



October 29, 2001

Ms. Betty Lou Foster
NPDES Administration
Bureau of Water
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, SC 29201

Dear Ms. Foster:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
NPDES PERMITS NO. SC0038407
RENEWAL APPLICATION (LP 131)

This letter provides the renewal application for NPDES Permit No. SC0038407 for the Virgil C. Summer Nuclear Station Nuclear Training Center. Included in this package are the following items:

- Completed Application Form 1 – General Information
- Completed Form 2E
- Sludge Disposal Summary
- Best Management Practices Summary
- Location Supplement for NPDES Permit Application

Should there be any questions, please contact Ms. Susan B. Reese at 345-4591.

Very truly yours,

Stephen A. Byrne

SBR/SAB/sbr
Enclosures

c: R. J. White (802 w/o enclosures)
J. W. Preston (175)
J. A. Orr (P40)
W. F. Bacon (331)
W. R. Higgins (830)
NSRC (300)

NRC Resident Inspector
Document Control Desk
RTS (0-L-99-0078, LP 131)
File (814.07-2)
DMS (RC-01-0186)

Cool

APPLICATION FORM 1

FORM 1		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>	I. EPA I.D. NUMBER 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
LABEL ITEMS		PLEASE PLACE LABEL IN THIS SPACE	I. EPA I.D. NUMBER
III. FACILITY NAME			GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.
V. FACILITY MAILING ADDRESS			
VI. FACILITY LOCATION			

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X'			SPECIFIC QUESTIONS	MARK 'X'		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		X	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1	SKIP	NUCLEAR TRAINING CENTER
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IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)	B. PHONE (area code & no.)
2 G O F F R A Y H A S C A L S U P E R V I S O R	8 0 3 3 4 5 4 8 4 0

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX	B. CITY OR TOWN	C. STATE	D. ZIP CODE
3 P O B O X 8 8	J E N K I N S V I L L E	S C	2 9 0 6 5

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER	D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)
5 J C T H W Y 2 1 3 & C O U N T Y R D 1 6	S C	2 9 0 6 5	
B. COUNTY NAME			
F A I R F I E L D			
C. CITY OR TOWN			
6 J E N K I N S V I L L E			

FORM 2E

Form
2E
NPDES

EPA Facilities Which Do Not Discharge Process Wastewater

I. Receiving Waters

For this outfall, list the latitude and longitude, and name of the receiving water(s).

Outfall Number (list)	Latitude			Longitude			Receiving Water (name)
	Deg	Min	Sec	Deg	Min	Sec	
001	18	19	17	34	15	54	Mayo Creek

II. Discharge Date (If a new discharger, the date you expect to begin discharging)

III. Type of Waste

A. Check the boxes indicating the general type(s) of wastes discharged.

Sanitary Wastes Restaurant or Cafeteria Wastes Noncontact Cooling Water Other Nonprocess Wastewater (Identify)

B. If any cooling water additives are used, list them here. Briefly describe their composition if this information is available.

IV. Effluent Characteristics

A. Existing Sources — Provide measurements for the parameters listed in the left-hand column below, unless waived by the permitting authority (see instructions).

B. New Dischargers — Provide estimates for the parameters listed in the left-hand column below, unless waived by the permitting authority. Instead of the number of measurements taken, provide the source of estimated values (see instructions).

Pollutant or Parameter	(1) Maximum Daily Value (include units)		(2) Average Daily Value (last year) (include units)		(3) Number of Measurements Taken (last year)	(4) Source of Estimate (if new discharger)
	Mass	Concentration	Mass	Concentration		
Biochemical Oxygen Demand (BOD)	0.24	24.0 ppm	0.065	12.4 ppm	13	N/A
Total Suspended Solids (TSS)	0.20	20.0 ppm	0.044	8.4 ppm	13	N/A
Fecal Coliform (if believed present or if sanitary waste is discharged)	N/A	>60cts/100ml	N/A	<1cts/100ml	14	N/A
Total Residual Chlorine (if chlorine is used)	<0.0005	<0.05 ppm	<0.00026	<0.05 ppm	13	N/A
Oil and Grease	0.058	5.8 mg/l	0.03	5.8 mg/l	1	N/A
*Chemical oxygen demand (COD)	N/A	N/A	N/A	N/A	N/A	N/A
*Total organic carbon (TOC)	N/A	N/A	N/A	N/A	N/A	N/A
Ammonia (as N)	0.0115	1.15 mg/l	0.006	1.15 mg/l	1	N/A
Discharge Flow	Value 0.0012 MGD		0.000627 MGD		15	N/A
pH (give range)	Value 7.7 s.u.		7.2 s.u.		13	N/A
Temperature (Winter)	N/A	°C	N/A	°C	0	N/A
Temperature (Summer)	N/A	°C	N/A	°C	0	N/A

