



VIRGINIA POWER

August 30, 1993

50-280/281

Mr. Vernon Williams, Director  
State Capitol Regional Office  
Virginia Department of Environmental Quality  
Arboretum V, Suite 250  
9210 Arboretum Parkway  
Richmond, Virginia 23236

Dear Mr. Williams:

Virginia Power hereby applies for a permit to modify the Surry Nuclear Power Station by installing an emergency standby diesel-powered generator.

The generator we plan to install, known as the "station blackout" (SBO) generator, will ensure the safe and orderly shutdown of the nuclear units at Surry in the event the station is suddenly isolated from Virginia Power's transmission and distribution system. Although the power station is already equipped with five smaller emergency diesel generators, recent changes in Nuclear Regulatory Commission regulations require that the station's safety systems be supplemented by the addition of one larger unit.

The generator will consist of a Caterpillar 3600 Series diesel engine rated at 5605 bhp at 900 rpm, driving a generator with a maximum output of 4000 kw. The unit will be operated for purposes of testing and in the event of an emergency. However, it may be necessary to deliver power to Virginia Power's system in order to test the unit under load. We expect the unit to operate less than 500 hours per year, and suggest a permit condition limiting it to that level of operation.

The generator will burn distillate oil (identified as either No.2 oil or diesel fuel, which are interchangeable) which will be delivered to a new 1400 gallon day tank by tank trucks. The generator and auxiliary equipment will be housed in a new building devoted exclusively to that purpose.

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As the attachments illustrate, the annual emission rates (at 500 hours of operation per year) of pollutants regulated under the Clean Air Act are so low that the generator is not subject to licensing under §120-08-02 (PSD) nor §120-08-03 (Nonattainment) of the Virginia regulations, and the emission rates of toxic and criteria pollutants other than NO<sub>x</sub> are below the Appendix R exemption levels for licensing under §120-08-01 (minor sources and minor modifications). However, the generator is subject to §120-08-01 as a result of its emissions (39.3 tons per year) of NO<sub>x</sub>.

Relevant pages of Form 7 are attached, as are emission calculations, the manufacturer's emission test data, a drawing of the building which will house the generator, and a map showing its location.

As required by the Board's regulations (Part VIII, Permits for Stationary Sources), the enclosed submittal includes a certificate signed by Mr. J. A. Ahladas, Virginia Power's Senior Vice President-Corporate Services. Mr. Ahladas has signed this certificate with the understanding that such certificate is not intended as a representation that he was directly responsible for supervising or directing all the individuals and entities that may have participated in preparing this submittal. For example, he did not supervise or direct the employees of vendors or contractors who may have contributed information. Also, some information contained in this submittal may have been prepared or gathered by Virginia Power employees who do not report to him directly or indirectly. Nevertheless, the preparation of this submittal was coordinated by individuals who do report directly to Mr. Ahladas, and to the best of his knowledge the information contained is complete and accurate.

Virginia Power's interpretation of the enclosed certification as reflected above is based on the U.S. Environmental Protection Agency's statements at 48 Fed. Reg. 39611, 39613 and 39621 (September 1, 1983) (enclosed) clarifying the intent of the identical certificate required under EPA's consolidated permit program rules.

Please do not hesitate to contact me by telephone (804/273-3023) if any additional information is needed.

Very truly yours,



A. W. Hadder  
Manager  
Air Quality

cc: U.S. Nuclear Regulatory Commission ✓  
Attn: Document Control Desk  
Washington, D.C. 20555

Surry Power Station  
Units 1 and 2  
Docket Nos. 50-280 and 50-281  
License Nos. DPR-32 and DPR-37

Mr. M. W. Branch  
NRC Senior Resident Inspector  
Surry Power Station

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF AIR POLLUTION CONTROL

DOCUMENT CERTIFICATION FORM

(see other side for instructions)

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 and evaluating 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.

SIGNATURE:

John Ahladas

DATE: 8/30/93

NAME:

John A. Ahladas

TITLE:

Senior Vice President-Corporate Services

COMPANY:

Virginia Power

PHONE:

(804) 771-4525

September 1, 1983 at the rates indicated in the table below.  
**List of Subjects in 39 CFR Part 10**  
**Foreign relations.**  
**Luxembourg International Express Mail**

Custom designed service <sup>1</sup> , up to and including—		On demand service <sup>2</sup> , up to and including—	
Pounds	Rate	Pounds	Rate
1	\$27.00	1	\$19.00
2	29.90	2	21.90
3	32.80	3	24.80
4	35.70	4	27.70
5	38.60	5	30.60
6	41.50	6	33.50
7	44.40	7	36.40
8	47.30	8	39.30
9	50.20	9	42.20
10	53.10	10	45.10
11	56.00	11	48.00
12	58.90	12	50.90
13	61.80	13	53.80
14	64.70	14	56.70
15	67.60	15	59.60
16	70.50	16	62.50
17	73.40	17	65.40
18	76.30	18	68.30
19	79.20	19	71.20
20	82.10	20	74.10
21	85.00	21	77.00
22	87.90	22	79.90
23	90.80	23	82.80
24	93.70	24	85.70
25	96.60	25	88.60
26	99.50	26	91.50
27	102.40	27	94.40
28	105.30	28	97.30
29	108.20	29	100.20
30	111.10	30	103.10
31	114.00	31	106.00
32	116.90	32	108.90
33	119.80	33	111.80
34	122.70	34	114.70
35	125.60	35	117.60
36	128.50	36	120.50
37	131.40	37	123.40
38	134.30	38	126.30
39	137.20	39	129.20
40	140.10	40	132.10
41	143.00	41	135.00
42	145.90	42	137.90
43	148.80	43	140.80
44	151.70	44	143.70

