

Refuelling RETHOUGHT

HOW WILL THE EPA'S NEW OFFSITE
FUELLING REGULATIONS AFFECT YOU?

by Jeffrey Decker



Long-delayed revisions to fuel spill regulations in the United States are just now coming into force, along with awareness of their application to both airports and temporary remote helibases alike. Some companies are ready for the deadline with double containment and spill prevention plans, while the rest soon will be. But many are worried about the added costs and cumbersome gear that could result from trying to adhere to the new regulations.

"It's not logical to try to apply full criteria, protocols and compliance compared to a fuel depot station on an airport," remarked Helicopter Association International (HAI) president Matt Zuccaro. "To try to recreate that environment at every remote site is not practical."

Helicopters aiding logging, and certainly fire fighting, he said, are highly mobile and may only refuel for one day at any rustic spot, which is considered a "facility."

"We're certainly going to be working with the operators to get their views and concerns," said Zuccaro, in hopes of making prudent changes before long. "Historically, we've found that to be a fairly good process." HAI has and will continue to communicate with the Environmental Protection Agency (EPA) to help them best understand field operations, and to weigh impacts on businesses and the environment.

HISTORY AND CURRENT IMPLEMENTATION

The history of Spill Prevention, Control and Countermeasure (SPCC) changes is a long one. Concerns from the petroleum industry delayed the implementation that had been first set for 2003. The latest change, announced on Jan. 29, 2009, has moved the effective date of the final rule to April 4. That has been joined by a 30-day public notice and comment period to accept input on the final rule from interested parties. There are some whispers that if the EPA receives sufficient comments, the

implementation date may again be delayed. If the April 4 date holds, though, operators will need to have SPCC plans in place before November 2009.

The new SPCC regulations cover everyone who uses every type of oil, even vegetable oil. An open advisory from Washington, D.C., attorney Warren Lehrenbaum suggested careful consideration of the situation: "The rules are quite detailed, and consequently an exacting attention to their requirements is advisable." Further, he noted that the EPA is allowing "a measure of regulatory relief."

Federal on-scene co-ordinator Matt Carr seconded Lehrenbaum's statement, and said, "A number of sectors, the aviation sector being one of them, didn't realize they were impacted by these regulations." A one-time remote rendezvous by a tanker and helicopter aren't covered, he explained, but any place where that tanker sits is considered a "facility." As an inspector and responder to spills in Alaska, Carr sits on the EPA's oil program technical workgroup and is among the dozen or so people most-informed on these complicated matters. Said Carr, "It used to be that if you had a single tank of 660 gallons, or aggregate storage of 1,320 gallons, and impacted a navigable waterway, of course, then the regulation would apply to you." Then, the 660 US gallon limit was raised to 1,320. "That did eliminate a lot of really small operators."

The motivation behind the modifications is to streamline and clarify certain SPCC requirements for several industry sectors, stated EPA spokesperson Latisha Petteway. "Remoteness is not a factor in whether a location is a 'facility' and whether an SPCC plan is required," she said. "What matters is if there is more than 1,320 gallons in total aggregate above ground or 42,000 gallons completely buried storage capacity, and whether there is a reasonable expectation that a discharge of oil will reach the waters of the U.S. Then, an SPCC plan must be prepared and

OPPOSITE New EPA regulations will affect all operators who park fuel tankers on site.

Skip Robinson Photo

BELOW Remote operators are driven to use either double-walled tanks or other sized secondary containment measures.

Shawn Evans Photo





TOP Operators need to have plans for fuel containment. **SEI Photo**

BELOW Canadian operators have long been dealing with stricter refueling regulations by using double-walled tankers **Randy Simonneau Photo**

implemented at the time operations are started at that location.”

Few changes were made to the SPCC rule between 1973 and 2002, when ease of compliance and enforcement became priorities. Now, total storage of 5,000 gallons or less is considered tier 1, requiring a self-prepared SPCC plan. “Between 5,001 and 10,000 gallons,” said Carr, “you cannot use fill-in-the-blank, but can use a shortened version and fill it out yourself. They are performance standard regulations and they are self-implemented,” unlike the heavy guidance in the Federal Aviation Administration regulations. When tanks add up to more than 10,000 gallons, professional engineers need to draw up specific plans.