*If noncontact cooling water is discharged

V. Except for leaks or spills, will the discharge described in this form be intermittent or seasonal?
If yes, briefly describe the frequency of flow and duration. Yes No

VI. Treatment System (Describe briefly any treatment system(s) used or to be used)

Sanitary sewage treatment system consisting of:
aeration tank, clarifier, chlorinator, chlorine contact tank,
dechlorinator, sludge storage tank, lift station, approximately 1100 feet
of 4" force main and 3100 feet of 4" gravity main

VII. Other Information (Optional)

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations. Attach additional sheets, if necessary.

VIII. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title Stephen A. Byrne Senior Vice President, Nuclear Operations	B. Phone No. (area code & no.) 803-345-4622
C. Signature 	D. Date Signed 10/26/01

SLUDGE DISPOSAL SUMMARY



BUREAU OF WATER
SLUDGE DISPOSAL SUPPLEMENT FOR NPDES AND ND PERMIT APPLICATIONS

Facility Name: Nuclear Training Center

Permit Number: SC00 38407 (leave blank for a new facility)

or ND00

Please check your proposed or current sludge disposal procedure:

I. Existing Facilities:

- Lagoon or other facility with no routine sludge disposal. Please attach a letter that addresses the approximate schedule for sludge removal and address the anticipated disposal method (note that the proposed sludge disposal method must be approved by the Department prior to initiation).
- Sludge disposal at another wastewater treatment facility. Attached is a recent letter of acceptance dated _____. This letter must include the NPDES or ND number of the treatment facility accepting the sludge for disposal. If no previous SCDHEC approval has been granted on the disposal method, then please include a detailed report on the existing sludge disposal method. See the attached requirements for Sludge Disposal Report A. If a previous SCDHEC approval has been granted, then include a recent analysis that shows the non-hazardous nature of the sludge or a signed statement that the sludge characteristics have not changes since the last analysis.
- Sludge disposal at a landfill. If the landfill is SWAIP (special waste) approved, an recent acceptance letter from the landfill is acceptable. If the landfill is not SWAIP approved, attached is SCDHEC Solid and Hazardous Waste approval dated _____, or other SCDHEC approval dated _____. If no previous approval has been granted on the disposal method, then please include a detailed report on the existing sludge disposal method. See the attached requirements for Sludge Disposal Report B.
- Sludge disposal by Beneficial Use of Sludge. Attached is SCDHEC approval letter or program approval dated _____. If no previous approval has been granted on the disposal method, then please include a detailed report on the existing sludge disposal method. See the attached requirements for Sludge Disposal Report C.

II. Proposed Facilities:

- Lagoon or other facility with no routine sludge disposal. Please attach a letter that addresses the approximate schedule for sludge removal and address the anticipated disposal method (note that the proposed sludge disposal method must be approved by the Department prior to initiation).
- Sludge disposal at another wastewater treatment facility. Please include a detailed report on the proposed sludge disposal method. See the attached requirements for Sludge Disposal Report A.
- Sludge disposal at a landfill. Please include a detailed report on the proposed sludge disposal method. See the attached requirements for Sludge Disposal Report B.
- Sludge disposal by Beneficial Use. Please include a detailed report on the proposed sludge disposal method. See the attached requirements for Sludge Disposal Report C.

Send this form and the appropriate disposal report (if applicable) with your NPDES or ND permit application.

ALSO SEE ATTACHED INSTRUCTIONS

Sludge Disposal Summary
V. C. Summer Nuclear Station Nuclear Training Facility
Highway 213, Jenkinsville, S.C. 29065

Facility: V. C. Summer Nuclear Station Nuclear Training Facility

Owner: South Carolina Electric and Gas Company (SCE&G)

Type: Wastewater Package Plant

Frequency: Once every ten to fifteen years

Sludge Disposal Method: Sludge from the Nuclear Training Facility package plant is pumped into a tanker truck and transported to the V.C. Summer Nuclear Station wastewater treatment plant (NPDES Outfall 005). The sludge is then placed into the inlet end of NPDES Outfall 005. The sludge/wastewater then progresses through the normal flow path of normal domestic wastewater at V. C. Summer Nuclear Station. The normal flow path consist of a settling tank, aeration basin, sand filter, chlorination basin, and de-chlorination basin. Both facilities are owned and operated by SCE&G.

