

**PROPOSED REGULATION OF THE STATE**  
**ENVIRONMENTAL COMMISSION**

**LCB File No. R083-05**

August 18, 2005

EXPLANATION – Matter in *italics* is new; matter in brackets ~~[omitted material]~~ is material to be omitted.

AUTHORITY: §§1-11, NRS 459.826 and 459.830; §§12, 13 and 15, NRS 459.826; §14, NRS 459.830; §§16 and 18, NRS 459.826 and 459.834; §17, NRS 459.826 and 459.832.

A REGULATION relating to marina storage tanks; providing that marina storage tanks must meet certain requirements; requiring the monitoring and inspection of marina storage tanks to detect leaks; requiring the construction and maintenance of containment areas around marina storage tanks; and providing other matters properly relating thereto.

**Section 1.** Chapter 459 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 11, inclusive, of this regulation.

**Sec. 2.** *“Listed” has the meaning ascribed to it in section 202 of the International Fire Code, 2003 edition.*

**Sec. 3.** *“Marina storage tank” means a petroleum storage tank at least 90 percent of which is either above ground level or in or over water and which has a capacity of at least 110 gallons but not more than 12,000 gallons. The term includes all piping connected to the tank, except piping, valves, hoses, filters and nozzles used to dispense fuel to water vessels.*

**Sec. 4.** *“Petroleum” has the meaning ascribed to it in NRS 590.790.*

**Sec. 5.** *The State Environmental Commission hereby adopts by reference chapters 2, 22 and 34 of the International Fire Code, 2003 edition. A copy of the volume containing these*

*provisions may be obtained at the cost of \$70 from the International Code Council at the Internet address <<http://www.iccsafe.org>>.*

**Sec. 6. 1.** *On or before 90 days after the effective date of this regulation and each year thereafter, the owner or operator of a marina storage tank shall register each marina storage tank compartment with the Division on a prescribed form and pay a fee of \$50 for each marina storage tank compartment.*

**2.** *Marina storage tanks must be in compliance with this chapter not later than September 30, 2006. The Division may require compliance before September 30, 2006, for any part of an existing system that poses a current threat to nearby property, human health or the environment.*

**Sec. 7. 1.** *A marina storage tank must meet the requirements of chapters 2, 22 and 34 of the International Fire Code, 2003 edition, with regard to construction, design, location and overfill prevention.*

**2.** *A marina storage tank that supplies marina service stations and pumps not integral to the dispensing device must be onshore, except that a double-walled tank not exceeding a capacity of 1,100 gallons may be located on a pier of the solid-fill type if spacing, containment and piping comply with the provisions of chapters 2, 22 and 34 of the International Fire Code, 2003 edition.*

**3.** *Any metallic portion of a marina storage tank or its piping system that is in contact with the soil or water and is subject to corrosion must be protected from corrosion by a continuously operating cathodic protection system that is properly engineered, installed and maintained in accordance with 40 C.F.R. § 280.20(b)(2). A metal tank sitting on a concrete*

*slab will be considered in contact with the soil unless it is insulated from the concrete by a dielectric material. Anchoring hardware is not considered part of the tank.*

**Sec. 8. 1.** *A marina storage tank must have a secondary containment area for the fuel stored in the tank.*

*2. Multiple products stored within the same containment area must be compatible with each other.*

*3. If the secondary containment area is open to precipitation, it must be capable of containing 110 percent of the capacity of the largest tank plus the volume displaced by the other tanks within the containment area.*

*4. The secondary containment area must be made of concrete or steel and be compatible with and impermeable to the products stored in the tank.*

*5. Liquid discharges to the environment from the secondary containment area are prohibited if contamination of the liquid by a regulated substance is suspected or detected.*

*6. The secondary containment area must not include any uncapped drain that extends outside of the containment area.*

*7. A double-walled tank does not require additional containment if:*

*(a) All piping connections to the tank are made above the normal maximum liquid level;*

*(b) A mechanism is provided to prevent the release of liquid from the tank by siphon flow;*

*(c) A mechanism, accessible to a delivery operator, is provided for determining the level of liquid in the tank;*

