

MTSA POLICY ADVISORY COUNCIL

July 29, 2009

Policy

Exempting Facilities that Transfer and Store Asphalt 09-09

FINAL

Issue: – Asphalt (aka Asphalt Cement, Neat Asphalt) describes a variety of low combustibility, low flammability, liquid hydrocarbons that are regulated under 33 CFR 154. Because of applicability to these safety and pollution prevention regulations, asphalt facilities are also placed into the MSTA regulatory regime contained in 33 CFR Subchapter H. However, given the physical properties of asphalt, should facilities that transfer and store asphalt be exempted from the requirements of 33 CFR Parts 105?

Discussion: 33 CFR 105.105 (a) (1) requires facilities that are regulated under 33 CFR 154 to be also regulated under the security regulations of 33 CFR Subchapter H. This was done for the entire category of oil products because of the potential that, if attacked or used as a weapon, the physical properties of many of these cargoes would likely result in a Transportation Security Incident. (TSI). TSIs are defined as a security incident that results in significant loss of life, environmental damage, transportation system disruption or economic disruption in a particular area.

Asphalt generally has a flash point of >450°F, and an ignition temperature of >700°F. It has an OSHA flammability classification of Class IIIB, with a flash point at or above 200°F and, therefore, OSHA flammable and combustible liquid regulations do not apply. This also means that, for practical purposes, someone initiating a security incident by attacking a cargo or storage tank of asphalt would first need to heat the cargo significantly to produce a fire. Moreover, facilities that handle asphalt cargoes typically store the asphalt in very large above ground storage tanks often with a capacity of 500,000 gallons or more. This makes it extremely difficult for a terrorist to heat up such a large tank of asphalt to a temperature to burn it or to get it to detonate. This makes an intentional attack on an asphalt tank implausible and unlikely to result in a TSI due to significant loss of life.

Asphalt is stored at elevated temperatures (300°F) to allow the product to be moved through pipelines and hoses as a liquid. It is stored at facilities in above ground tanks surrounded by an EPA approved spill containment berms. Areas enclosed by these berms are, by EPA regulation, sufficient in size to hold the entire contents the storage tank. This keeps the contents of a leaking tank within the boundary of the berm and greatly aids in recovery of the product and mitigation of harm to the environment. It is possible that an attack on a large above ground asphalt tank could result in a near instantaneous release of the tank's content and resulting wave of flowing asphalt that would flow over the spill prevention berm. However, once released, the asphalt would begin to cool and

harden. These characteristics make asphalt releases on the land relatively easy to mitigate and not likely to result in significant environmental damage.

In September, 2008, DOT Pipeline and hazardous Materials Safety Administration issued a proposed rule entitled, *Hazardous Materials: Risk Based Adjustment of Transportation Security Plan Requirements*. Concluding that the likelihood of terrorist action against asphalt carriers (Class 9) was remote therefore the security risk associated with the transportation of these materials was not sufficient to warrant development of security plans.

Policy:

Asphalt transfer and storage are low TSI risk operations. If asphalt storage tanks were to be attacked it is unlikely there would be significant loss of life, damage to the environment, significant disruption to the transportation system or to the area's economy. (Other commodities have been identified as low risk and granted MTSA exemptions in PACs 10-04, 16-04, 23-04, 33-04, & 51-05).

PAC decision 13-04 established a threshold of 42,000 gallons of other regulated cargoes as a reasonable action level for continuing MTSA regulations of facilities that primarily engage in storage of low risk cargoes. It is reasonable to continue this precedent for asphalt facilities.

Because we have concluded that asphalt facilities are a low risk to TSI operation, the Coast Guard is waiving the requirements of 33 CFR 105 to facilities that receive asphalt from any domestic cargo vessel if the following conditions are met:

1. The facility stores less than 42,000 aggregate gallons of any other 33 CFR 154 cargoes.
2. The facility receives no vessels subject to SOLAS.
3. The facility receives no foreign flagged vessels.
4. The facility receives no passenger vessels.
5. The facility is not regulated under another applicability factor.

Facilities that meet some, but not all, of the criteria may forward a request for a waiver under 33 CFR 105.130 to Commandant (CG-54) asking for permission to waive the requirements of 33 CFR 105 at their facility.

Questions can be directed to:

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