<sup>1</sup> Rates in this table are applicable to each piece of International Custom Designed Express Mail shipped under a Service Agreement providing for tender by the customer at a designated Post Office.  
<sup>2</sup> Pickup is available under a Service Agreement for an added charge of \$5.60 for each pickup stop, regardless of the number of pieces picked up. Domestic and International Express Mail picked up together under the same Service Agreement incurs only one pickup charge.

**MACAO INTERNATIONAL EXPRESS MAIL**

Custom designed service <sup>1</sup> , up to and including—		On demand service <sup>2</sup> , up to and including—	
Pounds	Rate	Pounds	Rate
1	\$28.00	1	\$20.00
2	31.70	2	23.70
3	35.40	3	27.40
4	39.10	4	31.10
5	42.80	5	34.80
6	46.50	6	38.50
7	50.20	7	42.20
8	53.90	8	45.90
9	57.60	9	49.60
10	61.30	10	53.30
11	65.00	11	57.00
12	68.70	12	60.70
13	72.40	13	64.40
14	76.10	14	68.10
15	79.80	15	71.80
16	83.50	16	75.50
17	87.20	17	79.20
18	90.90	18	82.90
19	94.60	19	86.60
20	98.30	20	90.30

<sup>1</sup> Rates in this table are applicable to each piece of International Custom Designed Express Mail shipped under a Service Agreement providing for tender by the customer at a designated Post Office.  
<sup>2</sup> Pickup is available under a Service Agreement for an added charge of \$5.60 for each pickup stop, regardless of the number of pieces picked up. Domestic and International Express Mail picked up together under the same Service Agreement incurs only one pickup charge.

**MACAO INTERNATIONAL EXPRESS MAIL**  
 Continued

Custom designed service <sup>1</sup> , up to and including—		On demand service <sup>2</sup> , up to and including—	
Pounds	Rate	Pounds	Rate
21	102.00	21	94.00
22	105.70	22	97.70
23	109.40	23	101.40
24	113.10	24	105.10
25	116.80	25	108.80
26	120.50	26	112.50
27	124.20	27	116.20
28	127.90	28	119.90
29	131.60	29	123.60
30	135.30	30	127.30
31	139.00	31	131.00
32	142.70	32	134.70
33	146.40	33	138.40
34	150.10	34	142.10
35	153.80	35	145.80
36	157.50	36	149.50
37	161.20	37	153.20
38	164.90	38	156.90
39	168.60	39	160.60
40	172.30	40	164.30
41	176.00	41	168.00
42	179.70	42	171.70
43	183.40	43	175.40
44	187.10	44	179.10

<sup>1</sup> Rates in this table are applicable to each piece of International Custom Designed Express Mail shipped under a Service Agreement providing for tender by the customer at a designated Post Office.  
<sup>2</sup> Pickup is available under a Service Agreement for an added charge of \$5.60 for each pickup stop, regardless of the number of pieces picked up. Domestic and International Express Mail picked up together under the same Service Agreement incurs only one pickup charge.

**SWEDEN INTERNATIONAL EXPRESS MAIL**

Custom designed service <sup>1</sup> , up to and including—		On demand service <sup>2</sup> , up to and including—	
Pounds	Rate	Pounds	Rate
1	\$28.00	1	\$20.00
2	31.70	2	23.70
3	35.40	3	27.40
4	39.10	4	31.10
5	42.80	5	34.80
6	46.50	6	38.50
7	50.20	7	42.20
8	53.90	8	45.90
9	57.60	9	49.60
10	61.30	10	53.30
11	65.00	11	57.00
12	68.70	12	60.70
13	72.40	13	64.40
14	76.10	14	68.10
15	79.80	15	71.80
16	83.50	16	75.50
17	87.20	17	79.20
18	90.90	18	82.90
19	94.60	19	86.60
20	98.30	20	90.30
21	102.00	21	94.00
22	105.70	22	97.70
23	109.40	23	101.40
24	113.10	24	105.10
25	116.80	25	108.80
26	120.50	26	112.50
27	124.20	27	116.20
28	127.90	28	119.90
29	131.60	29	123.60
30	135.30	30	127.30
31	139.00	31	131.00
32	142.70	32	134.70
33	146.40	33	138.40
34	150.10	34	142.10
35	153.80	35	145.80
36	157.50	36	149.50
37	161.20	37	153.20
38	164.90	38	156.90
39	168.60	39	160.60
40	172.30	40	164.30
41	176.00	41	168.00
42	179.70	42	171.70
43	183.40	43	175.40
44	187.10	44	179.10

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Service Agreement providing for tender by the customer at a designated Post Office.  
<sup>2</sup> Pickup is available under a Service Agreement for an added charge of \$5.60 for each pickup stop, regardless of the number of pieces picked up. Domestic and International Express Mail picked up together under the same Service Agreement incurs only one pickup charge.

