



**WAC 173-180-330 EXCERPTS
STORAGE TANK REQUIREMENTS**

- (1) STORAGE TANKS CONSTRUCTED AFTER MAY 1994 AND BEFORE THE EFFECTIVE DATE OF THIS RULE MUST MEET OR EXCEED THE 1993 VERSION OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA NO. 30) REQUIREMENTS AND ONE OF THE FOLLOWING DESIGN AND MANUFACTURING STANDARDS:
 - (a) UL NO. 142, STEEL ABOVEGROUND TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS (1993);
 - (b) API STANDARD 650, WELDED STEEL TANKS FOR OIL STORAGE (1988);
 - (c) API STANDARD 620, DESIGN AND CONSTRUCTION OF LARGE WELDED, LOW-PRESSURE TANKS (1990); OR
 - (d) ANOTHER STANDARD APPROVED BY ECOLOGY, AS LONG AS THE REQUIREMENTS IN SUCH STANDARD EQUAL OR EXCEED THOSE REQUIRED IN THIS SECTION.
- (2) STORAGE TANKS CONSTRUCTED BEFORE THE EFFECTIVE DATE OF THIS RULE MUST INCLUDE PROTECTIVE MEASURES THAT ARE DESIGNED, INSTALLED, AND MAINTAINED TO REDUCE RISK FROM SEISMIC EVENTS AND THAT INCLUDE ONE OR MORE OF THE FOLLOWING:
 - (a) FLEXIBLE MECHANICAL DEVICE(S) BETWEEN STORAGE TANK AND PIPING OR SUFFICIENT PIPING FLEXIBILITY TO PROTECT THE TANK AND PIPE CONNECTION AND PREVENT THE RELEASE OF PRODUCT; FOUNDATION DRIVEN PILING; ANCHORED STORAGE TANKS; OR
 - (b) ANOTHER SEISMIC PROTECTION MEASURE PROPOSED BY THE FACILITY AND APPROVED BY ECOLOGY, AS LONG AS SUCH PROTECTION MEASURE EQUALS OR EXCEEDS THOSE REQUIRED IN THIS SECTION. THIS MAY INCLUDE DEMONSTRATING THE STORAGE TANK MEETS API STANDARD 650 (2020) SEISMIC DESIGN REQUIREMENTS, INCLUDING ANNEX E AND SECTION E.7.3 PIPING FLEXIBILITY.
- (3) STORAGE TANKS CONSTRUCTED AFTER THE EFFECTIVE DATE OF THIS RULE MUST MEET THE FOLLOWING REQUIREMENTS:
 - (a) MEET OR EXCEED THE 2021 VERSION OF THE NFPA NO. 30 REQUIREMENTS AND ONE OF THE FOLLOWING DESIGN AND MANUFACTURING STANDARDS:
 - (i) UL NO. 142, STEEL ABOVEGROUND TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS (2019);
 - (ii) API STANDARD 650, WELDED STEEL TANKS FOR OIL STORAGE (2020);
 - (iii) API STANDARD 620, DESIGN AND CONSTRUCTION OF LARGE WELDED, LOW-PRESSURE TANKS (2013 WITH ADDENDUM 1 (2014), 2 (2018), AND 3 (2021)); OR
 - (iv) ANOTHER STANDARD APPROVED BY ECOLOGY, AS LONG AS THE REQUIREMENTS IN SUCH STANDARD EQUAL OR EXCEED THOSE REQUIRED IN THIS SECTION.
 - (b) MUST BE DESIGNED TO MEET THE FOLLOWING SEISMIC DESIGN REQUIREMENTS:
 - (i) API STANDARD 650 (2020) SEISMIC DESIGN REQUIREMENTS, INCLUDING ANNEX E AND SECTION E.7.3 PIPING FLEXIBILITY;
 - (ii) AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) 7-22 RISK CATEGORY III OR IV, INCLUDING SITE CLASS A, B, C, D, E, OR F BASED ON ON-SITE SOIL PROPERTIES, AND MEET SEISMIC DESIGN REQUIREMENTS UNDER CHAPTER 16 OF THE 2021 INTERNATIONAL BUILDING CODE (IBC) AND WAC 51-50-1613 AND 51-50-1615; AND
 - (iii) RESIST TSUNAMIS BASED ON THE FACILITY'S RISK AREA USING A TSUNAMI HAZARD TOOL OR A TSUNAMI DESIGN ZONE MAP, AND MEET TSUNAMI REQUIREMENTS UNDER CHAPTER 16 OF THE 2021 IBC AND WAC 51-50-1613 AND 51-50-1615.