“That’s a big deal for us,” said Paul Reichard, business unit manager for SEI Industries’ Remote Site and

Environmental divisions. Besides containment and tanker products, “We provide certified engineered drawing packages. There’s never been a demand for that before this came in.” A lot of SEI products that help meet the SPCC changes are selling well, as SEI has been helping clients prepare for the past two years. Yet, there are still many who have not prepared. Said Reichard: “There are a lot of the Johnny-come-lately folk who have forgotten. Everywhere I go, people are complaining, because it’s more expensive. It’s not just affecting helicopter contractors. This is affecting everyone who stores fuel.”

To help defray regulatory costs, which can total hundreds of thousands of dollars, many U.S. Forest Service contracts include added monies.

Operators that have been flying in Canada already have a head start. Canadian laws with the same effect as the new U.S. EPA rules were implemented June 12, 2008. Similar language fills the Canadian Environmental Protection Act and “Storage Tank Systems for Petroleum Products and Allied Petroleum Products” regulations.

ONE OPERATOR’S PERSPECTIVE

While Oregon’s Swanson Group doesn’t operate over Canada, said vice-president of aviation Carson Johnson, it already meets or exceeds most of those regulations in field operations. Its SPCC plans are in place and an assortment of secondary containment is already in use. “Really, the only change appears to be recognizing when it’s actually required,” said Johnson. “We use portable blow-up containment. We have A-framed style containments, a lot of the SEI stuff.”

While operating nozzles on tanker trucks, Swanson uses Throw ‘N Go berms from Pennsylvania’s Chemtech, which can be positioned in 30 seconds, and are said to be “the simplest and quickest berm to deploy in any situation, including emergencies.” Johnson explained how easily





heavy trucks drive over the flat, ovalur mats: "The Throw 'N Go is actually not a berm until some sort of fluid starts filling it up. If you have a spill or something like that, it naturally raises the sides." However, as with all open containment, "It's kind of a pain in the butt when it starts raining. Then you've got to figure out how to maintain it."

Portable blow-up containment products are quick and convenient, but require maintenance in rainy weather. **Fol-da-Tank Photo**

Given the nature of Swanson's missions, fire fighting, logging and survey work, its gear needs to be rapidly packed up and tucked away when its ships (three K-Maxes and three SA315B Lamas) are ready to move. Said Johnson, "We move day to day, week to week, month to month. Very rarely do we ever sit anywhere for a year. All of our operations are in the field."

For now, the plans and products it has in place work well, but Johnson sees the need to soon obtain another type of containment solution. "We are going to eventually invest in the EnviroTankers," he said, but wasn't sure when, given the cost of possibly having one fuel truck for each of its helicopters.

DOUBLE-WALLED TANK TRAILERS

EnviroTankers were introduced eight years ago to meet sized secondary containment requirements. The reflective metal tanks have empty spaces, mostly in the front and

rear, to catch spills from the inner tank if a leak occurs.

While mobile refuelers are exempt under the sized secondary containment requirements for bulk storage containers in Part 112.8(c), Sections (2) and (11) of Title 40 of the Code of Federal Regulations (40 CFR), EPA spokesperson Petteway said, "Mobile refuelers remain subject to the existing general secondary containment requirements of the rule." Specifically, this is covered under 40 CFR Part 112.7(c). Bulk tanks, large tanker trucks and bulk storage facilities need secondary containment able to hold 110 percent of the fuel in the primary tank, and also need smaller catch basins for drips and small spills within that secondary containment.

A typical tanker truck is fine as long as it's on pavement or only making deliveries. Said EnviroTankers managing director Randy Simonneau, "There is no regulation from the DOT [Department of Transportation] side of the house that requires you to have secondary containment when you're rolling down the highway. . . . The minute you leave the main public roads [though] you're no longer under DOT jurisdiction; it's EPA jurisdiction. . . ." He added, "Our product alleviates that logistical nightmare of having to use berms. You now comply with sized secondary containment no matter where you go."

Before Heli-Expo 2009, Simonneau said no U.S. customers had EnviroTankers or retrofits on their chassis, but response was so strong in Anaheim, the company has seen more than 15 orders (to go with its existing 28 sales and leases to Canadian customers).

