Carmen Johnson
18-09 1/25/12

APPROVED
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION
DATE 1-14-05 BY
Central office
18-09

Received
Solid Waste
Section

Duke Power

Marshall Steam Station

Catawba County, N.C.

Flue Gas Desulfurization (FGD) Residue Landfill Permit Application Site Suitability Information

August 29, 2003

Volume 1

15A NCAC 13B

.0503(1) and .0504(1) Requirements and Responses

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Volume 1

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1.0 INTRODUCTION

The Clean Smokestacks Act passed in 2002 requires significant reductions in emissions from coal-fired power plants operating in North Carolina. NC utilities must reduce the actual emissions of nitrous oxides (NO_X) by 77% by the year 2009 and must reduce actual sulfur dioxide (SO_2) emissions by 49% by the year 2009 and by 73% by 2013. As part of Duke Power's effort to meet the SO_2 reduction requirements, a Flue Gas Desulfurization (FGD) system will be installed at the Marshall Steam Station. Duke will also install similar FGD systems at other power plants located in NC. Duke's intent is that a large portion of the residue from this process will be utilized in beneficial products and the remainder will be placed in the proposed FGD residue landfill.

2.0 DESCRIPTION OF PLANT AND LANDFILL SITE

Marshall Steam Station is located in Catawba County, on Highway NC 150, just west of Lake Norman. The Marshall plant generates 2090 MW of electric power by combustion of coal. Marshall is the second largest coal facility owned by Duke Power. The Marshall station generates enough electricity to power over half a million homes.

The plant is located in the Piedmont physiographic region. Figure 1 shows the location of the plant and the location of the proposed FGD landfill. The footprint for the landfill contains an area of approximately 20.64 acres.

The FGD landfill will be located on Duke Power property, northwest of the Marshall plant and to the west of the Marshall Ash Basin. The landfill is located to the east of a railroad line, running north-to-south. Located to the west of this railroad line is Sherrill's Ford Road, which runs north-south along a surface water divide. Located within landfill footprint and the railroad line is a surface water drainage feature. This feature drains to the south, to an intermittent stream that drains to Beaverdam Creek, which drains to Lake Norman. There is a topographic divide running NNW through the landfill footprint, along Steam Plant Road. Surface drainage to the west of Steam Plant Road drains to the surface drainage feature and surface drainage to the east of Steam Plant Road drains to the Marshall Ash Basin.

As described in the site hydrogeological study (Hydrogeological Study FGD Scrubber Landfill, Duke Power – Marshall Steam Station, Terrell, North Carolina, S&ME Project No: 1264-02-578, May 30, 2003), the subsurface conditions in the landfill area consist of residual soils and partially weathered rock which have been formed by the in-place weathering of the parent rock. As is typical in the groundwater systems located in the Piedmont region, groundwater at the landfill site occurs within the residuum and saprolite under unconfined aquifer conditions. The predominant groundwater discharge areas are expected to be the drainage feature and the ash basins located to the east of the landfill.

3.0 DESCRIPTION OF FGD SYSTEM

The FGD system contracted for installation at Marshall is a Wet Scrubber system. In a Wet Scrubber system the SO_2 component of the flue gas produced from the coal combustion process is removed by reaction with a limestone-water slurry.

The particular system to be used at Marshall will collect the flue gas after it passes through the electrostatic precipitator and route the gas into the lower end of a vertical tank. As the gas rises through the tank to the outlet at the top, the gas passes through a spray header. An atomized slurry of water and limestone droplets is continually sprayed through this header into the stream of flue gas. The SO_2 in the flue gas reacts with the calcium in the limestone and produces SO_3. The SO_3 slurry falls to the bottom of the tank where a stream of air is injected to oxidize the slurry to form gypsum ($CaSO_4 \cdot H_2O$). The gypsum slurry is then drawn off to a hydroclone and subsequently routed to a vacuum belt filter. The liquid waste from this process will be treated as wastewater.

Duke is presently investigating beneficial uses for the FGD residue (gypsum). If these options are determined to be viable, the FGD residue meeting the material requirements for the beneficial uses will not be disposed in the landfill.

The typical parameters for this material produced by the system to be used at Marshall are:

Typical FGD Residue Parameters

Gypsum	93% to 95%
Sulfite	0.35%
CO_3	1.3%
CaF_2	0.2%
Inerts	2.5% to 3.5%
Fly ash Content	0.5% to 0.8%
pH	6.0 to 8.3
Unit Weight	76 lb/ft^3 to 97 lb/ft^3
Specific Gravity	2.35
Moisture	10% to 12%

FGD residue material that is not suitable for beneficial use will be placed in the landfill. In addition to this material, material will periodically be removed from the clarifier stage of the waste-water treatment system and placed in the landfill.

Synthetic Precipitation Leaching Procedure (SPLP EPA Method 1312) leaching has been performed on samples of FGD residue material provided by the equipment vendor. These results will be presented in subsequent submittals to NCDENR. Duke will also provide results of geotechnical tests performed on the FGD residue in subsequent submittals.

4.0 DESCRIPTION OF FGD RESIDUE LANDFILL

The FGD landfill will be located on Duke Power property, northwest of the Marshall plant and to the west of the Marshall Ash Basin. The landfill footprint contains approximately 20.64 acres. The FGD residue will be conveyed to the landfill site by truck, where the material will be spread and compacted. The landfill will begin receiving FGD residue in the summer of 2006. The volumetric capacity of the landfill is 1,753,000 yd^3.

The FGD residue landfill at Marshall will receive FGD residue generated at Marshall and at other Duke plants located within NC. The residue placed in the landfill will be:

1. FGD residue material that is not needed to meet the production needs of any beneficial use options.
2. FGD residue material that does not meet the specifications required for beneficial use.
3. FGD residue material that is removed from settling or clarifier stages of the associated waste water treatment facility.

Since the plan is to use as much FGD residue as possible for a beneficial use, the period of time that will be required to fill the capacity of the landfill cannot be determined at this time.

Duke plans to construct the landfill in phases. The first phase (Phase 1) will be located along the eastern side of the landfill and will extend north-to south. The second phase, Phase 2, of the landfill will utilize the remainder of the landfill footprint. The estimated capacity of Phase 1 is 550,000 yd^3. The Construction Plan Application, to be submitted later, will show the specific areas for Phase 1 and Phase 2.

5.0 .0503 SITING AND DESIGN REQUIREMENTS FOR DISPOSAL SITES

Disposal sites shall comply with the following requirements in order for a permit to be issued:
(1) A site shall meet the following siting requirements:

Response:
The specific requirements of .0503 (1) are addressed on the following pages.

Requirement .0503(1)(a)
A site located in a floodplain shall not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain or result in washout of solid waste so as to pose a hazard to human life, wildlife or land or water resources.

Response
The proposed landfill site for the Marshall Steam Station FGD Residue Landfill is not located in the 100-year floodplain. Therefore, the proposed landfill will not restrict the flow of a 100-year flood, nor will the proposed landfill reduce the temporary water storage capacity of the floodplain or result in washout of solid waste so as to pose a hazard to human life, wildlife or land or water resources.

Figure 2 is the National Flood Insurance Program Flood Insurance Rate Map, prepared by FEMA, for the area adjacent to Marshall Steam Station.

The location of the proposed landfill relative to the 100-year floodplain is shown on Figure 2.

Requirement .0503(1)(b) (i) and (ii)

A site shall be located in consideration of the following:

(i) a site shall not cause or contribute to the taking of any endangered or threatened species of plants, fish or wildlife;

(ii) a site shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in 50 C.F.R. Part 17 which is hereby incorporated by reference including any subsequent amendments and editions. This information is available for inspection at the Department of Environment, Health, and Natural Resources, Division of Solid Waste Management, 401 Oberlin Road, Raleigh, North Carolina 27605 where copies can be obtained at no cost;

Response

A site survey was performed to investigate the presence of endangered or threatened species of plants, fish or wildlife or critical habitat of endangered or threatened species. The Duke letter to the United States Fish and Wildlife Service (USFWS) providing the results of the site survey is dated April 30, 2003 and is included in Attachment 1.

The USFWS response is found in a letter dated July11, 2003. The USFWS response states:

> *According to our records and a review of the information you provided, no listed species or their habitats occur on the site. We concur with your determination that the proposed project will not affect endangered or threatened species and their habitats.*

The response from the USFWS is included as Attachment 2.

Requirement 0503(1)(b)(iii)
A site shall not damage or destroy an archaeological or historical site.

Response
The North Carolina Department of Cultural Resources, State Historic Preservation Office (SHPO) was consulted to determine if an archaeological or historic site was listed at the proposed site. The response provided by the SHPO is dated May 5, 2003. The response stated that:

> *"We have conducted a review of the proposed undertaking and are aware of no historic resources which would be affected by the project."*

The letter to the SHPO providing the location of the landfill is included in Attachment 3.

The response from the SHPO is found in Attachment 4.

Requirement 0503(1)(b)(iv)
A site shall not cause an adverse impact on a state park, recreation or scenic area, or any other lands included in the state nature and historic preserve.

Response
The proposed landfill will not adversely impact a state park, recreation or scenic area or nature or historic preserves. There are no state parks, recreation or scenic areas, or any other lands included in the state nature and historic preserve within ten (10) kilometers (6.2 miles) of the proposed landfill site.

Several boating access areas are located within ten (10) kilometers (6.2 miles) of the proposed landfill site including Hager Creek, McCrary Creek, and Pinnacle access areas. The Marshall bank fishing area is also located approximately one-half mile from the proposed landfill site. All of these access areas are owned by Duke Power. As operation of the current facility adjacent to the proposed landfill has not adversely impacted the access areas, there will be no impact resulting from the proposed landfill.

Requirement 0503(1)(c)
A new site disposing of putrescible wastes shall not be located within 10,000 feet of an airport runway used by turbojet aircraft or within 5,000 feet of an airport runway used by piston-type aircraft;

Response
The proposed landfill will not receive putrescible wastes.

Requirement 0503(1)(d)
A site shall have available adequate suitable soils for cover either on-site or from off-site.

Response
The proposed landfill site has adequate suitable soils available on-site. Drawing C-3 shows the grading plan for the proposed landfill. This drawing shows contours for the planned excavation.

The planed excavation within the proposed landfill footprint is 456,000 cubic yards. The soil volume required for cover system is 67,000 cubic yards. Therefore, there are adequate suitable soils on site.

6.0 .0504 APPLICATION REQUIREMENTS FOR SANITARY LANDFILLS

A permit for a sanitary landfill shall be based upon a particular stream of identified waste, as set forth in Rule .0504 (g)(i) and (ii) of this Section. Any substantial change in the population or area to be served, or in the type, quantity or source of waste shall require a new permit and operation plan, including waste determination procedures where appropriate. Five sets of plans shall be required with each application.

(1) The following information shall be required for reviewing a site application for a proposed sanitary landfill:

Requirement .0504(1)(a)

An aerial photograph on a scale of at least 1 inch equals 400 feet and a blueprint of the photograph accurately showing the area within one-fourth mile of the proposed site's boundaries with the following specifically identified:

(i) Entire property owned or leased by the person proposing the disposal site;

(ii) Land use and zoning;

(iii) Location of all homes, industrial buildings, public or private utilities, and roads;

(iv) Location of wells, watercourses, dry runs, and other applicable details regarding the general topography; and

(v) Floodplains.

Response

The information listed above is identified on Figure 3. An electronic version of an aerial photograph of the site is used as the background for Figure 3.

Requirement .0504(1)(b)
A map on a scale of at least 1 inch equals 1000 feet showing the area within two miles of the proposed site's boundaries with the following specifically identified:

(i) Significant ground-water users;

(ii) Potential or existing sources of ground-water and surface water pollution;

(iii) Water intakes;

(iv) Airport and runways; and

(v) Subdivisions.

Response
The information listed above is identified on Figure 4.

The Environmental Data Resources report, dated June 25, 2003 (Report TC0961975.2s) provides information on significant groundwater users and was used as a source for of information for items (i). A copy of this report is found in Attachment 5.[1]

The Environmental Data Resources report, dated June 25, 2003 (Report TC0961975.1s) provides information on potential or existing sources of groundwater contamination and was used as a source for of information for items (ii). A copy of this report is found in Attachment 6.

As shown on Figure 4, there are no significant ground-water users, water intakes, airports and runways, or subdivisions within two miles of the proposed site's boundaries.

[1] Note that in the EDR report there are a large number of wells (users) that are attributed to being located within 2 miles of the site. A large number of these wells are owned by Mid-South Water Systems, located in Sherrills Ford. Since EDR search is based on zip codes, all of the drinking water systems owned by Mid-South Water Systems appear in the report as being located within 2 miles of this site, when in fact they may be located as far away as Shelby, Charlotte, or Gastonia.

Requirement .0504(1)(c)
A geological and hydrological study of the site which provides:

(i) Soil borings for which the numbers and depths have been confirmed by the Division and lab testing of selected soil samples that provide:

(A) standard penetration - resistance;
(B) particle size analysis;
(C) soil classification - USCS;
(D) geologic considerations (slopes, solution features, etc.);
(E) undisturbed representative geologic samples of the unconfined or confined or semiconfined hydrological units within a depth of 50 feet that provide the following information for each major lithologic units:
(I) saturated hydraulic conductivity (or by in-situ);
(II) volume percent water; and
(III) porosity;
(F) remolded sample of cover soils that provide:
(I) saturated hydraulic conductivity,
(II) total porosity,
(III) atterberg limits;
(G) stratagraphic cross-sections identifying hydrogeological units including lithology;
(H) tabulation of water table elevations at time of boring, 24 hours, and seven days (The number of cased borings to provide this information shall be confirmed by the Division.); and
(I) boring logs;

(ii) A boundary plat locating soil borings with accurate horizontal and vertical control which are tied to a permanent onsite bench mark;
(iii) A potentiometric map of the surfical aquifer based on stabilized water table elevations; and
(iv) A report summarizing the geological and hydrological evaluation.

Response
A geological and hydrological study of the site is submitted. Prior to the start of the site investigation, a meeting was conducted with the Division to discuss the numbers, the locations, and the depths of the soil borings. The title of this report is:

Hydrogeological Study
FGD Scrubber Landfill
Duke Power – Marshall Steam Station
Terrell, North Carolina
S&ME Project No: 1264-02-578
May 30, 2003.

This report is included as Volume 2. The boundary plat providing the accurate horizontal and vertical location of the soil borings and wells is provided as Figure 5. Information on the depths of the borings and wells is found in the hydrogeologic study.

Requirement .0504(1)(d)
A conceptual design plan presenting special engineering features or considerations which must be included or maintained in site construction, operation, maintenance and closure.

Response
The conceptual design for the proposed FGD Residue landfill is shown on drawings C-1 to C-6.[2]

There are four special engineering features or considerations which must be included or maintained in site construction, operation, maintenance and closure. These engineering features or considerations are:

1. Construction of Phase 1 and Phase 2 of the landfill.
2. Landfill Design Considerations and Mitigation of Intermittent Stream and Potential Wetland Area.
3. Relocation of Energy United Electric Power Distribution Line.
4. Placement of an Engineered Cover to Minimize Infiltration.

These engineering features or considerations are discussed below.

Construction of Phase 1 and Phase 2 of the Landfill
Duke plans to construct the landfill in phases. The first phase (Phase 1) will be located along the eastern side of the landfill and will extend north-to south. The second phase, Phase 2, of the landfill will utilize the remainder of the landfill footprint. The estimated capacity of Phase 1 is 550,000 yd^3. The Construction Plan Application, to be submitted later, will show the specific areas for Phase 1 and Phase 2.

Landfill Design Considerations and Mitigation of Intermittent Stream and Potential Wetland Area
As noted in the Description of Plant and Landfill Site, an intermittent stream and potential wetland area are located within the footprint. The intermittent stream receives flow from surface water runoff from upgradient areas and from within the landfill footprint and supplies water to the wetland area, before draining out of the landfill footprint. The wetland area has developed from a spoil berm constructed across the drainage path of the stream. This spoil material is believed to have originated from soil excavations made during the construction of the railroad line that runs along the west side of the landfill footprint. An undersize corrugated metal culvert is located at the downstream end of the wetland and routes flow through the spoil berm. Soil deposition upstream of the culvert is believed to have impeded the flow of the intermittent stream, creating the potential for wetland conditions.

The stream and wetland area were investigated by a qualified wetlands specialist. The preliminary determination from this investigation is that the stream is classified as an unimportant intermittent stream and therefore does not require mitigation for disturbance. The

[2] Note that monitoring wells MS-10 and MS-11 were installed after drawings C-1 through C-6 were developed and therefore are not shown on these drawings. These wells are included in the hydrogeologic report and are shown on Figure 5.

preliminary determination for the wetland area was that the area did not meet all of the criteria to classify the area as a jurisdictional wetland. Representatives from the US Army Corps of Engineers (USACOE) and from NCDENR Water Quality Section have visited the site to view and discuss the stream and potential wetland area. The determination that this is not a jurisdictional wetland area is subject to regulatory confirmation by the USACOE with consultation by the NCDENR Water Quality Section.

A copy of the stream and wetland investigation report and the letter transmitting this information to the USACOE and to the NCDENR Water Quality Section are included as Attachment 7.

As described previously, Duke plans to construct the landfill in phases. The first phase (Phase 1) will be located along the eastern side of the landfill and will extend north-to south. Construction of Phase 1 of the landfill will not disturb this intermittent stream.

If this USACOE determination differs from the preliminary determination for the intermittent stream and wetland area, Duke will consult with the appropriate agency to perform the required mitigation, prior to construction of Phase 2 of the landfill.

The engineering features required to accommodate the surface drainage associated with this intermittent stream will be provided prior to the construction of Phase 2 of the landfill.

Relocation of Energy United Electric Power Distribution Line
An electric power distribution line transmission line, owned by Energy United is located to the west of Steam Plant Road. This line will be relocated to be outside of the proposed landfill footprint prior to construction.

Placement of an Engineered Cover to Minimize Infiltration
The proposed landfill will be a monofill composed of FGD residue from the wet scrubbers installed at Marshall and other Duke power plants located in NC. Laboratory analysis of the FGD residue leachate has been performed. This leachate was generated by subjecting the residue to SPLP testing (EPA Method 1312). The residue tested was provided by the FGD equipment vendor and is similar in type to the residue that will be produced at the Marshall Plant (similar processes)

This analytical information and infiltration modeling, developed by using the HELP model, was used in a groundwater fate and transport model (MYGRT) to determine compliance with T15A NCAC 2L Groundwater Standards. The results of this modeling show that a landfill design, utilizing an engineered cap system to minimize infiltration into the landfill, will allow the landfill to met 2L standards. This demonstration will be submitted in a separate submittal.

The engineered cap will consist of a 40 mil textured linear low density polyethylene (LLDPE) geomembrane beneath a geocomposite drainage net. The cap will be topped with two feet of soil for vegetative growth. The geomembrane is a barrier layer that prevents rainwater from entering the waste cell of the landfill. The geocomposite drainage net allows water that percolates through the vegetative layer to drain laterally to a collection system.

The vegetative layer protects the geomembrane and geocomposite from ultraviolet degradation, desiccation, freeze-thaw, wind, and vectors. The vegetative layer shall be stabilized and seeded appropriately to prevent erosion. Native material cut from open areas within the landfill will be used for the vegetative layer. Debris will be removed, and the soil will be amended as needed.

Other Engineering Features or Considerations

Other than the engineered cap described above, there are no special engineering features or considerations that must be included or maintained in site construction, operation, maintenance and closure.

Requirement .0504(1)(e)
Local government approvals:

> (i) If the site is located within an incorporated city or town, or within the extra-territorial jurisdiction of an incorporated city or town, the approval of the governing board of the city or town shall be required. Otherwise, the approval of the Board of Commissioners of the county in which the site is located shall be required. Approval may be in the form of either a resolution or a vote on a motion. A copy of the resolution, or the minutes of the meeting where the vote was taken, shall be forwarded to the Division.
>
> (ii) A letter from the unit of government having zoning jurisdiction over the site which states that the proposal meets all of the requirements of the local zoning ordinance, or that the site is not zoned.

Response
Requirement .0504(1)(e)(i) is not applicable.

A zoning approval letter from Catawba County, as stipulated by .0504(1)(e)(ii), is included as Attachment 8.

Requirement .0504(1)(f)
A discussion of compliance with siting standards in Rule .0503(1) of this Subchapter.

Response:
The .0503 (1) requirements and the Duke response are included with this site suitability package. The proposed design will ensure that the siting requirements specified in Rule .0503 (1) are met.

Requirement .0504(1)(g)

A report indicating the following:

(i) population and area to be served;

(ii) type, quantity and source of waste;

(iii) the equipment that will be used for operating the site;

(iv) a proposed groundwater monitoring plan including well location and schematics showing proposed screened interval, depth and construction.

Response

(i) The FGD residue landfill at Marshall will receive FGD residue generated at Marshall and at other Duke plants located within NC.

(ii) The FGD residue will primarily be gypsum. The quantity of waste placed in the landfill will not exceed 1,753,000 yd^3. Source of the waste will be FGD equipment located at Marshall and other Duke plants located in NC.

(iii) The equipment used to operate the landfill includes but is not limited to: backhoes, bulldozers, front end loaders, trucks to haul the material, excavators, watering and maintenance trucks.

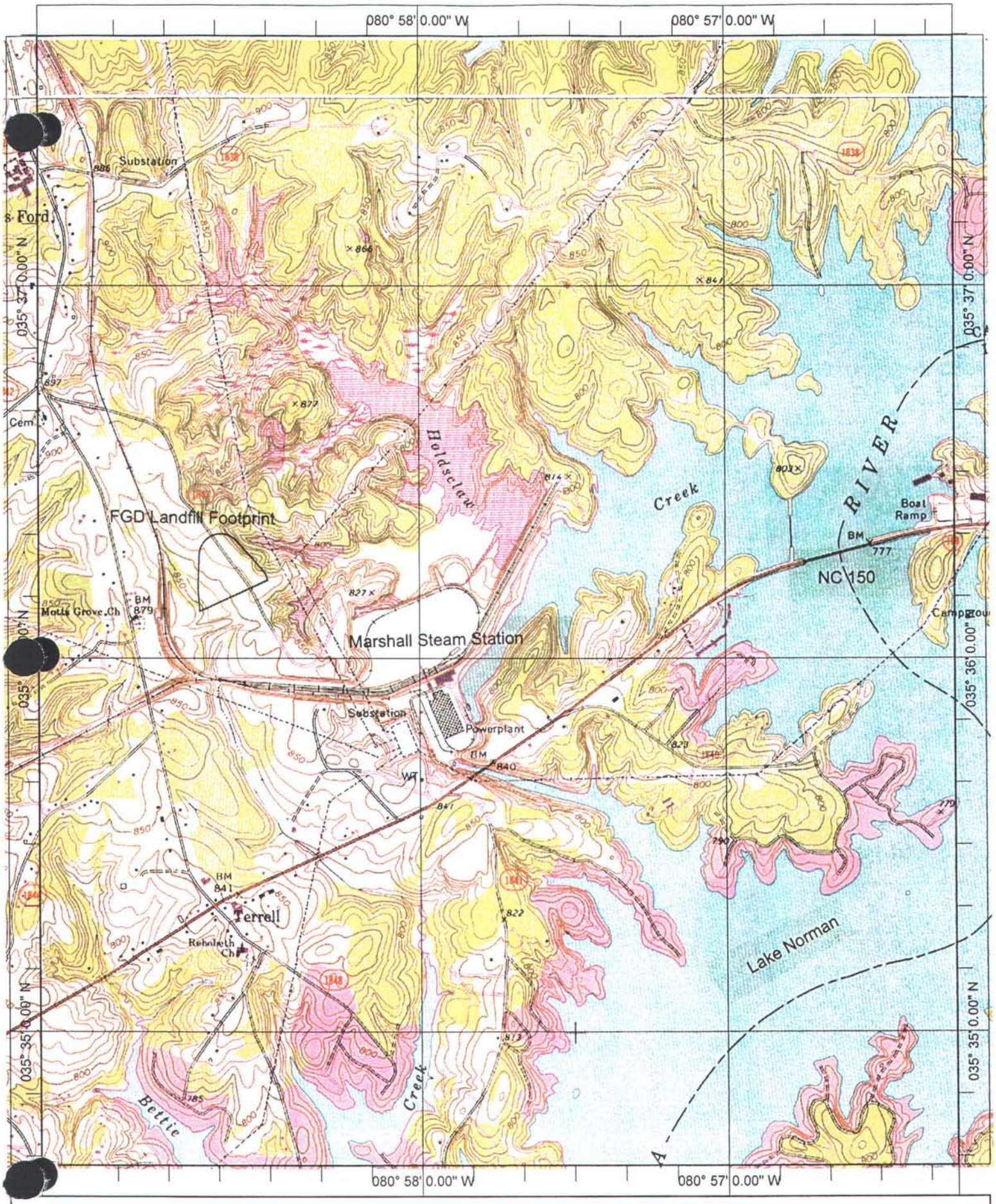
(iv) Attachment 9 contains the proposed groundwater monitoring plan including well locations, screened intervals, depths, and construction details.

Requirement .0504(1)(h)
Any other information pertinent to the suitability of the proposed site.

Response
The review performed by Duke and by its consultants has not identified any concerns with the suitability of the proposed site.

Duke is not aware of additional information pertinent to the suitability of the proposed site.

Figures



Name: LAKE NORMAN NORTH
Date: 6/5/2003
Scale: 1 inch equals 2000 feet

Location: 035° 36' 09.3" N 080° 57' 45.0" W
Caption: Figure 1 - Site Location
Duke Power
Marshall Steam Station

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Attachments

1

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FOSSIL AND HYDRO GENERATION

Duke Power
P.O. Box 1006
Charlotte, NC 28201-1006

April 30, 2003

Mr. Mark Cantrell
U.S. Fish and Wildlife Service
160 Zillicoa Street
Asheville, NC 28801

Subject: Marshall Steam Station
Proposed Gypsum Fill Site

Dear Mr. Cantrell:

Duke Power Company is proposing to permit a 22-acre fill site for gypsum, a by-product of a Flue Gas Desulfurization System, which will be installed to enhance air emission controls and comply with the new North Carolina clean air legislation at its Marshall Steam Station in southeastern Catawba County, North Carolina. The proposed fill site is identified on the attached Lake Norman North, N.C. USGS 7.5-minute topographic map (Figure 1). The following information is provided for your review with respect to endangered or threatened species of plants, fish, or wildlife.

The proposed fill project will be constructed so that stormwater drains to Marshall's wastewater treatment system. The fill site activity is regulated by the North Carolina Department of Environment and Natural Resources (NCDENR). The permitting of the fill site is under the jurisdiction of the NCDENR, Division of Solid Waste. Regulation NCAC 15A .0503 (1) requires that:

> (b) A site shall be located in consideration of the following:
>
> (i) a site shall not cause or contribute to the taking of any endangered or threatened species of plants, fish or wildlife;
>
> (ii) a site shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in 50 C.F.R. Part 17 which is hereby incorporated by reference including any subsequent amendments and editions.