A transmittal letter making these changes in the pages of the International Mail Manual will be published in the Federal Register as provided in 39 CFR 10.3 and will be transmitted to subscribers automatically.

(39 U.S.C. 401, 404, 407)  
**Fred Eggleston,**  
*Assistant General Counsel, Legislative Division.*  
 (FR Doc. 83-24018 Filed 8-31-83; 8:46 am)  
**BILLING CODE 7710-12-M**

**ENVIRONMENTAL PROTECTION AGENCY**

40 CFR Parts 122, 123, 124, 144, 145, 233, 270, and 271

[OW-FRL-2372-8]

**Permit Regulations; Revision in Accordance with Settlement**

**AGENCY:** Environmental Protection Agency (EPA).  
**ACTION:** Final rulemaking.

**SUMMARY:** EPA is today promulgating revisions to regulations governing the following EPA permit programs: the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act (CWA), Underground Injection Control (UIC) under the Safe Drinking Water Act (SDWA), the State "dredge or fill" (404) program under Section 404 of the CWA, and the Hazardous Waste Management (HWM) permit program under the Resource Conservation and Recovery Act (RCRA). The rules promulgated today cover a number of issues affecting these permit programs and are the result of a settlement agreement between EPA and industry petitioners.

On November 16, 1981, EPA entered into a settlement agreement with numerous industry petitioners in the consolidated permit regulations litigation (*NRDC v. EPA* and consolidated cases, No. 80-1607 [D.C. Cir., filed June 2, 1980]). On June 14, 1982, EPA published proposed rules which implemented the settlement agreement concerning the "common issues" affecting the NPDES, UIC, 404, and RCRA permit programs as well as several proposed rules affecting the NPDES permit program only (47 FR 25546). The final rules promulgated today address the concerns of the commenters to the proposed rules.

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of \$10 million criteria) without adversely affecting the company's concern and responsibility for compliance with environmental laws. Other commenters advocated language which would allow the corporation's "environmental officer" to sign permit applications without the restrictions on the size of the work force or the monetary transactions of the corporation.

EPA's goal in establishing the "signatory" requirement was to ensure high level corporate knowledge of a corporation's pollution control operations. In revising the signatory requirement in accordance with the language promulgated in today's rule, EPA recognized that some relief could be granted without compromising that goal. The intent of today's change is to provide relief from the economic and administrative burdens of having a corporation's top executive officers personally sign and be familiar with numerous permit applications for all its operations. Such problems are generally experienced by large corporations with facilities and operations spanning wide geographic areas. The cut-off criteria chosen by EPA will ensure that those plant managers who are authorized to sign permit applications have sufficient authority to direct the affairs of their facilities.

EPA does not agree with the comment which suggests that any "environmental manager" of a corporation be allowed to sign permit applications. It is not the intent of EPA's signatory requirement to designate field supervisors or facility operators to sign permit applications simply because they are located at or near the facility. They may have no ability to direct the activities of the corporation so as to ensure that necessary systems are established or actions taken to gather complete and accurate information. Rather, the signatory provision, as explained above, ensures involvement in the permit process by individuals authorized to make management decisions which govern the operation of the regulated facility. An "environmental manager" may not have sufficient responsibility and authority to direct corporate activities which guarantee that all necessary actions are taken to prepare a complete and accurate application. Of course, in cases where an "environmental officer" is an environmental vice president or comparable "responsible corporate officer" within the definition of today's rule, he would be authorized to sign permit applications.

## 2. Certification

The revisions also change the certification language which required

the signer of the form to have personally examined and be familiar with all the information submitted with the permit application. Under the new certification language promulgated today, the person signing the form (the signer) must have some form of direction or supervision over the persons gathering the data and preparing the form (the preparers), although the signer need not personally nor directly supervise these activities. The signer need not be in the same corporate line of authority as the preparers, nor do the persons gathering the data and preparing the form need to be company employees (e.g., outside contractors can be used). It is sufficient that the signer has authority to assure that the necessary actions are taken to prepare a complete and accurate application form.

None of the comments received objected to the proposed change in the certification language; thus, it is unchanged from the proposed language. EPA believes this change will assure an adequate level of corporate involvement and responsibility in the permit application process while eliminating the requirement of personal examination by the signer of all information submitted with the permit application.

