Treating Heavily Sludged Systems

Many older oil heat systems, and some not-so-old systems, have a large buildup of sludge in the tank. Contrary to what some additive salesmen will tell you this is not the result of fuel "repolymerization" or degradation. Also, it is not due to "bug carcasses". Rather, it is a buildup of slime generated by bacteria in the presence of moisture. True, it probably contains solid fuel particles and a few dead "bugs", but these things account for only a small fraction of the total mass. It is the slime that binds all of this stuff together and makes it sticky. In the tank bottom there might be, in addition to a layer of active slime, a buildup of inert stuff that forms when the slime in old sludge breaks down. This part of the buildup will consist of loose, blackish particles. Think of this loose buildup not as "dead" sludge, but rather as "dormant" sludge. If it is stirred up and this material sees contact with oxygen again, it will come back to life once more and the bacteria in it will start producing slime again.

A system with a heavy sludge buildup is likely to have carryover each time the tank is filled. This stirred up sludge can get sucked into the fuel line and overwhelm the filter, causing it to plug and the system to shut down. Some dealers call these systems "ambulance chasers" because the service truck has to follow the fuel truck to these sites.

A fuel oil dealer in New Jersey experimented on ten of his "ambulance chasers". He treated those tanks with a Fuel Right® EP "shock" dose (8 oz. Per 275-gallon tank) and watched to see what would happen. In eight of the ten systems the system no longer quit after a fill, so he took them off the "ambulance chaser" list. The other two systems continued to plug even after three or four Fuel Right treatments.

We told him that Fuel Right was not the whole answer for those two severe cases, and suggested he pump those tanks out. Instead he pulled them, took them to his yard and cut them open. He told us later that those two tanks each had more than a foot of sludge in the bottom! (We're good, but not that good!).

If he had listened and had simply pumped out those two tanks he probably would have saved the customers a lot of money and been just as well off. The multiple Fuel Right treatments would have "conditioned" the sludge so it flowed freely, and a large part of the sludge would have come out just by pumping out the tanks. The small amount that remained would most likely have been controlled effectively with just one more Fuel Right treatment on the next fill.

Try this approach if you have systems with heavy sludge buildup. You will probably be pleased with the results – and your customers will thank you.