**BEST MANAGEMENT PRACTICES
SUMMARY**

Summary of the V. C. Summer Nuclear Station

Nuclear Training Center

Best Management Practices Plan

This seven page document describes the Best Management Practices (BMP) Plan for the Virgil C. Summer Nuclear Station Nuclear Training Facility as required by NPDES Permit No. SC0038407. Additional references are 40 CFR 125, Subpart K, and the Code of Federal Regulations Title 40, Parts 302, 300 and 355.

The *Reference* section of the plan lists the documents mentioned in the previous paragraph, along with the associated V. C. Summer Nuclear Station procedures and other State and Federal Regulations. Next section is a *Definitions* section, containing CERCLA, Reportable Quantity and Threshold Planning Quantity. Section 4 is the *Plant Description and Location*, followed by the *Statement of Policy and Objectives*. The *BMP Committee* is addressed in Section 6, including the committee composition and responsibility.

Risk Management begins on page 3 and is identified as Section 7.0. It specifies the plant procedures that personnel should refer to in case of a spill or toxic release. These procedures are bound together in the Environmental Issues Manual, located in several locations throughout the plant. This section discusses, for each area/system the chemical or substance and hazardous substances that are stored and the potential for spills reaching receivable waters. Areas included in this section are oil storage, loading areas and the Chemistry laboratories. Other topics included are 40 CFR 302 substances, hazardous waste, battery rooms, sludge disposal and waste disposal.

Section 8, *Reporting*, addresses the expectations for plant personnel upon the discovery of a spill of a suspected hazardous or toxic substance. Section 9, *Material Compatibility* discusses chemical compatibility and containers. Section 10, *Good Housekeeping* and Section 11, *Preventive Maintenance*, state the plant procedures used to control these programs.

Inspections and Records, Section 12, outlines the responsibility of inspections. Section 13, *Security*, discusses the security of the facility and Section 14, *Employee Training* outlines the employee training requirements. The final part of the plan is a *Revision Summary*. This section specifies what changes were made to the BMP plan. This summary is typical of the plant procedures.

**LOCATION SUPPLEMENT
FOR
NPDES PERMIT APPLICATION**



South Carolina Department of Health
and Environmental Control

BUREAU OF WATER

(803) 898-4300

Location Supplement for ND and NPDES Permit Applications

I. Date: 10/18/01

II. Name of Facility: Nuclear Training Center

III. NPDES or ND Number: SC0038407 (proposed dischargers leave blank)

IV. If the facility is not owned by a city or town, please answer the following question. Is the plant or discharge point/application site(s) located within the corporate limits of a city or town?

 Yes, Name of city or town: _____

 X No.