*(d) A mechanism which does not restrict or interfere with the proper functioning of the normal vent or emergency vent is provided to prevent overfilling by sounding an alarm when*

*the liquid level in the tank reaches 90 percent of capacity and by automatically stopping the delivery of liquid to the tank when the level in the tank reaches 95 percent of capacity;*

*(e) If the interstitial space is enclosed, the space has emergency venting; and*

*(f) A means is provided to verify the integrity of the double wall.*

**Sec. 9. 1. If, on a marina storage tank:**

*(a) A submersible pump is used, a listed emergency shutoff valve must be installed at each dispensing device.*

*(b) A suction pump-type dispensing device is used, a listed vacuum-actuated shutoff valve with a shear section or equivalent-type valve must be installed directly under each dispensing device.*

*2. Piping and valves subject to pressure extremes caused by thermal expansion of the contents must be equipped with a pressure-relieving device that has secondary containment.*

*3. Above-ground piping runs must be enclosed in protective containment leading to a catch basin equipped with an operating automatic leak-detection audible alarm and shutoff device.*

*4. Except as otherwise provided in subsection 5, any new underground piping or replacement piping installed after the effective date of this regulation must be:*

*(a) Constructed of nonmetallic components;*

*(b) Double-walled and integral with a listed link sensor; and*

*(c) Installed with a tracer locator wire installed in all buried piping trenches.*

*5. Existing facilities which have metallic or single-walled nonmetallic piping and which are permanently relocated to a fuel island must install dispenser sumps with leak sensors. Any additions to the metallic piping must be nonmetallic single- or double-walled piping.*

*6. For piping used at floating marinas:*

*(a) Suitable lengths of oil-, weather- and UV-resistant flexible hose, UL-approved for use at marinas, must be used between the onshore piping and the piping on the floating structure.*

*(b) Piping at all hinge locations must be connected with UL-approved listed flexible piping.*

*(c) All docks and pier installations must have double-walled piping.*

*(d) A listed emergency breakaway device designed to retain liquid on both sides of the breakaway point must be installed in a spill containment box monitored with a leak sensor on each line serving the dock and anchored at the onshore end of the piping.*

**Sec. 10. 1.** *A control must be installed that will permit the fuel delivery pump to operate only when a dispensing nozzle is removed from its bracket or normal position with respect to the dispensing device and only when the switch on the dispensing device is manually actuated. The control must also stop the pump when all nozzles have been returned either to their brackets or to the normal nondispensing position.*

*2. Dispensers not integral with the tank must have sumps with operating leak-monitoring sensors that automatically shut off the electricity to the pumping device.*

*3. Dispenser hoses must be checked and a record kept on a daily basis for evidence of blistering, carcass saturation or separation, for cuts, nicks or abrasions that expose reinforced material, and for slippage, misalignment or leaks at couplings. Defective hoses must be removed from service with 48 hours after evidence of failure.*

*4. At least once each month, each dispenser hose must be completely extended and inspected as follows:*

*(a) The hose couplings and the first 12 inches of hose adjacent to the couplings must be examined.*

*(b) The dispenser hose must be checked for structural weakness evidenced by soft spots by pressing the hose in the area around its entire circumference. Any hose that shows evidence of soft spots must be removed from service.*

*5. Any dispensing nozzle used at a marina service station must be equipped with a nondrip check valve.*

**Sec. 11. 1.** *Except for tanks not exceeding a capacity of 1,100 gallons or tanks not equipped to accept a tight-fill that are instead filled from a delivery nozzle on a delivery vehicle:*

*(a) All above-ground marina storage tanks must be filled through a liquid-tight connection enclosed in a grounded fill pipe spill-containment box that is located at least 3 feet above the ground and 20 feet away from a body of water and is capable of containing a minimum of 5 gallons.*

*(b) All marina storage tanks filled by means of remote piping must have installed in the piping at a point where connection and disconnection is made between the tank and a delivery vehicle either a check valve and shutoff valve with a quick-connect coupling or a check valve with a dry-break coupling. The check valve device must be protected from tampering and physical damage.*

*2. Except for double-walled, above-ground marina storage tanks which are exempt from weekly monitoring requirements and except as otherwise provided in subsection 4, above-ground marina storage tanks must be visually inspected weekly for leaks.*

