

14 October 2013

Additional question and comment concerning shale oil from Estonian Competent Authorities

In Q&A, there is a question to be discussed in Vilnius Seveso expert meeting (24 October 2013) about shale oil (No 14: Is shale oil a petroleum product?). We would like to comment the answer and raise additional question concerning Seveso III and shale oil.

We agree that shale oil is no petroleum product since it does not originate from crude oil. But the suggested answer also states that petroleum products are among others also alternative fuels. It can be interpreted as alternative fuels are (only) petroleum products.

Because of that confusion we raise additional question: **can shale oil be one of alternative fuels so according to Seveso III thresholds 2500 t and 25000 t would apply?**

Background and argumentation:

In Estonia, shale oil is produced. It is mainly used for heating houses (central system for many areas). So it is stored in boiler-houses, shale oil tank with maximum capacity 1000 m³. As a result of additional testing for REACH registration shale oils were recently self-classified also as R51/53 (Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment) or Aquatic Chronic 2 (H411). Since shale oil is no petroleum product, according to Seveso II we must use the environmental hazard (R51/53) threshold 200 t and 500 t, resulting many boiler-houses to be also lower or upper tier Seveso establishments. Considering the substance and its field of application and risk and comparing other substances (including petroleum products) and Seveso establishments it seems unreasonable.

Thereof we consider possibility to treat shale oils after Seveso III transposition as alternative fuels. In Seveso III is said that alternative fuels are fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the named petroleum products.

According to REACH some diesel fuels (CAS 68476-34-6) are also self-classified as environmentally hazardous (R51/53) and heavy fuel oils (CAS 64741-80-6) self-classification is even more severe concerning environmental hazard (R50/53). Flammability properties of shale oils and petroleum products are also similar, shale oil flash points range -10 °C to + 67 °C and boiling points range +55 °C to +355 °C. Shale oil is used for heating as many petroleum products, so they serve the same purpose.

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