Federally listed species occurring in Catawba County are as follows:

Schweinitz's sunflower	*Helianthus schweiniitzii*	Endangered
Butternut	*Juglans cinerea*	FSC
Sweet pinesap	*Monotropsis odorata*	FSC

A search of the North Carolina Natural Heritage Program database for the Catawba County, N.C. USGS 7.5-minute map shows the following current or historic elements of occurrence:

Dwarf-flowered Heartleaf	*Hexastylis naniflora*	Threatened
Sweet Pinesap	*Monotropsis odorata*	Candidate

On November 14, 2002, Robert Siler, a biologist formally with Duke Power, conducted an inventory of the proposed fill site. The area includes four general vegetation types: pine stands, mixed hardwood stands, early succession communities, and a wetland. The largest land cover of the proposed site is the mixed hardwood stands. This community (Figure 2) varies from mature sections to selectively harvested sections. Small areas contained mature white oaks (*Quercus alba*), northern red oak (*Q. rubra*), scarlet oak (*Q. coccinea*), black oak (*Q. velutina*), and tulip poplar (*Liriodendron tulipifera*), reaching 20-30 inches in diameter. Other areas have been selectively logged and contain small red maple (*Acer rubrum*), tulip poplar, sourwood (*Oxydendrum arboreum*), American holly (*Ilex opaca*) and white oak. Numerous gullies occurred on some slopes; these were well vegetated and appeared to be from erosion from past farming. In some cases, the gullies contained hardwoods greater than 20 inches in diameter. Because of the time of the year, the dominant herbaceous vegetation observed was Christmas fern (*Polystichum acrostichoides*), New York fern (*Thelypteris noveboracensis*) and wild ginger (*Hexastylis arifolia*). The mixed hardwood community contained marginal habitat for sweet pinesap; because of the disturbed nature of the area, it is highly unlikely that the species occurs here. Dwarf-flowered heartleaf was not observed on the proposed site.

Pine stands were also abundant at the site. Stands included loblolly pine (*Pinus taeda*) plantations and natural regeneration in various ages. Some previously disturbed or farmed areas contained dense stands of Virginia pine (*Pinus virginiana*) (Figure 3). Herbaceous vegetation was sparse in the pine stands, except in some areas where running pine (*Lycopodium flabelliforme*) was abundant. No habitat for protected species was present in these stands.

The early succession community was composed of recently cleared areas and utility rights-of-way (Figure 4). Dominant species included goldenrod (*Solidago* spp.), Virginia pine, loblolly pine, black cherry (*Prunus serotina*), winged elm (*Ulmus alata*), red cedar (*Juniperus virginiana*), sericea (*Lepedeza cuneata*), fescue (*Festuca* spp.), privet (*Ligustrum sinense*), and honeysuckle (*Lonicera japonica*). While this community contains habitat for Schweinitz's sunflower (*Helianthus schweiniitzii*) none were observed.

A wetland area occurred on the proposed site (Figure 5). The wetland area developed as a result of placement of fill and a culvert, apparently during construction of a nearby railroad. The culvert eventually blocked and temporarily impounded water from an intermittent drainage. Red maple, privet, and sweetgum (*Liquidambar styraciflua*) colonized the area. A jurisdictional determination of the wetland is being pursued.

The intermittent drainages and wetland area on the proposed fill site provide seasonal habitat for aquatic life (primarily potential amphibians breeding habitat) only during significant rainfall events. The wetland area remains inundated for about two weeks following rain.

The proposed fill contains habitats that have been impacted from logging and clearing activities. No unique natural plant communities or habitats exist on the proposed fill site. The proposed fill project has little or no potential to impact listed species or critical habitat for listed species.

Your concurrence with this investigation and written response is requested within 30 days so we can include your review with our permit application. Should you have questions or need additional information, please contact me at (704) 373-5710.

Sincerely,

Ron Lewis

Ron Lewis, Scientist
Environmental Support
Fossil-Hydro Generation

Ron Lewis

bc: Donna Burrell
Bill Miller
Mike Ruhe
Todd Shuping
Robert Siler (7550 Forest Oak Dr., Denver, NC 28037)
Robert Wylie
File Number: 404.110.01 (Marshall Steam Station)

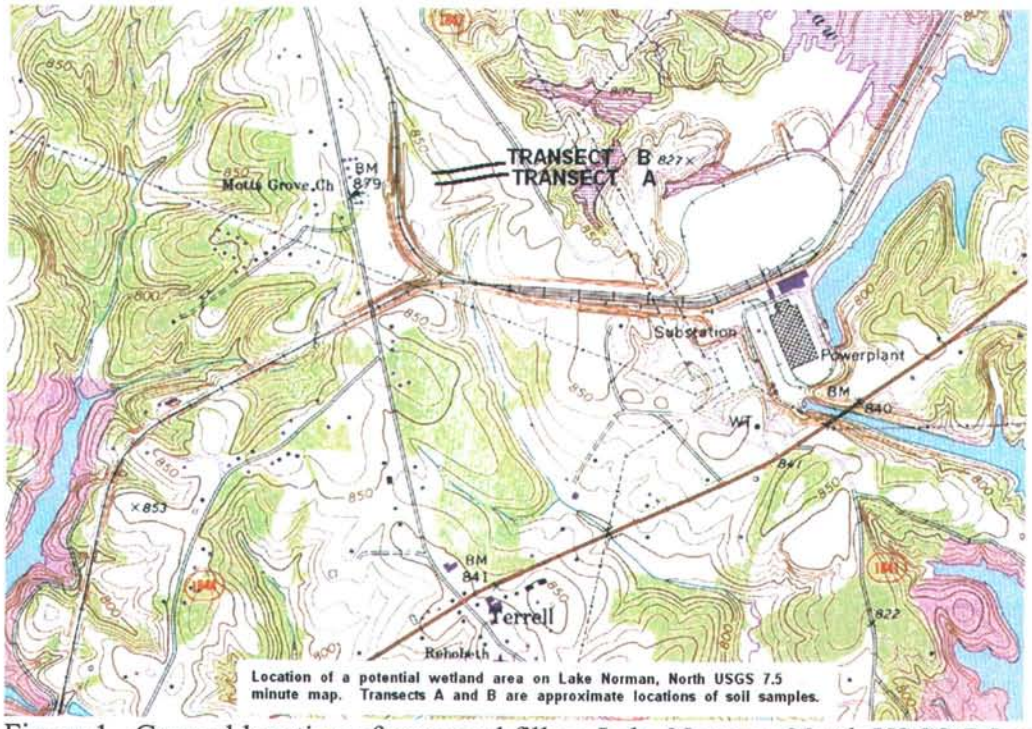

Figure 1. General location of proposed fill on Lake Norman, North USGS 7.5-minute map. The fill is located in the north-central area of the map, generally bounded by the railroad and parallel transmission lines from the Marshall Steam Station.

Figure 2. Typical mixed-hardwood stand on the area of the proposed fill.

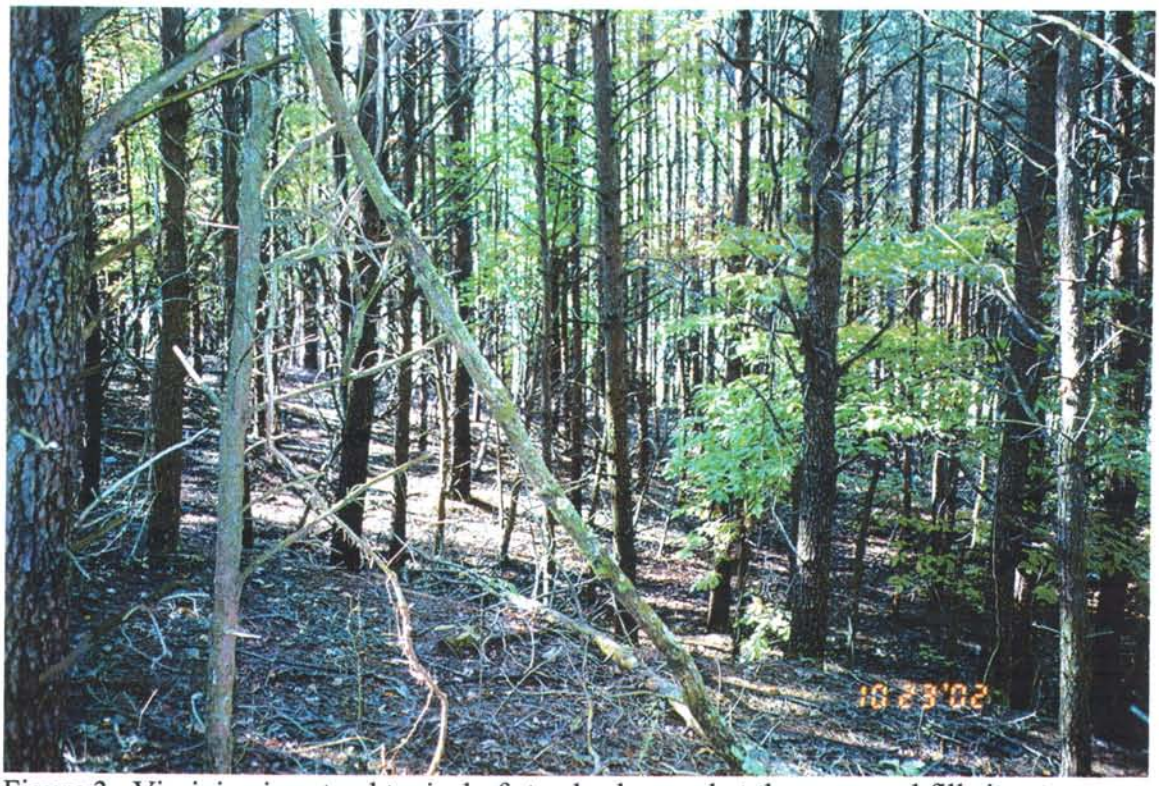

Figure 3. Virginia pine stand typical of stands observed at the proposed fill site at Marshall Steam Station.

Figure 4. Right-of-way located on the proposed fill site, which is representative of early succession vegetation on the site.

Figure 5. Wetland area located on the proposed fill site at Marshall Steam Station.

2

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Asheville Field Office
160 Zillicoa Street
Asheville, North Carolina 28801

July 11, 2003

Mr. Ron Lewis, Scientist
Environmental Support
Fossil-Hydro Generation
Duke Power
P.O. Box 1006
Charlotte, North Carolina 28201-1006

Dear Mr. Lewis:

Subject: Marshall Steam Station - Proposed Gypsum Fill Site, Catawba County, North Carolina

In your letter dated April 30, 2003, you requested our comments with regard to the subject project. The following comments are provided in accordance with the provisions of the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667e), and Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) (Act).

Endangered Species. According to our records and a review of the information you provided, no listed species or their habitats occur on the site. We concur with your determination that the proposed project will not affect endangered or threatened species and their habitats. Therefore, we believe the requirements under Section 7 of the Act are fulfilled. However, obligations under Section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered, (2) this action is subsequently modified in a manner that was not considered in this review, or (3) a new species is listed or critical habitat is determined that may be affected by the identified action.

Erosion Control. Given the proximity of the project to aquatic environments, we want to emphasize that stringent measures to control sediment and erosion should be implemented prior to any ground disturbance and should be maintained throughout project construction.

Recommendation to Mitigate for Unavoidable Impacts to Streams and Wetlands. We recommend that any mitigation plan for this project include the restoration of comparable

3

Duke Power
A Duke Energy Company

Duke Power
526 South Church Street
P.O. Box 1006
Charlotte, NC 28201-1006
Mail Code EC12Y

April 10, 2003

Ms. Renee Gledhill-Earley
North Carolina Department of Cultural Resources
4617 Mail Service Center
Raleigh, NC 27699-4617

Subject: Marshall Steam Station Scrubber Landfill
Catawba County

Dear Ms. Gledhill-Earley:

Duke Power is proposing to develop a new landfill. This landfill will be utilized as a disposal site for waste generated by new air emission control devices. Please see the attached drawing for the location of the landfill.

There are no known archaeological or historic sites within the proposed footprint of the new landfill. The landfill site is immediately adjacent to the facility's ash basin. The site itself includes a road, former agricultural lands including terraced fields, planted loblolly pines and other disturbed features. There does not appear to be any portion of the site that is undisturbed.

Due to the absence of known archaeological and historic sites as well as the highly disturbed nature of the site, Duke Power does not believe that the construction of a new landfill will impact archaeological or historic sites.

Please contact me by May 15, 2003 if Duke Power needs to conduct additional investigations in the project area. I may be reached at the above address of at 704.373.4392.

Thank you for your assistance in this matter.

Sincerely:

Jennifer Huff
Hydro Licensing

Enclosure

bcc: W.M. Miller

Name: LAKE NORMAN NORTH
Date: 3/26/2003
Scale: 1 inch equals 2000 feet

Location: 035° 35' 41.6" N 080° 58' 14.3" W
Caption: Figure 1
Duke Power Marshall Steam Station, Catawba County

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North Carolina Department of Cultural Resources
State Historic Preservation Office
David L. S. Brook, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Division of Historical Resources
David J. Olson, Director

May 5, 2003

Jennifer Huff
Hydro Licensing
Duke Power
P.O. Box 1006
Charlotte, NC 28201-1006

Re: Marshall Steam Station Scrubber Landfill, Catawba County, ER03-1033

Dear Ms. Huff:

Thank you for your letter of April 10, 2003, concerning the above project.

We have conducted a review of the proposed undertaking and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the undertaking as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Renee Gledhill-Earley

David Brook

www.hpo.dcr.state.nc.us

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount St., Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919) 733-4763 • 733-8653
RESTORATION	515 N. Blount St., Raleigh NC	4613 Mail Service Center, Raleigh NC 27699-4613	(919) 733-6547 • 715-4801
SURVEY & PLANNING	515 N. Blount St., Raleigh NC	4618 Mail Service Center, Raleigh NC 27699-4618	(919) 733-6545 • 715-4801

5

The EDR GeoCheck® Report

Duke Power Marshall Steam Station
Scrubber Waste Landfill Site
Terrell, NC 28682

Inquiry Number: 0961975.2s

June 25, 2003

Environmental Data Resources, Inc.

***The* Source For Environmental Risk Management Data**

3530 Post Road
Southport, Connecticut 06890

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM-HOW

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Physical Setting Source Records Searched **A-82**

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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GEOCHECK® - PHYSICAL SETTING SOURCE REPORT

TARGET PROPERTY ADDRESS

DUKE POWER MARSHALL STEAM STATION
SCRUBBER WASTE LANDFILL SITE
TERRELL, NC 28682

TARGET PROPERTY COORDINATES

Latitude (North):	35.604099 - 35˚ 36' 14.8"
Longitude (West):	80.977699 - 80˚ 58' 39.7"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	502019.9
UTM Y (Meters):	3939839.8
Elevation:	874 ft. above sea level

EDR's GeoCheck Report has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Report is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

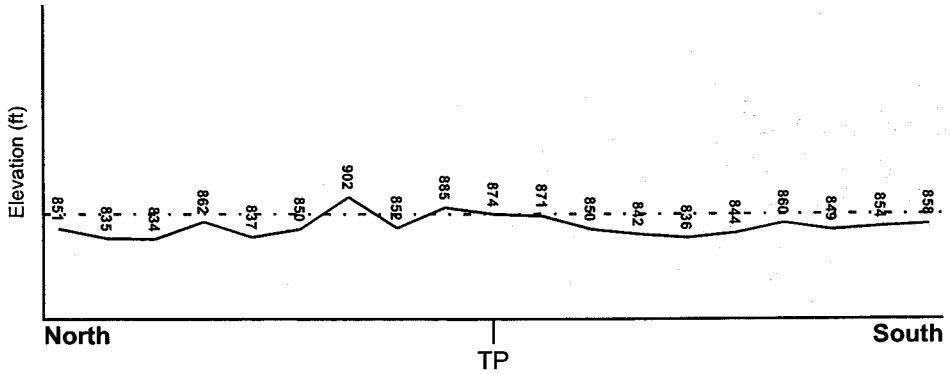
TOPOGRAPHIC INFORMATION

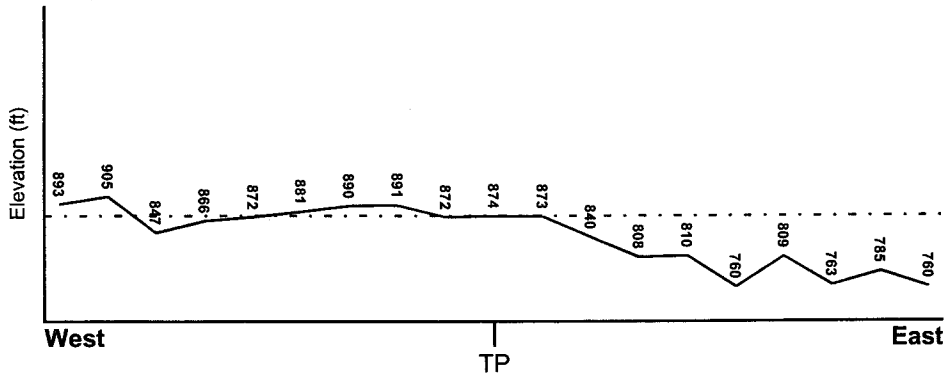
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map:	2435080-E8 LAKE NORMAN NORTH, NC
General Topographic Gradient:	General East
Source:	USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 874 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
CATAWBA, NC	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
LAKE NORMAN NORTH	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 2.000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Pennsylvanian
Series:	Felsic paragneiss and schist
Code:	mm1 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Metamorphic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	PACOLET
Soil Surface Texture:	fine sandy loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	HIGH
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	3 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 6.50 Min: 4.50
2	3 inches	29 inches	sandy clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
3	29 inches	52 inches	clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
4	52 inches	70 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: clay loam
gravelly - sandy loam
sandy loam
loam

Surficial Soil Types: clay loam
gravelly - sandy loam
sandy loam
loam

Shallow Soil Types: clay
sandy clay loam
silt loam
clay loam
silty clay loam

Deeper Soil Types: fine sandy loam
weathered bedrock

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	2.250
Federal FRDS PWS	2.250
State Database	2.250

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F25	USGS0803370	1 - 2 Miles NW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	NC0118168	1/4 - 1/2 Mile WSW
B4	NC0118676	1/2 - 1 Mile SE
5	NC0118590	1/2 - 1 Mile WNW
C7	NC0118605	1/2 - 1 Mile South
8	NC0118616	1/2 - 1 Mile SW
C9	NC0118599	1/2 - 1 Mile South
E12	NC0160266	1 - 2 Miles NNW
E13	NC0123133	1 - 2 Miles NNW
E14	NC0160232	1 - 2 Miles NNW
E15	NC0160202	1 - 2 Miles NNW
E16	NC0160130	1 - 2 Miles NNW
E17	NC0136194	1 - 2 Miles NNW
E18	NC0160238	1 - 2 Miles NNW
E19	NC0112119	1 - 2 Miles NNW
E20	NC0160244	1 - 2 Miles NNW
E21	NC0136116	1 - 2 Miles NNW
E22	NC0160187	1 - 2 Miles NNW
E23	NC0160250	1 - 2 Miles NNW
D24	NC0118589	1 - 2 Miles South
F26	NC0118497	1 - 2 Miles NNW
G29	NC0118623	1 - 2 Miles East
G30	NC0118622	1 - 2 Miles East
H31	NC0118621	1 - 2 Miles SSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H34	NC0118568	1 - 2 Miles SSW
I35	NC0118301	1 - 2 Miles NNW
K40	NC0118579	2 - 3 Miles WSW
41	NC0118598	2 - 3 Miles West
L43	NC0118617	2 - 3 Miles SSW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

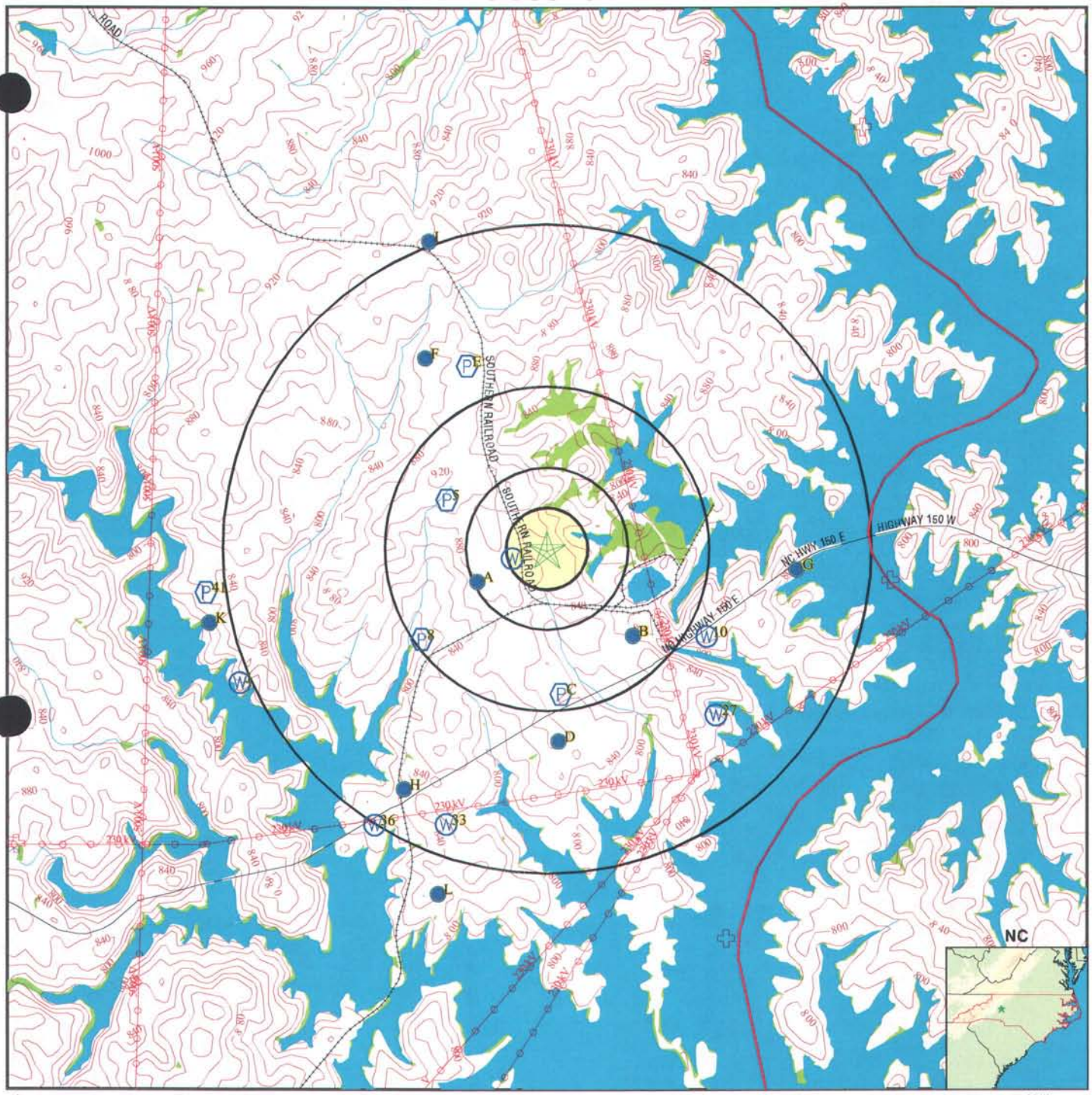
MAP ID	WELL ID	LOCATION FROM TP
1	NCWS001038	1/8 - 1/4 Mile WSW
A2	NCWS000806	1/4 - 1/2 Mile WSW
B6	NCWS000971	1/2 - 1 Mile SE
10	NCWS001000	1 - 2 Miles ESE
D11	NCWS000946	1 - 2 Miles South
27	NCWS000846	1 - 2 Miles SE
G28	NCWS000958	1 - 2 Miles East
H32	NCWS000982	1 - 2 Miles SSW
33	NCWS001018	1 - 2 Miles SSW
36	NCWS000899	2 - 3 Miles SSW
I37	NCWS000892	2 - 3 Miles NNW
J38	NCWS000939	2 - 3 Miles WSW
J39	NCWS000938	2 - 3 Miles WSW
K42	NCWS000950	2 - 3 Miles West
L44	NCWS000874	2 - 3 Miles SSW

OTHER STATE DATABASE INFORMATION

NORTH CAROLINA LOCATIONS OF NATURAL HERITAGE DATABASE

ID	Class
0162278	Plants
0571128	Natural Community Occurrence
0041602	Animal
0041988	Animal

PHYSICAL SETTING SOURCE MAP - 0961975.2s



County Boundary
Major Roads
Contour Lines
Power transmission lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 3/4 1 1/2 3 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Wetlands

Wildlife Areas
Natural Areas
Rare & Endangered Species

TARGET PROPERTY:	Duke Power Marshall Steam Station	CUSTOMER:	Duke Energy
ADDRESS:	Scrubber Waste Landfill Site	CONTACT:	Bill Miller
CITY/STATE/ZIP:	Terrell NC 28682	INQUIRY #:	0961975.2s
LAT/LONG:	35.6041 / 80.9777	DATE:	June 25, 2003 6:46 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
1 **WSW** **1/8 - 1/4 Mile** **Higher**	**NC WELLS**	**NCWS001038**

Site Name:	WELL #1		
PWS ID:	0118780	Source code:	W01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353611.59	Longitude:	805853.517
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	MOTT'S GROVE UMC		

A2 **WSW** **1/4 - 1/2 Mile** **Higher**	**NC WELLS**	**NCWS000806**

Site Name:	WELL #1		
PWS ID:	0118168	Source code:	S01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353602.746	Longitude:	805905.192
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	HEATER UTILITIES INC		

A3 **WSW** **1/4 - 1/2 Mile** **Higher**	**FRDS PWS**	**NC0118168**

PWS ID:	NC0118168	PWS Status:	Not Reported
Date Initiated:	Not Reported	Date Deactivated:	Not Reported
PWS Name:	PINEWOOD ACRES WATER SYSTEM SHERRILLS FORD, NC 28673		

Treatment Objective: CORROSION CONTROL
Treatment Process: PH ADJUSTMENT
Source: Ground water

Addressee / Facility: System Owner/Responsible Party
T CARROLL WEBER OR MGR NOW
PO BOX 127
SHERRILLS FORD, NC 28673

Addressee / Facility: System Owner/Responsible Party
MID-SOUTH WATER SYSTEMS, INC
PO BOX 127
SHERRILLS FORD, NC 28673

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Facility Latitude:	35 36 5.0000	Facility Longitude:	80 59 10.0000
City Served:	SHERRILLS FORD		
Treatment Class:	Untreated	Population:	41

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9404713	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9404714	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9404715	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9404716	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9404717	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9404718	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9404719	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9404720	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9404721	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9404722	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9404723	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9404724	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9404725	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9404726	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9404727	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9404728	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9404729	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9404730	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9412748	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested
System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued
System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing
System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	94E0004
Enforcement Date:	1994-12-08	Enf. Action:	Fed Compliance Achieved
System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received
System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued
System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested

ENFORCEMENT INFORMATION:

System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	PINEWOOD ACRES WATER SYSTE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412748	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested
System Name:	PINEWOOD ACRES WATER SYSTEM		
Violation Type:	71		
Contaminant:	7000		
Compliance Period:	2002-07-01 - 2002-07-18	Analytical Value:	0
Violation ID:	0301685	Enforcement ID:	0219499
Enforcement Date:	2002-07-18	Enf. Action:	State Compliance Achieved
System Name:	PINEWOOD ACRES WATER SYSTEM		
Violation Type:	71		
Contaminant:	7000		
Compliance Period:	2002-07-01 - 2002-07-18	Analytical Value:	0
Violation ID:	0301685	Enforcement ID:	0300468
Enforcement Date:	2002-10-18	Enf. Action:	State Formal NOV Issued

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B4
SE
1/2 - 1 Mile
Lower

FRDS PWS **NC0118676**

PWS ID:	NC0118676	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	DUKE POWER-MARSHALL STEAM STAT TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party HOWARD ERSKINE MGR PO BOX 210 ATN PAUL GREEN TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party DUKE POWER STEAM PROD DEPT PO BOX 33189 CHARLOTTE, NC 28242		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	TERRELL		
Treatment Class:	Treated	Population:	00000026

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

ENFORCEMENT INFORMATION:

