



# Supertund site could take decades more to clean



**Jean Mikle**

Asbury Park Press

Published 5:11 a.m. ET Jan. 18, 2023 | Updated 8:00 a.m. ET Jan. 18, 2023

TOMS RIVER - Groundwater clean-up began in 1996 at the 1,200-acre Ciba-Geigy Superfund site, with an estimate that it would take 30 years before polluted water beneath the property would be clean.

But Diane Salkie, remedial project manager for the federal Environmental Protection Agency, said Tuesday she's doubtful that goal will be reached.

"Cleaning groundwater is a very slow process," Salkie said on a webinar about the Superfund site sponsored by the environmental advocacy group Save Barnegat Bay. She estimated that the plume had shrunk by nearly 50% since the treatment program began. "... Once these contaminants get into the groundwater, it takes a long time to get them out."

The plume contains chemical byproducts of Ciba's industrial dye- and resin-making operations, including known human carcinogens trichloroethylene and tetrachloroethylene.

Waste from the dye production process was tossed into drums in an unlined landfill on the land, and also dumped into pits.

The Superfund site is owned by BASF, which acquired Ciba more than a dozen years ago, and has been working with the EPA on clean-up of the groundwater ever since.

Nearly 1 million gallons of polluted water are pumped up every day, treated with an air stripper and granulated carbon and discharged on the site's northeast corner after being cleaned, Salkie said.

A groundwater pollution plume migrated off the former Ciba site as far back as the 1960s, and even though it's been greatly reduced in size, part of it still flows underneath the nearby Oak Ridge neighborhood. In the 1960s, pollutants from the Ciba site made their way into the public drinking water supply by contaminating wells operated by the then-Toms River Water Co.



---

The EPA still does not allow new wells to be drilled in the area impacted by the Ciba plume.

Salkie, who has worked on the Ciba site since 2011, answered questions about the property that were posed by residents, but said she could not comment on the controversial settlement proposal that would resolve a lawsuit filed by the state in 2007 seeking compensation for damages to natural resources caused by Ciba's operations.

She repeatedly stressed that the settlement, which has been panned by the township as well as environmental groups, was made between the New Jersey Department of Environmental Protection and BASF. Save Barnegat Bay is sponsoring a "Community Speak-Out" for residents to give their input on the settlement from 6 to 9 p.m. Jan. 25 at Toms River High School North.

The settlement would preserve 1,000 acres of the site, but would not provide monetary compensation to the township or any individuals affected by pollutants discharged there. BASF would retain control of 250 acres of the property, which could potentially be developed.

The township wants all the property to be preserved, and a fund set aside to compensate those injured by Ciba's operations.

**Boardwalk fund:** Murphy pitches millions for NJ Boardwalk Fund. What could Jersey Shore towns get?

Salkie noted that 341,000 acres of contaminated soil on the site were dug up and treated, mostly with pollution-eating microbes in a process called bioremediation. Some of the treated soil was returned to the site, where it was buried, with a cap placed on top and a "slurry wall" beneath to prevent groundwater leakage, she said.

The EPA also supervised the removal of 47,000 drums of chemical waste and sludge from the property in the early 2000s.

In recent years, BASF has been hosting students from local high schools - including Toms River Regional schools - who have assisted with environmental studies and learned about the property's history and remediation efforts.

A state and federal study released initially in 2000 determined that some Toms River residents had been exposed to chemical pollutants from the site that had leached into private wells and the public drinking water system decades ago.



---

School is adjacent to the site.

The study was completed as part of a massive federal and state investigation into elevated levels of some childhood cancers in Toms River.

That investigation concluded with the release of a report in December 2001 that found exposure to air emissions from the Ciba plant — as well as exposure to water from the Parkway well field — was associated with elevated levels of leukemia in girls.

BASF has leased 156 acres of the property to Toms River Merchant Solar, which has built a massive solar farm, capable of generating up to 35 megawatts of electricity, on the site. Two megawatts of that power is used to power the pump and treat groundwater cleaning system, Salkie said.

The solar farm is believed to be the largest in the state, and can provide electricity for more than 4,000 homes.

*Jean Mikle covers Toms River and several other Ocean County towns, and has been writing about local government and politics at the Jersey Shore for nearly 38 years. She's also passionate about the Shore's storied music scene. Contact her: @jeanmikle, jmikle@gannettnj.com.*