

Kansas Administrative Regulations

Department of Health and Environment

Article 45.—Underground Hydrocarbon Storage Wells and Associated Brine Ponds

28-45-13. Emergency response plan; safety and security measures.

(a) Each applicant shall prepare an emergency response plan and shall submit the plan with the facility permit application. Each permittee shall maintain the emergency response plan at the facility and shall make the plan available for inspection by the department. Each emergency response plan shall include the following information:

(1) A description of the facility response to the following events:

(A) Spills and releases;

(B) fires and explosions;

(C) cavern subsidence and collapse; and

(D) any other activity that endangers public health and safety or that constitutes a threat to the environment;

(2) a description of the warning systems in operation at the facility;

(3) a description of the emergency response communication system that includes the following:

(A) A plat showing the location of all occupied buildings within a two-mile perimeter of the facility boundary; and

(B) a description of the method for contacting all persons within a two-mile perimeter of the facility boundary if a product release or emergency situation occurs, as specified in the emergency response plan;

(4) the procedures for coordination of emergency response with local emergency planning committees, including emergency notification and evacuation of citizens and employees;

(5) a description of employee training for emergency response;

(6) a plat of the facility showing the following locations:

(A) All storage wells;

(B) all underground injection control wells;

(C) all monitoring and water wells;

(D) all brine and product lines;

(E) railroad and transportation routes;

(F) brine ponds; and

(G) any other appurtenances at the facility; and

(7) a plan map of man-made surface structures and any construction activities within a one-mile perimeter of the facility boundary.

(b) Each permittee shall ensure that a copy of the emergency response plan is available at the facility, the company headquarters, and any coordinating agencies or committees involved in the emergency response plan.

(c) Each permittee shall establish an educational program for community safety and awareness of the emergency response plan.

(d) Each permittee shall update the emergency response plan whenever new construction is complete or whenever new information regarding the plan requirements becomes available.

(e) Each permittee shall provide security measures to protect the public and prevent unauthorized access. These security measures shall include the following:

(1) Methods for securing the facility from unauthorized entry and for providing a convenient opportunity for escape to a place of safety;

(2) clearly visible, permanent signs at all points of entry and along the facility boundary, identifying the storage well or facility name, owner, and contact telephone number;

(3) security lighting;

(4) alarm systems;

(5) appropriate warning signs in areas that could contain accumulations of hazardous or noxious vapors or where physical hazards exist;

(6) a direct communication link with the local control room or any remote control center for service and maintenance crews;

(7) combustible gas or hydrogen sulfide detectors, heat sensors, pressure sensors, and emergency shutdown instrumentation integrated with warning systems and alarms audible and visible in the local control room and at any remote control center;

(8) circuitry designed so that the failure of a detector or heat sensor, excluding meltdown and fused devices, will activate the warning systems and alarms; and

(9) a manually operated alarm, audible to facility personnel.

(f) Each permittee shall ensure that each storage well is protected with safety devices to prevent pressures in excess of the maximum allowable operating pressure from being exerted on the storage well or cavern and to prevent the backflow of any stored hydrocarbon if a flow line ruptures.

(g) Each permittee shall ensure that each wellhead is equipped with the following:

(1) Manual isolation valves; and

(2) a valve or blind flange on each port of the wellhead that is rated at the same pressure or more than the pressure rated for the wellhead.

(h) Each permittee shall install a process control system approved by the secretary to monitor storage operations for each storage well. Each of the following instruments shall be connected to an alarm:

(1) Flow indicators for product;

(2) combustible gas detectors;

(3) detectors for any other ignitable substance as requested by the secretary; and

(4) pressure indicators on both the product and brine lines of the wellhead.

(i) Each permittee shall install emergency shutdown valves on all hydrocarbon and brine lines. Criteria for emergency shutdown valves shall include the following:

(1)(A) Be rated at least equivalent to 125 percent of the maximum pressure that could be exerted at the surface; or

(B) meet a pressure-rating standard equivalent to that specified in paragraph (i)(1)(A) and determined by the secretary to be protective of public health, safety, and the environment;

(2) fail to the closed position;

(3) be capable of remote and local operation; and

(4) be activated by overpressuring and by gas and heat detection.

(j) Each permittee shall function-test each critical control system and emergency shutdown valve at least twice annually, not to exceed a 200-day interval between tests.

(k) Each permittee shall perform trip-testing of each loop, including the instrumentation, valves, shutdown equipment, and all wiring connections, to ensure the integrity of the circuit.

(l) Each permittee shall ensure that the equipment automatically closes all inlets and outlets to the storage cavern and safely shuts down or diverts any operation associated with the storage cavern, in case of overfilling or an emergency.

(m) Each permittee shall ensure that the automatic valve closure times meet the valve design limits for closure times.

(n) Each permittee shall cease operations or shall comply with the instructions from the secretary if the secretary determines that an imminent threat to public health, safety, or the environment exists due to any unsafe operating condition. The permittee may resume operations if the secretary determines that the facility operations no longer pose a risk to public health, safety, or the environment.

(o) Each permittee shall update security measures whenever new construction is complete or whenever new information regarding the requirements for security measures becomes available.

(Authorized by and implementing K.S.A. 2023 Supp. 55-1,117; effective, T-28-4-1-03, April 1, 2003; effective Aug. 8, 2003; amended Aug. 9, 2024.)

***** Authenticated Kansas Administrative Regulation *****