



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
WATER

MEMORANDUM

SUBJECT: Marysville Underground Storage Terminal Request for
Exclusion from UIC Regulations

FROM: Françoise M. Brasier, Chief *Françoise M. Brasier*
Underground Injection Control Branch

TO: Richard J. Zdanowicz, Chief
Underground Injection Control Section

Based upon the information submitted by the operators of the Marysville Underground Storage Terminal (MUST) the facility is used primarily for natural gas storage. As such, the storage operation would qualify for exclusion from the UIC regulations listed in 40 CFR 144.1(g)(2)(iv).

The nine cavern storage wells contain various mixtures of gases and minor amounts of pentane and heavier hydrocarbons. The only well that has more than 8% n-pentane and hexane+ by volume is FB-007. Since 90+% of the hydrocarbon components in all of the caverns are gases at standard temperature and pressure conditions (60°F. and 14.73 psia), the stored product should be categorized as natural gas mixtures.

With regard to the three questions posed by Mr. Overbeck, our decision to classify the MUST facility as a natural gas storage operation renders them irrelevant. You might inform him that the term "pipeline quality" refers to accepted industry standards and that EPA has not established a percentage (by volume) for less-volatile components (i.e., pentane and higher) that would qualify a well as a Class IIH hydrocarbon storage well. Similarly, since EPA has not set a minimum percentage standard for butane and lighter gases in a gas storage well, the issue of whether higher percentages of the more volatile isopentane is more acceptable is also a moot point. The brine displacement technique is used to facilitate injection and withdrawal of the hydrocarbons in many conventional natural gas storage facilities maintained by interstate pipelines and local distributors for demand "peak shaving."

Per your request, I am providing this formal determination for your files. Should you have any further questions please contact Jeff Smith at (202) 260-5586.



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