INNOVATIVE ALTERNATIVES

Among the other companies offering alternatives to the traditional berm solutions is Fol-Da-Tank of Milan, Ill. It's solutions do away with the old-fashioned large tarp with

bales of hay around it, where one parked their tanker truck in case of a leak. Fol-Da-Tank has both a line of berm and portable storage tank offerings. Said national sales manager Chad Christensen, "We can do fixed bracket sides, we can do pop-up sides, we can do air inflatable sides and foam sides."

The company will customize solutions for its clients and offer fabrics resistant to chemicals and harsh climates. And, what makes its berms — Fol-Da-Dams and Mini-Dams — truly unique is they all fold down to about one percent of their full size.

Fol-Da-Tank also carries this portability to its tank line with quick-assemble tanks like its Rol-La-Tank, which, said Christensen, "can be used in any type of oil spill or hazardous spill cleanup, as well as fire fighting."

Over at SEI, Reichard promotes the company's Insta-Berm line and its collapsible tanks as being extremely durable, and proven in the field. Three years ago, the company also added RainDrain, which "traps the fuel, the toxic hydrocarbons and just allows clean

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water to pass, well below the 10 parts per million. It's a gravity-fed system, so you need no power."

SEI has modified its auto-opening Ride-Side berm, but its newest innovation is its monitoring system. "You have to do regular maintenance," said Reichard, "and the biggest problem we find with accidents, in any part of the world, is operators tend to build it and walk away. We'll do regular inspections of the tank for them, monthly, but daily inspections are handled through online monitoring sensors that are built into our systems." The EPA, said Reichard, "is really saying now 'You have to really look at this section, guys, and pull up your socks.'"

THE FINER POINTS

Of all the regulatory amendments, Reichard said the biggest headache is 40 CFR Part 112.7(c), which the EPA expected to relieve the regulatory burden. Said Reichard, "Say you are a non-transportation-related tank truck filling other vehicles or other items [helicopters for instance]. You need to have some sort of secondary containment underneath that. Most people look at it as saying, 'Well, I have a double-steel-wall tanker truck. If part of the tanker truck leaks, it's contained in the second wall, so, by nature, it has [sized] secondary containment.' [This is correct,] but what they're missing is that while they're in the refuelling area, you can have other problems occur: such as spills from nozzles, broken fittings [or] an operator leaves a valve open." Operators must realize that other measures of secondary containment need to be put in place for items such as external nozzles and filters as well. Secondary containment in these cases may include mini-berms, catchment trays or spill kits on standby near external items if a leak could reasonably be expected to occur.

Both Reichard and Swanson Group's Johnson said inspections are extremely rare in the field. Said Johnson, "Rarely, rarely. On the DOT side [though] you have to re-certify your tanks every one to two years."


In Alaska, where inspectors cover the largest region, the penalties are the toughest, and the control over spills the strictest. "Because their fines are most heavy and their rules are most rigid, they probably practice some of the best secondary containment around," said Reichard. "We've noticed a lot of our clients in Alaska do things no one else does."

He's also noticed, over the last three years, an increase in voluntary compliance. "It's a big fine if fuel gets into the environment or it gets into the groundwater. The degree of the fine is lessened based on the defensive measures you took." Sincere effort could be rewarded with paying cleanup costs, but not the fine for accidental spills.

Doing the right thing and doing the smart thing often go together. Cautioned Reichard, "Sure, you could get away with it without getting caught. As

soon as the EPA catches you without the necessary products, you're going to get a small fine. If you have a spill, you're going to have a huge fine. The cost of one fine could have easily paid for all the equipment you have to use."

Overall, the new SPCC regulations apply only when navigable waterways could be impacted. And, while every ecosystem handles contaminants differently, the toxins in fuel can be very poisonous to humans and wildlife in any setting. Any which way you look at it, if you don't have the products needed to prevent a spill and an SPCC plan in place or in development already, you only have a few months left to decide on which will cost you more.

Jeffrey Decker reports on issues in aviation, energy and politics. He lives with his wife and son in Oshkosh, Wis. 



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