Scoping Statement Regarding Emerging Contaminants

Martino's Master Dry Cleaners, 3917 52nd Street, Kenosha, WI
BRRTS #02-30-552186

Per Wis Admin. Code § NR 716.07 and Wis. Admin. Code § NR 716.09, site investigation scoping and work plans should include evaluating potential emerging contaminants that were historically or are presently produced, used, handled, or stored at a site. Most notably, emerging contaminants include 1,4-dioxane and per- and poly-fluorinated alkyl substances (PFAS). The evaluation includes any available information on the use of any products containing these chemicals in any services process; the duration of the suspected chemical product use; the type of chemical contained in the product; and any areas of a site where products containing these chemicals may have been used, stored, managed, or discarded.

According to documents prepared by the U.S. Environmental Protection Agency, several State Regulatory Agencies, the Department of Defense, and various other sources of toxic chemical information, dioxane is typically used by industry as a catalytic solvent during the manufacturing of adhesives, resins, oils, waxes, pharmaceuticals, and certain plastics and rubbers. It is also used to stabilize chlorinated hydrocarbons when being transported in aluminum containers. Dioxane is also a known byproduct of the production of polyethylene terephthalate (PET) plastic.

PFAS are very ubiquitous in the environment and occur in many common everyday products such as Teflon® coatings, fast food wrappers and popcorn bags, stain and water repellents, some cosmetics, some insect repellents, and some sunscreen products, to name a few. In the 1940s, the manufacturing of these products incorporated PFAS due to their inherent hydrophobic (water repellent) and non-stick properties. PFAS are also components of fire-fighting foams.

The Site building was constructed in 1966 and has operated as a dry cleaner since construction, first under the name Better Cleaners and later as Martino's Master Dry Cleaners. Tetrachloroethene (PCE) was utilized as the solvent for the cleaning process since the business began through 2005, at which time Martino's centralized active cleaning at a single location elsewhere in Kenosha.

The current owner, Dan Martino, has owned the Site since 1970. Mr. Martino recalls applying a water and/or stain repellent product in very limited quantities from spray cans, primarily in the 1980s. Mr. Martino does not remember or have any records of product names. The water and/or stain repellent treatments were applied after clothes had been dry cleaned, so the chemicals would not have been released to the sewer, which is the primary pathway for solvent discharge to the subsurface.

At least 97% of the dry cleaning business was cleaning business attire and formal wear, for which customers did not request these kinds of additional treatments. Further, these types of garments were not produced with waterproofing or stain repellent applications for initial sale. All leather garments brought into Martino's were sent off-site to a third party for cleaning.

Conclusion

The Site has been operated by cleaning businesses since construction of the building. There is no history of manufacturing, and no reason to suspect 1,4-dioxane would have been used, stored, or discarded at the site.

The dry cleaning industry has been identified as a potential contributor to PFAS contamination because of suspected PFAS accumulation in dry cleaning waste. Our research of waterproofing/ stain repellent products used at other dry cleaner sites indicates that many of the commonly used products didn't contain PFAS compounds. Waterproofing and/or stain repellent product(s) were used by operators of the dry cleaning business at the Site but in a very limited quantity and outside of the dry cleaning process (i.e., applied by spray can after cleaning was complete). As such, there was no pathway for PFAS to enter the dry cleaning waste stream.

Considering the Site history and operations, and the conceptual site model identifying a point source PCE release from a leaky floor drain trap, the release of PFAS to the subsurface as a result of the dry cleaning operation is extremely unlikely. Therefore, no further evaluation or sampling assessments are warranted.