounded up to 1.1 NTU.

Consequently, a reading is not counted as above 1.0 NTU unless you entered a value that was 1.050 NTU or above.

SWTR Violation Report Form

The SWTR Violation Report Form (TCEQ Form 10449) contains the information we will request when you call; therefore, it is important to complete prior to calling. A blank copy of the form is available in Appendix F. It is also located on our website with instructions[10].

Non-acute Violations

Process for Notifying TCEQ

The process for notifying us of non-acute violations require the following actions:

- Fill out a SWTR Violation Report Form. (See previous subsection.)
- Call 512-239-4691 to notify us and consult with a SWTR Coordinator. Make this call as soon as possible after identifying the violation; and no later than 24 hours.
- Send the completed SWTR Violation Report Form to us via fax (512-239-6050) or email a scanned copy to SWTR@tceq.texas.gov.

Monthly and Daily, Non-acute Violations

Non-acute violations can occur on a daily or a monthly basis as indicated in Table 11.2. These two types of violations are explained in detail in the following subsections.

Daily Non-acute Violations

Daily, non-acute violations, as shown in Figure 11.2 are commonly triggered by CFE turbidity readings above 1.0 NTU, low disinfectant residual data for more than four consecutive hours, or low CT inactivation ratios. Examples of each of these situations are discussed below.

Example 1: Determining When to Notify TCEQ of a CFE Turbidity or Low Disinfectant Residual Violation

In this example, a SWTP collects the data shown in Figure 11.1 during the first week of the month. The plant feeds ammonia at some point during the treatment process and maintains a chloramine residual in the distribution system.

[10] www.tceq.texas.gov/drinkingwater/swmor/swmor/violation-report-form2

PERFORMANCE DATA																			
	Raw Water Pumpage	Treated Water Pumpage	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY							
					Basin No.						Turbidity						Lowest	
Date	(MGD)	(MGD)	NTU	Alk.	1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	Time
1	2.300	2.210	45	112	1.4	1.5					X	0.03	0.05	0.13	0.21	0.19	1.2	
2	2.100	1.988	53	116	1.9	2.5					X	0.13	0.25	0.11	0.07		2.1	
3	1.900	1.658	48	111	2.2	2.4					X	0.25	0.32	0.21	0.16	0.09	2.1	
4	4.500	4.654	66	101	1.8	1.3					X	0.47	0.55	0.24	0.11	0.31	1.8	
5	3.100	2.440	56	112	3.1	2.8					X	0.54	1.16	1.03	1.40	0.42	1.3	
6	2.300	2.232	45	110	2.2	1.9					X	0.22	0.08	0.04	0.05	0.09	1.9	
7	2.500	2.445	48	115	2.5	2.7					X	0.11	0.14	0.08	0.09	0.11	0.3	2.25

Figure 11.1. Example Data to Show When to Notify TCEQ of a CFE Turbidity or Low Disinfectant Residual Violation

This figure shows two CFE turbidity readings above 1.0 NTU on Day 5 (1.16 NTU in NTU3, and 1.4 NTU in NTU5). Because there were CFE turbidity levels above 1.0 NTU, the plant was required to consult with us within 24 hours (by noon the next day) and then notify its customers accordingly. If the plant did not consult with us by noon the next day, it would have been required to notify its customers per Section 11.3.

The total chlorine residual entering the distribution system dropped as low as 0.3 mg/L on Day 7 and was below 0.5 mg/L for as long as 2 hours and 15 minutes. Since the longest period that the residual was below 0.5 mg/L was less than 4 hours, the system did not violate the treatment technique requirements and was not required to notify either us or its customers. However, if the residual had been below 0.5 mg/L for more than 4.0 hours, the system would have violated the rule and been required to notify us of the violation no later than 5 p.m. on the next business day. The system would have also been required to notify its customers as described in Section 11.3.

Example 2: Determining When to Notify TCEQ of a CT Violation

Figure 11.2 shows sections of a SWTP's MOR which explains when to notify us of a CT violation.

PERFORMANCE DATA									
	DISINFECTION PROCESS DATA								
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
7	NA *D1*								
	FCL *D2A*	0.2	3.000	12.0	7.4				
	NA *D2B*					0.48	11.33	0.96	2.25
	CLA *D3*	0.3	3.000	14.0	7.5			(G)	
	D4								

Figure 11.2. Example Data to Show When to Notify TCEQ of a CT Violation

In this example, the plant has three disinfection zones. Zone D2 contains two, parallel treatment trains, D2A and D2B. Disinfection zones D1 and D2B were not being used for disinfection credit on Day 7. Based on the data reported, the following occurred:

- All the water had to flow through zone D1 because there was no treatment train alternative. However, there was no disinfectant used in that zone, which was denoted by NA. Due to the lack of disinfectant used in this zone, the plant would have not received CT credit; thus, no performance data set needed to be reported for this zone.
- Like zone D1, all the water must flow through zone D3, because there is no parallel treatment train alternative. The treatment plant was operating at a peak flow rate of 3.000 MGD when the sample set was collected for this zone.
- Unlike zones D1 and D3, the water can flow through either zone D2A and D2B, or both. However, it was reported that at a peak flow of 3.000 MGD, all the water flowed through zone D2A. Since there was no flow in zone D2B, the operator selected NA as the disinfectant., and was not required to report a performance data set.

