

US EPA ARCHIVE DOCUMENT

PUBLIC NOTICE FACT SHEET: Hydrodec North America, LLC – Canton, OH

Background

Hydrodec North America, LLC applied for a national approval on May 8, 2009 to treat and store PCB-contaminated transformer oil under Section 6(e) of the Toxic Substances Control Act (TSCA) and 40 CFR 761.60(e) and 40 CFR 761.65(d). This application proposed the use of an alternative technology to incineration, which they call Catalytic Hydrogenation (CH), together with a proposal for commercial PCB storage at their Canton, OH facility. EPA reviewed the application and issued a Demonstration Approval on October 13, 2009. Hydrodec then conducted a Demonstration Test from October 26 to October 30, 2009 with EPA representatives present to witness the demonstration test and collect split samples.

The purpose of the Demonstration Test was to determine whether Hydrodec can achieve EPA's performance standard of less than 2 parts per million (ppm) PCBs (which is equivalent to the performance standard of a PCB incinerator). During the Demonstration Test, Hydrodec successfully demonstrated treatment of PCBs to less than 2 ppm. Additionally, Hydrodec successfully demonstrated they could accurately and precisely analyze the PCBs and the performance of the treatment system, with data in close agreement with the data collected by EPA. Consequently, these data were used to determine the draft operating conditions for the draft operating 761.60(e) approval.

Analysis of the treated oil confirmed the CH process passed the Demonstration Test, with the feed oil treated to below the EPA regulated 2 ppm PCBs. Additionally, the analysis verified that oil with a PCB concentration of 2,000 ppm was successfully treated below 2 ppm. This level of 2,000 ppm PCBs is the maximum PCB concentration Hydrodec would be allowed to treat pursuant to the draft approval.

Alternative Disposal Technology, Storage, and Safety

The proposed PCB treatment technology to be used on-site is a CH process to treat PCB-contaminated transformer oil. The PCB-contaminated transformer oil is first collected in feedstock tanks and is then sent to the feed oil surge tank. From the feed oil surge tank, the oil is introduced to the CH process. The CH reactor is comprised of a single packed bed of a conventional hydro-treating catalyst, which destroys the PCBs to biphenyl and hydrochloric acid.

During the reaction, nitrogen or sulfur in the mineral oil dielectric fluid (MODEF) is converted to ammonia and hydrogen sulfide. Some saturated light hydrocarbon vapors and liquids below the boiling range of the MODEF may have been formed from the hydrogenation of the MODEF itself. These hydrocarbons are subsequently separated out within the CH system.

The 761.65(d) commercial storage approval would also allow Hydrodec to store on-site up to 28,500 gallons of oil containing PCBs and 440 gallons of non-liquid PCB waste at various levels in approved storage tanks, totes, and drums.

The draft approval identifies secondary containment restrictions, recordkeeping requirements, and reporting requirements. Additionally, the draft approval would require Hydrodec to adhere to its Spill Prevention, Control, and Response plan.

EPA has determined that the operation of the process does not pose unreasonable risk to health or the environment.

Facility Location

The facility is located at 2021 Steinway Blvd. SE in Canton, Ohio 44707 in an industrial park south of OH-30, east of I-77, and west of route 43/Waynesboro Drive SE.

Community Involvement

The draft PCB commercial storage and alternative technology disposal approval is open for public comment from May 14, 2012 to June 12, 2012. Copies of the draft PCB commercial storage and alternative technology disposal approval and supporting documents (i.e., demonstration approval, demonstration test report, PCB storage application) are located at the Stark County Library as well as posted online at epa.gov/pcbs. Comments are being accepted on the draft approval, not the supporting documents.

Contact

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