

KANSAS PERMIT FOR A BRINE POND ASSOCIATED WITH THE OPERATION OF UNDERGROUND LIQUID HYDROCARBON STORAGE WELLS

BRINE POND PERMIT

Pursuant to the provisions of Kansas Statutes Annotated 55-1,117 through 55-1,119 and Kansas Administrative Regulations Chapter 28, Article 45,

Facility Name: Mitchell Field Underground Storage Facility

Facility Location: 1145 23rd Avenue, Lyons, KS 67501

Brine Pond Identification: KS-BP-008-005

Legal Description: SW ¼ Section 26, T19S, R7W, Rice County, Kansas

Owner/Operator: Mid-Continent Fractionation and Storage, LLC

Owner/Operator's Address: One Williams Center, Tulsa, OK 74172

Enterprise Products Operating, LP is authorized to operate the above described brine pond associated with the operation of the above described underground hydrocarbon storage facility in accordance with the limitations, monitoring and reporting requirements set forth herein.

The permittee shall comply with: 1) all conditions in this permit, 2) Kansas Statutes Annotated 55-1, 117 through 55-1, 119 and 3) Kansas Administrative Regulations Chapter 28, Article 45.

This permit shall become effective _____ and shall expire on _____.

Robert Moser, M. D., Secretary,
Kansas Department of Health and Environment

Date: _____

I. BRINE POND DESCRIPTION

This brine pond is associated with the creation, operation, and maintenance of underground caverns developed in a salt formation for the storage of liquid hydrocarbons.

II. GENERAL CONDITIONS

The permittee is authorized to operate and maintain the brine pond for the creation, operation, and maintenance of underground liquid hydrocarbon storage caverns. Only brine from the operation of the underground hydrocarbon storage cavern shall be stored in the brine pond.

The permittee shall meet the requirements for liner construction in accordance with K.A.R. 28-45-22.

III. LIMITATIONS, MONITORING, INSPECTIONS & REPORTING

A. LIMITATIONS

<u>Parameter</u>	<u>Limitation</u>
Volume of liquid pumped from intermediate leak detection system**	Based on a rate of 10% of leak return system capacity* Not to exceed 1,000 gal/day/ac of pond area

B. MEASUREMENTS, FREQUENCY, & REPORTING

<u>Monitoring Activity</u>	<u>Measurement Frequency</u>	<u>Reporting Frequency</u>	<u>Measurement Type</u>
Liquid from intermediate leak detection system	Daily	Quarterly	Flow meter ***
Freeboard, ft.*****	Daily	Quarterly	Measure vertical depth of water level in the pond from the lowest point of the dike top

- * leak return system capacity as described in the KDHE-approved construction plans
- ** measured in gal/24 hr day
- *** or pumping rate times minutes pumped
- ***** minimum of 2 ft. freeboard required

The monitoring results shall be submitted to KDHE on a form provided by KDHE within 30 days after the end of the quarter.

C. INSPECTIONS

<u>Inspection Area</u>	<u>Frequency</u>	<u>Action</u>
Primary liner	Semiannual	Visually inspect liner for mechanical damage or UV degradation.
Liner subgrade	Semiannual When pond at lowest level.	Visually inspect for slope failure or erosion under the liner.
Leak return pumps	Monthly	Test cycle pumps; verify flow meter and totalizer working properly.
Liner penetrations and submerged structures	Annually	Visually inspect; include liner and liner welds.
Anchor trench erosion	Semiannually	Visually inspect.
Pond back, slope erosion and drainage	Semiannually	Visually inspect for erosion and surface tension cracking on top and back slope of berm.
Vegetation	Annually	Visually inspect vegetation on outer slopes. Remove cattails and woody vegetation.
Exposed influent piping	Semiannual	Visually inspect pipe, pipe supports, and concrete pad for damage or concrete cracks.
Gas detectors and igniters	Semiannual	Test and re-calibrate gas detectors and test Igniters for proper operation. Check remote data and alarm functions.
Fence	Monthly	Visually inspect for damage.
Documentation and records	Semiannually	Review to ensure regulatory and operational records are being properly maintained.

The inspections shall be recorded on a form provided by KDHE and shall be submitted to KDHE within 30 days after the inspection.

Monitoring and inspection forms shall be submitted to:

Kansas Department of Health and Environment
 Bureau of Water - Geology Section
 1000 SW Jackson St., Suite 420
 Topeka, Kansas 66612-1367

The permittee shall submit a schedule for correcting deficiencies indicated by an inspection to KDHE for approval.

D. REPORTING

1. The permittee shall notify KDHE within 72 hours if the volume of liquid pumped from the intermediate leak detection system exceeds the limitation established in III A.
2. Any release of hydrocarbon to the brine pond shall be reported to KDHE within two hours after the release.

IV. STANDARD CONDITIONS

In addition to the specified conditions stated herein, the permittee shall comply with the attached Standard Conditions dated March 1, 2004.

