

# **EPA aims to clarify rules for CO2 use in oil recovery**

**Manuel Quiñones, Environment & Energy Publishing, 12-20-13**

U.S. EPA tries to clarify the role of enhanced oil recovery in carbon dioxide capture projects in a final rule and draft guidance released yesterday on carbon capture and sequestration (CCS).

A complement to the 2010 Class VI well designation in the Underground Injection Control Program for CO2 captured from power plants and other industrial facilities, the rule essentially exempts the greenhouse gas from hazardous waste designation in that program.

"Carbon capture and sequestration technology can help us reduce carbon pollution and move us toward a cleaner, more stable environment," Mathy Stanislaus, EPA assistant administrator for solid waste and emergency response, said in a statement, adding that the rule "provides regulatory clarity to help facilitate the implementation of this technology in a safe and responsible way."

EPA promulgated the rule at the urging of CCS advocates who wanted more regulatory certainty and petroleum groups concerned that the CCS rules would impair the use of CO2 in enhanced oil recovery (EOR) operations. During the rulemaking, the American Petroleum Institute expressed concern about the impact of EPA actions on its operations. EOR is a common practice, it said, and shouldn't be at all connected to rulemaking dealing with waste streams.

So the final rule says the hazardous waste exemption is meant to affect only Class VI wells for underground storage and not Class II wells for EOR.

The agency added, "EPA does note that should CO2 be used for its intended purpose as it is injected into UIC Class II wells for the purpose of EOR [and enhanced gas recovery], it is EPA's expectation that such an injection process would not generally be a waste management activity."

Separately, EPA yesterday also released a draft guidance meant to further clarify how it views the relationship between Class VI wells for sequestration and Class II wells for EOR.

EPA said it expects underground injection of CO2 to occur at depleted oil and gas reservoirs. In that case, Class II wells may need Class VI permits because of the increased risk of damage to underground drinking water sources.

"Owners or operators of Class II wells that are injecting carbon dioxide for the primary purpose of long-term storage into an oil or gas reservoir must apply for and obtain a Class VI permit where there is an increased risk to [underground drinking water] compared to traditional Class II operations using carbon dioxide," said the guidance.

And if reclassification does happen, the guidance says, the "owner or operator must demonstrate that the proposed injection well is appropriately constructed and operable as a Class VI well" and will not harm drinking water.

The guidance, however, does allow companies some wiggle room to keep their Class II well designations even after oil or gas resources are depleted. That is, if the agency determines there is no increased risk to drinking water.

Similarly, if a company with a Class II well has a permit to affect an underground aquifer, it may transfer such

approval under Class VI permitting.

EPA is opening a 75-day comment period on the guidance.

Fred Eames, CCS Alliance attorney and partner at the firm Hunton & Williams LLP, said he welcomed any steps toward making carbon capture more commercially viable.

However, CCS advocates are still upset that EPA is considering CO<sub>2</sub> injected for underground sequestration to be a "contained gas." In other words, the agency is regulating the gas as a solid waste.

"The bigger issue is that EPA policy discourages anyone from getting a Class VI UIC permit in the first place. Three years after the Class VI rule, there isn't a single Class VI well," Eames said in an email.

The 2010 Class VI designation created construction, monitoring and testing rules distinct from those of other wells. EPA also set a 50-year monitoring requirement, unless companies can prove that less scrutiny is acceptable. Beyond that, industry advocates worry about indefinite liability for underground storage.

The release of the rule and guidance comes during a debate over EPA's proposed greenhouse gas emission standards that would require carbon capture technology for new coal-fired generators.

While the agency and its backers say the proposal will promote carbon capture, coal industry advocates and CCS boosters worry that the agency is doing the opposite.

Eames said EPA rules are likely to "discourage future facilities that would capture carbon." He applauded EPA for the intent of the new rule, "but it's not clear how many people will clear the growing red tape jungle to get to this one string of tape that has been cut."

American Coalition for Clean Coal Electricity spokeswoman Laura Sheehan reacted similarly to a proposal by Senate Finance Chairman Max Baucus (D-Mont.) to offer new tax incentives for CCS.

"Unless the administration and EPA enact common-sense revisions to the rule," she said, "any technology developed in America will be sold to countries that recognize the critical role affordable, reliable coal-fueled electricity will play in our global energy future."

[Click here](#) to read the new rule.

[Click here](#) to read guidance.