*3. Except as otherwise provided in subsection 4, above-ground marina storage tanks must be inspected monthly in accordance with the provisions of subsection 2 of NAC 590.740 and must be inspected for release detection in accordance with 40 C.F.R. § 280.43(a)-(d) and (g).*

*4. Weekly and monthly monitoring of an above-ground marina storage tank is not required when a marina is closed during the off-season if the tank contains only a de minimis quantity of fuel.*

*5. All underground or underwater piping that is not double-walled with interstitial leak sensors must be tightness-tested for leaks in accordance with the requirements of 40 C.F.R. § 280.41(b).*

*6. All electronic and mechanical equipment used for release detection, monitoring or warning must be tested for proper operation and calibration annually or pursuant to the manufacturer's recommendation, whichever is more frequent.*

*7. If, because of the nature of the above-ground marina storage tank or its secondary containment, visual inspections are not adequate for the purpose of determining whether a leak has occurred, an owner or operator of an above-ground storage tank shall keep daily inventory records. Daily inventory records for the most recent 3 years must be kept on the premises or made available for inspection upon 24 hours' notice. Daily inventory records are not required when a marina is closed during the off-season if the tank contains only a de minimis quantity of fuel.*

**Sec. 12.** NAC 459.9921 is hereby amended to read as follows:

459.9921 As used in NAC 459.9921 to 459.999, inclusive, *and sections 2 to 11, inclusive, of this regulation*, unless the context otherwise requires, the words and terms defined in NAC 459.9922 to 459.9929, inclusive, *and sections 2, 3 and 4 of this regulation* have the meanings ascribed to them in those sections.

**Sec. 13.** NAC 459.9929 is hereby amended to read as follows:

459.9929 ~~["Storage]~~ *“Underground storage tank”* has the meaning ascribed to ~~["underground storage tank"]~~ *it* in 40 C.F.R. § 280.12.

**Sec. 14.** NAC 459.993 is hereby amended to read as follows:

459.993 1. The State Environmental Commission hereby adopts by reference the provisions of 40 C.F.R. §§ 280.10 to 280.116, inclusive, as they existed on July 1, 1995. A copy of the volume containing these provisions may be obtained at a cost of ~~[\$40]~~ \$50 from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. ~~[20402.]~~ 20401.

2. Each owner and operator of ~~[a]~~ *an underground* storage tank shall comply with the requirements of 40 C.F.R. §§ 280.10 to 280.116, inclusive.

3. For the purposes of this section, any reference to “implementing agency” in 40 C.F.R. §§ 280.10 to 280.116, inclusive, shall be deemed to mean the Division.

**Sec. 15.** NAC 459.994 is hereby amended to read as follows:

459.994 1. Except as otherwise provided in this section, each owner or operator of ~~[a]~~ *an underground* storage tank shall perform or cause to be performed a test of the tank for tightness in accordance with the schedule contained in subsection (c) of 40 C.F.R. § 280.40.

2. The test must be performed by a contractor ~~[who is]~~ certified by the Division.

3. The owner or operator shall retain a certificate from the person performing the test showing that the test has been performed. The certificate must be made on a form approved by the Division.

4. In lieu of a test for tightness, each owner or operator may conduct any release detection methods prescribed in 40 C.F.R. §§ 280.43 and 280.44 as an acceptable means of release detection.



5. An operator of [a] *an underground* storage tank that is not empty but is temporarily closed in accordance with 40 C.F.R. § 280.70 shall perform or cause to be performed a test of the storage tank for tightness in accordance with 40 C.F.R. §§ 280.40 to 280.45, inclusive.

6. Except as otherwise provided in this subsection, an abandoned storage tank must be tested for tightness in accordance with subsection (c) of 40 C.F.R. § 280.43 before it is returned to service. If a test of the abandoned storage tank will cause a threat to human health or the environment, as determined by the Division, the Division may waive the test for tightness or require any other method of testing in accordance with the provisions of subsection (h) of 40 C.F.R. 280.43 and subsection (c) of 40 C.F.R. 280.44. The allocation of costs pursuant to NRS 590.880 or 590.890 will be applied if there is a discharge from the storage tank.

