

# A half-century later, a \$62 million plan to finally clean up hazardous waste dump in Florida's Broward County

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A half-century later, officials are taking significant steps toward a \$62 million cleanup of one of the nation's worst hazardous waste dumps, a

sludge-like mess that's lurked underground around a Pembroke Park property.

The federally supported cleanup could begin within months at the Petroleum Products Corporation Superfund site in Pembroke Park, off Carolina Street. There, toxins seeped into the ground where a used-oil processing and refining facility operated from 1957 until operations ceased at the site in 1971.

Although the former dumping pit was about 2 acres, the pollutants eventually spread out by 7 acres, Pembroke Park officials said.

The government acknowledges on its website "contamination from site operations affected soil and groundwater at the site as well as areas next to the site and the underlying Biscayne Aquifer."

The cleanup is estimated at \$62 million, the U.S. Environmental Protection Agency says. The state's Department of Environmental Protection is taking the lead on the construction for this site, said James Pinkney, spokesman for the U.S. EPA, on Monday.

"The construction should begin this fall after they get a contract in place and should last a little over a year, if there are no delays," he said. "EPA is happy to be working in partnership with the state to implement this remedy quickly to ensure minimal disruptions to the surrounding community."

Broward County is one of many entities that are contributing money toward the cleanup. On Tuesday, the County Commission is expected to sign off on a "federal consent decree" regarding future soil remediation of the site—which could come at a cost of hundreds of thousands of dollars.

## Dating back decades

There are warehouses on the grounds of the contaminated site, and many of them will be demolished so the cleanup can begin, said Franklin L. Zemel, a Fort Lauderdale-based attorney for Dr. Robert Cornfeld, a retired orthodontist who owns the land.

Zemel attributes the demise of the [oil refinery](#) site decades ago to Hurricane Camille in 1969, which caused flooding of the pit, which led to the shutdown of its recycling facilities. Only the storage operations remained.

After the oil refinery was gone, Cornfeld bought about half of the 11-acre land in the early 1970s. By then, the refinery had been replaced with blacktop and warehouses. Cornfeld bought the rest of the land a few years later.

That was before Cornfeld spotted oil bubbling up in a parking lot and alerted the EPA.

A clearer picture began to emerge of the pollution: The EPA determined in 1980 that the groundwater and soil were contaminated, and the site made the federal government's superfund list in 1987 as one of the nation's worst hazardous waste dumps.

## Early steps

The federal EPA has made efforts to clean up the problem.

It put in a system in 1994 to pump out the oil, but it failed and was taken out in 1998, Zemel said.

A new technology called a "bioslurper" went underground from 2002–2012 and pulled out 43,000 gallons of waste, according to the federal government.

The machines were considered too expensive for the results it was getting so they shut it down.

By 2016, according to Pembroke Park Town Hall, what was left was mostly hard tar-like matter that cannot easily be removed.

Town officials, in a 2017 email, said there "is occasional leakage when we have high rainfall under a few industrial buildings to the north of the site that were built over portions of the pit."

### **'Special form of concrete'**

As part of the cleanup, the warehouses south of Southwest 19th Street and north of Southwest 19th Street will be demolished, according to a letter Zemel sent Pembroke Park Town Hall in September.

The "vast majority" of the contamination in the ground will remain, "but mixed with a special form of concrete to safely keep the contamination from further leeching or movement."

"In doing so, however, an area of approximately 5 acres will be converted into a concrete block 20 feet or so deep below the ground," he wrote.

Pinkney, with the EPA, said the remedy includes a group of cleanup methods that prevent or slow the release of harmful chemicals from wastes, such as contaminated soil, sediment, and sludge.

"These methods usually do not destroy the contaminants. Instead, they

keep them from leaching above safe levels into the surrounding environment," Pinkney said. The work will be performed down to about 27 feet below ground surface at the deepest with an average of 20 feet below ground.

Then, there will be a monitoring period of three years to allow the groundwater to stabilize.

Pinkney said the remaining contamination "is sludge-like in composition." He said while it's difficult to accurately gauge the thickness "and therefore estimate the volume of sludge in the subsurface," the impacted soil volume is estimated at 60,000 cubic yards.

## **Legal action**

Known as an oil "re-recycling," businesses and agencies recycled oil using a chemical process decades ago, but leaving behind toxins that were left in an unlined pit, Zemel said. The Pembroke Park site was once the only such facility in South Florida to recycle the oil, Zemel said.

It was used by "anybody who generated and transported oil to be recycled so that's everybody, right? Automobile dealerships, all of the companies that do oil changes."

"What was done was legal at the time," he said. "There were no rules or regulations that prohibited the dumping of these oils into unlined pits."

There are dozens of agencies involved in a [legal settlement](#) over the land, including Broward and Miami-Dade counties.

## **Broward's connection**

Broward has been one of the "cooperating parties made up owners of real property at the site and generators of the waste oil brought to the site" since 1994 after acquiring a private transit company, county officials said. Broward Transit had previously sent its waste oil to the Pembroke Park site.

By 1994, a group of businesses and agencies had spent \$947,000 toward determining how contaminated the site was, and Broward agreed to pay more than \$78,000, based on the estimated percentage of the overall volume of waste oil sent to the site.

To date, Broward has paid more than \$168,057 and expects to pay another \$362,000 in future assessments to cover the current soil remediation.

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