**WAC 173-180-340 EXCERPTS
TRANSFER PIPELINE REQUIREMENTS**

- (4) PIPELINES REPLACED, RELOCATED, OR CONSTRUCTED AFTER MAY 1994 AND BEFORE THE EFFECTIVE DATE OF THIS RULE, WHICH ARE LOCATED IN AREAS NOT CONTROLLED BY THE FACILITY, MUST BE INSTALLED IN ACCORDANCE WITH 49 C.F.R. PARTS 195.246 THROUGH 195.254 (1991), WHERE FEASIBLE. FACILITY CONTROL IS ESTABLISHED BY FENCING, BARRIERS, OR ANOTHER METHOD APPROVED BY ECOLOGY WHICH PROTECTS THE PIPE RIGHT OF WAY AND LIMITS ACCESS TO PERSONNEL AUTHORIZED BY THE FACILITY.
- (5) PIPELINES CONSTRUCTED AFTER MAY 1994 AND BEFORE THE EFFECTIVE DATE OF THIS RULE MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) STANDARD FOR PRESSURE PIPING ASME B31.3 OR B31.4 (1993), OR ANOTHER STANDARD APPROVED BY ECOLOGY, AS LONG AS THE REQUIREMENTS IN SUCH STANDARD EQUAL OR EXCEED THOSE REQUIRED IN THIS SECTION.
- (6) ALL PIPELINES CONSTRUCTED BEFORE THE EFFECTIVE DATE OF THIS RULE MUST INCLUDE PROTECTIVE MEASURES THAT ARE DESIGNED, INSTALLED, AND MAINTAINED TO REDUCE RISK FROM SEISMIC EVENTS AND INCLUDE ONE OR MORE OF THE FOLLOWING, AND ARE ALSO INSTALLED UNDER THE PROVISIONS OF CHAPTER 57 OF THE 2021 INTERNATIONAL FIRE CODE (IFC), WHERE APPLICABLE:
 - (a) FLEXIBLE MECHANICAL DEVICE(S) BETWEEN STORAGE TANK AND PIPING OR SUFFICIENT PIPING FLEXIBILITY TO PROTECT THE TANK AND PIPE CONNECTION AND PREVENT THE RELEASE OF PRODUCT;
 - (b) FLEXIBLE MECHANICAL DEVICE(S) OR ADEQUATE PIPELINE FLEXIBILITY BETWEEN PIPES;
 - (c) PIPELINE SUPPORTS THAT PROTECT AGAINST SEISMIC MOTION;
 - (d) AUTOMATIC EMERGENCY ISOLATION SHUTOFF VALVES THAT ARE TRIGGERED TO CLOSE DURING SEISMIC EVENTS; OR
 - (e) ANOTHER SEISMIC PROTECTION MEASURE PROPOSED BY THE FACILITY AND APPROVED BY ECOLOGY, AS LONG AS SUCH PROTECTION MEASURE EQUALS OR EXCEEDS THOSE REQUIRED IN THIS SECTION.
- (4) PIPELINES REPLACED, RELOCATED, OR CONSTRUCTED AFTER THE EFFECTIVE DATE OF THIS RULE, WHICH ARE LOCATED IN AREAS NOT CONTROLLED BY THE FACILITY, MUST BE INSTALLED IN ACCORDANCE WITH 49 C.F.R. PARTS 195.202 (1981), 195.204 (2015), 195.205 (2015), 195.206 (1981), 195.207 (2015), 195.208 (1998), 195.210 (1998), 195.212 (1998), 195.214 (2017), 195.216 (1981), 195.222 (2017), 195.224 (1981), 195.226 (1981), 195.228 (2015), 195.230 (1983), 195.234 (2015), 195.246 (2004), 195.248 (2017), 195.250 (1998), 195.252 (2003), 194.254 (1981), AND 195.256 (1981), WHERE FEASIBLE.
- (5) PIPELINES CONSTRUCTED AFTER THE EFFECTIVE DATE OF THIS RULE MUST ALSO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE ASME STANDARD FOR PRESSURE PIPING ASME B31.3 - 2022 (2023) OR B31.4 - 2022 (2022), OR ANOTHER STANDARD APPROVED BY ECOLOGY, AS LONG AS THE REQUIREMENTS IN SUCH STANDARD EQUAL OR EXCEED THOSE REQUIRED IN THIS SECTION:
 - (a) BE DESIGNED TO API STANDARD 650 (2020), ANNEX E, SECTION E.7.3 PIPING FLEXIBILITY WHEN CONNECTED TO STORAGE TANKS;
 - (b) BE INSTALLED UNDER THE PROVISIONS OF CHAPTER 57 OF THE 2021 IFC, WHERE APPLICABLE, AND INCLUDE ONE OR MORE OF THE FOLLOWING:
 - (i) FLEXIBLE MECHANICAL DEVICE(S) OR ADEQUATE PIPELINE FLEXIBILITY BETWEEN PIPES;
 - (ii) PIPELINE SUPPORTS THAT PROTECT AGAINST SEISMIC MOTION;
 - (iii) AUTOMATIC EMERGENCY ISOLATION SHUTOFF VALVES THAT ARE TRIGGERED TO CLOSE DURING SEISMIC EVENTS; OR
 - (iv) ANOTHER SEISMIC PROTECTION MEASURE PROPOSED BY THE FACILITY AND APPROVED BY ECOLOGY, AS LONG AS SUCH PROTECTION MEASURE EQUALS OR EXCEEDS THOSE REQUIRED IN THIS SECTION.
 - (d) RESIST TSUNAMIS BASED ON THE FACILITY'S RISK AREA USING A TSUNAMI HAZARD TOOL OR A TSUNAMI DESIGN ZONING MAP.