7. A test for tightness is not required before [a] *an underground* storage tank is closed pursuant to subsection (b) of 40 C.F.R. § 280.71 if the Division:

- (a) Has no record of the storage tank being installed, operated [a] or closed; and
- (b) Is unable to locate the owner of the storage tank.

8. As used in subsection 6, “abandoned storage tank” means [a] *an underground* storage tank that:

- (a) Is not maintained and whose owner or operator has not provided the Division with a written statement of his intention to close the storage tank; or
- (b) Is not in service and does not comply with 40 C.F.R. § 280.70 or 280.71.

**Sec. 16.** NAC 459.997 is hereby amended to read as follows:

459.997 If a release occurs from [a] *an underground* storage tank, the Administrator of the Division may, at such times as are reasonably required:

1. Question the owner or operator of the tank, under oath, about any matter relating to the release;

2. Examine the books and records of the owner or operator; and

3. Waive any of the provisions of subsections 1, 2, and 6 of NAC 459.9973 and require corrective action to be taken immediately based on:

(a) Any actual or imminent impacts to *water bodies or* groundwater; and

(b) Any hazards to human health and safety.

**Sec. 17.** NAC 459.9972 is hereby amended to read as follows:

459.9972 1. The owner or operator of a storage tank shall provide an assessment to the Division before a storage tank is permanently closed.

2. The assessment must be conducted:

(a) Using analytical test method 8015 of the Environmental Protection Agency that is modified for petroleum hydrocarbons and other constituents as required by the Division; and

(b) On two soil samples that are obtained from native soil less than 2 feet below the bottom of the excavation, from opposite sides or ends of the excavation in an area where contamination is most likely to be present.

3. The analysis must be conducted by a laboratory that is approved by the Division.

4. The owner or operator of ~~{a}~~ *an underground* storage tank that is removed from the ground shall:

(a) Dispose of or reuse the tank in accordance with the provisions of NRS 459.800 to 459.856, inclusive; and

(b) Maintain a record of the disposal or reuse.

**Sec. 18.** NAC 459.9974 is hereby amended to read as follows:

459.9974 1. Soil that is contaminated:

(a) By a petroleum hydrocarbon substance only, and is removed through a corrective action, must be ~~disposed of:~~ *managed:*

(1) In a municipal solid waste landfill unit or a Class III site, after obtaining written approval from the holder of the permit to operate the landfill unit or site, and the solid waste management authority; or

(2) ~~[At a disposal or treatment facility that is approved by the Division.]~~ *In a manner approved by the Division if contaminated with total petroleum hydrocarbon (TPH) below the soil action level.*

*(3) In a manner approved by the Division and after obtaining written approval from the Division.*

(b) By a petroleum hydrocarbon substance and any other hazardous substance must be evaluated by the responsible person, who is certified pursuant to NAC 459.970 to 459.9729, inclusive, to determine if the soil is a hazardous waste.

2. As used in this section:

(a) “Hazardous substance” has the meaning ascribed to it in NRS 459.429.

(b) “Hazardous waste” has the meaning ascribed to it in NAC 445A.826.

**Sec. 19.** NAC 459.9975 is hereby amended to read as follows:

459.9975 1. If a regulated substance is detected in or is suspected to have contaminated groundwater, the owner or operator shall, with the approval of the Division, install at least one monitoring well. The number of wells and the location, design ~~[ ]~~ and installation of each well must be approved by the Division of Water Resources of the Department and the Division.

2. Monitoring of groundwater must be conducted for:

(a) Benzene, toluene, xylene, and ethylbenzene ~~[ ]~~ (*BTEX*), by test method ~~[624]~~ *8260* of the Environmental Protection Agency or an equivalent method that is approved by the Division;

(b) ~~[Total petroleum hydrocarbons, by analytical test method 8015 modified for petroleum hydrocarbons; and]~~ *If suspected or detected, methyl tertiary-butyl ether (MTBE), by test method 8260 of the Environmental Protection Agency or an equivalent method that is approved by the Division;*

(c) Any other pollutant that is present in the groundwater as a result of the action of the owner or operator ~~[ ]~~; *and*

*(d) Any other constituent as directed by the Division.*