System Name:	DUKE POWER-MARSHALL STEAM		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-10-01 - 1999-12-31	Analytical Value:	0000000.000000000
Violation ID:	0003221	Enforcement ID:	0005839
Enforcement Date:	2000-02-04	Enf. Action:	State Formal NOV Issued
System Name:	DUKE POWER-MARSHALL STEAM		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-10-01 - 1999-12-31	Analytical Value:	0000000.000000000
Violation ID:	0003221	Enforcement ID:	0005840
Enforcement Date:	2000-02-04	Enf. Action:	State Public Notif Requested

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5
WNW
1/2 - 1 Mile
Higher

FRDS PWS **NC0118590**

PWS ID:	NC0118590	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	SHERRILLS FORD PRES SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party SHERRILLS FORD PRES RT 1 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party SHERRILLS FORD PRES RT 1 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	SHERRILLS FORD		
Treatment Class:	Untreated	Population:	00000060

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

ENFORCEMENT INFORMATION:

System Name:	SHERRILLS FORD PRESBYTERIA		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-04-01 - 1999-06-30	Analytical Value:	0000000.000000000
Violation ID:	0000162	Enforcement ID:	9905609
Enforcement Date:	1999-08-12	Enf. Action:	State Public Notif Requested
System Name:	SHERRILLS FORD PRESBYTERIA		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-07-01 - 1999-09-30	Analytical Value:	0000000.000000000
Violation ID:	0000162	Enforcement ID:	Not Reported
Enforcement Date:	Not Reported	Enf. Action:	Not Reported

ENFORCEMENT INFORMATION:

System Name:	SHERRILLS FORD PRESBYTERIA		
Violation Type:	Max Contaminant Level, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	2000-08-01 - 2000-08-31	Analytical Value:	0000000.000000000
Violation ID:	0102199	Enforcement ID:	0022553
Enforcement Date:	2000-09-14	Enf. Action:	State Formal NOV Issued
System Name:	SHERRILLS FORD PRESBYTERIA		
Violation Type:	Max Contaminant Level, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	2000-08-01 - 2000-08-31	Analytical Value:	0000000.000000000
Violation ID:	0102199	Enforcement ID:	0022554
Enforcement Date:	2000-09-14	Enf. Action:	State Public Notif Requested
System Name:	SHERRILLS FORD PRESBYTERIA		
Violation Type:	Max Contaminant Level, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	2001-03-01 - 2001-03-31	Analytical Value:	0000000.000000000
Violation ID:	0108434	Enforcement ID:	0114092
Enforcement Date:	2001-04-26	Enf. Action:	State Formal NOV Issued
System Name:	SHERRILLS FORD PRESBYTERIA		
Violation Type:	Max Contaminant Level, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	2001-03-01 - 2001-03-31	Analytical Value:	0000000.000000000
Violation ID:	0108434	Enforcement ID:	0114093
Enforcement Date:	2001-04-26	Enf. Action:	State Public Notif Requested
System Name:	SHERRILLS FORD PRESBYTERIA		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-04-01 - 1999-06-30	Analytical Value:	0000000.000000000
Violation ID:	9909760	Enforcement ID:	9905608
Enforcement Date:	1999-08-12	Enf. Action:	State Formal NOV Issued
System Name:	SHERRILLS FORD PRESBYTERIA		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-04-01 - 1999-06-30	Analytical Value:	0000000.000000000
Violation ID:	9912352	Enforcement ID:	9905609
Enforcement Date:	1999-08-12	Enf. Action:	State Public Notif Requested

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B6
SE
1/2 - 1 Mile
Lower

NC WELLS **NCWS000971**

Site Name:	WELL #1		
PWS ID:	0118676	Source code:	S01
City:	TERRELL		
County:	Catawba		
Latitude:	353542.958	Longitude:	805802.343
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	DUKE ENERGY CORPORATION		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
C7 **South** **1/2 - 1 Mile** **Lower**	**FRDS PWS**	**NC0118605**

PWS ID:	NC0118605	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	TERRELL BAIT SHOP TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party TERRELL BAIT SHOP TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party TERRELL BAIT SHOP TERRELL, NC 28682		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	TERRELL		
Treatment Class:	Untreated	Population:	00000050

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

ENFORCEMENT INFORMATION:

System Name:	TERRELL BAIT & TACKLE SHOP		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-04-01 - 1999-06-30	Analytical Value:	0000000.000000000
Violation ID:	0000164	Enforcement ID:	9905613
Enforcement Date:	1999-08-12	Enf. Action:	State Public Notif Requested
System Name:	TERRELL BAIT & TACKLE SHOP		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-10-01 - 1999-12-31	Analytical Value:	0000000.000000000
Violation ID:	0000164	Enforcement ID:	0005833
Enforcement Date:	2000-02-04	Enf. Action:	State Formal NOV Issued
System Name:	TERRELL BAIT & TACKLE SHOP		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-10-01 - 1999-12-31	Analytical Value:	0000000.000000000
Violation ID:	0003218	Enforcement ID:	0005834
Enforcement Date:	2000-02-04	Enf. Action:	State Public Notif Requested
System Name:	TERRELL BAIT & TACKLE SHOP		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-10-01 - 1999-12-31	Analytical Value:	0000000.000000000
Violation ID:	0003218	Enforcement ID:	0009820
Enforcement Date:	2000-02-15	Enf. Action:	State Admin Penalty Assessed

ENFORCEMENT INFORMATION:

System Name:	TERRELL BAIT & TACKLE SHOP		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-10-01 - 1999-12-31	Analytical Value:	0000000.000000000
Violation ID:	0003218	Enforcement ID:	0009821
Enforcement Date:	2000-02-15	Enf. Action:	State AO (w/penalty) Issued
System Name:	TERRELL BAIT & TACKLE SHOP		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-04-01 - 1999-06-30	Analytical Value:	0000000.000000000
Violation ID:	9909758	Enforcement ID:	9905612
Enforcement Date:	1999-08-12	Enf. Action:	State Formal NOV Issued
System Name:	TERRELL BAIT & TACKLE SHOP		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-04-01 - 1999-06-30	Analytical Value:	0000000.000000000
Violation ID:	9909758	Enforcement ID:	9905613
Enforcement Date:	1999-08-12	Enf. Action:	State Public Notif Requested

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8
SW
1/2 - 1 Mile
Lower

FRDS PWS **NC0118616**

PWS ID:	NC0118616	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	HILDEBRAN GROCERY TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party HILDEBRAN GROCERY RT 2 TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party HILDEBRAN GROCERY RT 2 TERRELL, NC 28682		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	TERRELL		
Treatment Class:	Untreated	Population:	00000040

PWS currently has or had major violation(s) or enforcement: No

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C9
South
1/2 - 1 Mile
Lower

FRDS PWS **NC0118599**

PWS ID:	NC0118599	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	TERRELL SHELL TERRELL, NC 28682		

Addressee / Facility: System Owner/Responsible Party
TERRELL SHELL
BOX 416
TERRELL, NC 28682

Addressee / Facility: System Owner/Responsible Party
TERRELL SHELL
BOX 416
TERRELL, NC 28682

Facility Latitude: Not Reported
Facility Longitude: Not Reported
City Served: TERRELL
Treatment Class: Untreated
Population: 00000100

PWS currently has or had major violation(s) or enforcement: No

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10
ESE
1 - 2 Miles
Lower

NC WELLS **NCWS001000**

Site Name: WELL #1
PWS ID: 0118736
Source code: W01
City: TERRELL
County: Catawba
Latitude: 353546.433
Longitude: 805736.684
Availability: Permanent
Type: Ground
Depth: 0
Owner: THE OLD COUNTRY CHURCH

D11
South
1 - 2 Miles
Higher

NC WELLS **NCWS000946**

Site Name: WELL #1
PWS ID: 0118589
Source code: W01
City: TERRELL
County: Catawba
Latitude: 353515.339
Longitude: 805836.148
Availability: Permanent
Type: Ground
Depth: 0
Owner: REHOBETH UNITED METH CHURCH

E12
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0160266**

PWS ID: NC0160266
PWS Status: Active
Date Initiated: 9010
Date Deactivated: Not Reported
PWS Name: LANDEN MEADOWS
CHARLOTTE, NC 28673

Addressee / Facility: System Owner/Responsible Party
RICK DURHAM OR MANAGER NOW
PO BOX 127
SHERRILLS FORD, NC 28673

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Addressee / Facility: System Owner/Responsible Party
MID-SOUTH WATER SYSTEMS
PO BOX 127
SHERRILLS FORD, NC 28673

Facility Latitude: Not Reported
Facility Longitude Not Reported
City Served: CHARLOTTE
Treatment Class: Mixed (treated and untreated)
Population: 00000280

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9272730	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/89	Vio. end Date:	12/31/91	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	031392				

Violation ID:	9272731	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/89	Vio. end Date:	12/31/91	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	031392				

Violation ID:	9401356	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	10/01/93	Vio. end Date:	12/31/93	Vio. Period:	003 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	TTHM				
Vio. Awareness Date:	020994				

Violation ID:	9407329	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9407328	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407327	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407326	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407325	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9407324	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407323	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407322	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9407321	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9407320	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9407319	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9407318	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9407317	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9407316	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407315	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407314	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407313	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9407312	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9413102	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413102	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued

ENFORCEMENT INFORMATION:

System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	95E0006
Enforcement Date:	1994-11-23	Enf. Action:	State Compliance Achieved
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	95E0007
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	95E0008
Enforcement Date:	1994-10-31	Enf. Action:	State Compliance Achieved
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	9416494
Enforcement Date:	1994-08-29	Enf. Action:	State Formal NOV Issued

ENFORCEMENT INFORMATION:

System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	9416495
Enforcement Date:	1994-08-29	Enf. Action:	State Public Notif Requested
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414431	Enforcement ID:	95E0006
Enforcement Date:	1994-11-23	Enf. Action:	State Compliance Achieved
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 1994-06-30	Analytical Value:	00000000.00
Violation ID:	9414431	Enforcement ID:	9416494
Enforcement Date:	1994-08-29	Enf. Action:	State Formal NOV Issued
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 1994-06-30	Analytical Value:	00000000.00
Violation ID:	9414431	Enforcement ID:	9416495
Enforcement Date:	1994-08-29	Enf. Action:	State Public Notif Requested
System Name:	LANDEN MEADOWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 1994-06-30	Analytical Value:	00000000.00
Violation ID:	9414431	Enforcement ID:	9500006E
Enforcement Date:	1994-11-23	Enf. Action:	State Compliance Achieved

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E13
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0123133**

PWS ID:	NC0123133	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	WHITE ROCK S/D SHELBY, NC 28673		
Addressee / Facility:	System Owner/Responsible Party T CARROLL WEBER OR MGR NOW PO BOX 127 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MID-SOUTH WATER SYSTEMS, INC PO BOX 127 SHERRILLS FORD, NC 28673		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Facility Latitude:	35 37 13	Facility Longitude	080 59 12
City Served:	SHELBY		
Treatment Class	Not Reported	Population:	Not Reported

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9401280	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	10/01/93	Vio. end Date:	12/31/93	Vio. Period:	003 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	TTHM				
Vio. Awareness Date:	020994				

Violation ID:	9405056	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9405057	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9405058	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405059	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405060	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405061	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9405062	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9405063	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9405064	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9405065	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9405066	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9405067	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405068	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405069	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9405070	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9405071	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9405072	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9405073	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9412799	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412799	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested
System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412799	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing
System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414430	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested
System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414430	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued
System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414430	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing
System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414430	Enforcement ID:	95E0004
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested

ENFORCEMENT INFORMATION:

System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414430	Enforcement ID:	9416483
Enforcement Date:	1994-08-29	Enf. Action:	State Formal NOV Issued
System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414430	Enforcement ID:	9416484
Enforcement Date:	1994-08-29	Enf. Action:	State Public Notif Requested
System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 1994-06-30	Analytical Value:	00000000.00
Violation ID:	9414430	Enforcement ID:	9416483
Enforcement Date:	1994-08-29	Enf. Action:	State Formal NOV Issued
System Name:	WHITE ROCK S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 1994-06-30	Analytical Value:	00000000.00
Violation ID:	9414430	Enforcement ID:	9416484
Enforcement Date:	1994-08-29	Enf. Action:	State Public Notif Requested

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E14
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0160232**

PWS ID:	NC0160232	PWS Status:	Active
Date Initiated:	8505	Date Deactivated:	Not Reported
PWS Name:	WEXFORD S/D I CHARLOTTE, NC 28673		
Addressee / Facility:	System Owner/Responsible Party CARROLL WEBER OR MANAGER NOW PO BOX 127 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MID-SOUTH WATER SYSTEMS INC PO BOX 127 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	CHARLOTTE		
Treatment Class:	Treated	Population:	00000686

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9401345	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	10/01/93	Vio. end Date:	12/31/93	Vio. Period:	003 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	TTHM				
Vio. Awareness Date:	020994				

Violation ID:	9407118	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9407117	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407116	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407115	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407114	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9407113	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407112	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407111	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9407110	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9407109	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9407108	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9407107	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9407106	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9407105	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407104	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407103	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407102	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9407101	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9407100	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/90	Vio. end Date:	06/30/94	Vio. Period:	048 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	GROSS ALPHA, EXCL. RADON & U				
Vio. Awareness Date:	071594				

Violation ID:	9413087	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	94E0004
Enforcement Date:	1995-06-16	Enf. Action:	Fed Compliance Achieved

ENFORCEMENT INFORMATION:

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued

System Name:	WEXFORD S/D I		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413087	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested

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E15
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0160202**

PWS ID:	NC0160202	PWS Status:	Active
Date Initiated:	8801	Date Deactivated:	Not Reported
PWS Name:	SHELTON S/D CHARLOTTE, NC 28673		
Addressee / Facility:	System Owner/Responsible Party RICK DURHAM OR MANAGER NOW PO BOX 127 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MID-SOUTH WATER SYSTEMS, INC PO BOX 127 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	CHARLOTTE		
Treatment Class:	Treated	Population:	00000324

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9407022	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/90	Vio. end Date:	06/30/94	Vio. Period:	048 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	GROSS ALPHA, EXCL. RADON & U				
Vio. Awareness Date:	071594				

Violation ID:	9413083	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested
System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued
System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing
System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	94E0004
Enforcement Date:	1995-04-05	Enf. Action:	Fed Compliance Achieved
System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received

ENFORCEMENT INFORMATION:

System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued
System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested
System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	SHELTON S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413083	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested
System Name:	SHELTON S/D		
Violation Type:	Monitoring, Regular		
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Compliance Period:	1994-10-01 - 1994-12-31	Analytical Value:	00000000.00
Violation ID:	9543539	Enforcement ID:	9508010
Enforcement Date:	1995-07-14	Enf. Action:	State Formal NOV Issued
System Name:	SHELTON S/D		
Violation Type:	Monitoring, Regular		
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Compliance Period:	1994-10-01 - 1994-12-31	Analytical Value:	00000000.00
Violation ID:	9543539	Enforcement ID:	9508011
Enforcement Date:	1995-07-14	Enf. Action:	State Public Notif Requested
System Name:	SHELTON S/D		
Violation Type:	Monitoring, Regular		
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Compliance Period:	1995-01-01 - 1995-03-31	Analytical Value:	00000000.00
Violation ID:	9543540	Enforcement ID:	9508010
Enforcement Date:	1995-07-14	Enf. Action:	State Formal NOV Issued
System Name:	SHELTON S/D		
Violation Type:	Monitoring, Regular		
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Compliance Period:	1995-01-01 - 1995-03-31	Analytical Value:	00000000.00
Violation ID:	9543540	Enforcement ID:	9508011
Enforcement Date:	1995-07-14	Enf. Action:	State Public Notif Requested

E16
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0160130**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

PWS ID:	NC0160130	PWS Status:	Active
Date Initiated:	8409	Date Deactivated:	Not Reported
PWS Name:	GREENBRIAR OF MATTHEWS MATTHEWS, NC 28673		
Addressee / Facility:	System Owner/Responsible Party T CARROLL WEBER OR MGR NOW PO BOX 127 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MID-SOUTH WATER SYSTEMS, INC PO BOX 127 SHERRILLS FORD, NC 28673		
Facility Latitude:	35 37 13	Facility Longitude	080 59 12
City Served:	MATTHEWS		
Treatment Class:	Mixed (treated and untreated)	Population:	00000424

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9401340	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	10/01/93	Vio. end Date:	12/31/93	Vio. Period:	003 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	TTHM				
Vio. Awareness Date:	020994				

Violation ID:	9406850	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9406849	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9406848	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9406847	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9406846	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9406845	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406844	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406843	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9406842	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9406841	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9406840	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9406839	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9406838	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9406837	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406836	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406835	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406834	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9406833	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9413063	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing

ENFORCEMENT INFORMATION:

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	94E0004
Enforcement Date:	1995-06-16	Enf. Action:	Fed Compliance Achieved

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued

System Name:	GREENBRIAR OF MATTHEWS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413063	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested

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E17
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0136194**

PWS ID:	NC0136194	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	STARBROOK PARK GASTONIA, NC 28673		

Addressee / Facility: System Owner/Responsible Party
T CARROLL WEBER OR MGR NOW
PO BOX 127
SHERRILLS FORD, NC 28673

ENFORCEMENT INFORMATION:

System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested
System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested

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E23
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0160250**

PWS ID:	NC0160250	PWS Status:	Active
Date Initiated:	8809	Date Deactivated:	Not Reported
PWS Name:	WEXFORD II S/D CHARLOTTE, NC 28673		
Addressee / Facility:	System Owner/Responsible Party CARROLL WEBER OR MANAGER NOW PO BOX 127 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MID-SOUTH WATER SYSTEMS INC PO BOX 127 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	CHARLOTTE		
Treatment Class:	Treated	Population:	00000516

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9401350	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	10/01/93	Vio. end Date:	12/31/93	Vio. Period:	003 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	TTHM				
Vio. Awareness Date:	020994				

Violation ID:	9407221	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9407220	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407219	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407218	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9407217	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9407216	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407215	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407214	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9407213	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9407212	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9407211	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9407210	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9407209	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9407208	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407207	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407206	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9407205	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9407204	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9407203	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/90	Vio. end Date:	06/30/94	Vio. Period:	048 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	GROSS ALPHA, EXCL. RADON & U				
Vio. Awareness Date:	071594				

Violation ID:	9413097	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued

System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing

System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	94E0004
Enforcement Date:	1995-06-16	Enf. Action:	Fed Compliance Achieved

System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued

System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested

ENFORCEMENT INFORMATION:

System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested
System Name:	WEXFORD II S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413097	Enforcement ID:	95E0006
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received

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D24
South
1 - 2 Miles
Lower

FRDS PWS **NC0118589**

PWS ID:	NC0118589	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	REHOBETH CH TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party REHOBETH CH TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party REHOBETH CH TERRELL, NC 28682		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	TERRELL		
Treatment Class:	Untreated	Population:	00000120

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

ENFORCEMENT INFORMATION:

System Name:	REHOBETH UNITED METH CHURC		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-04-01 - 1999-06-30	Analytical Value:	0000000.000000000
Violation ID:	9910769	Enforcement ID:	Not Reported
Enforcement Date:	Not Reported	Enf. Action:	Not Reported

ENFORCEMENT INFORMATION:

System Name:	REHOBETH UNITED METH CHURC		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-01-01 - 1999-03-31	Analytical Value:	0000000.000000000
Violation ID:	9912353	Enforcement ID:	Not Reported
Enforcement Date:	Not Reported	Enf. Action:	Not Reported

F25
NW
1 - 2 Miles
Higher

FED USGS **USGS0803370**

Agency:	USGS	Site ID:	353711080593201
Site Name:	CW-289		
Dec. Latitude:	35.61986		
Dec. Longitude:	-80.99202		
Coord Sys:	NAD83		
State:	NC		
County:	Catawba County		
Altitude:	Not Reported		
Hydrologic code:	Not Reported		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	310FCMG		
Aquifer type:	Not Reported	Well depth:	220.0
Hole depth:	Not Reported	Source:	S
Project no:	Not Reported		

F26
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0118497**

PWS ID:	NC0118497	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	SHERRILLS FORD ELEM SCHOOL SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MARK BUMGARNER OR MANAGER NOW PO BOX 1000 NEWTON, NC 28658		
Addressee / Facility:	System Owner/Responsible Party CATAWBA CO BD OF EDUCATION PO BOX 1000 NEWTON, NC 28658		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	SHERRILLS FORD		
Treatment Class:	Untreated	Population:	00000500

PWS currently has or had major violation(s) or enforcement: No

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
27 **SE** **1 - 2 Miles** **Lower**	**NC WELLS**	**NCWS000846**

Site Name:	WELL #1		
PWS ID:	0118254	Source code:	S01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353521.22	Longitude:	805733.083
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	HEATER UTILITIES INC		

G28 **East** **1 - 2 Miles** **Lower**	**NC WELLS**	**NCWS000958**

Site Name:	WELL #1		
PWS ID:	0118622	Source code:	W01
City:	TERRELL		
County:	Catawba		
Latitude:	353603.018	Longitude:	805705.165
Availability:	Permanent		
Type:	Ground	Depth:	245
Owner:	MIKE FORBES		

G29 **East** **1 - 2 Miles** **Lower**	**FRDS PWS**	**NC0118623**

PWS ID:	NC0118623	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	MIDWAY RESTAURANT TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party MIDWAY RESTAURANT HWY 150 TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party MIDWAY RESTAURANT HWY 150 TERRELL, NC 28682		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	TERRELL		
Treatment Class	Not Reported	Population:	Not Reported

PWS currently has or had major violation(s) or enforcement: No

Map ID Direction Distance Elevation	Database	EDR ID Number
G30 **East** **1 - 2 Miles** **Lower**	**FRDS PWS**	**NC0118622**

PWS ID:	NC0118622	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	MIDWAY MARINA TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party MIDWAY MARINA HWY 150 TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party MIDWAY MARINA HWY 150 TERRELL, NC 28682		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	TERRELL		
Treatment Class:	Untreated	Population:	00000025

PWS currently has or had major violation(s) or enforcement: No

H31 **SSW** **1 - 2 Miles** **Lower**	**FRDS PWS**	**NC0118621**

PWS ID:	NC0118621	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	WEEKS FOOD INC TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party WEEKS FOOD INC RT 2 HWY 150 TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party WEEKS FOOD INC RT 2 HWY 150 TERRELL, NC 28682		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	TERRELL		
Treatment Class:	Untreated	Population:	00000100

PWS currently has or had major violation(s) or enforcement: No

H32 **SSW** **1 - 2 Miles** **Lower**	**NC WELLS**	**NCWS000982**

Site Name:	WELL #1		
PWS ID:	0118698	Source code:	W01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353456.364	Longitude:	805930.239
Availability:	Permanent		
Type:	Ground	Depth:	230
Owner:	JOHN R WATTS SR		

33
SSW
1 - 2 Miles
Lower

NC WELLS **NCWS001018**

Site Name:	WELL #1		
PWS ID:	0118758	Source code:	W01
City:	TERRELL		
County:	Catawba		
Latitude:	353446.079	Longitude:	805919.575
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	TERRELL BAPTIST MISSION		

H34
SSW
1 - 2 Miles
Lower

FRDS PWS **NC0118568**

PWS ID:	NC0118568	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	LK NORMAN MUSIC HALL TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party LK NORMAN MUSIC HALL HWY 150 TERRELL, NC 28682		
Addressee / Facility:	System Owner/Responsible Party LK NORMAN MUSIC HALL HWY 150 TERRELL, NC 28682		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	TERRELL		
Treatment Class:	Untreated	Population:	00000075

PWS currently has or had major violation(s) or enforcement: No

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I35
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0118301**

PWS ID:	NC0118301	PWS Status:	Not Reported
Date Initiated:	Not Reported	Date Deactivated:	Not Reported
PWS Name:	LYNMORE S/D SHERRILLS FORD, NC 28673		

PWS Facility Data Not Reported

Facility Latitude:	35 37 50.0000	Facility Longitude:	80 59 30.0000
City Served:	Not Reported		
Treatment Class	Not Reported	Population:	Not Reported

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

ENFORCEMENT INFORMATION:

System Name:	LYNMORE S/D		
Violation Type:	71		
Contaminant:	7000		
Compliance Period:	2002-07-01 - 2002-07-18	Analytical Value:	0
Violation ID:	0301727	Enforcement ID:	0219513
Enforcement Date:	2002-07-18	Enf. Action:	State Compliance Achieved
System Name:	LYNMORE S/D		
Violation Type:	71		
Contaminant:	7000		
Compliance Period:	2002-07-01 - 2002-07-18	Analytical Value:	0
Violation ID:	0301727	Enforcement ID:	0300504
Enforcement Date:	2002-10-18	Enf. Action:	State Formal NOV Issued

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36
SSW
2 - 3 Miles
Lower

NC WELLS **NCWS000899**

Site Name:	WELL #1		
PWS ID:	0118307	Source code:	S01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353445.819	Longitude:	805947.779
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	PIEDMONT WATER & CONST COMPANY		

I37
NNW
2 - 3 Miles
Higher

NC WELLS **NCWS000892**

Site Name:	WELL #1		
PWS ID:	0118301	Source code:	S01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353756.694	Longitude:	805923.165
Availability:	Permanent		
Type:	Ground	Depth:	61
Owner:	HEATER UTILITIES INC		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
J38 **WSW** **2 - 3 Miles** **Lower**	**NC WELLS**	**NCWS000939**

Site Name:	WELL #2 (BACK-UP)		
PWS ID:	0118579	Source code:	W02
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353531.532	Longitude:	810040.911
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	RALPH & HELEN DRUM		

J39 **WSW** **2 - 3 Miles** **Lower**	**NC WELLS**	**NCWS000938**

Site Name:	WELL #1 (MAIN)		
PWS ID:	0118579	Source code:	W01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353531.39	Longitude:	810041.01
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	RALPH & HELEN DRUM		

K40 **WSW** **2 - 3 Miles** **Lower**	**FRDS PWS**	**NC0118579**

PWS ID:	NC0118579	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	DRUMS FAMILY CMPGRD SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party DRUMS FAMILY CMPGRD RT 1 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party DRUMS FAMILY CMPGRD RT 1 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	SHERRILLS FORD		
Treatment Class:	Untreated	Population:	00000025

PWS currently has or had major violation(s) or enforcement: No

Map ID Direction Distance Elevation	Database	EDR ID Number
41 **West** **2 - 3 Miles** **Lower**	**FRDS PWS**	**NC0118598**

PWS ID:	NC0118598	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	CAMP DOGWOOD SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party CAMP DOGWOOD RT 1 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party CAMP DOGWOOD RT 1 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	SHERRILLS FORD		
Treatment Class:	Untreated	Population:	00000046

PWS currently has or had major violation(s) or enforcement: No

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K42 **West** **2 - 3 Miles** **Lower**	**NC WELLS**	**NCWS000950**

Site Name:	WELL #1		
PWS ID:	0118598	Source code:	W01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353555.99	Longitude:	810056.42
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	NC LIONS FOUNDATION		

L43 **SSW** **2 - 3 Miles** **Lower**	**FRDS PWS**	**NC0118617**

PWS ID:	NC0118617	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	SLANTING BRIDGE MARINA SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party SLANTING BRIDGE MARINA RT 2 SHERRILLS FORD, NC 28673		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Addressee / Facility:	System Owner/Responsible Party SLANTING BRIDGE MARINA RT 2 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	SHERRILLS FORD		
Treatment Class:	Untreated	Population:	00000075
PWS currently has or had major violation(s) or enforcement:		No	

L44
SSW
2 - 3 Miles
Lower

NC WELLS **NCWS000874**

Site Name:	WELL #1		
PWS ID:	0118281	Source code:	S01
City:	SHERRILLS FORD		
County:	Catawba		
Latitude:	353421.846	Longitude:	805916.303
Availability:	Permanent		
Type:	Ground	Depth:	0
Owner:	HEATER UTILITIES INC		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction Distance	Database	EDR ID Number

NC_NHEO **0162278**

Site ID:	0162278
Latitude / Longitude:	35.6014 / -80.9403
Classification by Type:	Plants
Degree of Accuracy associated with coordinate:	Minutes
Occurrence Status:	Historic, no evidence of destruction
State Status:	Candidate

NC_NHEO **0571128**

Site ID:	0571128
Latitude / Longitude:	35.6419 / -80.9433
Classification by Type:	Natural Community Occurrence
Degree of Accuracy associated with coordinate:	Seconds
Occurrence Status:	Extant
State Status:	Not Reported

NC_NHEO **0041602**

Site ID:	0041602
Latitude / Longitude:	35.5778 / -81.0361
Classification by Type:	Animal
Degree of Accuracy associated with coordinate:	Minutes
Occurrence Status:	Extant
State Status:	Significantly Rare

NC_NHEO **0041988**

Site ID:	0041988
Latitude / Longitude:	35.5694 / -80.9583
Classification by Type:	Animal
Degree of Accuracy associated with coordinate:	General
Occurrence Status:	Extant
State Status:	Special Concern

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: NC Radon

Radon Test Results

County	Result Type	Total Sites	Avg pCi/L	Range pCi/L
CATAWBA	Statistical	62	1.30	-0.50-5.30
CATAWBA	Non-Statistical	115	2.04	0.00-15.90

Federal EPA Radon Zone for CATAWBA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 28682

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.400 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

North Carolina Wildlife Resources/Game Lands
Source: Center for Geographic Information and Analysis
Telephone: 919-733-2090
All publicly owned game lands managed by the North Carolina Wildlife Resources Commission and as listed in Hunting and Fishing Maps for North Carolina Game Lands, 1989-90.

