

DEF

Another item we have been getting a lot of questions about is whether we regulate Diesel Exhaust Fluid (DEF). DEF is one technology to reduce nitrogen oxide emissions from heavy-duty diesel engines as required by EPA. DEF is not at this time a regulated substance, however, we strongly recommend to owners and UST professionals that they install the UST system according to the DNR's technical standards in Chapter 135, including secondary containment.

In a September 22, 2009 memo, EPA determined that while DEF may contain trace amounts of ammonia, which is a regulated hazardous substance, it would fall under the de minimis (meaning about minimal things) exclusion, and therefore, not regulated. This is not to say that the non-regulated status of DEF will not be revisited in the future, or that it is here to stay as a technology for reducing emissions from diesel engines. We strongly recommend to owners and installers that when a DEF tank is installed, it is installed according to Iowa UST requirements. So, in the future, if DEF becomes regulated or if the contents of the DEF tank change to a petroleum product, the tank will be compliance. The DNR would register the tank as a Non-regulated DEF tank. Therefore, if a DEF tank is to be installed, a completed Notification of Installation form (Form #542-0104), 148 form (Form #542-3266), and Installation Inspection Checklist should be submitted to the UST Section.

EPA and tank manufacturers expect "USTs storing DEF will be both compatible and secondarily contained. International standards for DEF set strict requirements for compatibility in order to avoid product contamination caused by materials in the storage tank system degrading into the DEF and also to prevent releases due to corrosion. Further, manufacturers recommend that underground DEF tank systems use secondary containment technologies with interstitial monitoring. EPA expects that owners and operators of DEF USTs will generally follow these industry, manufacturer, and international standards for the storage of DEF in USTs" (EPA Memo, 22 September 2009). We had this memo on our website at one time, and will make it available again.

The Iowa DNR also expects its licensed UST professionals to follow these standards for compatibility and prevention.