**WAC 173-180-025
NOTABLE DEFINITIONS**

- (8) "CLASS 1 FACILITY" MEANS A FACILITY AS DEFINED IN RCW 90.56.010 AS:
 - (A) ANY STRUCTURE, GROUP OF STRUCTURES, EQUIPMENT, PIPELINE, OR DEVICE, OTHER THAN A VESSEL, LOCATED ON OR NEAR THE NAVIGABLE WATERS OF THE STATE THAT TRANSFERS OIL IN BULK TO OR FROM A TANK VESSEL OR PIPELINE, THAT IS USED FOR PRODUCING, STORING, HANDLING, TRANSFERRING, PROCESSING, OR TRANSPORTING OIL IN BULK.
 - (B) FOR THE PURPOSES OF OIL SPILL CONTINGENCY PLANNING IN RCW 90.56.210, FACILITY ALSO MEANS A RAILROAD THAT IS NOT OWNED BY THE STATE THAT TRANSPORTS OIL AS BULK CARGO.
 - (C) EXCEPT AS PROVIDED IN (B) OF THIS SUBSECTION, A FACILITY DOES NOT INCLUDE ANY:
 - (I) RAILROAD CAR, MOTOR VEHICLE, OR OTHER ROLLING STOCK WHILE TRANSPORTING OIL OVER THE HIGHWAYS OR RAIL LINES OF THIS STATE;
 - (II) UNDERGROUND STORAGE TANK REGULATED BY ECOLOGY OR A LOCAL GOVERNMENT UNDER CHAPTER 70A.355 RCW;
 - (III) MOTOR VEHICLE MOTOR FUEL OUTLET;
 - (IV) FACILITY THAT IS OPERATED AS PART OF AN EXEMPT AGRICULTURAL ACTIVITY AS PROVIDED IN RCW 82.04.330; OR
 - (V) MARINE FUEL OUTLET THAT DOES NOT DISPENSE MORE THAN 3,000 GALLONS OF FUEL TO A SHIP THAT IS NOT A COVERED VESSEL, IN A SINGLE TRANSACTION.
- (9) "CLASS 2 FACILITY" MEANS A RAILROAD CAR, MOTOR VEHICLE, PORTABLE DEVICE OR OTHER ROLLING STOCK, WHILE NOT TRANSPORTING OIL OVER THE HIGHWAYS OR RAIL LINES OF THE STATE, USED TO TRANSFER OIL TO A NONRECREATIONAL VESSEL.
- (10) "CLASS 3 FACILITY" MEANS A STRUCTURE THAT:
 - (A) TRANSFERS OIL TO A NONRECREATIONAL VESSEL WITH A CAPACITY OF 10,500 OR MORE GALLONS OF OIL WHETHER THE VESSEL'S OIL CAPACITY IS USED FOR FUEL, LUBRICATION OIL, BILGE WASTE, OR SLOPS OR OTHER WASTE OILS; AND
 - (B) DOES NOT TRANSFER OIL IN BULK TO OR FROM A TANK VESSEL OR PIPELINE; AND
 - (C) DOES NOT INCLUDE ANY: BOATYARD, RAILROAD CAR, MOTOR VEHICLE, OR OTHER ROLLING STOCK WHILE TRANSPORTING OIL OVER THE HIGHWAYS OR RAIL LINES OF THIS STATE; UNDERGROUND STORAGE TANK REGULATED BY ECOLOGY OR A LOCAL GOVERNMENT UNDER CHAPTER 70A.355 RCW; OR A MOTOR VEHICLE MOTOR FUEL OUTLET; OR A FACILITY THAT IS OPERATED AS PART OF AN EXEMPT AGRICULTURAL ACTIVITY AS PROVIDED IN RCW 82.04.330.