North Carolina Rare/Endangered Species and Natural Areas
Source: Natural Heritage Occurrence Sites Center for Geographic Information and Analysis
Telephone: 919-733-2090

North Carolina Public Water Supply Wells
Source: Department of Environmental Health
Telephone: 919-715-3243

RADON

State Database: NC Radon
Source: Department of Environment & Natural Resources
Telephone: 919-733-4984
Radon Statistical and Non Statiscal Data

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Addressee / Facility: System Owner/Responsible Party
MID-SOUTH WATER SYSTEMS, INC
PO BOX 127
SHERRILLS FORD, NC 28673

Facility Latitude: 35 37 13 Facility Longitude080 59 12
City Served: GASTONIA
Treatment Class: Untreated Population: 00000048

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID: 9405511 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 01/01/91 Vio. end Date: 12/31/93 Vio. Period: 036 Months
Num required Samples: 000 Number of Samples Taken: 000
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Monitoring, Regular
Contaminant: PH
Vio. Awareness Date: 060194

Violation ID: 9405510 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 01/01/91 Vio. end Date: 12/31/93 Vio. Period: 036 Months
Num required Samples: 000 Number of Samples Taken: 000
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Monitoring, Regular
Contaminant: THALLIUM, TOTAL
Vio. Awareness Date: 060194

Violation ID: 9405509 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 01/01/91 Vio. end Date: 12/31/93 Vio. Period: 036 Months
Num required Samples: 000 Number of Samples Taken: 000
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Monitoring, Regular
Contaminant: BERYLLIUM, TOTAL
Vio. Awareness Date: 060194

Violation ID: 9405508 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 01/01/91 Vio. end Date: 12/31/93 Vio. Period: 036 Months
Num required Samples: 000 Number of Samples Taken: 000
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Monitoring, Regular
Contaminant: ANTIMONY, TOTAL
Vio. Awareness Date: 060194

Violation ID: 9405507 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 01/01/91 Vio. end Date: 12/31/93 Vio. Period: 036 Months
Num required Samples: 000 Number of Samples Taken: 000
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Monitoring, Regular
Contaminant: SULFATE
Vio. Awareness Date: 060194

Violation ID:	9405506	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405505	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405504	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9405503	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9405502	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9405501	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation ID:	9405500	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9405499	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9405498	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405497	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405496	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405495	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9405494	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9412838	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued

System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing

System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	94E0004
Enforcement Date:	1995-07-06	Enf. Action:	Fed Compliance Achieved

System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received

System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued

ENFORCEMENT INFORMATION:

System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested
System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	STARBROOK PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412838	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested

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E18
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0160238**

PWS ID:	NC0160238	PWS Status:	Active
Date Initiated:	8701	Date Deactivated	Not Reported
PWS Name:	HEATHERS S/D CHARLOTTE, NC 28673		
Addressee / Facility:	System Owner/Responsible Party T CARROLL WEBER OR MANAGER NOW PO BOX 127 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MID-SOUTH WATER SYSTEMS INC PO BOX 127 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude	Not Reported
City Served:	CHARLOTTE		
Treatment Class:	Treated	Population:	00000750

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9272722	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/89	Vio. end Date:	12/31/91	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	031392				

Violation ID:	9272723	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/89	Vio. end Date:	12/31/91	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	031392				

Violation ID:	9407140	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9413090	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued

System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing

System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	94E0004
Enforcement Date:	1995-06-16	Enf. Action:	Fed Compliance Achieved

ENFORCEMENT INFORMATION:

System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued
System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested
System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested
System Name:	HEATHERS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413090	Enforcement ID:	95E0006
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received

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E19
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0112119**

PWS ID:	NC0112119	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	SHOOK SPRINGS WTR SYS LONGVIEW, NC 28673		
Addressee / Facility:	System Owner/Responsible Party T CARROLL WEBER OR MGR NOW PO BOX 127 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MID-SOUTH WATER SYSTEMS, INC PO BOX 127 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	LONGVIEW		
Treatment Class:	Untreated	Population:	00000063

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9403913	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/90	Vio. end Date:	06/30/94	Vio. Period:	048 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	GROSS ALPHA, EXCL. RADON & U				
Vio. Awareness Date:	071594				

Violation ID:	9403914	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9403915	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/90	Vio. end Date:	12/31/93	Vio. Period:	048 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	GROSS ALPHA, EXCL. RADON & U				
Vio. Awareness Date:	060194				

Violation ID:	9403916	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9403917	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9403918	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9403919	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9403920	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9403921	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9403922	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9403923	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9403924	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9403925	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9403926	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9403927	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9403928	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9403929	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9403930	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9403931	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9403932	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9412675	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412675	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412675	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing

System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued

ENFORCEMENT INFORMATION:

System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing
System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received
System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested
System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	95E0003
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued
System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested
System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	95E0005
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	9416473
Enforcement Date:	1994-08-29	Enf. Action:	State Formal NOV Issued
System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9414427	Enforcement ID:	9416474
Enforcement Date:	1994-08-29	Enf. Action:	State Public Notif Requested
System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 1994-06-30	Analytical Value:	00000000.00
Violation ID:	9414427	Enforcement ID:	9416473
Enforcement Date:	1994-08-29	Enf. Action:	State Formal NOV Issued

ENFORCEMENT INFORMATION:

System Name:	SHOOK SPRINGS WTR SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 1994-06-30	Analytical Value:	00000000.00
Violation ID:	9414427	Enforcement ID:	9416474
Enforcement Date:	1994-08-29	Enf. Action:	State Public Notif Requested

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E20
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0160244**

PWS ID:	NC0160244	PWS Status:	Active
Date Initiated:	8807	Date Deactivated:	Not Reported
PWS Name:	BRANTLEY OAKS S/D CHARLOTTE, NC 28673		

Addressee / Facility: System Owner/Responsible Party
T CARROLL WEBER OR MANAGER NOW
PO BOX 127
SHERRILLS FORD, NC 28673

Addressee / Facility: System Owner/Responsible Party
MID-SOUTH WATER SYSTEMS
PO BOX 127
SHERRILLS FORD, NC 28673

Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	CHARLOTTE		
Treatment Class:	Treated	Population:	00000393

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9407181	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/90	Vio. end Date:	06/30/94	Vio. Period:	048 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	GROSS ALPHA, EXCL. RADON & U				
Vio. Awareness Date:	071594				

Violation ID:	9413094	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

ENFORCEMENT INFORMATION:

System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued
System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing
System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	94E0004
Enforcement Date:	1995-07-06	Enf. Action:	Fed Compliance Achieved
System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received
System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued
System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested
System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	BRANTLEY OAKS S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413094	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested

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E21
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0136116**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

PWS ID:	NC0136116	PWS Status:	Active
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	CHARLESTON PARK GASTONIA, NC 28673		

Addressee / Facility: System Owner/Responsible Party
CARROLL WEBER OR MGR
PO BOX 127
SHERRILLS FORD, NC 28673

Addressee / Facility: System Owner/Responsible Party
MID-SOUTH WATER SYSTEMS INC
PO BOX 127
SHERRILLS FORD, NC 28673

Facility Latitude:	35 37 13	Facility Longitude:	080 59 12
City Served:	GASTONIA		
Treatment Class:	Untreated	Population:	00000288

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9405143	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9405144	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9405145	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405146	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405147	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405148	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9405149	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9405150	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9405151	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9405152	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9405153	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9405154	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405155	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9405156	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9405157	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9405158	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9405159	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9405160	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9412811	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested

System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued

System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing

System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	94E0004
Enforcement Date:	1995-07-06	Enf. Action:	Fed Compliance Achieved

ENFORCEMENT INFORMATION:

System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received
System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued
System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	95E0003
Enforcement Date:	1994-12-20	Enf. Action:	Fed Public Notif Requested
System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	95E0004
Enforcement Date:	1994-12-20	Enf. Action:	Fed FAO Issued
System Name:	CHARLESTON PARK		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9412811	Enforcement ID:	95E0005
Enforcement Date:	1994-10-26	Enf. Action:	Fed Public Notif Requested

---

E22
NNW
1 - 2 Miles
Higher

FRDS PWS **NC0160187**

PWS ID:	NC0160187	PWS Status:	Active
Date Initiated:	8409	Date Deactivated:	Not Reported
PWS Name:	SOUTH HALL S/D CHARLOTTE, NC 28673		
Addressee / Facility:	System Owner/Responsible Party T CARROLL WEBER OR MANAGER NOW PO BOX 127 SHERRILLS FORD, NC 28673		
Addressee / Facility:	System Owner/Responsible Party MID-SOUTH WATER SYSTEMS, INC PO BOX 127 SHERRILLS FORD, NC 28673		
Facility Latitude:	Not Reported	Facility Longitude:	Not Reported
City Served:	CHARLOTTE		
Treatment Class:	Treated	Population:	00000148

PWS currently has or had major violation(s) or enforcement: Yes

VIOLATIONS INFORMATION:

Violation ID:	9401344	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	10/01/93	Vio. end Date:	12/31/93	Vio. Period:	003 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	TTHM				
Vio. Awareness Date:	020994				

Violation ID:	9406981	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	PH				
Vio. Awareness Date:	060194				

Violation ID:	9406980	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	THALLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9406979	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BERYLLIUM, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9406978	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ANTIMONY, TOTAL				
Vio. Awareness Date:	060194				

Violation ID:	9406977	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SULFATE				
Vio. Awareness Date:	060194				

Violation ID:	9406976	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SODIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406975	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	SELENIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406974	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NICKEL				
Vio. Awareness Date:	060194				

Violation ID:	9406973	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MERCURY				
Vio. Awareness Date:	060194				

Violation ID:	9406972	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	MANGANESE				
Vio. Awareness Date:	060194				

Violation ID:	9406971	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	IRON				
Vio. Awareness Date:	060194				

Violation ID:	9406970	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	FLUORIDE				
Vio. Awareness Date:	060194				

Violation ID:	9406969	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CYANIDE				
Vio. Awareness Date:	060194				

Violation ID:	9406968	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CHROMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406967	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	CADMIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406966	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	BARIUM				
Vio. Awareness Date:	060194				

Violation ID:	9406965	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/91	Vio. end Date:	12/31/93	Vio. Period:	036 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	ARSENIC				
Vio. Awareness Date:	060194				

Violation ID:	9406964	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	01/01/93	Vio. end Date:	12/31/93	Vio. Period:	012 Months
Num required Samples:	000	Number of Samples Taken:		000	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Monitoring, Regular				
Contaminant:	NITRATE				
Vio. Awareness Date:	060194				

Violation ID:	9413078	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/01/93	Vio. end Date:	12/31/93	Vio. Period:	006 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	Initial Tap Sampling for Pb and Cu				
Contaminant:	LEAD & COPPER RULE				
Vio. Awareness Date:	Not Reported				

ENFORCEMENT INFORMATION:

System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	94E0001
Enforcement Date:	1994-07-25	Enf. Action:	Fed Public Notif Requested
System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	94E0002
Enforcement Date:	1994-07-25	Enf. Action:	Fed Formal NOV Issued
System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	94E0003
Enforcement Date:	1994-08-25	Enf. Action:	Fed Show-cause Hearing
System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	94E0004
Enforcement Date:	1995-01-04	Enf. Action:	Fed Compliance Achieved
System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	95E0001
Enforcement Date:	1994-10-31	Enf. Action:	Fed Public Notif Received
System Name:	SOUTH HALL S/D		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9413078	Enforcement ID:	95E0002
Enforcement Date:	1994-10-26	Enf. Action:	Fed PAO Issued

6

The EDR Radius Map™ Report

Duke Power Marshall Steam Station
Scrubber Waste Landfill Site
Terrell, NC 28682

Inquiry Number: 0961975.1s

June 25, 2003

Environmental Data Resources, Inc.

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06890

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM-HOW

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Detail Map	3
Map Findings Summary	4
Map Findings	6
Orphan Summary	22
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

SCRUBBER WASTE LANDFILL SITE
TERRELL, NC 28682

COORDINATES

Latitude (North):	35.604100 - 35˚ 36' 14.8"
Longitude (West):	80.977700 - 80˚ 58' 39.7"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	502019.9
UTM Y (Meters):	3939839.8
Elevation:	874 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	2435080-E8 LAKE NORMAN NORTH, NC
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 6 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
DUKE ENERGY MARSHALL STEAM STATION 8320 E. NC HWY. 150 TERRELL, NC 28682	FINDS	110000351397
DUKE POWER/MARSHALL STEAM PLT NC 150 MOORESVILLE, NC	SWF/LF	N/A
DUKE ENERGY MARSHALL STEAM STATION 8320 E. NC HWY. 150 TERRELL, NC 28682	TRIS	28682DKNRG83
DUKE POWER (MARSHALL STEAM STATION) 8320 EAST NC 150 HIGHWAY TERRELL, NC 28682	AST	N/A
MARSHALL STEAM STATION HWY 150 TERRELL, NC 28682	UST	N/A
DUKE POWER (BELEWS CREEK STEAM STATION) PO BOX 557 WALNUT COVE, NC 27052	AST	N/A
DUKE POWER-MARSHALL STEAM HWY 150 TERRELL, NC 28682	RCRIS-SQG FINDS	NCD043678879

EXECUTIVE SUMMARY

DUKE POWER- MARSHALL STEAM STATION
HWY 150
TERRELL, NC

IMD N/A
LUST

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned
CORRACTS..... Corrective Action Report
RCRIS-TSD..... Resource Conservation and Recovery Information System
RCRIS-LQG..... Resource Conservation and Recovery Information System
ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

SHWS..... Inactive Hazardous Sites Inventory
OLI..... Old Landfill Inventory
INDIAN UST..... Underground Storage Tanks on Indian Land
VCP..... Responsible Party Voluntary Action Sites

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
RAATS..... RCRA Administrative Action Tracking System
TSCA..... Toxic Substances Control Act
SSTS..... Section 7 Tracking Systems
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

NC HSDS..... Hazardous Substance Disposal Site

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas..... Former Manufactured Gas (Coal Gas) Sites

EXECUTIVE SUMMARY

BROWNFIELDS DATABASES

Brownfields..... Brownfields Projects Inventory
VCP..... Responsible Party Voluntary Action Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STATE ASTM STANDARD

LUST: The Leaking Underground Storage Tank Incidents Management Database contains an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environment, & Natural Resources' Incidents by Address.

A review of the LUST list, as provided by EDR, and dated 03/07/2003 has revealed that there is 1 LUST site within approximately 2.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
TERRELL SHELL	***HWY 150***	***1 - 2 S***	***11***	***16***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environment & Natural Resources' Petroleum Underground Storage Tank Database.

A review of the UST list, as provided by EDR, and dated 11/08/2002 has revealed that there are 2 UST sites within approximately 2.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
SHERRILLS FORD ELEMENTARY SCH	8103 SHERRILLS FORD ROA	1/2 - 1 NW	10	14

Lower Elevation	Address	Dist / Dir	Map ID	Page
TERRELL SHELL	***HWY 150***	***1 - 2 S***	***11***	***16***

EXECUTIVE SUMMARY

FEDERAL ASTM SUPPLEMENTAL

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 03/19/2003 has revealed that there are 2 FINDS sites within approximately 2.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
TIMBER CREEK WOOD PRODUCTS	3085 STEAM PLANT ROAD	0 - 1/8 N	9	14

Lower Elevation	Address	Dist / Dir	Map ID	Page
TERRELL COUNTRY STORE WATER SY	9247 SHERRILLS FORD RD	1 - 2 SSE	12	21

STATE OR LOCAL ASTM SUPPLEMENTAL

LUST TRUST: This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

A review of the LUST TRUST list, as provided by EDR, and dated 05/09/2003 has revealed that there is 1 LUST TRUST site within approximately 2.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
TERRELL SHELL	*HWY 150*	*1 - 2 S*	*11*	*16*

IMD: Incident Management Database.

A review of the IMD list, as provided by EDR, and dated 04/24/2003 has revealed that there is 1 IMD site within approximately 2.25 miles of the target property.

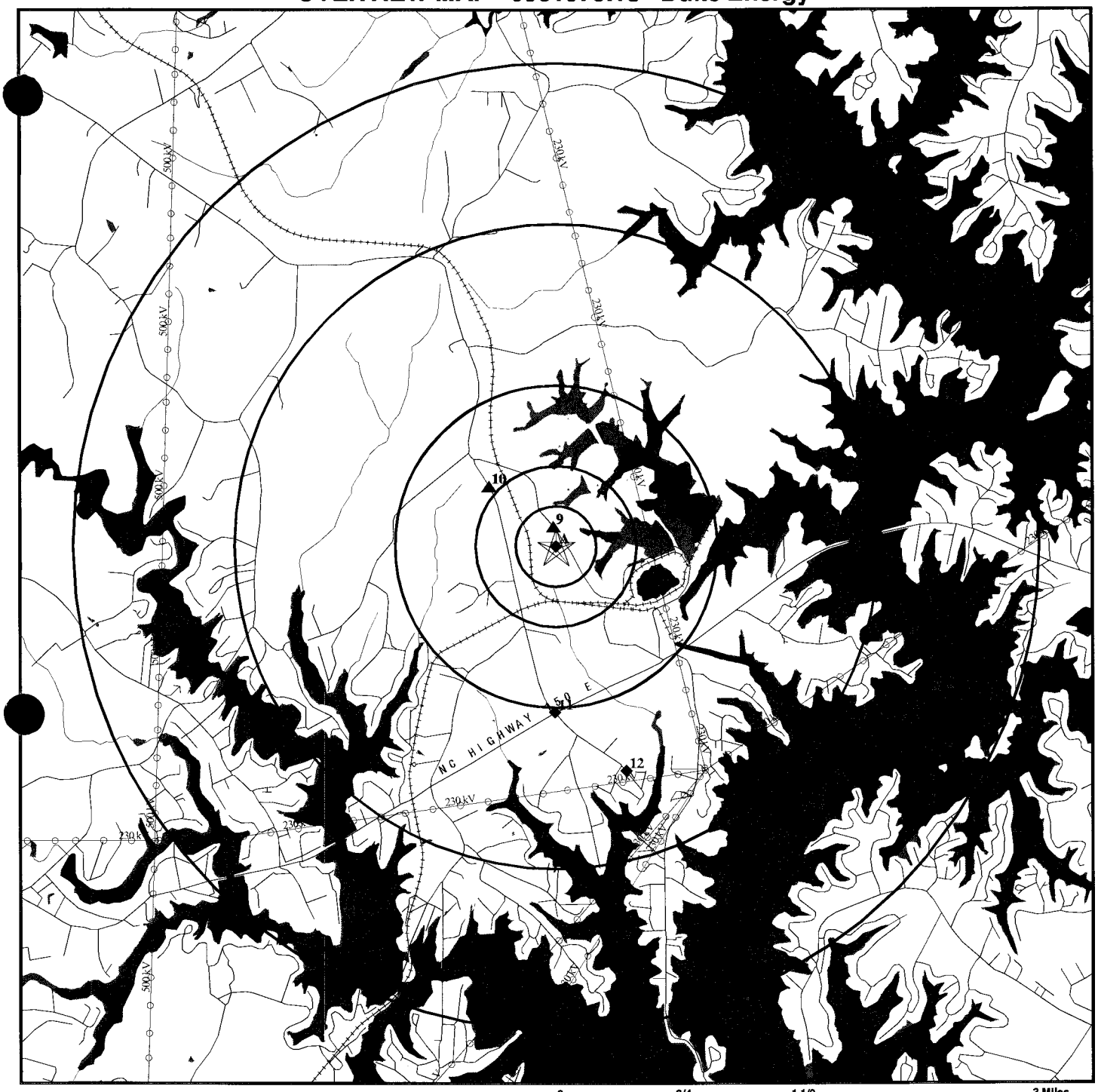
Lower Elevation	Address	Dist / Dir	Map ID	Page
TERRELL SHELL	*HWY 150*	*1 - 2 S*	*11*	*16*

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
THE GENERAL STORE OF DENVER I	IMD, LUST, UST, LUST TRUST
HARBOR LIGHTS MARKET	IMD, LUST
MIDWAY MARINA	IMD, LUST, LUST TRUST
RUN-IN HIGHWAY 21 (HILLTOP 66	UST
MRS. R.E. BUMGARDNER	UST
LAKESIDE TEXACO	UST
PRODELIN PLASTIC MOLDING	UST
DON'S PLACE	UST
HARBOR LIGHTS	UST
TERRELL'S BAIT SHOP	UST
MIDWAY MARINA	UST
SHARP MOTOR LINES	RCRIS-SQG, FINDS
RIDGEWAY CHEMICALS	RCRIS-SQG, FINDS
MARSHALL STEAM STATION US HWY 150	ERNS
MARSHALL STEAM STATION	ERNS
BACHS MHP SITE	IMD
GRYDER /MITCHELL RESIDENCE	IMD

OVERVIEW MAP - 0961975.1s - Duke Energy



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- County Boundary
- Power transmission lines
- Oil & Gas pipelines
- Federal Wetlands
- Hazardous Substance Disposal Sites

0 3/4 1 1/2 3 Miles

TARGET PROPERTY:	Duke Power Marshall Steam Station	CUSTOMER:	Duke Energy
ADDRESS:	Scrubber Waste Landfill Site	CONTACT:	Bill Miller
CITY/STATE/ZIP:	Terrell NC 28682	INQUIRY #:	0961975.1s
LAT/LONG:	35.6041 / 80.9777	DATE:	June 25, 2003 6:53 pm

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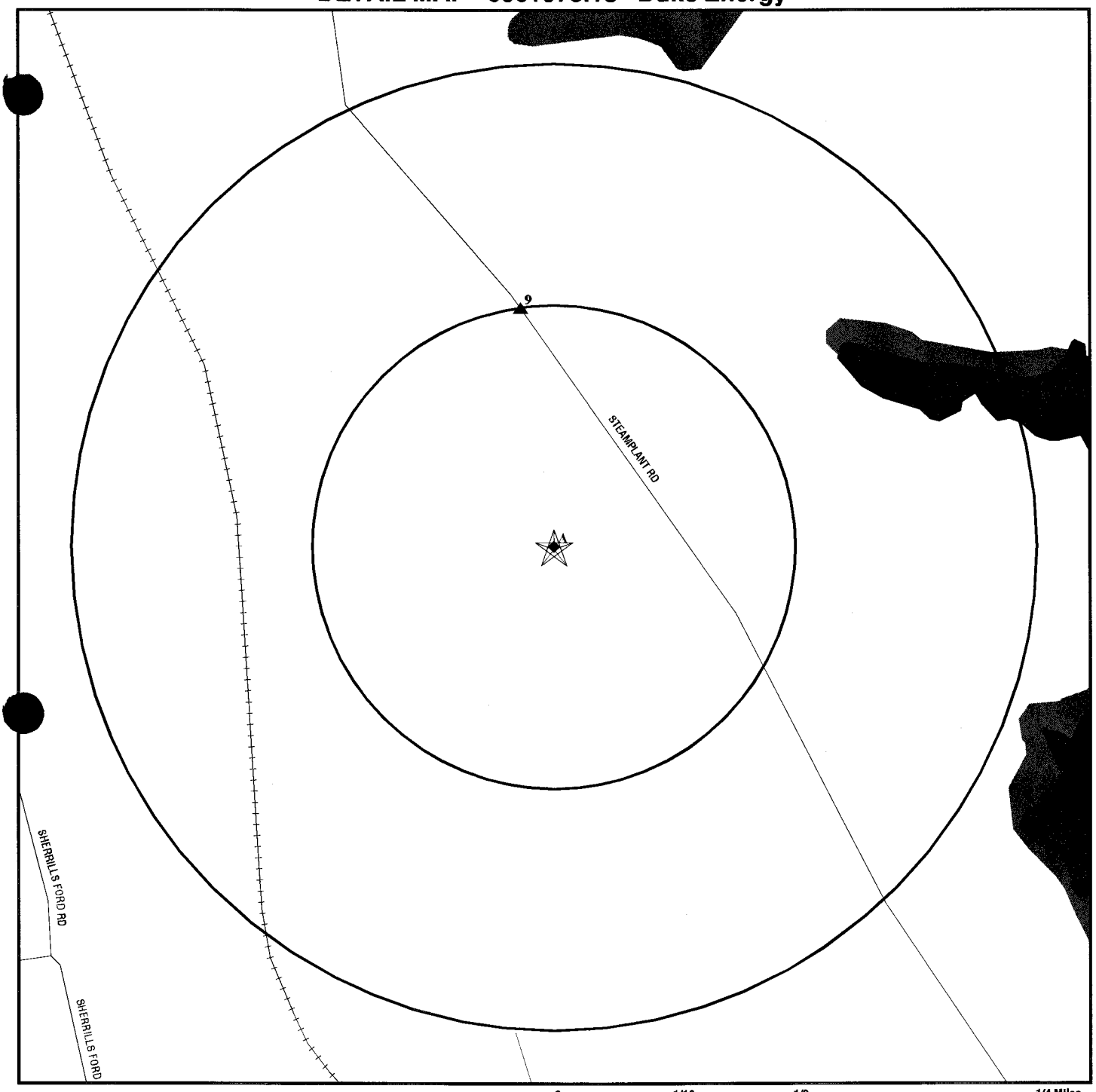
DETAIL MAP - 0961975.1s - Duke Energy



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

Coal Gasification Sites

Sensitive Receptors

National Priority List Sites

Landfill Sites

0 1/16 1/8 1/4 Miles

County Boundary

Oil & Gas pipelines

Federal Wetlands

Hazardous Substance Disposal Sites

TARGET PROPERTY:	Duke Power Marshall Steam Station	CUSTOMER:	Duke Energy
ADDRESS:	Scrubber Waste Landfill Site	CONTACT:	Bill Miller
CITY/STATE/ZIP:	Terrell NC 28682	INQUIRY #:	0961975.1s
LAT/LONG:	35.6041 / 80.9777	DATE:	June 25, 2003 6:53 pm

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD								
NPL		2.250	0	0	0	0	0	0
Proposed NPL		2.250	0	0	0	0	0	0
CERCLIS		2.250	0	0	0	0	0	0
CERC-NFRAP		2.250	0	0	0	0	0	0
CORRACTS		2.250	0	0	0	0	0	0
RCRIS-TSD		2.250	0	0	0	0	0	0
RCRIS Lg. Quan. Gen.		2.250	0	0	0	0	0	0
RCRIS Sm. Quan. Gen.	X	2.250	0	0	0	0	0	0
ERNS		2.250	0	0	0	0	0	0
STATE ASTM STANDARD								
State Haz. Waste		2.250	0	0	0	0	0	0
State Landfill	X	2.250	0	0	0	0	0	0
LUST	X	2.250	0	0	0	0	1	1
UST	X	2.250	0	0	0	1	1	2
OLI		2.250	0	0	0	0	0	0
INDIAN UST		2.250	0	0	0	0	0	0
VCP		2.250	0	0	0	0	0	0
FEDERAL ASTM SUPPLEMENTAL								
CONSENT		2.250	0	0	0	0	0	0
ROD		2.250	0	0	0	0	0	0
Delisted NPL		2.250	0	0	0	0	0	0
FINDS	X	2.250	1	0	0	0	1	2
HMIRS		2.250	0	0	0	0	0	0
MLTS		2.250	0	0	0	0	0	0
MINES		2.250	0	0	0	0	0	0
NPL Liens		2.250	0	0	0	0	0	0
PADS		2.250	0	0	0	0	0	0
RAATS		2.250	0	0	0	0	0	0
TRIS	X	2.250	0	0	0	0	0	0
TSCA		2.250	0	0	0	0	0	0
SSTS		2.250	0	0	0	0	0	0
FTTS		2.250	0	0	0	0	0	0
STATE OR LOCAL ASTM SUPPLEMENTAL								
NC HSDS		2.250	0	0	0	0	0	0
AST	X	2.250	0	0	0	0	0	0
LUST TRUST		2.250	0	0	0	0	1	1
IMD	X	2.250	0	0	0	0	1	1
EDR PROPRIETARY HISTORICAL DATABASES								
Coal Gas		2.250	0	0	0	0	0	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
BROWNFIELDS DATABASES								
Brownfields		2.250	0	0	0	0	0	0
VCP		2.250	0	0	0	0	0	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

A1 Target Property — **DUKE ENERGY MARSHALL STEAM STATION**
8320 E. NC HWY. 150
TERRELL, NC 28682

FINDS — **1006462436**
110000351397

Site 1 of 8 in cluster A

Actual: 871 ft.