The immediate implementation of today's certification language in permit application and reporting forms is infeasible. Because many States and EPA regional offices have large supplies of existing forms which contain the old certification language, it is both administratively and economically impractical to immediately convert to forms containing today's certification language. Therefore, permit application and reporting forms which contain the old signatory language will continue to be used until all have been used up or until provision can be made to replace the forms with new ones containing today's signatory language. However, in order to allow permittees to use the new certification language prior to publication of new forms, the signer may cross out the old language and insert today's language. States and regional offices may also wish to prepare an addendum to permit application and reporting forms which contains the new signatory language.

It should be noted that the HWM program has proposed amendments to § 270.11(d) (formerly § 122.6(d)) which contain additional procedures for owners and operators of HWM facilities (see 47 FR 15304, April 8, 1982 and 47 FR 32038, July 23, 1982).

## 3. Governmental Agencies

Under the June 14 proposal, EPA solicited comments on whether the

signatory requirement for public agencies should be amended. The U.S. Departments of the Interior and Agriculture objected to the retention of this signatory provision for Federal agencies, arguing that they are situated similarly to large private corporations and should be allowed the same "relief" as private corporations.

EPA believes that Federal officials responsible for agency operations covering widespread geographical or organizational units (similar to the Federal Regional Offices of many agencies) do experience problems similar to those of large private corporations and thus should also be entitled to relief. Where a Federal official has policy or decisionmaking authority for facilities under his widespread jurisdiction comparable to that of a "responsible corporate officer," that official would be authorized to sign permit applications.

Thus, under today's change a principal executive officer authorized to sign permit applications for a Federal agency will include the agency's chief executive officer and any senior executive officer having responsibility for the overall operations of a major geographic unit of the agency.

The intent of this change is to authorize senior agency officials comparable to EPA's own Regional Administrators to sign permit applications. Considering the information submitted by the two Federal agencies which commented on this regulation, EPA recognizes the State Directors of the Bureau of Land Management as the requisite level of authority intended in the federal signatory provision. In the case of the Forest Service, the Regional Forester would be the appropriate level for signatory authority. EPA does not consider the 122 Forest Supervisors of the Forest Service to have the required level of authority intended by today's change.

EPA does not believe that public notice and comment need be extended on the issue of the appropriate signatory level for Federal agencies. Comments were specifically solicited on the issue of providing relief to Federal agencies similar to that provided to private corporations. The comments received convinced EPA that such a change for Federal agencies is warranted.

EPA does not believe that the problem cited by industry petitioners and Federal agencies, namely the inconvenience of having a corporation's vice-president or Federal agency head personally sign and be familiar with each and every permit application covering a

(1) It is likely to receive a permit to discharge at that site;

(2) The environment will not be irreparably harmed if the source is allowed to begin discharging in compliance with the conditions of the Presiding Officer's order pending final agency action; and

(3) Its discharge pending final agency action is in the public interest.

(d) If for any offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig which has never received a finally effective permit to discharge at a "site," but which is not a "new discharger" or "new source," the Regional Administrator finds that compliance with certain permit conditions may be necessary to avoid irreparable environmental harm during the nonadversary panel procedures, he may specify in the statement of basis or fact sheet that those conditions, even if contested, shall remain enforceable obligations of the discharger during administrative review unless otherwise modified by the Presiding Officer under paragraph (c) of this section.

**PART 144—REQUIREMENTS FOR UNDERGROUND INJECTION CONTROL PROGRAMS UNDER THE SAFE DRINKING WATER ACT**

40 CFR Part 144 is amended as follows:

1. Section 144.4 is amended by revising the introductory paragraph as follows:

**§ 144.4 Considerations under Federal law.**

The following is a list of Federal laws that may apply to the issuance of permits under these rules. When any of these laws is applicable, its procedures must be followed. When the applicable law requires consideration or adoption of particular permit conditions or requires the denial of a permit, those requirements also must be followed.

2. Section 144.32 is amended by revising paragraph (a)(1); adding a new note following paragraph (a)(1); revising paragraph (a)(3); and adding a new paragraph (d) as follows:

**§ 144.32 Signatories to permit applications and reports.**

(a) . . . .

(1) *For a corporation:* by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decisionmaking functions for the

corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

*Note.*—EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in § 144.32(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under § 144.32(a)(1)(ii) rather than to specific individuals.

(2) . . . .

(3) *For a municipality, State, Federal, or other public agency:* by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

(d) *Certification.* Any person signing a document under paragraphs (a) or (b) of this section shall make the following 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.

**PART 145—REQUIREMENTS FOR UNDERGROUND INJECTION CONTROL PROGRAMS UNDER THE SAFE DRINKING WATER ACT**

40 CFR Part 145 is amended as follows:

1. Section 145.13 is amended by revising paragraph (c) and adding a new paragraph to the beginning of the note following paragraph (c) as follows:

**§ 145.13 Requirements for enforcement authority.**

(c) A civil penalty assessed, sought, or agreed upon by the State Director under paragraph (a)(3) of this section shall be appropriate to the violation.

*Note.*—To the extent that State judgments or settlements provide penalties in amounts which EPA believes to be substantially inadequate in comparison to the amounts which EPA would require under similar facts, EPA, when authorized by the applicable statute, may commence separate actions for penalties.