- (11) "CLASS 4 FACILITY" MEANS A STRUCTURE THAT:
 - (A) IS A MARINA, BOATYARD, MARINE FUELING OUTLET, AND OTHER FUELING INSTALLATION THAT TRANSFERS TO A NONRECREATIONAL VESSEL WITH A CAPACITY TO HOLD LESS THAN 10,500 GALLONS OF OIL WHETHER THE VESSEL'S OIL CAPACITY IS USED FOR FUEL, LUBRICATION OIL, BILGE WASTE, OR SLOPS OR OTHER WASTE OIL;
 - (B) DOES NOT TRANSFER OIL IN BULK TO OR FROM A TANK VESSEL OR PIPELINE; AND
 - (C) DOES NOT INCLUDE ANY: RAILROAD CAR, MOTOR VEHICLE, OR OTHER ROLLING STOCK WHILE TRANSPORTING OIL OVER THE HIGHWAYS OR RAIL LINES OF THIS STATE; UNDERGROUND STORAGE TANK REGULATED BY ECOLOGY OR A LOCAL GOVERNMENT UNDER CHAPTER 70A.355 RCW; OR A MOTOR VEHICLE MOTOR FUEL OUTLET; OR A FACILITY THAT IS OPERATED AS PART OF AN EXEMPT AGRICULTURAL ACTIVITY AS PROVIDED IN RCW 82.04.330.
- (13) "CRUDE OIL" MEANS ANY NATURALLY OCCURRING HYDROCARBONS COMING FROM THE EARTH THAT ARE LIQUID AT 25 DEGREES CELSIUS AND ONE ATMOSPHERE OF PRESSURE INCLUDING, BUT NOT LIMITED TO, CRUDE OIL, BITUMEN AND DILUTED BITUMEN, SYNTHETIC CRUDE OIL, AND NATURAL GAS WELL CONDENSATE.
- (24) "OIL" OR "OILS" MEANS OIL OF ANY KIND THAT IS LIQUID AT 25 DEGREES CELSIUS AND ONE ATMOSPHERE OF PRESSURE AND ANY FRACTIONATION THEREOF INCLUDING, BUT NOT LIMITED TO, CRUDE OIL, BITUMEN, SYNTHETIC CRUDE OIL, NATURAL GAS WELL CONDENSATE, PETROLEUM, GASOLINE, FUEL OIL, DIESEL OIL, BIOLOGICAL OILS AND BLENDS, OIL SLUDGE, OIL REFUSE, AND OIL MIXED WITH WASTES OTHER THAN DREGGED SPOIL. OIL DOES NOT INCLUDE ANY SUBSTANCE LISTED IN TABLE 302.4 OF 40 C.F.R. PART 302 ADOPTED AUGUST 14, 1989, UNDER SECTION 102(A) OF

REFERENCE | NOTES

SEE WAC CHAPTER 173-180 REGULATIONS FOR ALL DETAILS AND REQUIREMENTS. THIS DOCUMENT IS INTENDED FOR A BRIEF OVERVIEW ON THE REQUIREMENTS.

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 WAC 173-180 FACILITY OIL HANDLING
 STANDARDS COMPLIANCE REFERENCE

SCALE: AS NOTED DWG. NO. NOR-WAC-001 REV. A