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NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

December 23, 1997

Mr. Phil Vorsatz
NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

RE: Brownfield Site Assessment Report
Eakes Dry Cleaners,
Durham, Durham County, North Carolina

Dear Mr. Vorsatz:

This letter is being sent to you to convey the information that the North Carolina Superfund Section has obtained on a site named Eakes Dry Cleaners.

Eakes Cleaners is located at 827 West Morgan Street in Durham, North Carolina. It consists of a 6,600 square foot brick and block building situated on approximately 0.3 acres. The site was a Dry Cleaning and Fur Storage business for many years until its closure in 1995, after the death of Mr. Eakes and the bankruptcy of his estate. The site is located in a mixed commercial, light industrial, and residential area in downtown Durham. The site is located at North 36° 00' 02.5" and West 078° 54' 36.0".

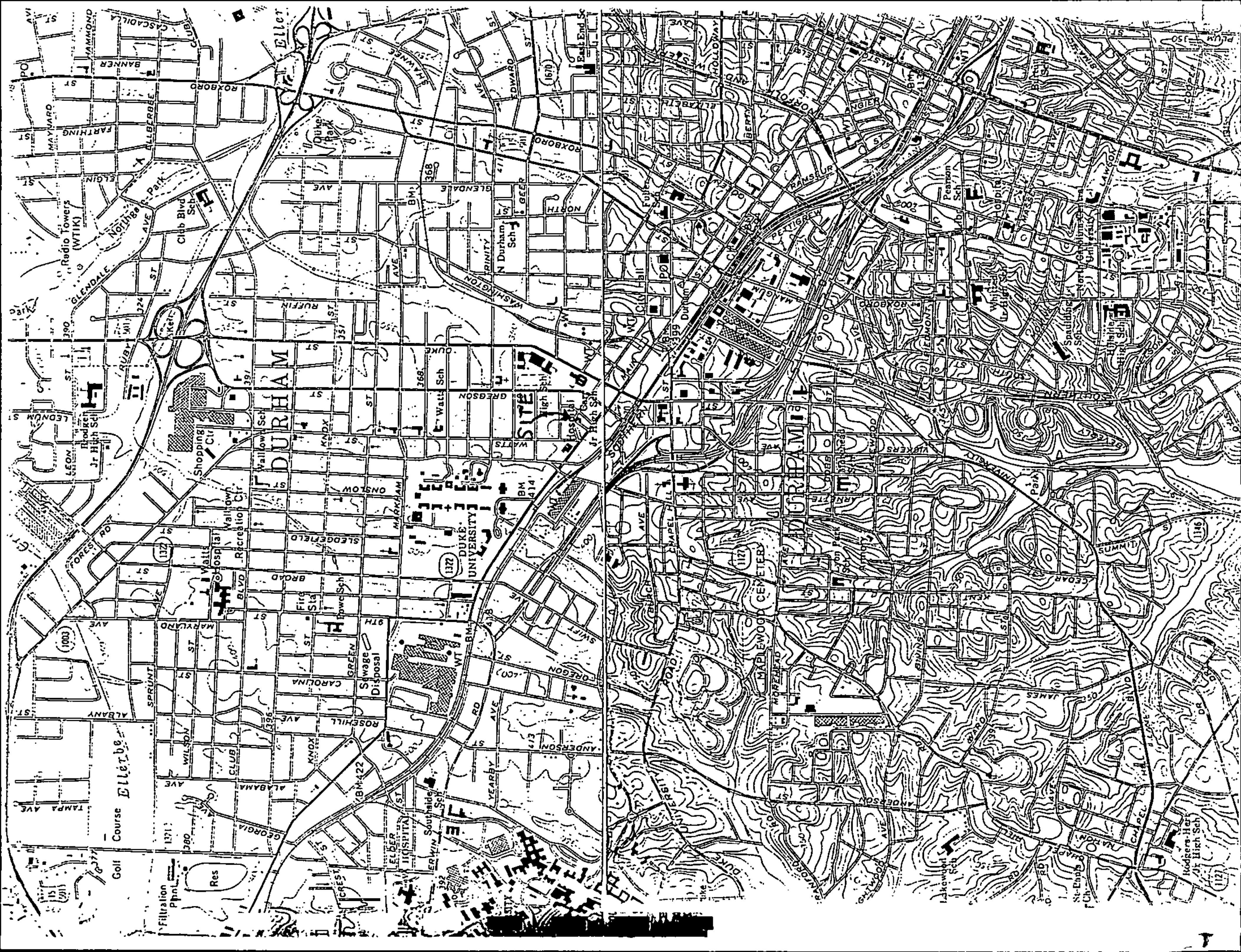
On October 14, 1996 Front Royal Environmental Services, Inc. submitted a Limited Soil and Groundwater Investigation Report to Mr. John A. Northen, Trustee in Bankruptcy for the site. This report revealed significant soil and groundwater contamination. The primary contaminants are tetrachloroethylene and its degradation products; trichloroethylene, trans-1,2dichloroethene, 1,1dichloroethene, and vinyl chloride. These contaminants are associated with the dry cleaning process and are concentrated in two areas; outside the Boiler/Distillation room and outside the old sump area along the south wall of the building. The remaining contaminants, benzene, toluene, ethylbenzene, xylenes (BTEX), and naphthalene are associated with an underground heating oil tank located at the northwest corner of the building.