**PART 233—DREDGE OR FILL (404) PROGRAM UNDER SECTION 404 OF THE CLEAN WATER ACT**

40 CFR Part 233 is amended as follows:

1. Section 233.6 is amended by revising paragraphs (a)(1), (a)(3), and (d) and adding a new note following (a)(1) as follows:

**§ 233.6 Signatories to permit applications and reports.**

(a) . . . .

(1) *For a corporation:* by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decisionmaking functions for the corporation, or (ii) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

*Note.*—EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in § 233.6(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under § 233.6(a)(1)(ii) rather than to specific individuals.

(2) . . . .

(3) *For a municipality, State, Federal, or other public agency:* by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations

**SURRY STATION BLACKOUT GENERATOR  
EMISSIONS CALCULATIONS**

**CRITERIA POLLUTANTS**

Uncontrolled<sup>(1)</sup> emission rates based on manufacturer's test data.

	NOMINAL		GUARANTEED		PSD Significance Level	
	g/hr	g/hr	lb/hr	lb/10 <sup>6</sup> BTU	TPY (500 hr)	TPY
NO <sub>x</sub>	59418	71302	157.2	4.30	39.30	40
HC (VOC) <sup>(2)</sup>	2242	3027	6.7	0.18	1.68	40
CO	3139	4238	9.3	0.25	2.33	100
SO <sub>2</sub>	3363 <sup>(4)</sup>	8408 <sup>(5)</sup>	18.5 <sup>(5)</sup>	0.51 <sup>(5)</sup>	4.63 <sup>(5)</sup>	40
TSP	561	842	1.9	0.05	0.48	25
PM <sub>10</sub> <sup>(3)</sup>	561	842	1.9	0.05	0.48	15

(1) With no controls other than design features which are essential to operation.

(2) Manufacturer's data for hydrocarbons, assumed equal to VOC.

(3) Manufacturer's data for particulates, assumed to be 100% PM<sub>10</sub>.

(4) At 0.2% sulfur.

(5) At 0.5% sulfur.

**LEAD**

Neither AP-42 nor the vendor provide emission factors for lead. Report No. EPA-450/2-89-001 "Estimating Air Toxic Emissions from Coal and Oil Combustion Sources" (April 1989) suggests a factor of 8.9lb/10<sup>12</sup> BTU for distillate oil-fired boilers, assuming 50% of the lead in the fuel is emitted. If we make a conservative assumption that 100% is emitted from a diesel engine, the factor would be 17.8 lb/10<sup>12</sup> BTU.

$$(17.8 \text{ lb}/10^{12} \text{ BTU}) \times (36.6 \times 10^6 \text{ BTU}/\text{hr}) = 6.51 \times 10^{-4} \text{ lb}/\text{hr}$$

$$((6.51 \times 10^{-4} \text{ lb}/\text{hr}) \times (500 \text{ hr}/\text{yr})) / (2000 \text{ lb}/\text{ton}) = 1.63 \times 10^{-4} \text{ tpy}$$

PSD significance level for lead is 0.6 tpy

**TOXIC POLLUTANTS**

Uncontrolled<sup>(6)</sup> emission rates based on AP-42 emission factors, except lead.

	CAS No.	lb/10 <sup>6</sup> BTU	lb/hr	TPY (500 hr)	TLV-TWA	TLV-STEL	Appendix R Exemption	
					mg/m <sup>3</sup>	mg/m <sup>3</sup>	lb/hr	TPY
Lead	7439-92-1	1.78E-05	6.51E-04	1.63E-04	0.15	None	9.90E-03	2.17E-02
Benzene	71-43-2	7.76E-04	2.84E-02	7.10E-03	32	None	2.11E+00	4.64E+00
Toluene	108-88-3	2.81E-04	1.03E-02	2.57E-03	188	None	1.24E+01	2.73E+01
Xylenes	Note <sup>(7)</sup>	1.93E-04	7.06E-03	1.77E-03	434	651	2.15E+01	6.29E+01
Propylene	115-07-1	2.79E-03	1.02E-01	2.55E-02	None	None	NA	NA
Formaldehyde	50-00-0	7.89E-05	2.89E-03	7.22E-04	C 0.37	None	1.22E-02	NA
Acetaldehyde	75-07-0	2.52E-05	9.22E-04	2.31E-04	180 <sup>(8)</sup>	270	8.91E+00	2.61E+01
Acrolein	107-02-8	7.88E-06	2.88E-04	7.21E-05	0.23	0.69	2.28E-02	3.34E-02
Naphthalene	91-20-3	1.30E-04	4.76E-03	1.19E-03	52	79	2.61E+00	7.54E+00
Acenaphthylene	208-96-8	9.23E-06	3.38E-04	8.45E-05	None	None	NA	NA
Acenaphthene	83-32-9	4.68E-06	1.71E-04	4.28E-05	None	None	NA	NA
Fluorene	86-73-7	1.28E-05	4.68E-04	1.17E-04	None	None	NA	NA
Phenanthrene	85-01-8	4.08E-05	1.49E-03	3.73E-04	None	None	NA	NA
Anthracene	120-12-7	1.23E-06	4.50E-05	1.13E-05	None	None	NA	NA
Fluoranthene	206-44-0	4.03E-06	1.47E-04	3.69E-05	None	None	NA	NA
Pyrene	129-00-0	3.71E-06	1.36E-04	3.39E-05	None	None	NA	NA
Benz(a)anthracene	56-55-3	6.22E-07	2.28E-05	5.69E-06	None	None	NA	NA
Chrysene	218-01-9	1.53E-06	5.60E-05	1.40E-05	None	None	NA	NA
Benzo(b)fluoranthene	205-99-2	1.11E-06	4.06E-05	1.02E-05	None	None	NA	NA
Benzo(k)fluoranthene	207-08-9	<2.18E-07	<7.98E-06	<1.99E-06	None	None	NA	NA
Benzo(a)pyrene	50-32-8	<2.57E-07	<9.41E-06	<2.35E-06	None	None	NA	NA
Indeno(1,2,3-cd)pyrene	193-39-5	<4.14E-07	<1.52E-05	<3.79E-06	None	None	NA	NA
Dibenz(a,h)anthracene	53-70-3	<3.46E-07	<1.27E-05	<3.17E-06	None	None	NA	NA
Benzo(g,h,i)perylene	191-24-2 <sup>(9)</sup>	<5.56E-07	<2.03E-05	<5.09E-06	None	None	NA	NA