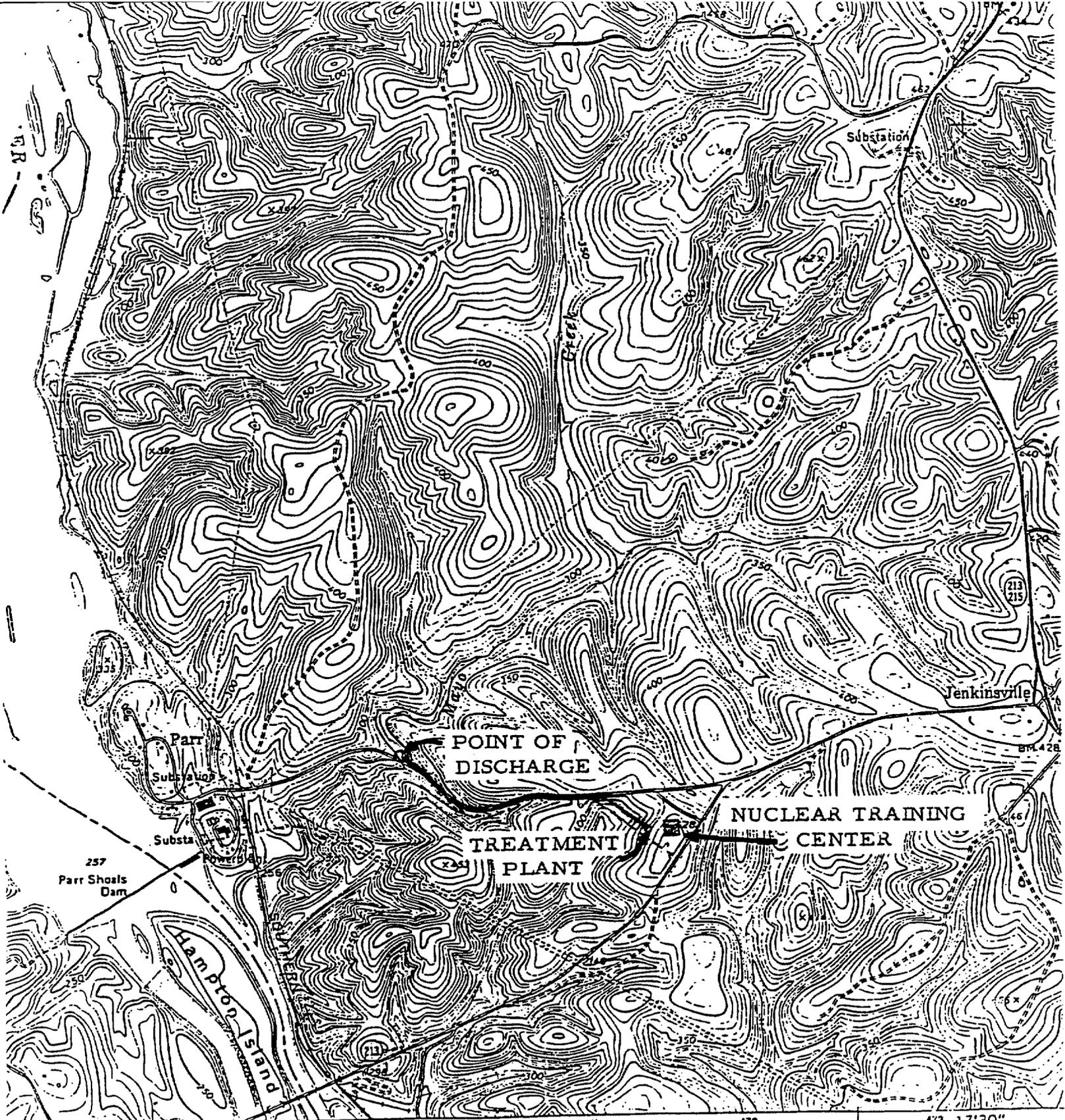
V. If the address on the application is not a specific location, please give a short description of the plant location. Example: Plant is located at the interchange of Interstate I-26 and U.S. Highway #1.

Plant is located at the junction of Highway 213 and County Road 16.

VI. For NPDES permits, please give a description of the location of each discharge point into the receiving stream using some landmark as a reference point, i.e., bridge, stream, road junction, the plant itself, etc. Example: Discharge #001 is into Johnny Creek approximately 300 feet directly behind the plant. Discharge #002 is into Doris Creek 150 feet downstream from U.S. Highway #30 bridge. For ND permits, describe the location of each application site. Use additional sheets, as necessary.

Discharge #001 is into Mayo Creek approximately 3/4 of a mile behind the plant.

VII. Please submit a copy of a U.S. Geological Survey 7½ minute quad sheet (or a 15 minute quad if a 7½ quad is not available for the area) with the discharge point(s) identified. The entire quad sheet need not be submitted. An 8½ by 11 photocopy of the applicable portion of the map is sufficient. The quad sheet name must be provided on the copy submitted to the Department. USGS are available at the SC Department of Natural Resources/Map and Information Center, 2221 Devine Street, Suite 222, Columbia, SC 29205. Telephone #: (803) 734-9108.