401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605
PHONE 919-733-4996 FAX 919-715-3605

Table 1

Soil Analytical Results (mg/kg or ppm)			
Sample ID	Date Collected	Depth(feet)	Analytical Results
SS-1	9/11/96	3.5	534 diesel
SS-2	9/11/96	3.0	81.3 diesel
SS-3	9/11/96	2.5	BDL diesel 0.0124 trans DCA 0.0338 vinyl chloride
SS-4	9/11/96	3.0	0.0375 trans DCA 0.005 toluene 0.0705 vinyl chloride
SS-5	9/11/96	3.0	0.00611 toluene 0.00506 PCE
SS-6	9/11/96	3.0	BDL TPH BDL 8240
SS-7	9/11/96	3.0	0.174 PCE
SS-8	9/27/96	7.0	0.005 TCE
SS-9	9/27/96	9.0	0.152 TCE 0.0383 PCE

trans DCA = trans-1,2 dichloroethene
PCE = perchlorethylene
TCE = trichloroethylene



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HAMMOND
CASCADILLA
MAYNARD
Radio Towers (WTIK)
Northgate Park
Club Blvd Sch
Rodgers Jr High Sch
Shopping Ctr
Walltown Sch
Walltown Recreation Ctr
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Watts Sch
N Durham Sch
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Powe Sch
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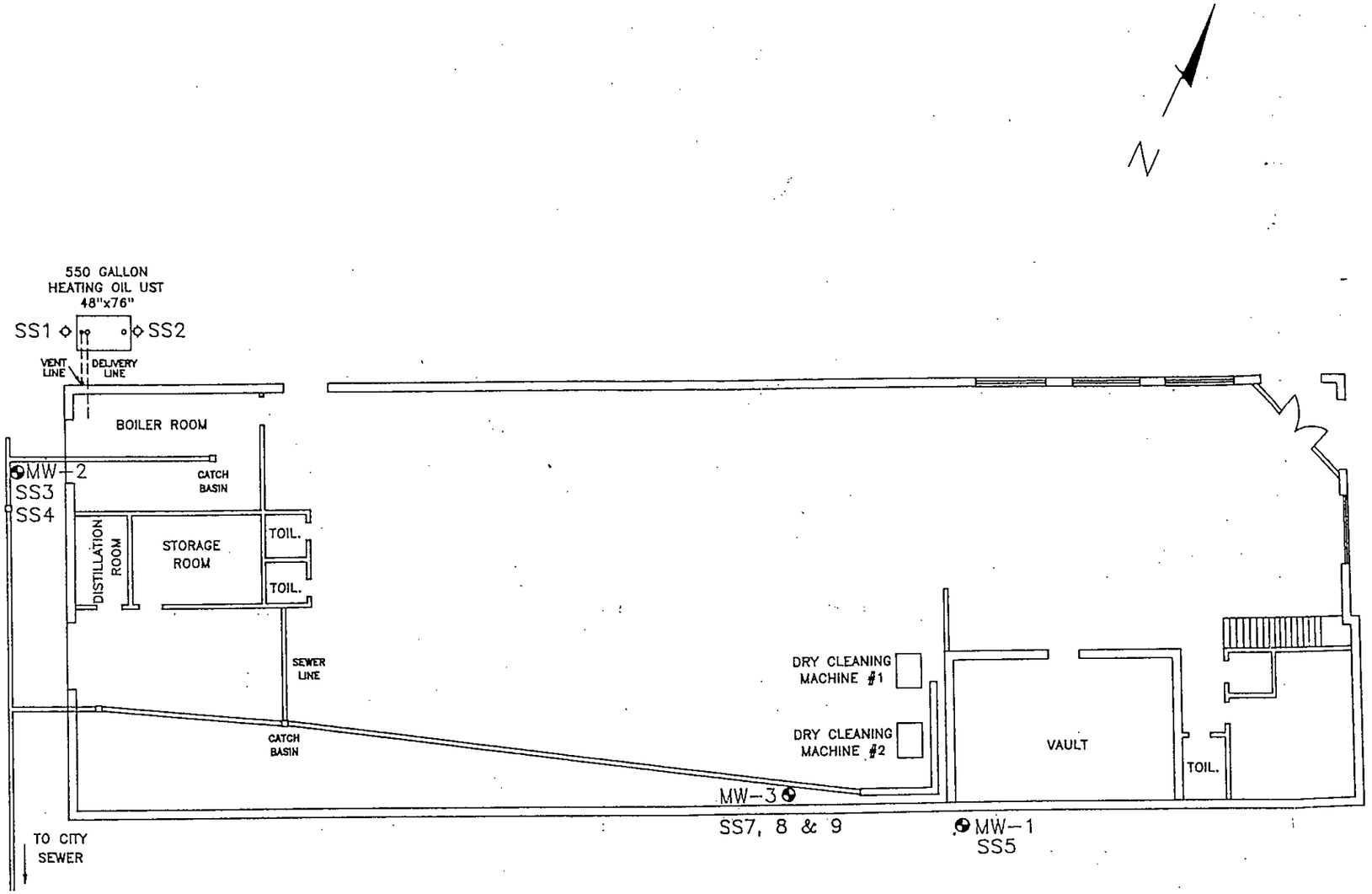
Southside Sch
HOSPITAL
Golf Course
Ellerbe
Res
Filtration Plant
Pearson Sch
Whitted Jr High Sch
North Carolina College University
Hillside High Sch
Spaulding Sch
Lyon Park
MAPLEWOOD CEMETERY
Lakewood Sch
St Theresa Sch
Rodgers-Herr Jr High Sch
East End Sch
Fuller Sch
City Hall
Durham
SITE



