

Cargo Tank Test and Inspection Records

Standard Operating Procedure, sanitized sample

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SAMPLE DOCUMENT. Built from the published regulations and general practice to show format and rigor. It contains no client information and no client system. Regulatory citations were verified on 13 September 2026 and carry a currency note in Appendix B. They are not legal advice and do not replace the regulation.

About This Sample

This procedure keeps a cargo tank fleet's periodic test and inspection records current, and keeps a tank that is out of date off the road. It is a records procedure with an operational point, which is the combination most operators get wrong in one direction or the other: either the tests get done and the paperwork is scattered, or the binder is tidy and a tank is running past due.

The design point is the due-date calculation. A tank does not have one expiration. It has a separate clock for each test type, each running from the date that test was last successfully completed. That is the part a spreadsheet built by hand almost always gets wrong.

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1. Purpose

To ensure every specification cargo tank in the fleet receives each required test and inspection before its due date, that the results are recorded and retained as required, that the specification plate markings match the record, and that no tank is filled or offered for transportation with a test past due.

2. Scope

- Applies to every specification cargo tank motor vehicle the operation owns or operates, including tanks on lease for 30 days or more.
- Applies to all periodic test and inspection types required for the tank's specification and service.
- Covers the records, the due-date calculation, the out-of-service decision, and the marking check.
- Does not cover the tests themselves, which are performed by a registered inspector or tester, nor does it cover repairs, modifications, or requalification after an accident.
- Does not cover daily pre-trip and post-trip inspection, which is a separate procedure.

- Does not replace the regulation. Where this procedure and 49 CFR Part 180 disagree, the regulation governs and this procedure gets corrected.

3. Roles

Role	Owns	Does not own
[Compliance Owner]	The tank register, the due-date calculation, scheduling, and the records file.	Performing or certifying any test.
[Maintenance Owner]	Presenting the tank prepared for test, and completing repairs identified by the inspector.	Deciding whether a tank returns to service.
[Registered Inspector or Tester]	Performing the test or inspection and issuing the written report. Must hold a current DOT registration.	Maintaining the operator's records.
[Dispatcher]	Honoring the out-of-service status on any tank flagged by this procedure.	Overriding an out-of-service flag.
[Approver]	Returning a tank to service after a failed test is corrected and retested.	Waiving a required test.

Roles, not names. The role-to-person map lives on the location roster, outside this document and outside the system.

4. Definitions

Term	Meaning in this procedure
Specification cargo tank	A cargo tank built and marked to a DOT or MC specification, for example DOT-406 or MC-306 in petroleum service.
Test type	One of the periodic tests and inspections listed in 49 CFR 180.407(c). Each type has its own interval and its own clock.
Due date	The last date a given test type may be completed, calculated from the date that test type was last successfully completed, not from the date of any other test.
Registered inspector or tester	A person registered with the U.S. Department of Transportation to perform the test or inspection, as required under 49 CFR Part 180 and Part 107, Subpart F.
Successfully completed	The test was performed, the tank passed, and a compliant written report exists. A test performed but failed is not a completed test.
Out of service	A status this procedure applies to a tank, blocking it from being filled or offered for transportation until the condition clears.
Specification plate	The marking on the tank that carries the specification and the date of the most recent test of each type, per 49 CFR 180.415.

5. Procedure

#	Action	Owner	Evidence it happened
1	At [interval, commonly monthly], review the tank register for every unit with any test type due inside the next [lead time, commonly 60 days].	[Compliance Owner]	Dated review record for the period
2	For each unit, confirm which test types apply to that tank's specification, service, insulation, and lining, and confirm the last successful completion date for each type.	[Compliance Owner]	Per-unit test type list with last-completed dates
3	Compare each due date to today. Any test type already past due goes to stop point G1 immediately, before anything is scheduled.	[Compliance Owner]	Due-date comparison result
4	Schedule the test with an inspector or tester holding a current DOT registration. Record the registration number at scheduling, not after the fact.	[Compliance Owner]	Scheduled date and the tester's registration number
5	Present the tank prepared for the test: cleaned, purged as required for the test type, and with access available.	[Maintenance Owner]	Preparation record
6	Test or inspection performed by the registered inspector or tester.	[Inspector]	Field record
7	Confirm the result for each test type performed. Any failure goes to stop point G2 before the tank moves.	[Compliance Owner]	Pass or fail recorded per test type
8	Receive the written report and check it against the required content in 49 CFR 180.417(b): tank identification and specification, MAWP, the type of test and the month and year performed, the items tested, defects found and how they were resolved, the performer's name, address and registration number, and the required signatures. An incomplete report goes to stop point G3.	[Compliance Owner]	Report received and completeness check recorded
9	Confirm the specification plate markings were updated to show the date of the most recent test of each type, per 49 CFR 180.415.	[Maintenance Owner]	Marking check, photographed or signed
10	File the report and calculate the next due date for each test type performed, from this completion date. Update the tank register.	[Compliance Owner]	Filed report and updated register
11	Clear the out-of-service flag if one was set, and confirm dispatch can see the unit as available.	[Approver]	Status change with approver and timestamp

