



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

JUL 31 1987

OFFICE OF  
WATER

MEMORANDUM

SUBJECT: Classification of Wells Used to Inject Air Scrubber  
Waste or Water Softener Regeneration Brine Associated  
with Oil Field Operations

FROM: Michael B. Cook, Director *Michael B Cook*  
Office of Drinking Water

TO: Water Supply Branch Chiefs  
Regions I-X

I. Background

The issue of what fluids may be injected into Class II wells has been raised several times since the UIC regulations have taken effect. Most recently, the issue has arisen in regard to certain production practices in California. Due to the viscosity of the heavy crude, a steam flood is used. To produce the steam, sour crude is burned. To meet air requirements, the stacks are scrubbed. Typically produced water is treated and used in this process. Fresh water is sometimes added to make up the necessary volume, and, on rare occasions, used in lieu of the produced brine. The question has been asked by the Western Oil and Gas Association, whether these injection wells used to dispose of the resulting wastes should be classified as Class II wells.

II. Comments

We have sent several drafts of a policy statement to the Regions for comment, the most recent dated July 16, 1987. This policy takes into consideration all comments received and the fact that Regional recommendations varied widely.

TO: COMMITTEE ON ENVIRONMENTAL COORDINATION  
MECHANICAL INTEGRITY TASK FORCE

FROM: John G. Blackburn, Jr.

FOR YOUR INFORMATION

8/24/87

SEP 14 1987

### III. Final Policy

Aside from enhanced recovery operations, four kinds of fluids, as noted below, may be injected into Class II wells.

1. Waste waters (regardless of their source) from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection. (See 40 CFR 144.6(b)(1)).
2. Brines or other fluids brought to the surface in connection with oil or natural gas production or natural gas storage operations. (See 40 CFR 144.6(b)(1)).
3. Brines or other fluids described in item 2 which, prior to injection, have been
  - (a) used on-site for purposes integrally associated to oil and gas production or storage,
  - (b) chemically treated or altered to the extent necessary to make them useable for purposes integrally related to oil and gas production or storage, or
  - (c) co-mingled with fluid wastes resulting from the treatment in (b),so long as they do not constitute a hazardous waste under 40 CFR Part 261.
4. Fresh water (i.e. water containing less than 10,000 mg/l total dissolved solids) from ground-water or surface water sources, added to or substituted for the brine may also be injected, as long as the only use of the water is for purposes integrally associated with oil and gas production or storage.

The Director of a State program shall make the determination whether or not a particular fluid belongs to one of these categories. He may make such a determination case-by-case or generically for a type of fluid. Such determination shall be reported to the Regional Office.

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