FRONT ROYAL

ENVIRONMENTAL SERVICES, INC.

PROJECT # 2239-96-183

SOIL BORING/MONITOR WELL LOCATION MAP

EAKES DRYCLEANERS
DURHAM, NORTH CAROLINA

FIGURE 4

SCALE 1" = 15'

Table 2

Groundwater Analytical Results on 9/27/96 (ppb)				
Analyte	NCAC 2L	MW-1	MW-2	MW-3
PCE	0.7	13.2	29,200	565
TCE	2.8	7.85	5,830	689
1,1dichloroethene	0.0	BDL	33.8	10.5
trans DCA	70.0	BDL	601	71.2
Vinyl Chloride	0.015	BDL	4,000	615
Benzene	1.0	BDL	49.3	BDL
Ethylbenzene	29.0	BDL	38.5	BDL
Toluene	1000.0	BDL	54.9	BDL
Xylenes	530.0	BDL	68.3	BDL
Naphthalene	21.0	NS	33.8	NS

trans DCA = trans-1,2 dichloroethene
PCE = perchlorethylene
TCE = trichloroethylene .

The monitoring wells installed by Front Royal were all screened in sandy clay at depths ranging from 7 to 12 feet. the static groundwater levels were from 4 to 6 feet below land surface.

Even though the groundwater has been heavily contaminated, the groundwater pathway is not a pathway of concern. The North Carolina Division of Public Health, Public Water Supply Section lists the closest community well (Tyndrum Subdivision) approximately 5 miles from the site. No individual potable wells have been observed and none are suspected in the vicinity of the site since the entire area is served by the Durham City Water Department.

Surface water drainage from the site is collected by the storm sewers and conveyed for approximately 0.5 miles. The drainage is then carried in an intermittent stream for another 0.5 miles before the stream becomes perennial. The unnamed perennial stream empties into Ellerbe Creek after another 0.5 miles. The pathway runs 8 miles through Ellerby Creek and ends in Falls Lake. Since the area around the site is commercial/light industry, attribution of contaminants, if any were found, to the site would be very difficult.

The groundwater in the area of the site is very shallow, 4 to 6 feet deep. The concentrations of the volatile organic compounds (VOC's) are very high in monitoring well #2 (MW-2). The combination of these situations led us to examine the possibility that contaminants were migrating into basements and buildings around the site from the off-gassing of the contaminants from groundwater. To address this possibility, a survey of construction of the surrounding buildings was performed by the North Carolina Superfund Section on December 6, 1996. The Durham Magnet Center, part of the Durham Magnet Schools Program, at 400 N. Duke Street was the only building in the vicinity of the site that had a basement area. All of the other surrounding building were constructed in the "slab on grade" method.

Air sampling was performed by David Lilley, Industrial Hygienist for the Superfund Section on March 6, 1997 at seven locations including a background and the Magnet School. These samples were collected using a modified NIOSH 1007 Method and analyzed for tetrachloroethylene, trichloroethylene, and vinyl chloride. The samples were collected by low flow personal sampling pumps, through 150 mg. charcoal tubes equipped with a back-up section for a target duration of 8 hours, Then the contaminants were desorbed from the charcoal using carbon disulfide and analyzed on a gas chromatograph with a flame ionization detector.

None of the samples collected indicated the presents of any of the contaminants tested for, including BETX. The sample numbers followed by a B are the analysis of the back-up section of the sample tubes.

Due to the inability to locate any receptors using or threatened by the contaminated groundwater, the groundwater pathway is not a pathway of concern. No release to the surface water pathway has been documented and no significant receptors are threatened; therefore, the surface water pathway is not a pathway of concern. Contaminant levels found in the soils are very low, with the possible exception of the petroleum products associated with the heating oil tank, and no on-site targets exist, consequently, the soil exposure pathway is not considered a pathway of concern. The outdoor air is not an area of concern and sampling has demonstrated that the indoor air in surrounding buildings has not been contaminated.

Because of the above factors, the North Carolina Superfund Section recommends that this site receives a status of No Further Remedial Action Planned under CERCLA/SARA (NFRAP).

If you have any questions, please contact me at (919) 733-2801.

Sincerely,

Harry Zinn
Environmental Engineer
Special Projects Branch
NC Superfund Section

HZ
Enclosures