When the sample set on Day 7 was collected, the inactivation ratio for both *Giardia* and viruses was 0.96. The maximum period that the inactivation ratio was below 1.0 was 2 hours, 15 minutes. Since the longest period that the inactivation ratios were below 1.0 was less than 4.0 hours, the system did not violate the treatment technique requirements and was not required to notify either us or its customers about the problem. However, if the inactivation ratio had been below 1.0 for more than 4.0 hours, the system would have had a violation that required it to notify us no later than 5 p.m. on the next regular business day. The system would have also been required to notify its customers as described in Section 11.3.

Monthly Non-acute Violations

Once a monthly violation is identified or is unavoidable, you must notify us, even if it is before the end of the month. For example, if you have an operational problem at the beginning of the month resulting in a violation, you cannot wait until the end of the month to review your records and decide whether you should contact us and notify the public. As soon as you identify a monthly violation has occurred or cannot be avoided, you have 24 hours to notify us.

Monthly violations can be triggered by having more than 5% of the distribution disinfectant residual readings fall below the minimum required level for two consecutive months, or by having more than 5% of the CFE turbidities above 0.3 NTU during a single month. See Table 11.4 to determine if the samples that trigger a violation make up more than 5% of the total number of samples you collect.

Table 11.4. Number of Samples that Trigger a Monthly Violation

Total Number of Samples Collected	Number of Samples Collected hat will put you over 5%
0–19	1
20–39	2
40–59	3
60–79	4
80–99	5
100–118	6
119–138	7
139–158	8
159–178	9
179–198	10
199–217	11

Note: The MOR workbooks only count readings that are above violation limits after rounding to the nearest 0.1. This means that all readings of 0.301 NTU to 0.349 NTU are rounded down to 0.30 NTU. Any reading from 0.350 NTU to 0.399 NTU are rounded up to 0.4 NTU. Consequently, a reading is not counted as above 0.3 NTU unless you enter a value that is 0.350 NTU or above.

M/R Violations

The MOR workbooks automatically report M/R violations. You do not have to take any special steps to notify us of an M/R violation prior to your MOR submission; however, you still need to notify to your customers. (See Section 11.3.)

Proof of Public Notification

You are required to send us copies of any PNs distributed to your customers within 10 days of issuance. Each copy must be accompanied with a signed COD.

Email copies of PNs and CODs to PWSPN@tceq.texas.gov, or mail them to:

Drinking Water Inventory, MC-155
Attn: Public Notice
TCEQ
PO Box 13087
Austin, TX 78711-3087

Additional information including COD templates is on our Public Notification webpage[11].

[11] www.tceq.texas.gov/drinkingwater/public_notice.html/#SWTR

11.3 Notifying Customers

PN protects your customers by informing them of potential health risks associated with improperly treated water. Notifying your customers within required timeframes is an important step in protecting public health. Each PN must conform to specific requirements and contain mandatory information. The customer notification requirements for the different types of violations are explained in this section.

> It is important to be mindful of the type and severity of the violation so that you can quickly identify the level of PN required and take the proper actions. Visit our PN webpage at <www.tceq.texas.gov/drinkingwater/public_notice.html/#SWTR> to access the mandatory language that must be included with your PN.

Treatment Technique Violations

Acute Violations

Acute violations require that you issue PN to your customers within 24 hours of the identified violation. In some cases, you will also be required to issue a BWN along with the PN. The requirements for how to notify customers of acute violations vary for community and non-community water systems.

Community Water Systems

Community Water Systems must distribute acute violation notices within 24 hours of identification (with or without the BWN) in one or more of the following ways which are reasonably calculated to reach everyone served by the PWS in the required time period:

- Furnish a copy to radio and television stations serving the PWS service area.
- Publish in a local newspaper serving the PWS service area. If the area is not served by a newspaper in general circulation, the notice may be distributed in one of the following ways:
    - Deliver directly to customers.
    - Continuously post in conspicuous places within affected PWS service area.
    - Deliver electronically or use alert systems (e.g., reverse 911).