6. Stop Points

ID	Condition	Action	Why it is a point
G1	Any required test type is past its due date.	Flag the unit out of service immediately. It may not be filled or offered for transportation until the test is successfully completed. Notify dispatch the same day.	49 CFR 180.407(a) is direct on this point: the tank may not be filled and offered for transportation until the test or inspection has been successfully completed. There is no grace period to manage and no operational argument that outranks it.
G2	A test or inspection failed.	The tank stays out of service. Repair, retest, and return to service only on a documented pass approved by the [Approver].	A failed test is information, not an obstacle. The failure mode to guard against is a tank quietly returning to service between the failure and the repair because someone needed a truck that morning.

ID	Condition	Action	Why it is a point
G3	The inspector's report is missing required content.	Do not file it and do not clear the flag. Return it to the tester for correction.	The report is the proof the test happened. An incomplete report means that at the next audit the operation has a tested tank and no record of it, which is indistinguishable from an untested tank.
G4	The specification plate markings do not match the record.	Correct before the unit returns to service.	The plate is what a roadside inspector reads. A correct file and a wrong plate is still an out-of-service finding at the scale.

7. Exceptions

- Tank filled before the due date and still loaded when the date passes. 49 CFR 180.407(a) addresses this case directly. Confirm the specific text before relying on it, deliver the load, and do not refill until the test is completed.
- Leased tank. A motor carrier leasing a cargo tank for 30 days or more carries the same record retention duty as the owner under 49 CFR 180.417(b). Get the current reports at lease start, not at audit.
- Tank out for repair across a due date. The due date does not pause. Schedule the test to occur while the unit is already down rather than releasing it and bringing it back.
- Tester registration lapsed between scheduling and testing. The test is not valid. Confirm current registration at the time of the test, not only at scheduling.
- Record lost or destroyed. Treat the test as not documented and reschedule. Reconstructing a test record after the fact is not an option available to the operator.

8. Records and Retention

Record	Stored at	Retention	Owner
Test and inspection reports, per test type	Principal place of business, or where the vehicle is housed or maintained, per 49 CFR 180.417(b)	Until the next test or inspection of the same type is successfully completed, per 49 CFR 180.417(b)	[Compliance Owner]
Tank register with per-type due dates	[system of record]	Life of the unit in the fleet	[Compliance Owner]
Tester registration numbers	[system of record]	With the report	[Compliance Owner]
Out-of-service flags and clearances	[system of record]	[period]	[Approver]
Marking check evidence	[records location]	With the report	[Maintenance Owner]

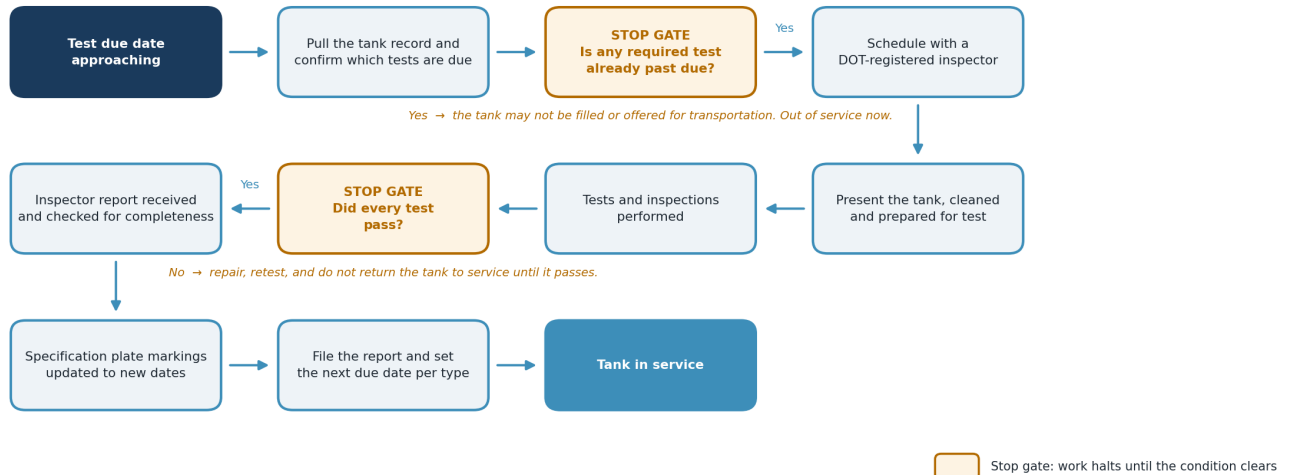
A retention trap worth stating plainly

The regulation requires the report to be kept until the next test of the same type is successfully completed. Operations that file by year rather than by test type routinely purge a report that is still the current one, because the tank had a different test that year. File by unit and by test type, not by calendar year.