(6) With no controls other than design features which are essential to operation.

(7) Includes 1330-20-7, 95-47-6, 108-38-3, and 106-42-3.

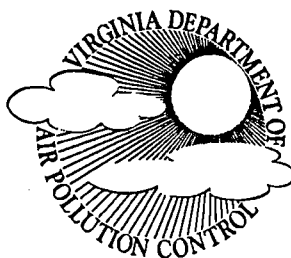
(8) ACGIH has proposed to change the TLV for acetaldehyde to C=45 mg/m<sup>3</sup>.

With that TLV, the exemption level will be 1.48 lb/hr.

(9) The CAS number given is for Benzo(g,h,i)perylene, although AP-42 identifies the compound as Benzo(g,h,i)perylene.



COMMONWEALTH OF VIRGINIA  
Department of Air Pollution Control



PERMIT APPLICATION  
General information  
Applications/Registration Updates

<p><b>Reason For Submittal:</b></p> <table style="width:100%"> <tr> <td><input type="checkbox"/> NEW SOURCE</td> <td><input type="checkbox"/> CHANGE OF OWNERSHIP OR LOCATION</td> </tr> <tr> <td><input checked="" type="checkbox"/> EXISTING SOURCE - new process or equipment</td> <td><input type="checkbox"/> REGISTRATION UPDATE</td> </tr> <tr> <td><input type="checkbox"/> EXISTING SOURCE - modification of existing process or equipment</td> <td><input type="checkbox"/> OTHER (specify) _____</td> </tr> </table> <p><b>Brief Description:</b> EMERGENCY DIESEL GENERATOR</p> <p>_____ _____ _____</p>	<input type="checkbox"/> NEW SOURCE	<input type="checkbox"/> CHANGE OF OWNERSHIP OR LOCATION	<input checked="" type="checkbox"/> EXISTING SOURCE - new process or equipment	<input type="checkbox"/> REGISTRATION UPDATE	<input type="checkbox"/> EXISTING SOURCE - modification of existing process or equipment	<input type="checkbox"/> OTHER (specify) _____	<p style="text-align:center"><b>FOR AGENCY USE ONLY</b></p> <p>REGISTRATION NUMBER: [ ][ ][ ][ ][ ][ ]</p> <table style="width:100%"> <tr> <td>COUNTY: [ ][ ][ ][ ]</td> <td>CITY: [ ][ ][ ][ ]</td> </tr> <tr> <td>PLANT I.D.: [ ][ ][ ][ ]</td> <td>MAJOR SIC: [ ][ ][ ][ ]</td> </tr> <tr> <td>HT. ABOVE MSL (ft.): [ ][ ][ ][ ][ ]</td> <td>GRID NO: [ ][ ][ ]</td> </tr> <tr> <td colspan="2">UTM COORDINATES: [ ][ ][ ] [ ][ ]     [ ][ ][ ][ ][ ] [ ][ ]</td> </tr> </table>	COUNTY: [ ][ ][ ][ ]	CITY: [ ][ ][ ][ ]	PLANT I.D.: [ ][ ][ ][ ]	MAJOR SIC: [ ][ ][ ][ ]	HT. ABOVE MSL (ft.): [ ][ ][ ][ ][ ]	GRID NO: [ ][ ][ ]	UTM COORDINATES: [ ][ ][ ] [ ][ ]     [ ][ ][ ][ ][ ] [ ][ ]	
<input type="checkbox"/> NEW SOURCE	<input type="checkbox"/> CHANGE OF OWNERSHIP OR LOCATION														
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COUNTY: [ ][ ][ ][ ]	CITY: [ ][ ][ ][ ]														
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UTM COORDINATES: [ ][ ][ ] [ ][ ]     [ ][ ][ ][ ][ ] [ ][ ]															