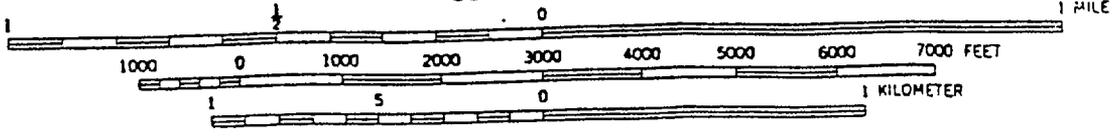
POINT OF DISCHARGE

TREATMENT PLANT

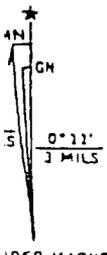
NUCLEAR TRAINING CENTER

71 (CHAPIN)
475 IN NE

SCALE 1:24 000

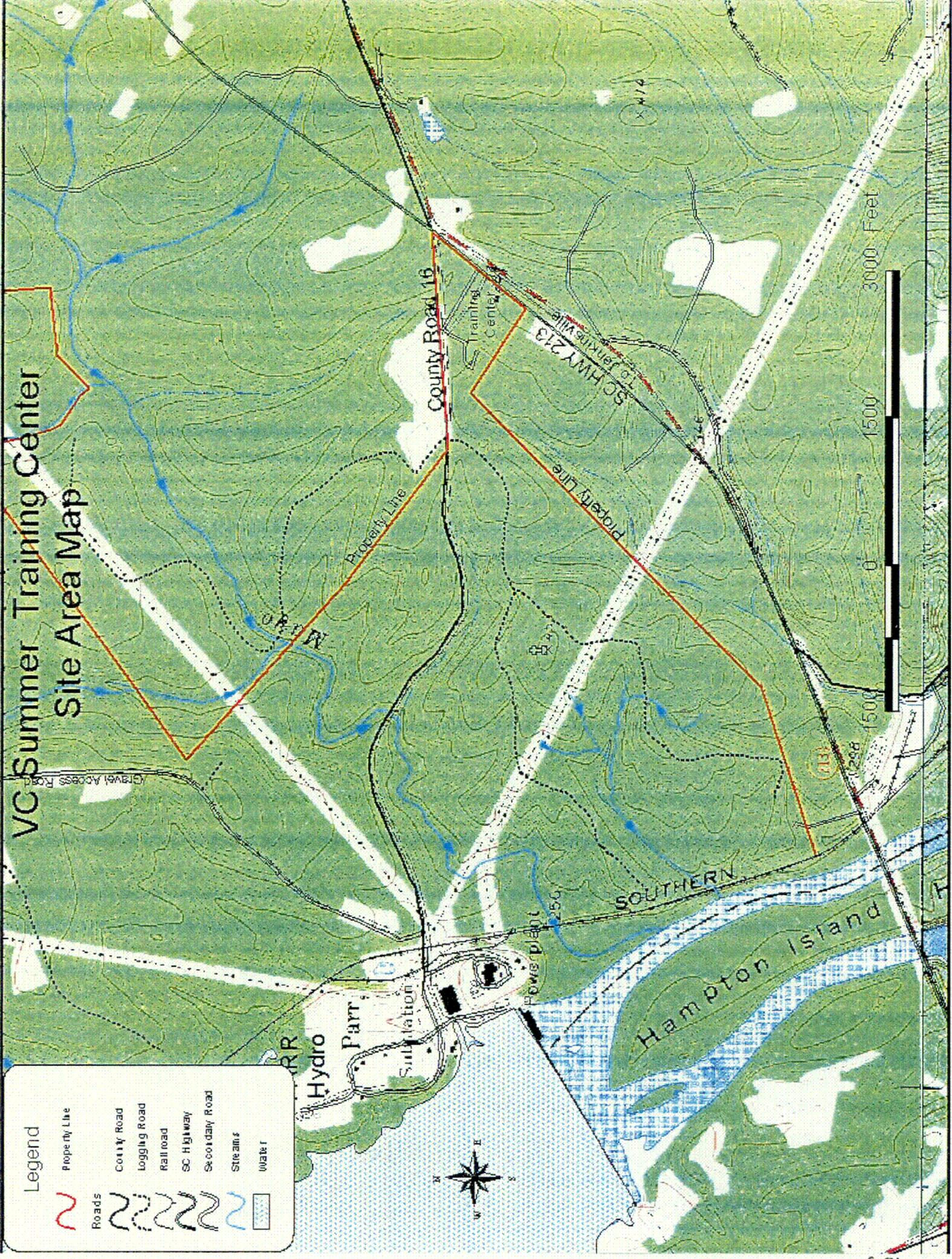


CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



1969 MAGNETIC NORTH

VC Summer Training Center Site Area Map



Legend

-  Property Line
-  County Road
-  Logging Road
-  Rail road
-  SC Highway
-  Secondary Road
-  Streams
-  Water