A2 Target Property — **DUKE POWER/MARSHALL STEAM PLT**
NC 150
MOORESVILLE, NC

SWF/LF — **S103240135**
N/A

Site 2 of 8 in cluster A

Actual: 871 ft.

LF:

Facility Id:	P0027
Facility Telephone:	(704) 478-2121
Facility Fax:	(704) 382-8667
Contact:	DONNA BURRELL
Engineer:	Not reported
Waste Mgmt Specialist:	Teresa Bradford
Contact Address:	8320 E. NC 150 HIGHWAY TERRELL, NC 28682
Public/Private:	PRIVATE
Facility Status:	OPEN
Lined:	False
Facility Type 1:	Industrail Solid Waste

A3 Target Property — **DUKE ENERGY MARSHALL STEAM STATION**
8320 E. NC HWY. 150
TERRELL, NC 28682

TRIS — **1005453183**
28682DKNRG83

Site 3 of 8 in cluster A

Actual: 871 ft.

A4 Target Property — **DUKE POWER (MARSHALL STEAM STATION)**
8320 EAST NC 150 HIGHWAY
TERRELL, NC 28682

AST — **A100186754**
N/A

Site 4 of 8 in cluster A

Actual: 871 ft.

DUKE POWER (MARSHALL STEAM STATION) (Continued) **A100186754**

AST:

Facility Id:	18014
Registration Number:	184020014
Dt Application Received:	11-24-99
Facility Phone:	(828) 478-2121

A5 Target Property **MARSHALL STEAM STATION** **UST** **U003563393**
HWY 150 **N/A**
TERRELL, NC 28682

Site 5 of 8 in cluster A

Actual: 871 ft.

UST:

Facility ID:	0-033150
Telephone:	(704) 373-7894
Owner name :	DUKE POWER COMPANY ATTN:J CARTER
Owner Address:	PO BOX 1006 MAIL CODE EC12Y
	CHARLOTTE, NC 28201
Owner Phone :	(704) 373-4389
Tank capacity :	25000
Comment :	FILLED W/INERT MAT
Tank product :	Heating Oil/ Fuel
Tank material :	Steel
Interior Protection:	None
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	01/01/1964
Date removed:	12/31/1991
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	HEA
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported

MARSHALL STEAM STATION (Continued) **U003563393**

Begin Certified Number:	Not reported
End Certified Number:	Not reported

Facility ID:	0-033150
Telephone:	(704) 373-7894
Owner name :	DUKE POWER COMPANY ATTN:J CARTER
Owner Address:	PO BOX 1006 MAIL CODE EC12Y
	CHARLOTTE, NC 28201
Owner Phone :	(704) 373-4389
Tank capacity :	40000
Comment :	FILLED W/INERT MAT
Tank product :	Heating Oil/ Fuel
Tank material :	Steel
Interior Protection:	Unknown
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	01/01/1969
Date removed:	12/31/1991
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	HEA
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	19911231

Facility ID:	0-033150
Telephone:	(704) 373-7894
Owner name :	DUKE POWER COMPANY ATTN:J CARTER
Owner Address:	PO BOX 1006 MAIL CODE EC12Y
	CHARLOTTE, NC 28201

MARSHALL STEAM STATION (Continued) **U003563393**

Owner Phone :	(704) 373-4389
Tank capacity :	40000
Comment :	FILLED W/INERT MAT
Tank product :	Heating Oil/ Fuel
Tank material :	Steel
Interior Protection:	Unknown
Exterior Protection:	Unknown
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	01/01/1968
Date removed:	12/31/1991
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	HEA
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

Facility ID:	0-033150
Telephone:	(704) 373-7894
Owner name :	DUKE POWER COMPANY ATTN:J CARTER
Owner Address:	PO BOX 1006 MAIL CODE EC12Y
	CHARLOTTE, NC 28201
Owner Phone :	(704) 373-4389
Tank capacity :	550
Comment :	FILLED W/INERT MAT
Tank product :	Gasoline, Gasoline Mixture
Tank material :	Steel
Interior Protection:	Unknown
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported

MARSHALL STEAM STATION (Continued) **U003563393**

Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	01/01/1965
Date removed:	12/31/1988
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	NON
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

Facility ID:	0-033150
Telephone:	(704) 373-7894
Owner name :	DUKE POWER COMPANY ATTN:J CARTER
Owner Address:	PO BOX 1006 MAIL CODE EC12Y
	CHARLOTTE, NC 28201
Owner Phone :	(704) 373-4389
Tank capacity :	550
Comment :	FILLED W/INERT MAT
Tank product :	Other, Petroleum
Tank material :	Steel
Interior Protection:	Unknown
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported

MARSHALL STEAM STATION (Continued) **U003563393**

Date installed:	01/01/1966
Date removed:	12/31/1988
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	NON
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

Facility ID:	0-033150
Telephone:	(704) 373-7894
Owner name :	DUKE POWER COMPANY ATTN:J CARTER
Owner Address:	PO BOX 1006 MAIL CODE EC12Y
	CHARLOTTE, NC 28201
Owner Phone :	(704) 373-4389
Tank capacity :	10000
Comment :	FILLED W/INERT MAT
Tank product :	Gasoline, Gasoline Mixture
Tank material :	Steel
Interior Protection:	Unknown
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	01/01/1980
Date removed:	12/31/1988
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	NON
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported

MARSHALL STEAM STATION (Continued) **U003563393**

Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

A6 Target Property — **DUKE POWER (BELEWS CREEK STEAM STATION)** — **AST** — **A100187968**, **N/A**
PO BOX 557
WALNUT COVE, NC 27052

Site 6 of 8 in cluster A

Actual: 871 ft.

AST:

Facility Id:	85006
Registration Number:	854020006
Dt Application Received:	11-24-99
Facility Phone:	(336) 427-0274

A7 Target Property — **DUKE POWER-MARSHALL STEAM** — **RCRIS-SQG, FINDS** — **1000198045**, **NCD043678879**
HWY 150
TERRELL, NC 28682

Site 7 of 8 in cluster A

Actual: 871 ft.

RCRIS:

Owner:	DUKE POWER CO (704) 875-5961
EPA ID:	NCD043678879
Contact:	DONNA BURRELL (704) 478-2121
Classification:	Conditionally Exempt Small Quantity Generator
Used Oil Recyc:	Yes
TSDF Activities:	Not reported
Violation Status:	No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
- AIRS Facility System (AIRS/AFS)
- CAMDBS
- Facility Registry System (FRS)
- ICIS
- National Emissions Trends (NET)
- National Toxics Inventory (NTI)
- Permit Compliance System (PCS)
- Resource Conservation and Recovery Act Information system (RCRAINFO)
- Toxic Chemical Release Inventory System (TRIS)

DUKE POWER-MARSHALL STEAM (Continued) **1000198045**

A8 Target Property **DUKE POWER- MARSHALL STEAM STATION**
HWY 150
TERRELL, NC

IMD S101572484
LUST N/A

Site 8 of 8 in cluster A

Actual: 871 ft.

LUST:

Incident Number:	8601		
Date Occurred:	04/19/88	Submit Date:	07/23/92
Incident Desc:	UST LEAK		
Owner:	RALPH ROBERTS		
Ownership:	Private	Location:	Facility
Site Priority:	Not reported		
Wells Affected:	Not reported	Num Affected:	0
7.5 Min Quad:	Not reported	5 Min Quad:	M67h
Lat/Long:	353548 / 805758		
Release Code:	0	Source Type:	Not reported
Facility ID:	Not reported	GPS Confirmed:	Not reported
Source:	Leak-underground	Samples Include:	Not reported
Last Modified:	07/30/92		
Incident Phase:	Closed Out		
NOV Issued:	/ /	NORR Issued:	Not reported
45 Day Report:	Not reported	SOC Sighned:	Not reported
Public Meeting Held:	Not reported		
Close-out Report:	7/23/92	RS Designation:	Not reported
Corrective Action Planned:	Not reported		
Reclassification Report:	Not reported		
Closure Request Date:	Not reported		

IMD:

Incident Number:	8601
Region:	MOR
Date Occurred:	04/19/1988
Submit Date:	07/23/1992
GW Contam:	Not reported
Soil Contam:	Not reported
Operator:	RALPH ROBERTS PO BOX 33189 CHARLOTTE, NC 28242 MECKL County
Contact Phone:	Not reported
Priority Code:	Not reported
Priority Update:	Not reported
Site Priority:	Not reported
Dem Contact:	MARK NORRIS
Wells Affected:	Not reported
Num Affected:	Not reported
Sampled By:	Samples Include:
7.5 Min Quad:	Not reported
5 Min Quad:	Not reported
Incident Desc:	UST LEAK
Ownership:	Private
Operation:	Industrial
Material:	HEATING OIL
Qty Lost:	Not reported
Qty Recovered:	Not reported
Source:	Leak-underground
Type:	Heating Oil

DUKE POWER- MARSHALL STEAM STATION (Continued) **S101572484**

Location:	Facility		
Setting:	Rural		
Wells Contam:	Not reported		
Sampled By:	Not reported		
Samples Include:	Not reported		
Owner Company:	DUKE POWER		
Lat/Long:	Not reported		
Risk Site	Not reported		
Lat/Long Decimal:	0 / 0		
GPS:	NOD	Agency :	DWM
Last Modified:	7/30/92	Incident Phase:	CO
NOV Issued:	Not reported	NORR Issued:	Not reported

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9 North < 1/8 659 ft. **TIMBER CREEK WOOD PRODUCTS** **FINDS** **1004548139**
3085 STEAM PLANT ROAD **110001494339**
SHERRILLS FORD, NC 28673

Relative: Higher

Actual: 889 ft.

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
Facility Registry System (FRS)

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10 NW 1/2-1 2954 ft. **SHERRILLS FORD ELEMENTARY SCH** **UST** **U001204555**
8103 SHERRILLS FORD ROAD **N/A**
SHERRILLS FORD, NC 28673

Relative: Higher

Actual: 914 ft.

UST:

Facility ID:	0-029165
Telephone:	(704) 464-3562
Owner name :	CATAWBA CO BOARD OF EDUCATION
Owner Address:	PO BOX 1000
	NEWTON, NC 28658
Owner Phone :	(828) 464-3562
Tank capacity :	10000
Comment :	Not reported
Tank product :	Heating Oil/ Fuel
Tank material :	Fiberglass Reinforced Plastic
Interior Protection:	FRP
Exterior Protection:	FRP
Piping material :	Copper
Certify Type :	Installer certified or licensed by NCDEM
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	04/04/1993
Date removed:	Not reported
Status:	Currently In Use
Compartment Tank :	No
Main Tank :	No

SHERRILLS FORD ELEMENTARY SCH (Continued) **U001204555**

Product Type:	HEA	
Piping System Type Code:		Not reported
Piping System Type Description:		Not reported
Corrosion Protection Tank1:		Not reported
Corrosion Protection Tank Date:		Not reported
Corrosion Piping:		Not reported
Corrosion Protection Piping Date:		Not reported
Overfill:		Not reported
Spill Overfill Date:		Not reported
Financial Responsibility Code:		Not reported
Financial Responsibility Description:		Not reported
Surface Water:		80.98893
Water Supply Well:		80 59 20.14
Tank Last Used Date:		Y
Tank Certified Number:		SJG
Date Last Certified:		Not reported
Begin Certified Number:		Not reported
End Certified Number:		Not reported

Facility ID:	0-029165
Telephone:	(704) 464-3562
Owner name :	CATAWBA CO BOARD OF EDUCATION
Owner Address:	PO BOX 1000
	NEWTON, NC 28658
Owner Phone :	(828) 464-3562
Tank capacity :	10000
Comment :	Not reported
Tank product :	Heating Oil/ Fuel
Tank material :	Unknown
Interior Protection:	Unknown
Exterior Protection:	Unknown
Piping material :	Unknown
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	01/01/1964
Date removed:	07/18/1993
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	HEA
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported

SHERRILLS FORD ELEMENTARY SCH (Continued) **U001204555**

Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	80.98893
Water Supply Well:	80 59 20.14
Tank Last Used Date:	Y
Tank Certified Number:	SJG
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

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11 South > 1 5432 ft. **TERRELL SHELL**
HWY 150
TERRELL, NC 28682

IMD U003562579
LUST N/A
UST
LUST TRUST

Relative: Lower

Actual: 861 ft.

LUST:

Incident Number:	15677		
Date Occurred:	11/01/95	Submit Date:	06/21/96
Incident Desc:	UPON REMOVAL OF 5 USTS, TPH LEVELS OF 956 PPM WERE DISCOVERED.		
Owner:	ACME OF SOUTH CAROLINA		
Ownership:	Private	Location:	Facility
Site Priority:	145B		
Wells Affected:	No	Num Affected:	0
7.5 Min Quad:	Not reported	5 Min Quad:	M67X
Lat/Long:	35'35'20 / 80'59'10		
Release Code:	0	Source Type:	Not reported
Facility ID:	0-014327	GPS Confirmed:	Not reported
Source:	Leak-underground	Samples Include:	Soil Samples
Last Modified:	02/15/02		
Incident Phase:	Follow Up		
NOV Issued:	06/03/02	NORR Issued:	Not reported
45 Day Report:	Not reported	SOC Sighned:	Not reported
Public Meeting Held:	Not reported		
Close-out Report:	Not reported	RS Designation:	Not reported
Corrective Action Planned:	Not reported		
Reclassification Report:	Not reported		
Closure Request Date:	Not reported		

LUST TRUST:

Facility ID :	0-014327
Site ID :	15677.00000
Site Note:	Not reported
Site Eligible?:	True
Commercial Find :	1.00000
Priority Rank:	High
3rd Party Deductable Amount:	100000.00000
Sum of 3rd Party Amounts Applied:	0.00000
Deductable Amount:	20000.00000

The NC LUST TRUST database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

IMD:

Incident Number:	15677
Region:	MOR
Date Occurred:	11/01/1995
Submit Date:	06/21/1996
GW Contam:	Not reported
Soil Contam:	Yes
Operator:	ACME OF SOUTH CAROLINA

TERRELL SHELL (Continued) **U003562579**

543 COX ROAD
GASTONIA, NC 28054
GASTO County

Contact Phone:	Not reported
Priority Code:	H
Priority Update:	5/15/98
Site Priority:	145B
Dem Contact:	Not reported
Wells Affected:	No
Num Affected:	Not reported
Sampled By:	Samples Include:
7.5 Min Quad:	Not reported
5 Min Quad:	Not reported
Incident Desc:	UPON REMOVAL OF 5 USTS, TPH LEVELS OF 956 PPM WERE DISCOVERED.
Ownership:	Private
Operation:	Commercial
Material:	GASOLINE
Qty Lost:	Not reported
Qty Recovered:	Not reported
Material:	KEROSENE
Qty Lost:	Not reported
Qty Recovered:	Not reported
Source:	Leak-underground
Type:	Gasoline/diesel
Location:	Facility
Setting:	Residential
Wells Contam:	Not reported
Sampled By:	Responsible Parties
Samples Include:	Soil Samples
Owner Company:	Not reported
Lat/Long:	Not reported
Risk Site	Yes
Lat/Long Decimal:	0 / 0
GPS:	NOD
Last Modified:	2/15/02
NOV Issued:	6/3/02
Agency :	DWM
Incident Phase:	FU
NORR Issued:	Not reported

UST:

Facility ID:	0-014327
Telephone:	(704) 867-7281
Owner name :	ACME PETROLEUM & FUEL COMPANY
Owner Address:	PO BOX 2359 543 COX ROAD
	GASTONIA, NC 28053
Owner Phone :	(704) 867-2336
Tank capacity :	3000
Comment :	Not reported
Tank product :	Gasoline, Gasoline Mixture
Tank material :	Steel
Interior Protection:	None
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported

TERRELL SHELL (Continued) **U003562579**

Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	05/04/1971
Date removed:	10/01/1995
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	NON
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

Facility ID:	0-014327
Telephone:	(704) 867-7281
Owner name :	ACME PETROLEUM & FUEL COMPANY
Owner Address:	PO BOX 2359 543 COX ROAD
	GASTONIA, NC 28053
Owner Phone :	(704) 867-2336
Tank capacity :	2000
Comment :	Not reported
Tank product :	Gasoline, Gasoline Mixture
Tank material :	Steel
Interior Protection:	None
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	05/05/1966
Date removed:	10/01/1995
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No

TERRELL SHELL (Continued) **U003562579**

Product Type:	NON
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

Facility ID:	0-014327
Telephone:	(704) 867-7281
Owner name :	ACME PETROLEUM & FUEL COMPANY
Owner Address:	PO BOX 2359 543 COX ROAD
	GASTONIA, NC 28053
Owner Phone :	(704) 867-2336
Tank capacity :	2000
Comment :	Not reported
Tank product :	Gasoline, Gasoline Mixture
Tank material :	Steel
Interior Protection:	None
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	05/05/1966
Date removed:	10/01/1995
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	NON
Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported

TERRELL SHELL (Continued) **U003562579**

Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

Facility ID:	0-014327
Telephone:	(704) 867-7281
Owner name :	ACME PETROLEUM & FUEL COMPANY
Owner Address:	PO BOX 2359 543 COX ROAD
	GASTONIA, NC 28053
Owner Phone :	(704) 867-2336
Tank capacity :	1000
Comment :	Not reported
Tank product :	Gasoline, Gasoline Mixture
Tank material :	Steel
Interior Protection:	None
Exterior Protection:	Paint
Piping material :	Steel
Certify Type :	Not reported
Leak Detection Type :	Not reported
Leak Detection Type 2:	Not reported
Leak Detection Piping 1:	Not reported
Corrosn Protec Tank:	Not reported
Corrosn Protec Pipe:	Not reported
Spill and Overfill :	Not reported
Financial Responsiblity :	Not reported
Region:	03
Tank ID:	Not reported
Date installed:	05/05/1966
Date removed:	10/01/1995
Status:	Permanent Closed
Compartment Tank :	No
Main Tank :	No
Product Type:	NON

Piping System Type Code:	Not reported
Piping System Type Description:	Not reported
Corrosion Protection Tank1:	Not reported
Corrosion Protection Tank Date:	Not reported
Corrosion Piping:	Not reported
Corrosion Protection Piping Date:	Not reported
Overfill:	Not reported
Spill Overfill Date:	Not reported
Financial Responsibility Code:	Not reported
Financial Responsibility Description:	Not reported
Surface Water:	.00000
Water Supply Well:	Not reported
Tank Last Used Date:	N
Tank Certified Number:	Not reported
Date Last Certified:	Not reported
Begin Certified Number:	Not reported
End Certified Number:	Not reported

TERRELL SHELL (Continued) **U003562579**

12
SSE
> 1
7698 ft.

TERRELL COUNTRY STORE WATER SYS
9247 SHERRILLS FORD RD
TERRELL, NC 28682

FINDS **1005656918**
110010709073

Relative:
Lower

Actual:
812 ft.

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
ICIS

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
DENVER	U001187597	THE GENERAL STORE OF DENVER I	6360 EAST NC HWY 150	28673	IMD, LUST, UST, LUST TRUST
HILDEBRAN	1004745042	SHARP MOTOR LINES	HWY 64-70 W	28673	RCRIS-SQG, FINDS
MOORESVILLE	U003295289	RUN-IN HIGHWAY 21 (HILLTOP 66	ROUTE 2, BOX 826	28117	UST
MOORESVILLE	U001436126	MRS. R.E. BUMGARDNER	ROUTE 4, BOX 580	28117	UST
SHERRILLS FD.	U003134541	LAKESIDE TEXACO	RT. 1	28673	UST
SHERRILLS FORD	1004744803	RIDGEWAY CHEMICALS	RT 1 BOX 46RC/SR 1837 HWY 150	28673	RCRIS-SQG, FINDS
SHERRILLS FORD	U001193114	PRODELIN PLASTIC MOLDING	ROUTE 1, BOX 200	28673	UST
SHERRILLS FORD	U001190537	DON'S PLACE	ROUTE 1/HIGHWAY 150 S.R. 1844	28673	UST
SHERRILLS FORD	S104913700	BACHS MHP SITE	BACH RD / HWY 150E	28673	IMD
SHERRILLS FORD	S101572346	HARBOR LIGHTS MARKET	MT. PLEASANT RD	28673	IMD, LUST
SHERRILLS FORD	S104913387	GRYDER /MITCHELL RESIDENCE	SHERRILLS FORD ROAD	28673	IMD
SHERRILLS FORD,	U003134454	HARBOR LIGHTS	ROUTE 1	28673	UST
TERRELL	U001200143	TERRELL'S BAIT SHOP	7970 HWY 150/PO BOX 324	28682	UST
TERRELL	S104157203	MIDWAY MARINA	8693 EAST HIGHWAY 150	28682	IMD, LUST, LUST TRUST
TERRELL	U001190751	MIDWAY MARINA	NC HWY 150	28682	UST
TERRELL	94406459	MARSHALL STEAM STATION US HWY 150	MARSHALL STEAM STATION US HWY 150		ERNS
TERRELL	2000538965	MARSHALL STEAM STATION	MARSHALL STEAM STATION		ERNS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List
Source: EPA
Telephone: N/A
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/30/03
Date Made Active at EDR: 06/02/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/05/03
Elapsed ASTM days: 28
Date of Last EDR Contact: 05/09/03

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 6
Telephone: 214-655-6659

EPA Region 8
Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites
Source: EPA
Telephone: N/A

Date of Government Version: 04/30/03
Date Made Active at EDR: 06/02/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/05/03
Elapsed ASTM days: 28
Date of Last EDR Contact: 05/05/03

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/19/03
Date Made Active at EDR: 04/08/03
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/24/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 03/24/03

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 03/19/03
Date Made Active at EDR: 04/08/03
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 03/24/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 03/24/03

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/31/03
Date Made Active at EDR: 05/08/03
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 04/07/03
Elapsed ASTM days: 31
Date of Last EDR Contact: 03/10/03

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 09/09/02
Date Made Active at EDR: 10/28/02
Database Release Frequency: Varies
Date of Data Arrival at EDR: 09/24/02
Elapsed ASTM days: 34
Date of Last EDR Contact: 05/09/03

ERNS: Emergency Response Notification System
Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/02
Date Made Active at EDR: 02/03/03
Database Release Frequency: Annually
Date of Data Arrival at EDR: 01/27/03
Elapsed ASTM days: 7
Date of Last EDR Contact: 04/28/03

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99
Database Release Frequency: Biennially
Date of Last EDR Contact: 03/17/03
Date of Next Scheduled EDR Contact: 06/16/03

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies
Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision
Source: EPA
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/09/03
Database Release Frequency: Annually

Date of Last EDR Contact: 04/07/03
Date of Next Scheduled EDR Contact: 07/07/03

DELISTED NPL: National Priority List Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/30/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/05/03
Date of Next Scheduled EDR Contact: 08/04/03

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/19/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/07/03
Date of Next Scheduled EDR Contact: 07/07/03

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 01/31/03
Database Release Frequency: Annually

Date of Last EDR Contact: 04/30/03
Date of Next Scheduled EDR Contact: 07/21/03

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/23/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/07/03
Date of Next Scheduled EDR Contact: 07/07/03

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 03/11/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/31/03
Date of Next Scheduled EDR Contact: 06/30/03

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 05/27/03
Date of Next Scheduled EDR Contact: 08/25/03

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-564-3887
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/26/03
Database Release Frequency: Annually
Date of Last EDR Contact: 05/12/03
Date of Next Scheduled EDR Contact: 08/11/03

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 03/10/03
Date of Next Scheduled EDR Contact: 06/09/03

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/00
Database Release Frequency: Annually
Date of Last EDR Contact: 03/25/03
Date of Next Scheduled EDR Contact: 06/23/03

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-5521
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/98
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 03/06/03
Date of Next Scheduled EDR Contact: 06/09/03

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA
Telephone: 202-564-2501

Date of Government Version: 04/15/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/24/03
Date of Next Scheduled EDR Contact: 06/23/03

SSTS: Section 7 Tracking Systems
Source: EPA
Telephone: 202-564-5008
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/00
Database Release Frequency: Annually
Date of Last EDR Contact: 05/09/03
Date of Next Scheduled EDR Contact: 07/21/03

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-564-2501
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/15/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/24/03
Date of Next Scheduled EDR Contact: 06/23/03

STATE OF NORTH CAROLINA ASTM STANDARD RECORDS

SHWS: Inactive Hazardous Sites Inventory
Source: Department of Environment, Health and Natural Resources
Telephone: 919-733-2801
State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/08/03
Date Made Active at EDR: 05/08/03
Database Release Frequency: Annually
Date of Data Arrival at EDR: 04/21/03
Elapsed ASTM days: 17
Date of Last EDR Contact: 04/15/03

SWF/LF: List of Solid Waste Facilities
Source: Department of Environment and Natural Resources
Telephone: 919-733-0692
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/29/03
Date Made Active at EDR: 05/08/03
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 04/29/03
Elapsed ASTM days: 9
Date of Last EDR Contact: 04/28/03

LUST: Incidents Management Database
Source: Department of Environment and Natural Resources
Telephone: 919-733-1315
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/07/03
Date Made Active at EDR: 04/16/03
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 03/10/03
Elapsed ASTM days: 37
Date of Last EDR Contact: 03/10/03

UST: Petroleum Underground Storage Tank Database
Source: Department of Environment and Natural Resources
Telephone: 919-733-1308
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 11/08/02
Date Made Active at EDR: 12/09/02
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 11/13/02
Elapsed ASTM days: 26
Date of Last EDR Contact: 03/13/03

OLI: Old Landfill Inventory
Source: Department of Environment & Natural Resources
Telephone: 919-733-4996

Date of Government Version: 04/08/03
Date Made Active at EDR: 05/21/03
Database Release Frequency: Varies

Date of Data Arrival at EDR: 04/28/03
Elapsed ASTM days: 23
Date of Last EDR Contact: 04/28/03

VCP: Responsible Party Voluntary Action Sites
Source: Department of Environment and Natural Resources
Telephone: 919-733-4996

Date of Government Version: 02/04/03
Date Made Active at EDR: 02/28/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 02/10/03
Elapsed ASTM days: 18
Date of Last EDR Contact: 05/23/03

INDIAN UST: Underground Storage Tanks on Indian Land
Source: EPA Region 4
Telephone: 404-562-9424

Date of Government Version: N/A
Date Made Active at EDR: N/A
Database Release Frequency: Varies

Date of Data Arrival at EDR: N/A
Elapsed ASTM days: 0
Date of Last EDR Contact: N/A

STATE OF NORTH CAROLINA ASTM SUPPLEMENTAL RECORDS

HSDS: Hazardous Substance Disposal Site
Source: North Carolina Center for Geographic Information and Analysis
Telephone: 919-733-2090
Locations of uncontrolled and unregulated hazardous waste sites. The file includes sites on the National Priority List as well as those on the state priority list.

