

# EMISSIONS RULES

## Operators may be caught off guard by tank battery emissions rules

Midland Reporter-Telegram November 11, 2012 – By: Mella McEwen



Thanks to unconventional resource plays like the Wolfberry and Bone Spring, Permian Basin oil and gas producers have significantly increased oil and gas production. They are also busily constructing or expanding tank batteries because that production has to go somewhere.

Steve Scribner, vice president marketing and business development at Hy-Bon Engineering, estimates there has been a 25 percent increase in new tank batteries since August 2011. "The number is staggering, how many have been installed since last August," he said.

What operators don't realize, warned Larry Richards, Hy-Bon president, is that new federal regulations regarding emissions from tank batteries have gone into effect. With the mid-October publication of the regulations in the Federal Register, he said, they have gone into effect and "the clock is ticking."

"What most companies don't realize," Richards continued, "is that they affect every new tank battery constructed since they were announced in August 2011 -- every new tank battery and modified tank batteries." Operators, he said, have until next October to make modifications to bring their tank batteries into compliance.

The new regulations from the Environmental Protection Agency, known as "Quad O" are "the first really stringent gas venting regulations from the federal government," Richards said.

While the Texas Commission on Environmental Quality covers emissions of 25 tons of volatile organic compounds (VOCs), Richards and Scribner say the new regulations require tank batteries emitting over six tons of VOCs per year to capture or destroy 95 percent of those emissions. They said they're trying to make operators aware the rules are in effect so companies don't wake up next October and realize they need to get compliant."

There is a new twist, he said. "What we're seeing in the Permian Basin is facilities are receiving letters giving them a 30 to 60-day timeframe to fix the emissions or shut in production. Having production shut in is a new phenomenon we've not seen much as a tool from regulatory agencies in the Permian Basin until the last 12 months or so."

Having to retrofit a facility, Scribner said, is more difficult than "getting out in front of it and configuring the tank battery with new equipment in mind. That's what a product operator should do."

Agreed Richards, "It's better to spend at the front end. Why waste shareholder money?"

There are two ways to meet the 95 percent reduction requirement, Richards said, beginning with a vapor recovery unit, especially combined with a vapor recovery tower, a piece of equipment designed to keep emissions from reaching six tons. But once that threshold is triggered, he said, operators can use controlled destruction like a flare or enclosed combustor.



Reducing emissions from oil and condensate tank batteries is just one of five or six main emission sources the EPA is targeting in the oilpatch, Richards said. The good news is, he said, the rules are being phased in over several years. Industry officials

expect that, as the rules are phased in, the EPA will delegate oversight to the individual states.

He said it remains to be seen to what level enforcement will rise, and how strict.

Added Scribner, "the closer to a populated area, the closer attention the facilities will get."

"I think it's helpful that the EPA is staging it in and initially focuses only on new tank batteries, but they may ultimately start reaching back. The other positive is that, at least the first part has real economic payback for operators," Richards said. He estimated recovery projects in the Permian Basin have a nine to 12-month payback timeframe.

He explained that the gas emitted from the tank batteries, if in high enough quantities, can be captured and sold. But in some cases the infrastructure to move the gas isn't available or it's not economically feasible to capture the gas. For emissions over 5 Mcf a day, an enclosed combustor to burn off the gas is recommended; below that, Hy-Bon offers a biofilter approved by the TCEQ to reduce VOC emissions.

The second tier of emissions regulations, Richards cautioned, will take effect in 2014 and could prove to be very costly, relating to drilling and completion operations.

"The second tier may be more challenging," he acknowledged, but "our industry has historically been resilient in finding ways to overcome obstacles."

Richards and Scribner said the key to adapting to the new regulations is to take a comprehensive field approach rather than a battery-by-battery approach.

While Hy-Bon manufactures, stocks and installs vapor recovery units and towers and combustors, Richards stressed the company tries not to focus only on offering the equipment but helping companies find the best way to comply with the regulations. To that end they have hired Jeff Voorhis, formerly with the TCEQ, as a technical expert to help companies navigate state and federal regulations.

Hy-Bon is sponsoring a seminar about the new Quad O regulations on Thursday, Dec. 6

If you go:

When: Thursday, Dec. 6 at 11:30 a.m.

Where: Advanced Technology Center, 3200 W. Cuthbert Ave.

Reservations: Call Jill Rogers at 697-2292