<b>COMPANY AND DIVISION NAME</b> VIRGINIA POWER, SURRY POWER STATION	
<b>MAILING ADDRESS</b> ATTN: MR. A. W. HADDER, 5000 DOMINION BLVD., GLEN ALLEN, VA. 23060	
<b>TELEPHONE NUMBER</b> (804) 273-3023	<b>NUMBER OF EMPLOYEES AT SITE</b> 1070
<b>PROPERTY AREA AT SITE</b> 840 acres	
<b>EXACT SOURCE LOCATION - INCLUDE NAME OF CITY (COUNTY) AND ATTACH MAP WITH PROPERTY BOUNDARIES AT THE END OF STATE ROUTE 650, 7 MILES NORTH OF STATE ROUTE 10, NEAR SURRY, VIRGINIA, IN SURRY COUNTY</b>	
<b>PERSON TO CONTACT ON AIR POLLUTION MATTERS - TITLE</b> MR. A. W. HADDER, MANAGER - AIR QUALITY	<b>PHONE NUMBER</b> (804) 273-3023
<b>TYPE OR PRINT NAME OF OWNER OR CERTIFIED COMPANY OFFICIAL - TITLE</b> MR. J. A. AHLADAS, SENIOR VICE PRESIDENT - CORPORATE SERVICES	
<b>SIGNATURE OF OWNER OR CERTIFIED COMPANY OFFICIAL</b> 	<b>DATE</b> 8/30/93

COMMONWEALTH OF VIRGINIA  
 DEPARTMENT OF AIR POLLUTION CONTROL  
 GENERAL INFORMATION (CONTINUED)

PERSON COMPLETING FORM	DATE	REGISTRATION NUMBER
MR. A. W. HADDER, MANAGER - AIR QUALITY	Aug. 30, 1993	50336

IS THE FACILITY TO BE PERMITTED AS A PORTABLE PLANT?

Yes

No

LIST THE PRODUCTS MANUFACTURED AND/OR SERVICES PERFORMED AT THIS FACILITY:

GENERATION OF ELECTRICITY

LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE(S) FOR THE FACILITY:

4	9	1	1																
---	---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

MILESTONES

ESTIMATED  
STARTING DATE

ESTIMATED  
COMPLETING DATE

New source construction

\_\_\_\_\_

\_\_\_\_\_

New equipment installation

NOV. 1, 1993\*

SPRING 1995

Modification of existing  
process or equipment

\_\_\_\_\_

\_\_\_\_\_

Transfer of ownership or  
location

\_\_\_\_\_

\_\_\_\_\_

Startup SPRING, 1995

\* Or as soon thereafter as a permit is received.

**FUEL BURNING EQUIPMENT AND STATIONARY COMBUSTION ENGINES (EXCEPT INCINERATORS)  
(BOILERS, TURBINES, GAS/DIESEL ENGINES, KILNS, ETC.):**

UNIT REF. NO.	EQUIPMENT MANUFACTURER AND MODEL NUMBER, IF KNOWN; OTHERWISE, TYPE OF EQUIPMENT	MAXIMUM RATED INPUT HEAT CAPACITY FOR EACH FUEL (MILLION BTU/HR)	TYPE OF FUEL	TYPE OF EQUIPMENT (USE CODE A)	MAXIMUM RATED OUTPUT APPROPRIATE TO SOURCE TYPE			USAGE (USE CODE B)
					STEAM QUANTITY (lb/hr)	MECHANICAL or BOILER POWER (HP)	ELECTRICAL POWER (KW)	
7	CATERPILLAR 3600 SERIES DIESEL ELECTRIC GENERATOR	36.6, BASED ON 261.4GPH X 140,000 BTU/GAL	DISTILLATE (DIESEL FUEL OR N#2 OIL)	16		5605	4000	6 (STATIONARY)

**Code A - Equipment**

**BOILER TYPE:**

1. Pulverized Coal - Wet Bottom
2. Pulverized Coal - Dry Bottom
3. Pulverized Coal - Cyclone Furnace
4. Spreader Stoker
5. Chain or Travelling Grate Stoker
6. Underfeed Stoker
7. Hand Fired Coal
8. Oil, Tangentially Fired
9. Oil, Horizontally Fired (except rotary cup)
10. Gas, Tangentially Fired
11. Gas, Horizontally Fired

**Code A (continued)**

12. Wood with Flyash Reinjection
13. Wood without Flyash Reinjection
14. Other Type Boiler \_\_\_\_\_

**STATIONARY ENGINE TYPE:**

15. Combustion Turbine
16. Internal Combustion Engine
17. Other Type Engine \_\_\_\_\_

**OTHER COMBUSTION UNITS:**

18. Oven / Kiln
19. Rotary Kiln
18. Process Furnace
99. Other \_\_\_\_\_

**Code B - Usage**

1. Steam Production
2. Drying / Curing
3. Space Heating
4. Process Heat
5. Food Processing
6. Electrical Generation
7. Mechanical Work
99. Other \_\_\_\_\_