Date of Government Version: 06/21/95
Database Release Frequency: Biennially

Date of Last EDR Contact: 06/02/03
Date of Next Scheduled EDR Contact: 09/01/03

AST: AST Database
Source: Department of Environment and Natural Resources
Telephone: 919-715-6170
Facilities with aboveground storage tanks that have a capacity greater than 21,000 gallons.

Date of Government Version: 01/01/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/21/03
Date of Next Scheduled EDR Contact: 07/21/03

LUST TRUST: State Trust Fund Database
Source: Department of Environment and Natural Resources
Telephone: 919-733-1315
This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

Date of Government Version: 05/09/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/12/03
Date of Next Scheduled EDR Contact: 08/11/03

IMD: Incident Management Database
Source: Department of Environment and Natural Resources
Telephone: 919-733-1315
Groundwater and/or soil contamination incidents

Date of Government Version: 04/24/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/28/03
Date of Next Scheduled EDR Contact: 07/28/03

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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STATE OF NORTH CAROLINA BROWNFIELDS DATABASES RECORDS

Brownfields: Brownfields Projects Inventory
Source: Department of Environment and Natural Resources
Telephone: 919-733-4996
A brownfield site is an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment. All of the sites in the inventory are working toward a brownfield agreement for cleanup and liabitliy control.

Date of Government Version: 12/31/02
Database Release Frequency: Varies

Date of Last EDR Contact: 05/06/03
Date of Next Scheduled EDR Contact: 08/04/03

VCP: Responsible Party Voluntary Action Sites
Source: Department of Environment and Natural Resources
Telephone: 919-733-4996

Date of Government Version: 02/04/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/23/03
Date of Next Scheduled EDR Contact: 07/14/03

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Facility List
Source: Department of Health & Human Services
Telephone: 919-662-4499

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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Duke Power®
A Duke Energy Company

FOSSIL-HYDRO GENERATION

Duke Power
EC11E / 526 South Church Street
Charlotte, NC 28202-1802

January 28, 2004

Received
FEB 2004
Solid Waste Section

North Carolina Department of Environment
and Natural Resources
Division of Waste Management
Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646

ATTENTION: Mr. Jim Barber
Branch Head
Solid Waste Permitting Branch

SUBJECT: Marshall Steam Station
FGD Industrial Landfill
Wetlands Delineation Report

Attached is the U.S. Army Corp of Engineers wetlands delineation report for the proposed Flue Gas Desulfurization (FGD) industrial landfill at Marshall Steam Station.

If additional information is needed to ensure a timely response, please contact me at (704) 382-4309.

Sincerely,

Allen Stowe

Allen Stowe, Scientist
Environmental Support

Attachments

U.S. ARMY CORPS OF ENGINEERS
Wilmington District

Action ID: 200330269 **County:** Catawba

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Property
Owner Duke Power
Attn: Ron Lewis
Address EC11D/ 526 South Church Street
Charlotte, NC 28202-1802
Telephone Number 704-373-5710

Size and Location of Property (waterbody, Highway name/number, town, etc.): The site is located on the east side of SR 1848, approximately 1 mile north of its intersection with N.C. Hwy 150, near the existing Marshall Steam Station, southwest of Mooresville, Catawba County, North Carolina.

Basis for Determination: The site contains wetlands and stream channels with indicators of ordinary high water marks, located adjacent to and including an unnamed tributary to Lake Norman, in the Catawba River Basin.

Indicate Which of the Following Apply:

____ There are waters of the U.S., to include wetlands, on the above described property which we strongly suggest should be delineated and surveyed. The surveyed wetland lines must be verified by our staff before the Corps will make a final jurisdictional determination on your property.

____ Because of the size of your property and our present workload, our identification and delineation of your wetlands cannot be accomplished in a timely manner. You may wish to obtain a consultant to obtain a more timely delineation of the wetlands. Once the consultant has flagged a wetland line on the property, Corps staff will review it, and, if it is accurate, we strongly recommend that you have the line surveyed for final approval by the Corps. The Corps will not make a final jurisdictional determination on your property without an approved survey.

X The waters of the U.S., to include wetlands, on your lot have been delineated, and the limits of the Corps jurisdiction have been explained to you. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

____ There are no waters of the U.S., to include wetlands, present on the above described property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

Placement of dredged or fill material in wetlands on this property without a Department of the Army Permit is in most cases a violation of Section 301 of the Clean Water Act (33 USC 1311). A permit is not required for work on the property restricted entirely to existing high ground. If you have any questions regarding the Corps of Engineers regulatory program, please contact Amanda D. Jones **at telephone number** (828) 271-7980 extension 231.

Project Manager Signature Amanda D. Jones
Date December 3, 2003 **Expiration Date** December 3, 2008

SURVEY PLAT OR FIELD SKETCH OF THE DESCRIBED PROPERTY AND THE WETLAND DELINEATION FORM MUST BE ATTACHED TO THE YELLOW (FILE) COPY OF THIS FORM.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Duke Power / Marshall Steam Station Scrubber Landfill	File Number: 200330269	Date:12-03-03

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION

If you have questions regarding this decision and/or the appeal process you may contact: Ms. Amanda D. Jones, Regulatory Specialist Asheville Regulatory Field Office 151 Patton Avenue, Room 208 Asheville, North Carolina 28801-5006	If you only have questions regarding the appeal process you may also contact: Mr. Arthur Middleton, Administrative Appeal Review Officer CESAD-ET-CO-R U.S. Army Corps of Engineers, South Atlantic Division 60 Forsyth Street, Room 9M15 Atlanta, Georgia 30303-8801

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

Duke Power
A Duke Energy Company

FOSSIL-HYDRO GENERATION

Duke Power
EC11E / 526 South Church Street
Charlotte, NC 28202-1802

August 28, 2003

Ms Amanda Jones
U.S. Army Corp of Engineers
Asheville Regulatory Field Office
151 Patton Avenue
Asheville, NC 28801-5006

Re: Marshall Steam Station Scrubber Landfill, Catawba County, NC

Dear Ms. Jones:

Attached are Data 1 Forms, Channel Evaluation Forms, supporting information and a civil survey of the wetland delineation and channel at the site near Marshall Steam Station on Lake Norman in Catawba County, NC. The wetland delineation is based on the review that Mr. John Hendrix performed on May 15, 2003. Mr. Mike Parker, NC Department of Environment and Natural Resources, approved the same boundary on June 6, 2003. New information on the wetland characteristics in the attached report do not support that the hydrology parameter is met in the wetland boundary. On June 27, 2003, the wetland had no surface water after a 6-day period of no rain, but record rainfall occurred the days preceding the dry period. Never the less, because of our schedule, we are submitting the survey with the delineation that you approved; we think that this delineation is very conservative. We ask that you certify this delineation and concur with our channel evaluations.

This area is our proposed site for a Duke Power landfill. The landfill will receive waste associated with using limestone to remove constituents from combustion emission, as necessary, to comply with the new North Carolina Clean Smokestacks legislation. Duke is in the process of performing the site investigation for the landfill permitting process.

If you have any question please contact me by phone at (704) 373-5710 or by e-mail at relewis1@duke-energy.com. Thank you for your attention in this matter.

Sincerely,

Ron Lewis

Ron Lewis
Scientist, Environmental Support

Attachment
cc: Mike Parker, DENR

ATTACHMENT

INTRODUCTION

Duke Power is planning for the development of a landfill to store waste from scrubbers as part of the compliance for North Carolinas Clean Smokestacks legislation. The proposed site for the landfill contains a wetland area and a channel that has been reviewed by the Asheville Field Office and by the North Carolina Department of Environment and Natural Resources. The most recent site visits were by John Hendrix of the Asheville Field Office of the Army CORPS on May 15, 2003 and by Mike Parker of the Mooresville Office of North Carolina Department of Environment and Natural Resources on June 6, 2003. Mr. Hendrix and Mr. Parker approved the wetland delineation that was in place, and Duke Power subsequently performed the attached civil survey from the delineation.

The attached Channel Evaluation Forms and supporting information were part of ongoing discussions with the Asheville Field Office, and to the best of our knowledge, consistent with the discussion we have had on channel evaluations.

Because of the manmade influences on the waters of the site, both wetlands and channels were complex. The following information provides support for the delineations and channel evaluations provided.

INTERMITTENT CHANNEL EVALUATION FORM

ACTION ID Section A . APPLICANT NAME Duke Energy . DATE 6/27/03 .
PROPOSED CHANNEL WORK Landfill for scrubber waste .
WATERBODY/RIVER BASIN Tributary to Lake Norman/Catawba River.
COUNTY/CITY Catawba County. RECENT WEATHER CONDITIONS Period of heavy rain followed by 6 day period of dry weather (see Table 1) .

P	SP	NP	OBSERVATION	COMMENTS OR DESCRIPTION
		X	Fish/Shellfish/Crustaceans Present	None observed
		X	Benthic Macro Invertebrates	None observed
X			Amphibians Present/Breeding	Adults, young present in pools
		X	Algae and/or Fungus (water quality function)	Iron flocculent dominates
		X	Wildlife Channel Use (i.e. tracks, feces, shell, other)	Deer, raccoon
		X	Federally Protected Species Present (Discontinue)	None
		X	Riffle/Pool/Structure	None apparent
X		X	Stable Streambanks	Banks apparent in headwaters, weak in lower section
		X	Channel Substrate(i.e. gravel, cobble, rock, coarse sand)	Silt, iron flocculent, roots
X			Riparian Canopy Present (SP>/=50% Closure)	None in classical sense
		X	Undercut Banks/Instream Habitat Structure	None
		X	Flow in Channel	Flow during storm events
X			Wetlands Adjacent to /Contiguous with Channel (Discontinue)	Narrow wetlands contiguous with channel
X			Persistent Pools/Saturated Bottom (June-September)	Apparently saturated bottom during dry period, inundated during storm events
		X	Seeps/Groundwater Discharge (June-September)	None apparent
X			Adjacent Floodplain Present	Floodplain resulting from control downstream
		X	Wrack material or Drift Lines	Leaves from recent flooding, some in channel
X			Hydrophytic Vegetation in/adjacent to Channel	Greenbrier, Honeysuckle, Privet, Sweet gum, Red maple adjacent to channel

Important To Domestic Water Supply? Y/N N .
Does Channel Appear On A Quad or Soils Map? Y/N N .
Approx. Drainage Area: Not determined .

Determination:
Perennial Channel ___. Important Channel: ___. Project Manager Initials:___.
Intermittent Channel X . Unimportant Channel: X .
Ephemeral Channel: ___. (non-jurisdictional)
Ditch Through Upland:___. (non-jurisdictional)
Evaluator's Signature: Robert Siler (704) 483-0972

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P=Present SP=Strongly Present NP=Not Present

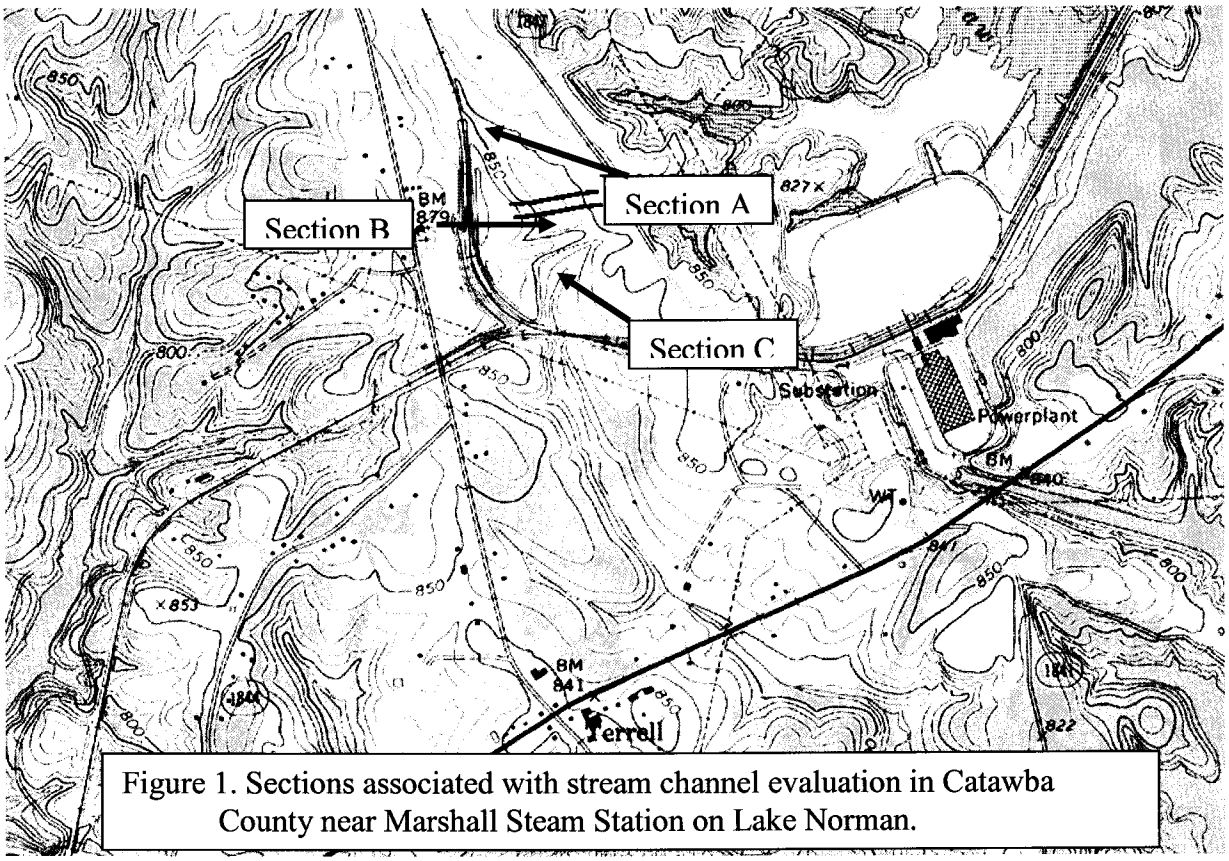


Figure 1. Sections associated with stream channel evaluation in Catawba County near Marshall Steam Station on Lake Norman.

Table 1. Rainfall data from Marshall Steam Station for June 1 - 26, 2003.

Date	6/1/03	6/4/03	6/5/03	6/7/03	6/8/03	6/16/03	6/17/03	6/18/03	6/19/03	6/20/03
Rainfall	0.95"	2.02"	0.25"	0.75"	1.18"	0.13"	0.44"	0.02"	0.10"	0.03"

Average rainfall for Catawba County in June is 4.73 inches with a 30% probability that rainfall will exceed 5.35 inches; the rainfall measured at nearby Marshall Steam Station for the period of June 1-26, 2003 totaled 5.87 inches. The rainfall during June 1-26, 2003 was exceeded only 5 times from 1949-1999 (which included the full 30 days). Clearly, June 2003 is one of the wettest on record. The same can be said for the spring of 2003.

Section A

Channel Section A is located upstream of a potential wetland area (Figure 1) and is about 107-meters long (as determined by a hip chain) from the upstream extent of the wetland boundary to a culvert under a railroad. The channel begins upstream of Duke Energy property through two channels; one from a culvert under fill from an adjacent and parallel railroad (Photo 1) and another from a channel that parallels the railroad (Photo 2). The channels here appear to be formed as part of past borrow from construction of the adjacent railroad. The channel banks here are defined and surface water is present for about the upstream 50-meters of channel (Photos 3 and 4), but no flow was observed on 6/27/03. Downstream, the lower 50-meters of Section A to the wetland boundary, the channel contained no surface water (Photos 5, 6, 7 and 8). Braided channels in the upstream portion of the wetland are dry during dry weather (Photos 9 and 11) and contain water during extended wet weather (Photo 10). No flow was observed in the entire length of Channel Section A on 6/27/03. Braided channels occur to about 40 meters above the wetland boundary; the channel banks are defined upstream of this point. The substrate is the same throughout, being iron flocculants, silt, and exposed roots. Low-grade habitat exists for amphibian larvae and mosquitoes, but other aquatic insects were not observed in dip net samples. Vegetation adjacent to the channel includes both hydophytic and upland species in a narrow band along the channel. Where a forested canopy exists, sweet gum dominates.

A 6-day period without rain (see Table 1 above) was sufficient for about half of this channel in Section A to dry to the point where surface water was eliminated, even when the previous period had record rainfall. The downstream wetland, created by fill from railroad construction and blocked culvert, results in water being temporarily stored in the wetland and backing up storm water in the upstream channel. The absence of aquatic biota, the substrate characteristics, the apparent lack of ground water inputs, the lack of defined banks in the lower portions of this section, and the variable hydrology support the "ephemeral" classification of this stream section, while the defined banks and presence of some surface water in the upstream 50-meters of this section support a classification as "intermittent". Manmade influences on the hydrology and morphometry of the channel are significant. Therefore, Section A was classified as "intermittent, unimportant".

Photo 1. Culvert through railroad fill (gravel from railroad is located in the upper portion of photo) as observed on 6/27/03. Channel is approximately 105-m upstream of the upstream extent of the surveyed wetland boundary.

Photo 2. Channel that parallels the railroad and is an independent channel from the one that flows through culvert shown in Photo 1, as observed on 6/27/03. Notice the steep slopes that were apparently formed from borrowing for railroad that is located immediately to the left of photo.

Photo 3. Channel at a location approximately 100-meters upstream of upstream extent of surveyed wetland boundary, as observed on 6/27/03. Channel is 40-inches wide, surface water is 31-inches wide, and depth is 4 inches with no flow observed. Depth here is related to flow being impeded from wrack lines in the channel.

Photo 4. Channel at a location approximately 75-meters (as determined by hip chain) upstream of the upstream extent of the surveyed wetland boundary, as observed on 6/27/03. Channel is 29-inches wide, surface water is 19-inches wide, and the maximum depth is 4 inches with no flow observed.

Photo 5. Channel at a location approximately 50-meters (as determined by hip chain) upstream of upstream extent of surveyed wetland boundary, as observed on 6/27/03. Channel is 40-inches wide with no surface water. Isolated pool of surface water about 1-meter long occur about 5-meters upstream of this point. Banks are less well defined.

Photo 6. Main channel at a location approximately 30-meters (as determined by hip chain) upstream of upstream extent of surveyed wetland boundary, as observed on 6/27/03. Channel is 52-inches wide with no surface water. Banks are less defined and some braided channels occur adjacent to this channel.

Photo 7. Main channel at a location approximately 20-meters (as determined by hip chain) upstream of upstream extent of surveyed wetland boundary, as observed on 6/27/03. Channel is 62-inches wide with no surface water. Banks are less defined and other dry braided channels occur here.

Photo 8. Channel at a location approximately 7-meters (as determined by hip chain) upstream of upstream extent of surveyed wetland boundary, as observed on 6/27/03. Channel is 50-inches wide with no surface water. Banks are less defined.

Photo 9. Braided channels within wetland boundary as observed on 6/27/03. Note no defined channel.

Photo 10. Braided channels within wetland boundary (at location of Photo 9) as observed on 3/27/03 during a period of extended rainfall.

Photo 11. Braided channels within wetland boundary (at location of Photo 9) as observed on 12/03/02.

INTERMITTENT CHANNEL EVALUATION FORM

ACTION ID Section B . APPLICANT NAME Duke Energy . DATE 6/27/03 .
PROPOSED CHANNEL WORK Landfill for scrubber waste .
WATERBODY/RIVER BASIN Tributary to Lake Norman/Catawba River.
COUNTY/CITY Catawba County. RECENT WEATHER CONDITIONS Period of heavy rain followed by 6 day period of dry weather (see Table 1) .

P	SP	NP	OBSERVATION	COMMENTS OR DESCRIPTION
		X	Fish/Shellfish/Crustaceans Present	None observed
		X	Benthic Macro Invertebrates	One diptern larvae observed
X			Amphibians Present/Breeding	Present earlier in spring
		X	Algae and/or Fungus (water quality function)	Iron flocculent
X			Wildlife Channel Use (i.e. tracks, feces, shell, other)	Deer, raccoon
		X	Federally Protected Species Present	None
		X	Riffle/Pool/Structure	Minor resulting from exposed roots
X			Stable Streambanks	Defined channel, exposed clay, roots
X			Channel Substrate(i.e. gravel, cobble, rock, coarse sand)	Silt-stained leaves to roots (fine and coarse) sand, gravel, scoured clay
X			Riparian Canopy Present (SP>/=50% Closure)	Chinese privet, Christmas fern, mosses
		X	Undercut Banks/Instream Habitat Structure	None
X			Flow in Channel	Flow during storm events, dries as upstream storage reduces.
		X	Wetlands Adjacent to /Contiguous with Channel (Discontinue)	None in channel section, but immediately upstream of channel.
X			Persistent Pools/Saturated Bottom (June-September)	Saturated bottom during dry period, inundated during wet period
		X	Seeps/Groundwater Discharge (June-September)	None apparent
X			Adjacent Floodplain Present	Floodplain resulting from control (blocked culvert) downstream, otherwise none
		X	Wrack material or Drift Lines	Leaves/sticks from recent flooding to 4 feet depth
X			Hydrophytic Vegetation in/adjacent to Channel	Privet, Christmas fern, moss

Important To Domestic Water Supply? Y/N N .
Does Channel Appear On A Quad or Soils Map? Y/N N .
Approx. Drainage Area: Not determined .

Determination:
Perennial Channel ___. Important Channel: ___. Project Manager Initials:___.
Intermittent Channel X . Unimportant Channel: X .
Ephemeral Channel: ___. (non-jurisdictional)
Ditch Through Upland:___. (non-jurisdictional)
Evaluator's Signature: Robert Siler (704) 483-0972 .

P=Present SP=Strongly Present NP=Not Present

Section B

Section B (Figure 1) includes a wetland and a short channel below the wetland that extends 10 meters to a blocked culvert through a fill that was apparently placed in the late 1950's. No channel is apparent in the wetland area (Photo 12). A scoured channel that is defined is present just below the wetland (Photo 13.); this channel contains surface water and flow when the wetland is inundated following storm events (Photo 14), but is dry after a period of no rainfall (Photo 13). Flow in the channel is controlled by rainfall, storage in the wetland immediately upstream, and flow through culvert/fill downstream (Photos 15 and 16). The channel varies from 18-inches wide to 70-inches wide, and the maximum channel depth varies from 2 to 6.5 inches (on 3/27/03). Controls in the channel are roots; the substrate is composed of coarse and fine roots with iron flocculent and organic matter; areas of sand, gravel and clay are also present (Photos 17 and 18). The riparian area is composed of Chinese privet, Christmas fern, and mosses (Photo 19). Privet and an unidentified vascular plant grow in the channel. One diptern larvae was found in the channel, and no insects were found in the relatively abundant leaf packs. Wrack lines from heavy rainfall indicate that the water level at the blocked culvert can reach a depth of about 4 feet; water seeps through the blocked culvert but mainly drains through cracks in the fill slope (Photo 16). The Section B channel is incised to about 18 inches deep. The channel has 2 meanders in this section between the wetland and the culvert inlet. Discharge was estimated as approximately 0.08 cubic-feet/second on 3/27/03, and dry on 6/27/03. The channel is evaluated an "unimportant intermittent channel" because the discharge is controlled by a downstream culvert and storage in the upstream wetland, the absence of benthic macroinvertebrates, and is dry during summer and fall as observed on 12/3/02 and 6/27/03. The channel would likely not exist if the artificial wetland and associated storage and subsequent scouring did not exist, as supported by the absence of a defined channel in the lower portions of Section A and in the wetland area.

Photo 12. Upstream portion (facing downstream) of wetland in Section B as observed on 6/27/03. No defined channel is apparent through wetland.

Photo 13. Section B channel immediately below wetland as observed on 6/27/03.

Photo 14. Section B channel immediately below wetland as observed on 3/27/03 following period of extended rainfall. Here the channel is 70-inches wide and 5-inches deep. Water flows around a red maple.

Photo 15. Culvert at the downstream extent of Section B as observed on 6/27/03. Blocked culvert extends through a fill that was placed in about the late 1950's.

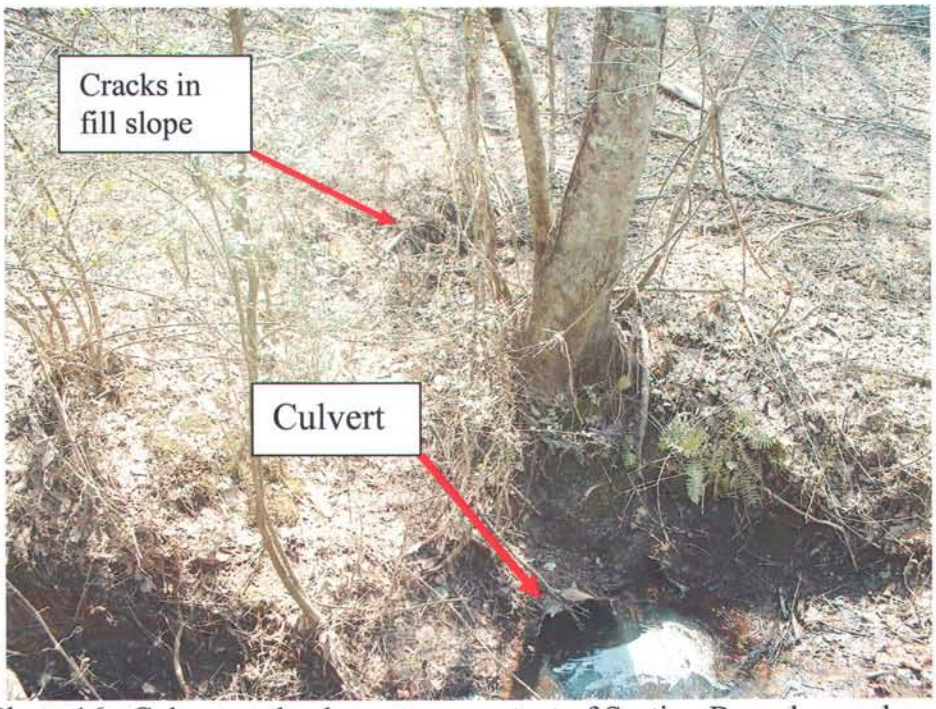


Photo 16. Culvert at the downstream extent of Section B as observed on 3/27/03. Blocked culvert extends through a fill that was placed in about the late 1950's. Water seeps through cracks in the fill slope with minor amounts seeping through the culvert.

Photo 17. Section B channel at a location just upstream of culvert as observed on 6/27/03.

Photo 18. Section B at a location just upstream of the culvert as observed on 3/27/03. Note the root controls, incised bank, and meander. Depth is 2 inches, width is 18 inches, and the channel is incised about 18 inches.