Non-community Water Systems

Non-community water systems are not required to publish acute violation notices on the radio or television; or publish it in a local paper. However, they must be distributed within 24 hours of identification in one of the following ways:

- Deliver directly to customers.
- Continuously post in conspicuous places within affected PWS service area.
- Deliver electronically or use alert systems (e.g., reverse 911).

Additional Notice

You must keep your customers informed about the status of the violation until the problem is resolved. Following the initial notice, you must comply with each of the following requirements:

- Notify your customers of the status of the violation no later than 45 days after the violation. You can request that this requirement be waived if you have corrected the violation within the 45-day period; however, we must give the waiver, in writing, prior to the 45-day deadline.
- Reissue the notice at least every 90 days as long as the violation exists.
- Rescind BWNs by following the BWN guidance on our public notice to boil water webpage[12].

If the original notice was issued by mail or direct delivery, we recommend you issue any follow-up notices using the same method.

Non-acute Violations

Non-acute violations require that you issue PN to your customers within 30 days of the identified violation. The requirements for how to notify customers of non-acute violations also vary for community and non-community water systems.

Community Water Systems

Community water system must distribute non-acute violation notices within 30 days of identification in one of the following ways:

- Mail to each customer receiving a bill, and to other service connections to which water is delivered.
- Deliver directly to each customer receiving a bill, and to other service connections to which water is delivered.

Additionally, you are required to distribute the non-acute violation notice within 30 days of identification, in one or more of the following ways reasonably calculated to reach other persons served by the PWS:

- Publish in a local newspaper.
- Deliver multiple copies for distribution to others (i.e. apartment building owners, large private employers).
- Continuously post in conspicuous public places within the area served.
- Publish on the Internet.
- Deliver directly or use alert systems (e.g., reverse 911.).
- Deliver to community centers.

Continuous posting must remain in place for at least seven days or as long as the violation exists, whichever is longer.

[12] www.tceq.texas.gov/goto/pws/notices

Non-community Water Systems

Non-community water systems are not required to publish non-acute violation notices on the radio or television, or in a local paper. However, they must be distributed within 30 days in one of the following ways:

- Continuously post the notice in conspicuous places within the affected PWS's service area.
- Mail or deliver directly to each customer or service connection.

Additionally, you must distribute the notice by any of the following ways reasonably calculated to reach other people served by the PWS:

- Publish in a local newspaper or newsletter distributed to customers.
- E-mail to notify employees or students.
- Deliver electronically or use alert systems (e.g., reverse 911).
- Deliver multiple copies to central locations (e.g., community centers).

Updating Customers Following the Initial Notice

You must keep your customers informed about the status of the violation until the problem is resolved. Following the initial notice, you must reissue the PN at least every 90 days as long as the violation exists.

If the original notice was issued by mail or direct delivery, it is recommended any follow-up notices be issued using the same method.

M/R Violations

Monitoring or reporting (M/R) violations require that a PN be issued to customers within 12 months of the identified violation. The requirements for noticing customers of these violations vary for community and non-community water systems.

Community Water Systems

Community water system must issue M/R violation notices within 12 months of identification. You must distribute the notice in one of the following ways:

- Mail or directly deliver to each customer receiving a bill and to other service connections to which water is delivered.
- Report in your annual CCR as long as it is issued within the 12-month time of the violation or situation.

Additionally, you are required to distribute the notice with 12 months by one or more of another method reasonably calculated to reach other persons served by the PWS such as:

- Deliver multiple copies for distribution to others (i.e. apartment building owners, large private employers).
- Continuously post in conspicuous public places within the area served.
- Publish on the Internet.

- Deliver electronically or use alert systems (e.g., reverse 911).
- Deliver to community organizations.

Continuous posting must remain in place for at least seven days or as long as the violation exists, whichever is longer.

Non-community Water Systems

Non-community water systems are not required to issue their non-acute violation notices using electronic media or to publish them in a local paper. However, you must distribute the notice within 12 months in one of the following ways:

- Continuously post the notice in conspicuous places within affected PWS or service area.
- Mail or directly deliver the notice to each customer or service connections.

You must also distribute the notice within 12 months in one or more the following ways reasonably calculated to reach other persons served by the PWS such as:

- Publish in a local newspaper or newsletter distributed to customers.
- E-mail to notify employees or students.
- Deliver electronically or use alert systems (e.g., reverse 911).
- Deliver multiple copies to central locations (e.g., community centers, large employers).
- Publish on the Internet.

Updating Customers Following the Initial Notice

You must keep your customers informed about the status of the violation. Following the initial notice, you must reissue the notice at least every 12 months as long as the violation exists. If the original notice was issued by mail or direct delivery, any follow-up notices must be issued using the same method.