9. Revision History

Version	Date	Change	Approved by
1.0	2026-09-13	Sample release. Sanitized demonstration document, no client content. Citations verified against the eCFR current text on 2026-09-13.	Jacob Johnston, True North Data Strategies LLC

Appendix A. Process Flow



Appendix B. Regulatory Basis

The periodic test and inspection schedule is set by 49 CFR 180.407(c). Intervals depend on the tank's specification, its service, and whether it is insulated or lined, so the table below is the general shape rather than a substitute for reading the governing table for a specific unit. The entries most often relevant to a petroleum marketer's non-pressure cargo tanks are marked.

Test type	General interval	Applies to
External visual	1 year	Cargo tanks generally. Vacuum-loaded tanks with full opening rear heads are on a 6 month interval.
Internal visual	5 years	Cargo tanks generally. 1 year for insulated tanks other than MC 330, MC 331 and MC 338, and 1 year for tanks in corrosive service.
Leakage test	1 year	Cargo tanks generally. 2 years for MC 330 and MC 331 in chlorine service.
Pressure test	5 years	Cargo tanks generally. 1 year for an insulated tank with no manhole or an insulated and lined tank. 2 years for vacuum-loaded tanks with full opening rear heads.
Lining inspection	1 year	Lined cargo tanks transporting lading corrosive to the tank.
Thickness test	2 years	Unlined cargo tanks transporting lading corrosive to the tank.

Source: 49 CFR 180.407(c). Bold rows are the types most commonly applicable to non-pressure petroleum cargo tanks such as DOT-406 and MC-306. MC-331 propane service carries its own intervals, including a 10 year internal and pressure interval for certain dedicated propane tanks under 3,500 gallons.

Other provisions this procedure relies on

Citation	What it requires
49 CFR 180.407(a)	A cargo tank may not be filled and offered for transportation or transported until the required test or inspection has been successfully completed, with a stated allowance for a tank filled before the due date.
49 CFR 180.415	Marking of the cargo tank to show the date of the most recent test and inspection of each type.
49 CFR 180.417(b)	Content of the written test and inspection report, retention by both the owner and the motor carrier until the next test of the same type is successfully completed, storage at the principal place of business or where the vehicle is housed or maintained, and the exception for a carrier leasing a tank for fewer than 30 days.
49 CFR Part 107, Subpart F	Registration of persons who perform cargo tank tests, inspections, repairs and manufacture.

Currency note

Citations above were read against the eCFR current text on 13 September 2026, which showed Part 180 amendments through 13 February 2026. Regulations change. Before this procedure is adopted at an operation, confirm each citation against the current eCFR text and record the date of that check in the revision history. A procedure that cites a rule is only as current as its last verification.

Appendix C. Why This Procedure Is Built This Way

One clock per test type

The single most common records failure in a cargo tank program is treating the tank as having one due date. It does not. Each test type runs from its own last successful completion. Step 2 and step 10 exist to force the per-type calculation, and the tank register is built the same way.

The out-of-service flag lives where dispatch can see it

A compliance finding that only compliance can see is not a control. Point G1 requires same-day notice to dispatch, because the only thing that actually keeps a past-due tank off the road is the person assigning loads knowing it is unavailable.

The report is checked on receipt, not at audit

Step 8 checks report completeness while the tester is still reachable and the work is fresh. Operations that skip it discover incomplete reports during an audit, years later, when the tester may no longer be in business and the tank has been tested three more times.

Scope says what this does not do

Section 2 explicitly disclaims the tests themselves and defers to the regulation on conflict. That is not hedging. A procedure that reads as though it replaces the regulation invites someone to follow the procedure instead of the rule, and the rule is what the operation is actually held to.

This sample is provided by True North Data Strategies LLC to show the form of a delivered procedure. It is not legal advice and it does not replace 49 CFR Parts 107, 171 through 180, or any applicable state requirement. In an engagement, the bracketed owners, intervals, and retention periods are filled from the operation as it actually runs and from the regulation as it reads on the date of the build.