Photo 19. Riparian community at the channel portion of Section B as observed on 3/27/03.

INTERMITTENT CHANNEL EVALUATION FORM

ACTION ID Section C . APPLICANT NAME Duke Energy . DATE 6/27/03 .
PROPOSED CHANNEL WORK Landfill for scrubber waste .
WATERBODY/RIVER BASIN Tributary to Lake Norman/Catawba River.
COUNTY/CITY Catawba County. RECENT WEATHER CONDITIONS Period of heavy rain followed by 6 day period of dry weather (see Table 1) .

P	SP	NP	OBSERVATION	COMMENTS OR DESCRIPTION
		X	Fish/Shellfish/Crustaceans Present	None observed
		X	Benthic Macro Invertebrates	None observed
X			Amphibians Present/Breeding	Present in spring
		X	Algae and/or Fungus (water quality function)	Iron flocculants on fine roots
X			Wildlife Channel Use (i.e. tracks, feces, shell, other)	Raccoon track
		X	Federally Protected Species Present (Discontinue)	None
X			Riffle/Pool/Structure	Riffle over coarse gravel in short section
X			Stable Streambanks	Banks defined, channel incised; evidence of major erosion/sloughing in past
X			Channel Substrate(i.e. gravel, cobble, rock, coarse sand)	Gravel, sand, silt, roots; soil deposition adjacent to channel
X			Riparian Canopy Present (SP>/=50% Closure)	Privet, young tulip tree, American holly, ironwood, black cherry, red maple
		X	Undercut Banks/Instream Habitat Structure	None
X		X	Flow in Channel	Estimated at approximately 0.02 cubic-feet/second on 3/27/03, none on 6/27/03
		X	Wetlands Adjacent to /Contiguous with Channel (Discontinue)	None
?			Persistent Pools/Saturated Bottom (June-September)	Assumed saturated bottom during dry period, inundated during wet period
		X	Seeps/Groundwater Discharge (June-September)	None apparent, water from seep through fill at head of section supplies section with water
		X	Adjacent Floodplain Present	None, deeply incised to 10+ feet
		X	Wrack material or Drift Lines	None, controlled by blocked culvert upstream
X			Hydrophytic Vegetation in/adjacent to Channel	Christmas fern, red maple, mosses adjacent to channel

Important To Domestic Water Supply? Y/N N (Drains to Lake Norman-water supply).
Does Channel Appear On A Quad or Soils Map? Y/N Y, but downstream of Section C .
Approx. Drainage Area: Not determined .

Determination:
Perennial Channel ___. Important Channel: _____. Project Manager Initials:___.
Intermittent Channel X . Unimportant Channel: X .
Ephemeral Channel: _____. (non-jurisdictional)
Ditch Through Upland:___. (non-jurisdictional)
Evaluator's Signature: Robert Siler (704) 483-0972 .

P=Present SP=Strongly Present NP=Not Present

Section C

Section C originates in a fill slope where a culvert (Photo 20) has failed due to blockage, resulting in major erosion and sloughing; this channel was evaluated for 23 meters below the culvert. The stream banks in Section C are defined and are colonized with young tulip trees, American holly, Christmas fern, privet, and mosses (Photo 21 and 25). It appears that major fill was placed in this section when a railroad was constructed, and the channel has cut through this fill. The substrate in Section C is silt, sand, and coarse and fine roots with gravel located just below the failed culvert, all covered with an iron flocculent (Photo 22 and 23). Deposition of new soil is apparent adjacent to the channel (Photo 21 and 24) as mud bars. Evidence of major past erosion and sloughing is apparent from fallen or tilted trees (Photo 21 and 25), likely occurring just after the fill and culvert were placed, and, to a lesser degree, still continuing. Large trees grow in the channel about 10 meters below the culvert (Photos 26 and 27). Small meanders are present in the channel. Discharge was coarsely estimated as 0.02 cubic-feet/second on 3/27/03, and no flow was apparent on 6/27/03 (Photos 27, 28, 29, and 30). No discharge occurs during times of little rainfall and is probably less than 0.05 cubic-feet per second when water is present in the potential wetland upstream. Water from Section B is released as seepage through the fill and blocked culvert, controlling storm surges. The banks in Section C are deeply incised with the channel being over 10 feet below the banks. The channel varies from 20-to 36-inches wide and water depth is typically 1.5 inches deep. Section C is evaluated as an "intermittent-unimportant channel" because the stream is dry during low rainfall, the presence of iron flocculent at maximum flow, lack of aquatic insects, the man-made influence on hydrology, the dominance of coarse roots as a substrate, the presence of large trees in the channel, and its value for aquatic life and wildlife.

Photo 20. Section C begins just downstream of a culvert (no water drains through culvert in photograph), as observed on 3/27/03 following a period of substantial rainfall; most water supplying this section is from seepage from the fill and supplied from cracks in the slope as shown in Photo 16. Note erosion upslope of culvert.

Photo 21. Riparian vegetation in Section C as observed on 3/27/03. Note trees in foreground have tilted from past sloughing, and slopes downstream show evidence of past sloughing. Mud bars are present in depositional areas along the channel.

Photo 22. Gravel/silt/sand in channel of Section C just below culvert. Channel is 20- inches wide and the maximum depth is 1.5 inches. Note iron flocculent in stream as observed on 3/27/03 following a period of substantial rainfall.

Photo 23. Channel in Section C. Note fine roots with organic matter and iron flocculent in substrate as observed on 3/27/03.

Photo 24. Channel in Section C. Note mud accumulation adjacent to channel following storm event as observed on 3/27/03. Privet, Christmas fern and mosses colonize adjacent slopes.

Photo 25. Section C with meanders and past sloughing and eroded slopes that have healed with American holly, mosses, Christmas fern, honeysuckle, and greenbrier (03/27/03).

Photo 26. Channel in Section C located 10 meters below culvert. Note red maples growing in narrow channel (3/27/03).

Photo 27. Channel in Section C located 10 meters below culvert (as in Photo 25), as observed on 6/27/03.

Photo 28. Channel in Section C located 13 meters below culvert as observed on 6/27/03. No surface water is present, but soil is saturated.

Photo 29. Channel in Section C located 15 meters downstream of culvert as observed on 6/27/03. Note scoured channel with root exposed.

Photo 30. Channel in Section C located 18 meters downstream of culvert at site of proposed lower portion of scrubber landfill as observed on 6/27/03. The channel here is 29 inches, the surface water is 20 inches wide, the maximum depth is 2 inches, and no flow was present. The substrate is sand, silt, and iron flocculent.

DATA FORM 1

WETLAND DETERMINATION

Applicant Name: Duke Power. Project Name: _Marshall Scrubber Landfill_
State:_NC_. County:__Catawba___. Date: __6/27/03_____.
Section: ___Lake Norman North, USGS 7.5 minute map_____.

Vegetation

Species	**Indicator status**	**Species**	**Indicator status**
Trees		**Herbs**	
Acer rubrum 6-24"	FAC	*Carex* spp.	FAC
Liquidambar styraciflua to 15"	FAC+	*Andropogon* spp.	FAC
Saplings/shrubs		**Woody vine**	
Liquidambar styraciflua	FAC+	*Smilax rotundifolia*	FAC
Ligustrum sinense	FAC	*Lonicera japonica*	FAC-

Scattered Black Cherry, Black Willow, Ironwood,
% of species that are OBL, FACW, and/or FAC:___87.5%_.Other indicators:
Hydrophytic vegetation: Yes:_X_.No:___.Basis: % of FAC and wetter,

Soil (see attachment)
Series and phase:_Mapped-_Worsham fine sandy loam_____.
Mottled: Yes:_X_No:__. Mottled color:_10YR 6/3_; Matrix color:_2.5YR5/8__
Gleyed: Yes:__. No:_X_. Other indicators:_____.
Hydric soils: Yes:___. No:_X. Basis:__Chroma greater than 2_____.

Hydrology (see attachment)
Inundated: Yes:_during rain events_. No:__. Depth of standing water: _8 in.-variable_.
Saturated soils: Yes:_X_No:__. Depth to saturated soil: _6 inches during rain events_.
Other indicators:_Area periodically inundates but drains relatively quickly, hard pan clay reduces percolation; silt-stained leaves_.
Wetland hydrology: Yes:_?_No:___. Basis:_Likely saturated for short periods during growing season, and likely less than 2-3 weeks.
Atypical situation: Yes:_X_No:_____;.
Normal Circumstances? Yes:____No:_X_.

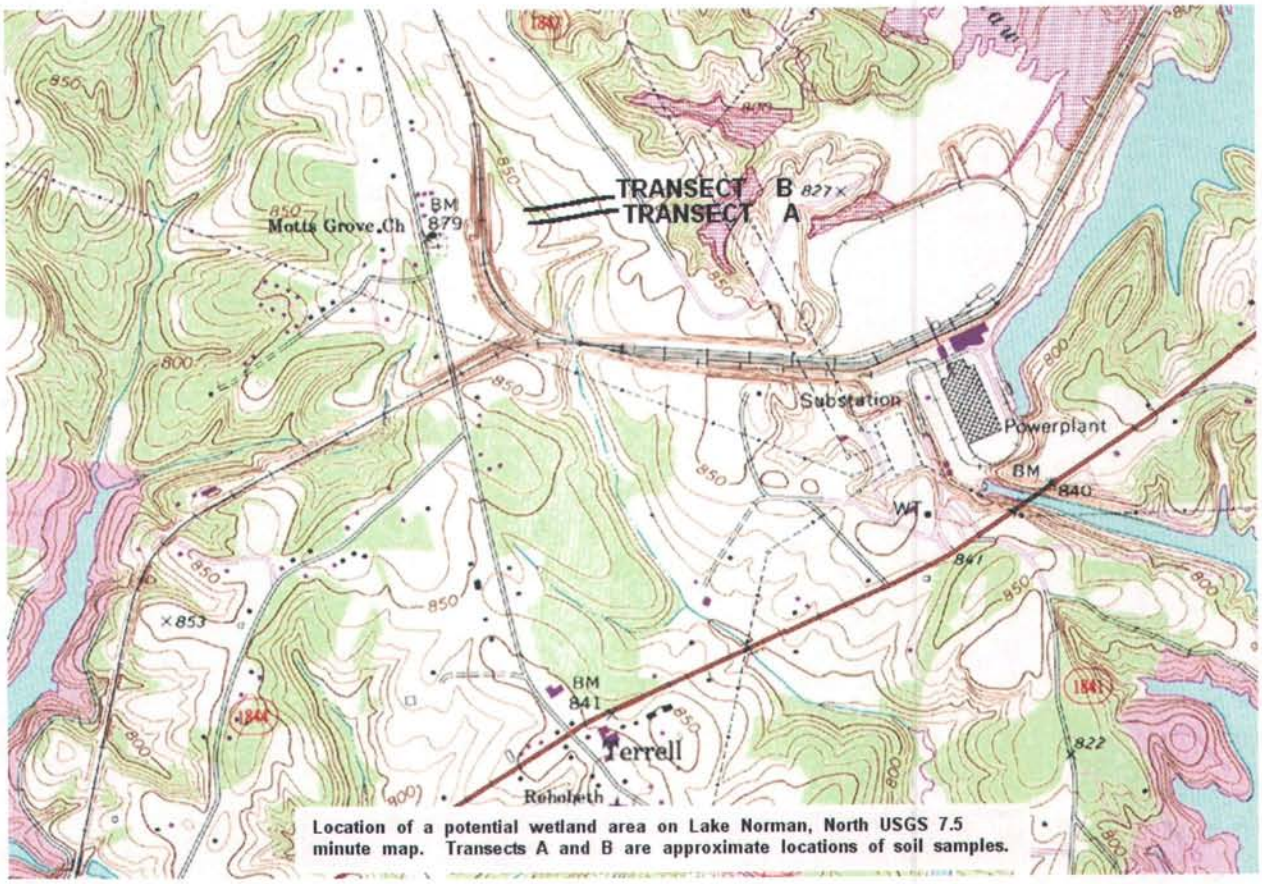
Wetland Determination: Wetland:__X___Nonwetland:_____.
Comment:_Area blocked by fill likely in mid-1950s; culvert blocked by surrounding erosion of fill; area inundates during rain event, but largely drains during subsequent days (time between samples 6 days). Soils not developed. Little herbaceous vegetation in wetland/Sweetgum seedlings.
Determined by: Robert Siler, 7550 Forest Oak Drive,
Denver, NC 28037, (704) 483-0972

Wetland Description:

A wetland area exists in an unnamed tributary to Lake Norman in Catawba County that is located in an area proposed as a landfill for scrubber waste for Duke Power's Marshall Steam Station; the landfill is necessary to comply with the new North Carolina Clean Smokestacks legislation. Other suitable sites owned by Duke Power do not exist. The wetland area occurs as a result of a culvert and fill that were placed in an intermittent or ephemeral channel, apparently during the construction of a nearby railroad. The fill was apparently placed in the late 1950's. The culvert became blocked, the area periodically inundated, and over the years, red maple and sweet gum have colonized what appeared to be an old field. Due to blockage of the culvert, the fill slope apparently became saturated and slope failures, fissures, and seepages developed in the fill that have eroded portions of the downstream fill slope. During rainfall, the wetland area fills with water (Photos 1 and 3) and slowly drains through the fill (Photo 2 and 4). The period for the wetland to drain is dependent on weather conditions, but from June 1-20, 2003, the area experienced 5.87 inches of rainfall to June 20, and by June 26 the wetland contained no surface water (Photo 4). A similar situation was documented from November 15, 2002 when the wetland was fully inundated and sometime before December 2, 2002, the area was dry except for a small pool at the deepest point of the wetland area (Photo 2). Due to the extremely wet spring of 2003, it has been impossible to evaluate the normal hydrology of the site. Time constraints for planning for the landfill do not allow for detailed hydrology investigations at this time. Therefore, we assumed hydrology to be present, and delineated a boundary that we feel is very conservative.

Because of the unusual characteristics of the site, a detailed investigation of the soils of the wetland area was performed on December 2, 2002. Two transects were taken at right angles to the long axis of the wetland (Figure 2); one through the deepest portion of the wetland (Table 2) and one located 42 feet upstream and parallel to the first transect (Table 3). Soil samples were taken at 10-foot intervals, and soils were characterized at the surface, 6 inches, and 12 inches. Surface soils showed the greatest hydric development but chroma generally was in the range of 3-4. Soils at 6 and 12 inches were mottled but the matrices were bright with a chroma in the range of 6-8. Samples at the western portion of the wetland (110 feet from baseline) contained hydric soils; this small area was presumed to be the old creek channel and was extremely narrow. In general, the site did not have development of hydric soils.

Vegetation at the site was dominated by red maple in the area most inundated. Very little herbaceous vegetation was present. The most prevalent ground cover was seedling sweet gum. The wetland area least inundated contained sweet gum, greenbriar, multiflora rose, and privet. A fairly clear demarcation existed between the red maples and sweet gum, and Virginia pines or upland mixed hardwoods surrounded the sweet gums. A couple of black willows and red ash were present in the delineated wetland, and several black cherries and ironwoods were scattered through the site. Vegetation was not diverse and was uncharacteristic of a Piedmont wetland.



Location of a potential wetland area on Lake Norman, North USGS 7.5 minute map. Transects A and B are approximate locations of soil samples.

Figure 2.

Table 2

Marshall Scrubber Landfill
Soil Sampling 12/03/2002
Transect A (258 degrees; 42'2.5" north of Transect B)

Distance E to W	Depth of Saturation	0-3 inches	6 inches Matrix	6 inches Mottled	12 inches Matrix	12 inches Mottled
0 feet	0 inches	10YR 6/6	2.5YR 5/8	10YR 6/6	2.5YR 6/8	N/A
10	0	10YR 6/4	2.5YR 5/8	10YR 6/6	2.5YR 5/8	10YR 6/6
20	0	Not sampled				
30 (10+00)	0	10YR 5/4	2.5YR 5/8	10YR 6/6	2.5YR 4/8	10YR 6/4
40	0	Not sampled				
50	0	10YR 5/4	2.5YR 4/8	10YR 6/3	2.5YR 4/8	10YR 6/4
60	Saturated 0-3"	10YR 5/3	2.5YR 4/8	10YR 6/3	2.5YR 4/8	10YR 6/3
70	Saturated 0-3"	10YR 5/3	2.5YR 5/8	10YR 5/3	2.5YR 5/8	10YR 6/3
80	Inundated 3"	10YR 5/4	2.5YR 4/8	10YR 5/3	2.5YR 5/8	10YR 6/3
90	Inundated 8"	10YR 5/3	2.5YR 5/8	10YR 6/4	2.5YR 4/8	10YR 6/4
100	Inundated 6"	10YR 5/3	2.5YR 5/8	10YR 6/4	2.5YR 4/6	10YR 5/3
110[2]	Saturated 12"	10YR 5/3	10YR 5/2[1]	?Chunks of 5YR 5/2	10YR 5/2[1]	?Chunks of 5YR 5/2
120	Upland	2.5YR 4/8	2.5YR 4/8	N/A	10YR 5/4 @ 7"	N/A

[1]Sandy clay soil
[2]In privet thicket
[3]Light mottles follow roots

Table 3

Marshall Scrubber Landfill
Soil Sampling 12/03/2002
Transect B (258 degrees; on Phase1/PhaseII survey line-10+00 to 11+00)

Distance E to W	Depth of Saturation	0-3 inches	6 inches Matrix	6 inches Mottled	12 inches Matrix	12 inches Mottled
0 feet	0 inches	10YR 5/4	2.5YR 5/8	10YR 6/6	2.5YR 6/8	N/A
10	0	10YR 5/3	2.5YR 5/8	10YR 6/6	2.5YR 5/8	10YR 6/6
20	0	10YR 5/3				
30 (10+00)	0	10YR 5/3	2.5YR 5/8	10YR 6/6	2.5YR 4/8	10YR 6/4
40	0	10YR 5/3				
50	0	10YR 5/3	2.5YR 4/8	10YR 6/3	2.5YR 4/8	10YR 6/4
60	0	10YR 5/3	2.5YR 4/8	10YR 6/3	2.5YR 4/8	10YR 6/3
70	0	10YR 5/3	2.5YR 5/8	10YR 5/3	2.5YR 5/8	10YR 6/3
80	0	10YR 5/3	2.5YR 4/8	10YR 5/3	2.5YR 5/8	10YR 6/3
90	Saturated 0-3"	10YR 5/3	2.5YR 5/8	10YR 6/4	2.5YR 4/8	10YR 6/4
100	Inundated 2"	10YR 5/3	2.5YR 5/8	10YR 6/4	2.5YR 4/6	10YR 5/3
110	0	10YR 5/4	10YR 5/2[1]	?Chunks of 5YR 5/2	10YR 5/2[1]	?Chunks of 5YR 5/2
120	Upland	5YR 4/4	2.5YR 4/8	N/A	10YR 5/4 @ 7"	N/A

[1]Sandy-clay soil

Photo 1. Wetland as observed on 11/15/02.

Photo 2. Wetland as observed on 12/03/02.

Photo 3. Wetland area as observed on 3/27/03.

Photo 4. Wetland area as observed on 6/27/03.

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CATAWBA COUNTY
P.O. Box 389 • 100-A South West Boulevard • Newton, North Carolina 28658-0389 • Telephone (828) 465-8390
http://www.co.catawba.nc.us FAX (828) 465-8484

August 20, 2003

CATAWBA COUNTY
RECEIVED
AUG 20 2003
LEGAL DEPT.

Duke Energy
Attention Allen Stowe
Mail Code: EC11E
Charlotte, NC 28201-1006

RE: Parcel I.D. 4616-03-14-9641
E NC 150 Highway

Dear Mr. Stowe:

This letter is in response to your request for a zoning determination for a Gypsum Landfill unit at the above referenced property. This parcel of land is zoned E-2 Industrial. A Gypsum Landfill is allowed as a permitted accessory use in this district as long as the gypsum is generated from the industrial use on the above referenced property. This expansion will meet the requirements of the Catawba County Zoning Ordinance.

If you have questions concerning this matter, you may call my office at 828-465-8382.

Sincerely,

Jacky Eubanks
Catawba County
Planning Department

dj

"Keeping the Spirit Alive Since 1842!"

9

DUKE POWER
MARSHALL STEAM STATION
CATAWBA COUNTY, NC

FLUE GAS DESULFURIZATION (FGD) RESIDUE LANDFILL

PROPOSED

GROUND WATER MONITORING PROGRAM SAMPLING AND ANALYSIS PLAN

July 11, 2003

Prepared By:

NORTH CAROLINA PROFESSIONAL SEAL 17661 ENGINEER WILLIAM M. MILLER

William M. Miller, P.E.

Duke Power
PO Box 1006
Charlotte, NC 28201-1006

1.0 PROGRAM DESCRIPTION

1.1 SCOPE OF WORK

This Ground-Water Monitoring Program is designed to monitor the effects of the Flue Gas Desulfurization (FGD) Residue Landfill at Marshall Steam Station (MSS) on the groundwater in the area. This plan has been prepared according to the guidelines set forth by the North Carolina Water Quality Guidance Document for Solid Waste Facilities (SW-1001-87), and by the EPA in "Interim Guidelines and Specifications for Preparing Quality Assurance Plans" (QAMS-500/80), and documents the methodologies of field sampling, record-keeping protocols, data quality objectives, and data validation procedures that will be used in this program.

1.2 BACKGROUND AND SITE HYDROGEOLOGICAL DESCRIPTION

Marshall Steam Station is located in Catawba County, on Highway NC 150, just west of Lake Norman. The plant is located in the Piedmont physiographic region. Figure 1 shows the location of the plant and the location of the proposed FGD landfill. The landfill footprint contains approximately 20.64 acres.

The FGD residue will be conveyed to the landfill site by truck, where the material will be spread and compacted. The landfill will begin receiving FGD residue in May of 2006. The volumetric capacity of the landfill is 1,865,000 yd^3. The FGD residue landfill at Marshall will receive FGD residue generated at Marshall and at other Duke plants located within NC.

The FDG landfill will be located on Duke Power property, northwest of the Marshall plant and to the west of the Marshall Ash Basin. The landfill is located to the east of a railroad line, running north-to-south. Located to the west of this railroad line is Sherrill's Ford Road, which runs north-south along a surface water divide. Located between the landfill footprint and the railroad line is a surface water drainage feature. This feature drains to the south, to an intermittent stream that drains to Lake Norman. There is a topographic divide running NNW through the landfill footprint, along Steam Plant Road. Surface drainage to the west of Steam Plant Road drains to the surface drainage feature and surface drainage to the east of Steam Plant Road drains to the Marshall Ash basin.

As described in the site hydrogeological study (Hydrogeological Study FGD Scrubber Landfill, Duke Power – Marshall Steam Station, Terrell, North Carolina, S&ME Project No: 1264-02-578, May 30, 2003), the subsurface conditions in the landfill area consist of residual soils and partially weathered rock with have formed by the in-place weathering of the parent rock. As is typical in the groundwater systems located in the Piedmont region, groundwater at the landfill site occurs within the residuum and saprolite under unconfined aquifer conditions. The predominant groundwater discharge areas are expected to be the drainage feature and the ash basins located to the east of the landfill.

The subsurface conditions at the landfill can be described by the following conditions:

- Residuum: Beneath the ground surface, residual material consisting of silts, silty clays, clayey silts, and silty sands and sandy silts were found for a depths ranging from 2.5 to 14 feet below ground surface.

- Saprolite: Saprolite material was found from depths from 13.5 feet to 68.5 feet below ground surface. This material is a product of weathered bedrock, consisting of silts to clayey silts and sandy silts to silty sands, having a Standard Penetration Test (SPT) resistance of 50 blows or more.

- Partially Weathered Rock: This material is defined as material exhibiting SPT resistances in excess of 100 blows per foot. This material was found ranging from depths of 25.5 feet to 90 feet below ground surface.

- Bedrock: Bedrock was found at depths ranging from 25.5 feet to 79.5 feet. When sampled, this material was classified as granite, schist and gneiss. Horizontal to high-angle fractures were found in the upper ten feet. Many fractures were found to be iron stained, indicating flow of water into the fractures.

1.3 WELL LOCATIONS AND INSTALLATION

The landfill will be monitored through a series of six monitoring wells and one background well identified as:

MS-9 (existing),
MS-10 (proposed),
MS-11(proposed),
MS-12(proposed),
B-4 (existing), and
MS-13 (proposed).

Monitoring well B-6 (existing) will be used as the background well. Monitoring well information is detailed in Table 1. These wells are located at approximately 125' from the waste boundary (except for well B-6). See Figure 2

Each of the wells will be screened near the water table. These wells will be constructed of two-inch diameter PVC well screen and casing. Each well will intercept the aquifer with section of PVC well screen with a slot size of 0.010 inch. The screen lengths are shown in Table 1. The wells will be installed by a North Carolina registered well driller in accordance with applicable NCDENR regulations. The location of the well and the elevation of the top of the casing will be surveyed under the direction of a Professional Surveyor, licensed in North Carolina.

Figure 3 shows a typical construction diagram for the wells. All wells will be equipped with dedicated bladder type pump systems. Well construction records for the existing wells are included in Appendix B.

A brief description of the monitoring locations and their monitoring function is provided below.

Monitoring Well B-6 – Background Well
Monitoring well B-6 will be used as a background monitoring well. This well is located approximately 350 feet south-east of the landfill, on the west side of Steam Plant Road. Due to the location of the landfill relative to the property line and the topography, there is not a suitable location for an upgradient well to use as a background monitoring well. This well is screened to monitor groundwater in the saprolite layer.

Monitoring Well MS-9
This well is located north of the landfill. This well is screened to monitor groundwater in the saprolite layer.

Monitoring Well MS-10
This well is located east of the landfill. This well is screened to monitor groundwater in the saprolite layer.

Monitoring Well MS-11
This well is located east of the landfill. This well is screened to monitor groundwater in the saprolite layer.

Monitoring Well B-4
This well is located east of the landfill. This well is screened to monitor groundwater in the saprolite layer.

Monitoring Well MS-13
This well is located east of the landfill. This well is screened to monitor groundwater in the saprolite layer.

1.4 SURFACE WATER SAMPLING

As described in Section 1.2, there is an intermittent stream running through the landfill footprint. The initial phase (Phase 1) of landfill construction will be to the east of this stream and will not impact the stream. As described in the geologic report, the intermittent stream is fed primarily with surface water drainage from upgradient of the landfill, and therefore may contain constituents from upgradient sources.

Due to the nature of the intermittent flow and the source of the stream (overland flow), there are no plans to conduct surface water sampling of the stream during operation of Phase 1 of the landfill. Once construction proceeds to Phase 2, the flow in this stream from upgradient of the landfill will be captured and routed around the footprint. Consideration of the need to perform sampling will be reviewed prior to beginning of Phase 2 of the landfill.

1.5 MONITORING FREQUENCY

The wells will be sampled semi-annually (with the actual sampling periods determined later). Sampling results will be submitted to the State within 90 days of sampling. The monitoring wells will be sampled prior to placement of waste in the landfill expansion.

1.6 PARAMETERS

Proposed parameters, units of measure, methods, and detection limits are presented in Table 2.

1.6 DATA QUALITY OBJECTIVES

The overall Quality Assurance (QA) objective is to ensure that reliable data of known and acceptable quality are provided. All measurements will be documented to yield results that are representative of the groundwater. Data will be calculated and reported in units consistent with those of other agencies and organizations to allow comparability of data.

The QA objectives for precision, accuracy, and completeness have been established by the laboratory(s) in accordance with EPA or other accepted agencies for each measurement variable (where possible). The objectives are outlined in the Duke Power Company Laboratory Services Procedures Manual, and are available upon request.