STANDARD CONDITIONS FOR BRINE PONDS ASSOCIATED WITH LIQUID
HYDROCARBON STORAGE WELLS

1. Definitions:
 - A. The terms “Director”, “Division”, and Department refer to the Director, Division of Environment, Kansas Department of Health and Environment, respectively.
 - B. KDHE means the Kansas Department of Health and Environment.
 - C. The term “year” refers to calendar year.
 - D. The term “quarter” refers to standard calendar quarters.
2. Emergency Reporting: The permittee shall meet the reporting criteria specified in the facility’s emergency response plan for notification of local emergency planning committees. The permittee shall give oral notification within two hours and written notification within one week to KDHE for any threat to public health, safety or the environment; and any uncontrolled or unanticipated loss of brine that is detectable by any monitoring or testing; any other condition that could endanger public health, public safety or the environment.
3. Emergency Action: The permittee shall cease operations or shall comply with instructions from KDHE 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 brine pond operations no longer pose a risk to the public health, safety, or the environment.
4. Brine Pond Closure: The permittee shall submit a closure plan to the secretary for review and consideration for approval at least 60 days before the closure of the brine pond in accordance with K.A.R. 28-45-30.
5. Permit Transfer: The automatic transfer of a permit is prohibited. The requirements to transfer a permit are as follows: Each person requesting a permit transfer shall submit a completed application to KDHE at least 60 days before the effective date of the proposed transfer and each owner and each operator shall comply with the conditions of the existing permit until KDHE reissues the permit.
6. Permit Modification: A permit for a brine pond associated with the operation of underground hydrocarbon storage wells may be modified by KDHE under any of the following conditions: KDHE receives information that was not available when the permit was issued; KDHE receives a request for modification of a permit; KDHE conducts a review of the permit file and determines that a modification is necessary. Only the permit actions subject to modification shall be reopened.

Minor modifications not requiring public notification include the following except as otherwise specified: Correction of typographical errors; requirements for a more frequent monitoring or reporting by the permittee; a date change in a schedule of compliance; a change in ownership or operational control of the facility, unless KDHE determines that public notification is necessary to protect the public interest; a change in construction requirements, if KDHE determines that the change is protective of public health, safety and the environment; and any amendments to a brine pond closure plan.

A draft permit and notification to the public shall be required if any of the following conditions are met: A permittee proposes substantial alterations or additions to the brine pond or proposes an activity that justifies a change in the permit requirements, including cumulative effects on public health, safety, or the environment; information has become available that would have initially justified different permit requirements; standards of regulations on which the permit was based have changed due to promulgation of new or amended standards or due to a judicial decision after the permit was issued.

Any permittee may request a permit modification within 180 days after any of the following: The adoption of a new regulation or standards; any deadline to achieve compliance with regulations or standards before the expiration date of the permit; or any judicial remand and stay of a promulgated regulation if the permit requirement was based on the remanded regulation.

7. Permit Renewal: The permittee shall renew the brine pond permit every 10 (ten years), on a form provided by KDHE, for review and consideration for approval for the continued operation of the brine pond. The permittee shall submit the completed form to KDHE by April 1 of the year in which the permit renewal is due.
8. Signatories: The permittee shall designate signatories to sign permit applications and all reports required by KDHE. Positions that may be approved by KDHE shall be plant or operation manager, cavern specialist, superintendent and a position with responsibility at least equivalent to that required by these positions listed. Any signatory may submit written notification to KDHE specifying a position having responsibility for the overall operation of the regulated facility or activity to act as designated signatory. The requirements of K.A.R. 28-45-26 shall be met by the permittee.
9. All reports required by this permit, unless specified otherwise, shall be submitted to: Kansas Department of Health and Environment, Bureau of Water – Geology Section, 1000 SW Jackson Street, Suite 420, Topeka, KS 66612-1367.
10. Financial Assurance: The permittee shall establish financial assurance for the closure of the brine pond pursuant to K.A.R. 28-45-27. Proof of financial assurance shall be provided annually on or before January 31 of each year.
11. Right of Entry: KDHE may enter any property or facility that is subject to the provisions of this permit, and K.S.A. 55-1,117 and amendments thereto, for the purpose of observing,

monitoring, collecting samples, examining records and facilities to determine compliance or noncompliance with state laws, rules, regulations, and permit requirements relating to water pollution, soil pollution, and public health or safety.

12. Groundwater monitoring: The permittee shall meet the requirements of K.A.R. 28-45-29 for quarterly groundwater monitoring and static water level measurements, and monthly combustible gas readings. The permittee may be required to submit a workplan, if chloride concentrations exceed 250 mg/L., that delineates the extent of contamination and describes methods to control migration of the chloride plume.
13. Slope maintenance: Visually inspect vegetation on the outer slopes of the pond. Remove cattails and woody vegetation. Mow the grass to maintain the integrity of the slope.
14. Modifications: The permittee shall receive approval from KDHE prior to making any modifications to the existing pond, liner and/or leakage detection system.
15. Severability: The provisions of this permit are severable. If any provision of this permit or any circumstance is held invalid, the application of such provision to other circumstances and the remainder of the permit shall not be affected thereby.