Monthly Emergency Generator Inspection Instructions

Applicable Regulation: 30 Texas Administrative Code Subsection 290.46(m)(8)

Why should I use this checklist?

Use this checklist to document routine testing and maintenance for your water system's emergency generator(s). This checklist is designed specifically for systems serving less than 1,000 connections. Systems should also adhere to any maintenance recommended by the generator's manufacturer.

Note: Systems serving 1,000 connections or more are required to conduct generator testing and maintenance according to Level 2 maintenance requirements contained in the National Fire Protection Association (NFPA) 110 Standard.[1] Systems serving less than 1,000 connections may also use this standard instead of this checklist.

How do I use it?

Complete each item on the checklist and record the findings in the applicable column. If problems are identified, state how they were addressed in the "Action Taken" column.

Item numbers25-29 of this checklist must be completed with the generator operating for at least 30 minutes while running at least 30% of the generator's kW rating or as per manufacturer's recommendations. For example, if the generator has a maximum rating of 100 kW, you should run the generator with a load of at least 30 kW when inspecting Item numbers 25-29.

Record the date when the test and maintenance were conducted and include the name of the individual performing the work. Water system personnel or a third party may conduct the inspection.

How often do I use this checklist?

Test all emergency generators at least once a month.

Do I send it to TCEQ?

No, you do not need to send this to TCEQ, unless requested. Keep it with your records for inspections.

How long should I keep it?

Keep completed checklists for as long as the generator and its components are in use at your system (i.e., for the life of the generator). Keep an inventory of all critical generator components, such as maintenance items, lubricants, and coolants, as well.

Need assistance?

If you have questions about how to fill out the checklist or the public water system program, please contact Small Business and Local Government Assistance by phone at 800-447-2827 or by email at TexasEnviroHelp@tceq.texas.gov.

1. www.nfpa.org/codes-and-standards/nfpa-110-standard-development/110

MONTHLY EMERGENCY GENERATOR INSPECTION CHECKLIST

Location: _____

Description:

SN _____ **Model** _____ **Year** _____ **Rating** _____ **(kW)**

Item Number	Item	Yes	No	N/A	Action Taken
	Prior to generator start up:				
	Fuel System				
1	Record the level in generator's (or external) fuel tank				Tank level: gallons
2	Is the generator free of fuel contamination and condensation?				
3	Are the fuel lines and fittings free of signs of breaks and degradation?				
4	Are the fuel filters or water separators free of water accumulation, clogging, and sediment buildup?				
5	Fuel filter replacement date (if applicable):				Date:
6	Water separator replacement date (if applicable):				Date:
7	Are the fuel transfer pumps and float switches/valves operating properly?				
8	Are the fuel tank grounding rod or cathodic and generator lightning protection free of damage?				
9	If located inside an enclosure, are the auto alarms and generator shutdowns for the carbon monoxide monitor present and operational?				
	Lubrication System				
10	Is there an adequate oil level in oil lines and reservoirs?				
11	Are the oil lines and reservoirs free of leaks/breaks/degradation?				
12	Oil change date (if applicable):				Date:
13	Date of applying grease to bearing components and fittings (if applicable):				Date:

Item Number	Item	Yes	No	N/A	Action Taken
	Coolant System				
14	Is there an adequate coolant level in block heater, coolant lines, and coolant reservoirs?				
15	Are the block heater, coolant lines, and coolant reservoirs free of any leaks/breaks/degradation?				
16	Is the coolant filter free of clogs and sediment buildup?				
17	Coolant filter replacement date (if applicable):				Date:
18	Are the radiator, fan system, belts, air intake, and filters free of blockages/cracks/breaks/leaks?				
	Electrical System				
19	Are batteries mounted and secured?				
20	Are chargers/wiring/cables free of damage and corrosion?				
21	Are all chargers/wiring/cables secured tightly onto battery terminals?				
22	Does each battery unit have adequate electrolyte levels, charge retention, and discharge voltage?				
23	Are the Programmable Logic Controller and Uninterrupted Power Supplies water-tight, not subject to flood, properly ventilated, and backup power supply has adequate charge?				
24	Are switch gears water-tight and operable?				
	With generator operating under load:				
25	Operated generator at 30% load for at least 30 minutes?				
26	Is the fuel pump operating properly?				
27	Are the exhaust manifold and muffler working properly?				
28	Are fumes from the exhaust directed away from enclosed areas?				
29	Are the engine starters and alternators operating properly?				

Comments:

Inventory:

Signature of Inspector	Date of Inspection