

Did you know.....

Perchloroethylene (commonly referred to as perc) is dangerous to your health and the environment.

What is perc?

Perc is a liquid, synthetic chlorinated hydrocarbon primarily used as a solvent in the dry cleaning industry and in industrial applications.

How are people exposed to perc?

- From drinking water from a contaminated well.
- In surface waters used for drinking water supplies.
- In indoor air from perc vapors that can migrate from groundwater through floors and walls
- Through clothing that has been cleaned using perc
- In air through releases of perc vapors from dry cleaners and other industrial sources.
- In air from perc hazardous waste which must be disposed of through incineration.



How can perc affect your property?

Property owners who discover they have perc contamination must disclose the information on their property deeds. Mitigation of perc contamination is extremely difficult, and in most cases mitigation of perc on affected properties will continue indefinitely.



Is there any compensation to property owners for damages caused by perc?

The Dry Cleaning Solvent Clean Up Act (DSCA) of 1997 provides funding to remediate an estimated 2,000 contaminated dry cleaning sites in NC. The program's goal is to mitigate the impacts of perc contamination to a "risk-based" level; however, no compensation is available for residents whose properties have been devalued as a result of perc contamination and no medical monitoring program exists for residents who have been exposed to perc.



How can perc affect your health?

Short term exposure to perc can cause skin, eye, respiratory irritation, headache, and nausea. Perc is associated with breast cancer, leukemia, and liver and kidney damage. High levels of exposure can be fatal. Studies show that perc affects the developing fetus. The International Agency for Research on Cancer lists perc as a probable human carcinogen or cancer-causing chemical. Dry cleaning workers may be at higher risk. Perc is classified as a "hazardous air pollutant" by the US EPA.

If perc is so dangerous why hasn't it been banned?

Old habits die hard, especially when economics are concerned. One 55-gal drum of perc can clean 16,000 lbs. of clothing. Despite more stringent laws requiring "safe" disposal, perc continues to pose a threat to public health and the environment because of its widespread use, hazardous waste generated and various pathways into the body. There are no requirements for the state to notify consumers about the hazards of perc nor are dry cleaners required to post warnings.

6 ways to protect our health and environment from the use of perc

- Buy clothing that doesn't require professional cleaning services.
- Patronize cleaners that use safer alternatives to solvent cleaners such as wet cleaning - reward them with your business!



- Work with your city council members, county commissioners and state representatives on a plan to phase out the use of perc.
- Require dry cleaners that use perc to post a disclaimer stating they use a dry cleaning solvent known to cause cancer.
- Talk with family members, friends and neighbors, and give them information on the risks associated with the use of perc.
- Get involved with BREDL's *Phase-Out PERC Now* campaign.

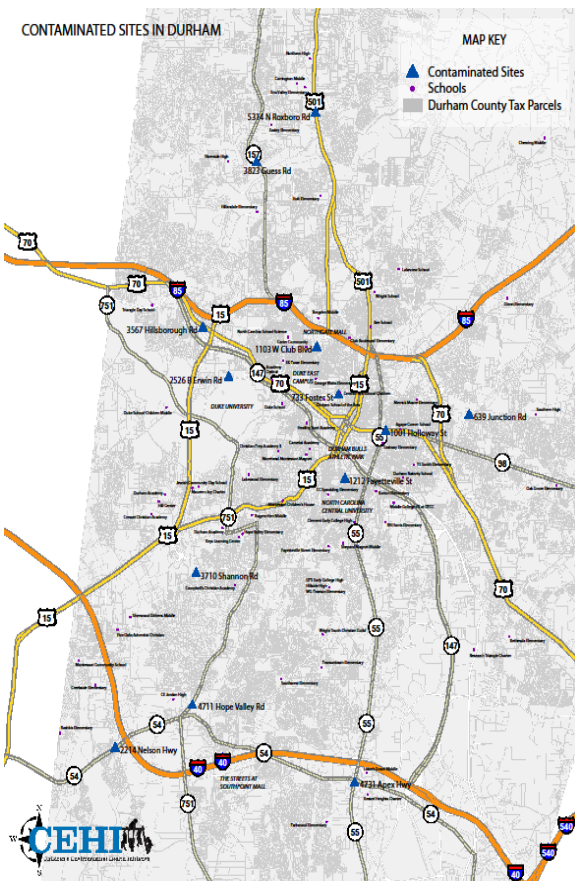
States like California are phasing out the use of perc with tax incentives for cleaners to switch to safer alternatives, and many more states are considering the same measures. Contact BREDL's NC Healthy Communities today!

Phase-Out PERC Now

Blue Ridge Environmental Defense League
Sue Dayton, NC Healthy Communities
PO BOX 44
Saxapahaw, NC 27340

Perc's heavy toll on Durham County

The map below shows the locations of 13 contaminated dry cleaning sites currently in various stages of remediation in Durham County; all are located within the city's limits. Groundwater at 12 sites has been impacted above NC DENR DWQ 2L groundwater standards for perc (0.0007 ppm) and two surface water bodies - Ellerbe Creek and Goose Creek - have been impacted above NC DENR DWQ's 2B surface water standards for perc (0.8 ppb). Several drinking water wells have been impacted, adjacent properties contaminated, and residents exposed to toxic perc vapors.



Map courtesy of the Children's Environmental Health Initiative, Nicholas School of the Environment, Duke University, Durham, NC.

Durham County Contaminated dry cleaning sites (*as of 11/09)

- **Former BB&T, 1103 West Club Blvd.** Highest perc levels in groundwater recorded (70,000 ppb). Adjacent properties contaminated and occupants of at least 2 houses at risk for exposure to perc vapors.
- **Weavers Cleaners, 1212 Fayetteville St.** Adjacent properties contaminated and occupants may be impacted by perc vapors.
- **TNT Cleaners, 5314 N. Roxboro Rd.** Perc plume 400 ft. in length. Unknown as to whether plume is stable or migrating. Indoor air tests to be conducted.
- **W.P. Ballard, 639 Junction Rd.** High amounts of soil contamination, residential drinking water wells.
- **Plants Unlimited, 3567 Hillsborough Rd.** Ellerbe Creek and Goose Creek impacted above NC DWQ 2B surface water standards of 0.8 ppb. Drinking water supply wells impacted.
- **Triangle Square Cleaners, 4731 Apex Hwy.** Day care center at risk due to fast moving water 70 ft. beneath surface carrying high levels of concentrated perc (DNAPL).
- **Model Laundry, 1001 Holloway St.** Impacts to Goose Creek above NC DWQ 2B surface water quality standards and possible indoor air contamination.
- **Scott & Roberts Dry Cleaners, 733 Foster St.** Underground perc plume not yet delineated.
- **Durham Dry Cleaners, 2526 B Erwin Rd.** Soil and groundwater impacted above DWQ 2L water quality standards.
- **American Dry Cleaners, 4711 Hope Valley Rd.** Possible danger to wildlife in area.
- **Hollywood Cleaners, 3823 Guess Rd.** Plume being monitored.
- **Carolina Cleaners, 2214 Nelson Hwy.** Perc contamination limited to building slab, did not impact church, playground on adjacent property.
- **Shannon Dry Cleaning, 3710 Shannon Rd.** Plume 185 ft. in length, could be closed soon.

**An additional 5 contaminated dry cleaning sites have been closed; all but one have land use restrictions. Approximate cost: \$368,805.48.*

Blue Ridge Environmental Defense League



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