Detection limits for the water analyses presented in Table 2 are generally specified by the analytical methods. As stated above, appropriate methods have been selected to meet applicable standards for groundwater quality. Instances may occur, however, in which the condition of the sample will not allow detection of the desired limits for various parameters either because of matrix interference or high analyte concentrations requiring sample dilution. The laboratory(s) will provide sufficient documentation with each data package to notify reviewers of the data to any analytical problems.

2.0 SAMPLING PROCEDURES

2.1 SAMPLING EQUIPMENT

Development, purging and sampling equipment are selected to ensure all materials are compatible with the sample parameters and comply with state and federal regulatory requirements for sampling. Positive-gas-displacement fluorocarbon resin bladder pumps are installed in each monitoring well as dedicated purging and sampling systems.

2.1.1 Equipment Cleaning Procedures

Dedicated sampling equipment will be installed in each monitoring well. However, in the event non-dedicated equipment is used, reusable water level meters, development pumps, purging and sampling equipment are cleaned between wells in accordance with standard EPA approved cleaning procedures for field equipment. This standard is outlined in "Standard Operating Procedures and Quality Assurance Manual", Engineering Support Branch, EPA Region IV, February 1, 1991.

2.2 GROUND-WATER SAMPLING

2.2.1 Development of Wells

After installation of new wells, and prior to initial sampling, the monitoring wells are developed. Development removes silt that has settled into the bottom of the well following installation, and removes fine silt and clay particles from the well screen and sandpack surrounding the screen. Well development is necessary to eliminate potential clogging and enhance well performance. Development involves removing an estimated ten or more well volumes from the well using a positive-gas-displacement fluorocarbon resin bladder pump with an up-and-down agitation to loosen particles from the well screen. After development of a well, a true well depth is recorded.

2.2.2 Ground-Water Level and Total Depth Measurements

Water-level measurements are performed to determine the ground-water flow elevations and to calculate the volume of standing water in the well. All monitoring wells have been surveyed by a registered surveyor to determine the elevation of the top of each well casing. All depth and water-level measurements are referenced to the top of the well casing and recorded to the nearest one-hundredth of a foot.

Water level measurements are made with an electronic measuring device consisting of a spool of dual conductor wire, a probe attached to the end, and an indicator. When the probe comes in contact with water, the circuit is closed and a meter light and/or buzzer attached to the spool signal the contact. The probe is lowered further until it rests on the bottom of the well to determine the depth of the well. The depth and water level are used to determine that the well has not filled with silt and to calculate the volume of standing well water. The volume of well water (in gallons) is calculated using the following equation:

$$V = h \times \pi r^2 \times (7.48052 \text{ gal/ft}^3)$$

where V = volume of standing water (gallons)
h = height of standing water (feet) = casing depth - water level
r = radius of well casing (feet)

In dedicated sampling systems, an accurate well depth is determined, as indicated above, after development of the well and prior to installation of the dedicated bladder pump. The well depth, water level measurement, and calculated well volume are recorded on the Groundwater Monitoring Data Sheet (Figure 4).

2.2.3 Well Purging and Sampling

A Hydrolab® Multi-parameter Water Quality Monitoring Instrument is used to measure indicator parameters for establishing representative groundwater. These instruments are calibrated with

reference standards prior to and after each sampling day as described in Procedure 3210.1[1]. The pH subsystem is calibrated with two different pH standards (pH 7.0 and 4.0) which usually bracket the expected groundwater pH. The conductivity subsystem is calibrated to a standard nearest the expected groundwater conductivity. Calibration results are recorded on the Field Sampling Calibration Data Form (Figure 5).

Wells will be purged and sampled by conventional sampling methods in accordance to Procedure 3500.1[2]. Conventional sampling entails removing one equivalent well volume and measuring the indicator parameters temperature, pH, conductivity and turbidity. When indicator parameters have stabilized within ±0.2 pH units and ±10% for temperature, conductivity and turbidity over 3 to 5 consecutive well volumes, representative groundwater has been determined and sample collection may begin. Removed well volumes, indicator parameters, and pertinent notations are documented on the Groundwater Monitoring Data Sheet.

In the case of low groundwater levels, an alternative to conventional well purging and sample collection is the use of low flow sampling technology. This technique is particularly suited for low yielding wells where conventional purging and sampling evacuate a well to dryness. This method will not normally be employed, but is a viable option for obtaining samples under low groundwater conditions.
Low flow well purging and sampling allows the well to be purged in a shorter period of time, with less purge water generated while maintaining the same level of accuracy and reproducibility. Low flow technology involves using dedicated bladder pumps, a flow through cell, and water quality monitor continually measuring pH, turbidity, specific conductance, temperature, oxidation-reduction potential, and dissolved oxygen. Water is purged from the screened interval of the well at low flow rates (≤ 100 ml/min) through a flow cell connected to a water quality instrument. The pumping rate will be maintained in an attempt to match the natural groundwater flow velocity in order to minimize drawdown in the well. Indicator parameters are electronically logged until stabilization is achieved and samples are collected.

2.2.4 Sample Collection

After representative groundwater has been determined by purging and stablilizing the indicator parameters, sampling may begin. Sampling personnel wear clean, disposable, non-powdered latex gloves during sample collection for each well. Samples are collected in the order of the volatilization sensitivity of the parameters:

- Metals
- Sulfate and chloride
- Nitrate
- TDS

If groundwater samples for metal analysis have a turbidity ≥ 10 NTU, the sample is collected and preserved. An additional sample should be collected using an in line flow through filter suitable for groundwater sampling. This filtered sample should be preserved accordingly with the analytical results used as information only.

2.2.5 Sample Containers, Volume, Preservative, and Holding Time

All sample containers supplied for the collection of groundwater samples by the laboratory are new, precleaned as approved by EPA procedures appropriate for the parameters of interest. Table 3 summarizes the sample containers, sample volume, preservation procedures and holding times required for each type of sample and parameter. Sample containers are kept closed until used. All sample containers are provided by Duke Energy or vendor laboratories.

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[1] Procedure found in Duke Power Company Environmental Chemistry Operating Procedure For The Hydrolab Water Quality Analyzers.
[2] Procedure found in Groundwater Investigation, Groundwater Monitoring, Sample Collection And Aquifer Investigations At Duke Energy Corporation Locations.

3.0 SAMPLE TRACKING

The chain of custody program allows for tracing the possession and handling of individual samples from the time of field collection through laboratory analysis and report preparation. Samples are pre-logged prior to sample collection. This process assigns a unique tracking number for each sample and generates corresponding labels.

3.1 SAMPLE LABELING

Sample containers are labeled and organized prior to field activities as part of the pre-sampling staging process. As samples are actually collected, the sampling personnel write the following information directly on the label: sampling date and time, and initials of sample collector. This information is also recorded on the Groundwater Monitoring Data Form and the Chain of Custody Record (Figure 6).

3.2 FIELD DOCUMENTATION

Field documentation form each sampling event is recorded on the Groundwater Monitoring Data Sheets, the Field Sampling Calibration Form, and the Chain-of-Custody Record. These loose-leaf sheets are arranged in sequential order and filed by project and date. All recorded entries are made in indelible ink. Errors are corrected by drawing a line through the error, initialing and dating the correction, and starting a new entry on the next line (if necessary). Additionally, a Groundwater Sampling Site Checklist (Figure 7) is completed indicating information of the monitoring well such as proper ID tag, condition of protective casing and pad. Field notations are made during the course of the field work to document the following information:

- Identification of well
- Well depth
- Static water level depth and measurement technique
- Presence of immiscible layers and detection method
- Well yield - high or low
- Purge volume or pumping rate
- Sample identification numbers
- Well evacuation procedure/equipment
- Sample withdrawal procedure/equipment
- Date and time of collection
- Types of sample containers used
- Identification of replicates or blind samples
- Preservative(s) used
- Parameters requested for analysis
- Field analysis data and methods
- Sample distribution and transporter
- Field observations on sampling event
- Name of collector(s)
- Climatic conditions including estimate of air temperature

3.3 CHAIN-OF-CUSTODY RECORD (COC)

The COC Record (Figure 6) accompanies the sample(s), traces sample possession from time of collection to delivery to the laboratory(s), and clearly identifies which sample containers have been designated for each requested parameter. The record includes the following types of information:

- Sample identification number
- Signature of collector
- Date and time of collection
- Sample type (e.g., groundwater, immiscible layer)
- Identification of well
- Number of containers
- Parameters requested for analysis
- Preservative used
- Signature of persons involved in the chain of possession
- Inclusive dates of possession

3.4 SAMPLE CUSTODY, SHIPMENT AND LABORATORY RECEIPT

For the purpose of these procedures, a sample is considered in custody if it is:

- In actual possession of the responsible person;
- In view, after being in physical possession;
- Locked so that no one can tamper with it, after having been in physical custody; or in a secured area, restricted to authorized personnel. All samples are maintained in the custody of the sampling crew during the sampling event. At the end of each sampling day and prior to the transfer of the samples off-site, chain-of-custody entries are completed on the COC for all samples. Upon transfer of custody, the chain-of-custody form is signed by a sampling crew member, including the date and time. If outside vendor laboratories are utilized, samples are delivered to these facilities by Duke Energy personnel or courier.

All chain-of-custody forms received by the laboratory(s) are signed and dated by the respective Supervising Scientist(s) or their designee (at the Duke Energy lab), or the laboratory sample custodian (at vendor labs) immediately following receipt by the laboratory.

The analysts at the laboratory(s) maintain a sample-tracking record that will follow each sample through all stages of laboratory processing. The sample tracking records show the date of sample extraction or preparation, and analysis. These records are used to determine compliance with holding time limits during lab audits and data validation.

Custody procedures followed by Duke Energy laboratory personnel are described in detail in the Duke Energy Laboratory Services Procedures Manual.

4.0 ANALYTICAL PROCEDURES

The main analytical laboratory used in this program is the Duke Energy Laboratory Services Laboratory: N.C. Drinking Water (NC37804) and Wastewater (#248) Certifications. The organizational structure and staff qualifications of the laboratory are discussed in its generic Quality Assurance Program (QAP). The QAP and Laboratory Services Procedures Manual are available for review upon request.

Vendor laboratories that meet EPA and North Carolina certification requirements may be used for analyses which cannot be performed in-house.

The analytical procedures used for this Groundwater Monitoring Program are listed in Table 2. Indicator parameters are measured in the field according to Duke Energy Scientific Services Section Quality Assurance Plan and Procedure 3210.1.

5.0 INTERNAL QUALITY CONTROL CHECKS

Internal laboratory control checks used by the laboratories are described in their generic QAP and procedures manual. The laboratories demonstrate the ability to produce acceptable results using the methods specified.

Internal quality control checks for sampling procedures and laboratory analyses will be conducted with each sampling event. These checks will consist of the preparation and submittal of field blanks, trip (travel) blanks, and/or field replicates for analysis of all parameters at frequencies described in the laboratory(s) procedures manuals. Equipment rinsate blanks for laboratory-cleaned equipment will be collected quarterly.

The above field QC blanks and replicates included as internal QC checks are described as follows:

- **Field Blanks**: A field blank consists of sample containers filled in the field with organic-free, deionized or distilled water prepared and preserved in the same manner as the samples. The field blank is transported to the laboratory with the samples and analyzed along with the field samples for the constituents of interest to check for contamination imparted to the samples by the sample container, preservative, or other exogenous sources.

- **Trip Blanks**: A trip (travel) blank is a sample container filled with organic-free water in the laboratory that travels unopened with the sample bottles. It is returned to the laboratory with the field samples, and analyzed along with the field samples for parameters of interest.

- **Field Replicates**: A field replicate is a duplicate sample prepared at the sampling locations from equal portions of all sample aliquots combined to make the sample. Both the field replicate and the sample are collected at the same time, in the same container type, preserved in the same way, and analyzed by the same laboratory as a measure of sampling and analytical precision.

APPENDIX A

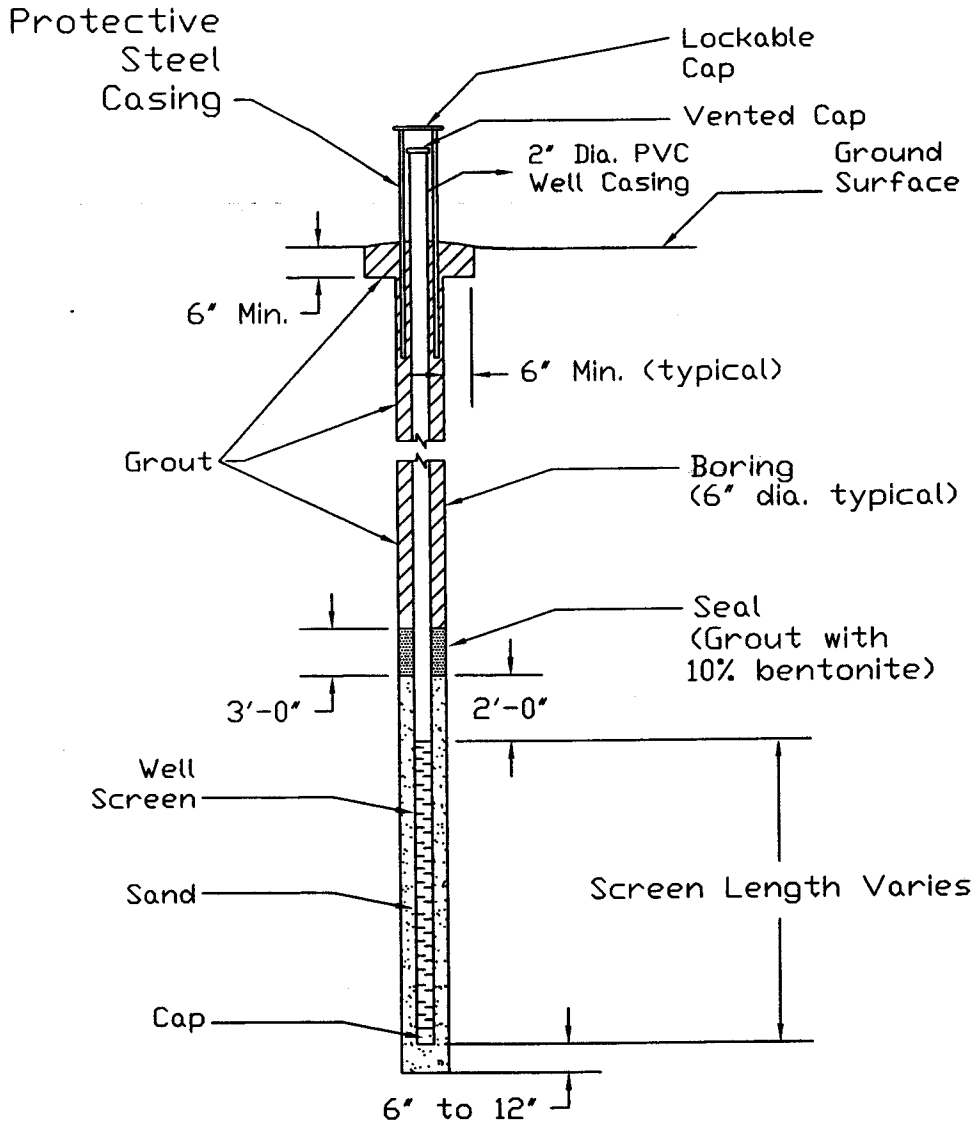
FIGURES & TABLES

Name: LAKE NORMAN NORTH
Date: 6/5/2003
Scale: 1 inch equals 2000 feet

Location: 035° 36' 09.3" N 080° 57' 45.0" W
Caption: Figure 1 - Site Location
Duke Power
Marshall Steam Station

Copyright (C) 1997 Maptech, Inc.

MS-9
MS-10
MS-11
MS-12
MS-13
B-4
B-6
ASH BASIN
ASH BASIN
WASTE LIMIT
REVIEW BOUNDARY
125'
STEAM PLANT ROAD
SOUTHERN RAILROAD
DUKE PROPERTY LINE
LEGEND
MONITORING WELL LOCATION (EXISTING)
MONITORING WELL LOCATION (PROPOSED)
DUKE POWER
MARSHALL STEAM STATION
MONITORING WELL LOCATIONS AT
PROPOSED FGD RESIDUE LANDFILL
YEARS 1 - 5
FIGURE NO. 2
100 50 0 100 200 300
SCALE IN FEET



Notes:

- All well casing material shall be Sch 40 PVC.
- Well screen material shall be Sch 40 PVC.

Duke Power Company

Typical
Groundwater Monitoring Well
Construction Details
FIGURE 3

DUKE POWER COMPANY
GROUNDWATER MONITORING DATA SHEET

LOCATION:			
PROJECT NAME:			
PROCEDURE NUMBER:	3500.1		
SAMPLING DATE:		FIELD CREW:	

MONITORING WELL NUMBER: _____

WATER LEVEL METER SERIAL #: _____
PRODUCT LEVEL METER SERIAL #: _____
TIME SAMPLE COLLECTED: _____

WELL VOLUME CALCULATION:

WELL DIAMETER (in)	WELL DEPTH (ft)	-	DEPTH TO WATER (ft)	=	WATER COLUMN (ft)	X	CONVERSION FACTOR	=	WELL VOLUME (gal)
2"		-		=		X	0.1631	=	
4"		-		=		X	0.6530	=	
6"		-		=		X	1.4684	=	

METHOD (Pump/Bail):	
MICROPURGE (Yes/No):	
PID READING:	ppm

DEDICATED SAMPLING SYSTEMS ONLY		
REFERENCE PROBE DEPTH:		(ft)
SUBMERSION DEPTH:	-	(ft)
DEPTH TO WATER:	=	(ft)

DETECTED ODORS	FREE PRODUCT MEASUREMENT		
TYPE:	DEPTH TO WATER		(ft)
STRONG:	DEPTH TO PRODUCT	-	(ft)
MINOR:	PRODUCT THICKNESS	=	(ft)
NONE:	DON'T SAMPLE IF THICKNESS > OR = TO 0.1 ft !		

VOLUME (gal)	EVACUATED VOLUME (gal)	TEMP (deg C)	SPECIFIC CONDUCTANCE (umho/cm)	TURBIDITY (NTU)	pH (unit)	ORP (mV)	DISSOLVED OXYGEN (mg/l)		COMPLETE EVACUATION (Yes/No)

COMMENTS: WATER LEVEL, PRODUCT LEVEL AND WELL DEPTH REFERENCED TO THE TOP OF WELL CASING.

Figure 4

FIELD SAMPLING CALIBRATION DATA FORM

STUDY: _____

DATE: _____ WEATHER CONDITIONS: _____

COLLECTORS: _____ SURFACE UNIT READER: _____

HYDROLAB SERIAL #: _____ COMPUTER: _____

OTHER EQUIPMENT: _____ SURVEYOR SERIAL #: _____

Procedure Number 3210.1

Calibration Time		Time			Time			Time		
Barometric Pressure				mmHg			mmHg			mmHg
Parameter	Calib.	Instrument Value		Standard Value	Instrument Value		Standard Value	Instrument Value		Standard Value
Thermometer No.										
TEMP (deg C)			-/->			-/->			-/->	
			-/->			-/->			-/->	
DO (mg/l)	W									
	W									
	W									
	AW		-->			-->			-->	
pH (units)	B		-->	7.00		-->	7.00		-->	7.00
	B		-->	4.00		-->	4.00		-->	4.00
	B		-->	10.00		-->	10.00		-->	10.00
SP COND (uS/cm)	SS		-->	0.00		-->	0.00		-->	0.00
	SS		-->			-->			-->	
	SS		-->			-->			-->	
ORP (mV)	SS		-->			-->			-->	
	SS		-->			-->			-->	
TURBIDITY (ntu)	SS		-->	0.00		-->	0.00		-->	0.00
	SS		-->			-->			-->	

KEY:
B = Buffer
SS = Standard Solution
--> = Adjusted To
W = Winkler
AW = Average Winkler
-/-> = Not Adjusted To
NA = Not Applicable

Figure 5

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Duke EnergySM

For Detailed Instructions, see:
http://dewww/essenv/coc/

Analytical Laboratory Services

Mail Code MGO3A2 (Building 7405)
13339 Hagers Ferry Rd
Huntersville, N. C. 28078
(704) 875-5245
Fax: (704) 875-5038

Analytical Laboratory Use Only

LIMS #	Sample Class	Samples Originating From NC___ SC___
Logged By	Date & Time	SAMPLE PROGRAM: Ground Water ___ NPDES ___ Drinking Water ___ UST ___ RCRA Waste ___
Vendor	Cooler Temp (C)	
PO #	[15]Preserv.: 1=HCL 2=H_2SO_4 3=HNO_3 4=Ice 5=None	
MR #		

[19]Page ____ of ____
DISTRIBUTION
ORIGINAL to LAB,
COPY to CLIENT

Customer must Complete

1)Project Name		2)Phone No:
3)Client		4)Fax No:
5)Business Unit:	6)Process:	7)Resp. To:
8)Project ID:	9)Activity ID:	10)Mail Code:

Customer to complete all appropriate NON-SHADED areas.

Customer to complete appropriate columns to right

LAB USE ONLY [11]Lab ID	[12]Chem Desktop No.	[13]Sample Description or ID	[14]Collection Information: Date	Time	Signature	[17]Comp.	[18]Grab	[16]Analyses Required	[20]Total # of Containers

Customer to sign & date below

21)Relinquished By	Date/Time	Accepted By:	Date/Time
Relinquished By	Date/Time	Accepted By:	Date/Time
Relinquished By	Date/Time	Accepted By:	Date/Time
23)Seal/Locked By	Date/Time	Sealed/Lock Opened By	Date/Time
24)Comments			

Customer, important please indicate desired turnaround

[22]Requested Turnaround
14 Days _____
*7 Days _____
*48 Hr _____
*Other _____
* Add. Cost Will Apply

Figure 6

GROUNDWATER SAMPLING SITE CHECKLIST

Location _____ **Site** _____

Site Contact _____ **Field Crew** _____

Sample Date _____ **Weather** _____

YES	NO	SITE CONDITIONS DURING GROUNDWATER SAMPLING EVENT
____	____	Was Access to the wells clear & adequate ? _____
		_____
____	____	Were wells locked ? _____
____	____	Do locks need replacing ? _____

Do wells have proper identification tags attached including:

NC REQUIREMENTS

__ Drilling contractor name & registration number
__ Date well completed
__ Total well depth
__ Warning that the well is not for water supply & that the groundwater may contain hazardous materials
__ Depth to screen

SC REQUIREMENTS

__ Drilling contractor name & driller certification number
__ Date well completed
__ Total well depth
__ Casing depth (ft) and inside diam. (in)
__ Screen interval(s)
__ Yield in gpm or specific capacity in gpm per ft of drawdown (gpm/ft-dd)
__ Static water level and date measured

____	____	Were well PVC casings in good shape ? _____
____	____	Were concrete pads in good shape ? _____
____	____	Any ants, wasps, etc. in or around the casing ? _____
____	____	Were well protective casings in good shape _____

_____

FLUSH MOUNT WELLS ONLY

____	____	Do well caps work properly ? _____
____	____	Are gaskets & bolts in good shape (keep out the rain) ? _____

_____

Note any type activity that might impact the integrity of the monitoring wells (dumping, earthmoving, construction, or the use of pesticides/herbicides) _____

_____

ANY OTHER COMMENTS: _____

_____

_____

Figure 7

Table 1. Monitoring Well Construction Information

	MS-9	MS-10	MS-11	MS-12	B-4	MS-13	B-6
	(Existing)	(Proposed)	(Proposed)	(Proposed)	(Existing)	(Proposed)	(Existing)
North (ft)	681,384.5				680,428.0		680,035.5
East (ft)	1,412,181.7				1,412,428.0		1,412,750.0
Top Of Casing Elevation (ft)	868.04				861.47		854.5
Well Diameter	2"	2"	2"		2"	2"	2"
Well Stick-up	2.68'				3.05	'	2.91'
Type of Casing	PVC	PVC	PVC		PVC	PVC	PVC
Total Depth (ft)	50.0				59.0		47.0
Screen Length (ft)	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Screen Interval (ft below ground surface)	40.0 To 50.0				49.0 To 59.0		37.0 To 47.0

Coordinates: NC State Plane Grid, NAD83.

Table 2. Sample Parameters, Analytical Methods and Detection Limits

PARAMETER	UNITS	ANALYTICAL METHOD	DETECTION LIMITS
Insitu Parameters			
Field pH	pH Units	Hydrolab	NA
Specific Conductance	umhos/cm	Hydrolab	NA
Temperature	°C	Hydrolab	NA
Turbidity	NTU	HACH	NA
Water Level	ft	Water Level Meter	0.01 ft
Laboratory Analyses			
Nitrate	mg/l	EPA 353.2	0.05
Chloride	mg/l	EPA 300.0	0.1
Arsenic	ug/l	EPA 200.8	(Note 1) 2
Barium	mg/l	EPA 200.7	0.0050
Cadmium	ug/l	EPA 200.8	0.5
Chromium	ug/l	EPA 200.8	1
Copper	ug/l	EPA 200.8	2
Iron	mg/l	EPA 200.7	0.010
Lead	ug/l	EPA 200.8	2
Manganese	mg/l	EPA 200.7	0.0050
Mercury	ug/l	EPA 245.1	0.1
Nickel	ug/l	EPA 200.7	40
Selenium	ug/l	EPA 200.8	2
Silver	ug/l	EPA 200.8	0.5
Zinc	ug/l	EPA 200.7	0.02
Sulfate	mg/l	EPA 300.0	0.1
Fluoride	mg/l	EPA 300.0	0.10
TDS	mg/l	EPA 160.1	10

Note 1: The Division of Public Health has recommended that the Groundwater Quality Standard for Arsenic be lowered to 0.00002 mg/L. The Environmental Management Commission previously directed that NCDENR staff proceed with permanent rulemaking to change the Groundwater Quality Standard for Arsenic. The permanent rule published for hearing will propose a concentration level for Arsenic at the much lower concentration of 0.00002 milligrams per liter. Duke is evaluating methods to achieve detection at this lower concentration.

Table 3. Sample Containers, Preservatives and Holding Times.

PARAMETER	CONTAINERS	PRESERVATIVES	HOLDING TIMES
Insitu Parameters			
Field pH	Insitu	None	Analyze Immediately
Specific Conductance	Insitu	None	Analyze Immediately
Temperature	Insitu	None	Analyze Immediately
Turbidity	Insitu	None	Analyze Immediately
ORP	Insitu	None	Analyze Immediately
Laboratory Analyses			
Nitrate	500 ml HDPE	Cool 4°C	48 hrs
Chloride	500 ml HDPE	Cool 4°C	28 days
Arsenic	500 ml HDPE	pH<2 HNO_3	6 months
Barium	500 ml HDPE	pH<2 HNO_3	6 months
Cadmium	500 ml HDPE	pH<2 HNO_3	6 months
Chromium	500 ml HDPE	pH<2 HNO_3	6 months
Copper	500 ml HDPE	pH<2 HNO_3	6 months
Iron	500 ml HDPE	pH<2 HNO_3	6 months
Lead	500 ml HDPE	pH<2 HNO_3	6 months
Manganese	500 ml HDPE	pH<2 HNO_3	6 months
Nickel	500 ml HDPE	pH<2 HNO_3	6 months
Mercury	500 ml HDPE	pH<2 HNO_3	6 months
Selenium	500 ml HDPE	pH<2 HNO_3	6 months
Silver	500 ml HDPE	pH<2 HNO_3	6 months
Zinc	500 ml HDPE	pH<2 HNO_3	6 months
Sulfate	500 ml HDPE	Cool 4°C	28 days
Fluoride	500 ml HDPE	pH<2 HNO_3	6 months
Total Dissolved Solids	500 ml HDPE	Cool 4°C	7 days

APPENDIX B

Monitoring Well Construction Records

(Monitoring Well Construction Records will be supplied upon construction of the wells)

Drawings Under Seperate Cover