STACK PARAMETERS AND FUEL DATA:

UNIT REF. NO.	VENT/STACK NO.	VENT/STACK OR EXHAUST DATA						FUEL(S) DATA						
		VENT/STACK CONFIG. (USE CODE K)	VENT STACK HEIGHT (feet) *	EXIT DIA. (feet)	EXIT GAS VELOCITY (fpm)	EXIT GAS VOLUME (acfm)	EXIT GAS TEMP. (°F)	TYPE OF FUEL **	MAX. RATED BURNED/HOUR*** (SPECIFY UNITS)	MAX. EXPECTED BURNED/DAY *** (SPECIFY UNITS)	MAX. EXPECTED BURNED/YEAR *** (SPECIFY UNITS)	HIGHER HEATING VALUE (SPECIFY UNITS)	MAX. % SULFUR	MAX. % ASH
7	7	3	30	2.17 (26 in.)	8440 (1)	31044(1)	801	DISTILLATE (DIESEL OR Nº 2)	0.2614 10 <sup>3</sup> GAL	6.2736 10 <sup>3</sup> GAL	130.7 10 <sup>3</sup> GAL	140,000 BTU/GAL	0.5	•

Code K - Vent/Stack Configuration

- 1. Unobstructed vertical discharge
- 2. Obstructed vertical discharge (e.g., raincap)
- 3. Horizontal or downward discharge (e.g., T-stack)
- 99. Other (specify) \_\_\_\_\_

(1) Estimated for the operating condition of 4000 kW.  
Specified as 128 fps (7680 fpm) and 28250 cfm @ 3640 kW.

- Above Ground Level.
- Identify All Types of Fuels (Including Auxiliary Fuels, In-Process Fuels) and Corresponding Data.
- Use Tons for Solid Fuels, Thousands of Gallons for Liquids, and Millions of Cubic Feet for Gaseous Fuels.

CRITERIA POLLUTANT EMISSIONS:

UNIT REF. NO	VENT/ STACK NO	MAXIMUM EMISSION RATES TO ATMOSPHERE OF CRITERIA POLLUTANTS														BASIS OF ESTIMATE (USE CODE M)
		TOTAL SUSPENDED PARTICULATES * (TSP)		10 μM OR SMALLER PARTICULATES * (PM <sub>10</sub> )		SULFUR DIOXIDE (SO <sub>2</sub> )		NITROGEN OXIDES (NO <sub>x</sub> )		CARBON MONOXIDE (CO)		VOLATILE ORGANIC COMPOUNDS * (VOC)		LEAD (Pb)		
		lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	
7	7	1.9	0.46	1.9	0.46	18.5	4.63	157.2	39.30	9.3	2.34	6.7	1.67	6.51E-04	1.63E-04	99 SEE ATTACHMENT

Code M - Emission Estimate Method (provide detailed calculations including assumed control efficiency of control equipment, if applicable)

- 1. Stack Test (include a copy)
- 2. Material Balance (include calculations)
- 3. Emission Factor (identify)
- 99. Other (describe)

\* TSP, PM<sub>10</sub>, VOCs should also be split up by component and reported on Page 13 as TOXIC POLLUTANTS.

TOXIC POLLUTANT EMISSIONS FROM PROPOSED FACILITY: SEE ATTACHED LIST

UNIT REF. NO	VENT/ STACK NO	MAXIMUM EMISSION RATES TO ATMOSPHERE OF TOXIC POLLUTANTS (specify pollutant) *												BASIS OF ESTIMATES (USE CODE M)	
		NAME CAS #				NAME CAS #				NAME CAS #					
		UNCONTROLLED		CONTROLLED		UNCONTROLLED		CONTROLLED		UNCONTROLLED		CONTROLLED			
		lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr		

**Code M - Emission Estimate Method (provide detailed calculations including assumed control efficiency of control equipment, if applicable)**

- 1. Stack Test (include a copy)
- 2. Material Balance (include calculations)
- 3. Emission Factor (identify)
- 99. Other (describe) \_\_\_\_\_

\* Toxic Pollutant is defined as any pollutant not listed on Page 12 of this form. Specify which pollutants are also reported on Page 12 as TSP, PM10, or VOCs

**OPERATING PERIODS:**

UNIT REF. NO.	PERCENT ANNUAL USE/THROUGHPUT BY SEASON				NORMAL PROCESS/EQUIPMENT OPERATING SCHEDULE			MAXIMUM EQUIPMENT/PROCESS OPERATING SCHEDULE		
	DECEMBER ----- FEBRUARY	MARCH ----- MAY	JUNE ----- AUGUST	SEPTEMBER ----- NOVEMBER	HOURS PER DAY	DAYS PER WEEK	WEEKS PER YEAR	HOURS PER DAY	DAYS PER WEEK	WEEKS PER YEAR
7	25	25	25	25	8'	1	12'	24	7	52 (MAX 500 HR/YR)

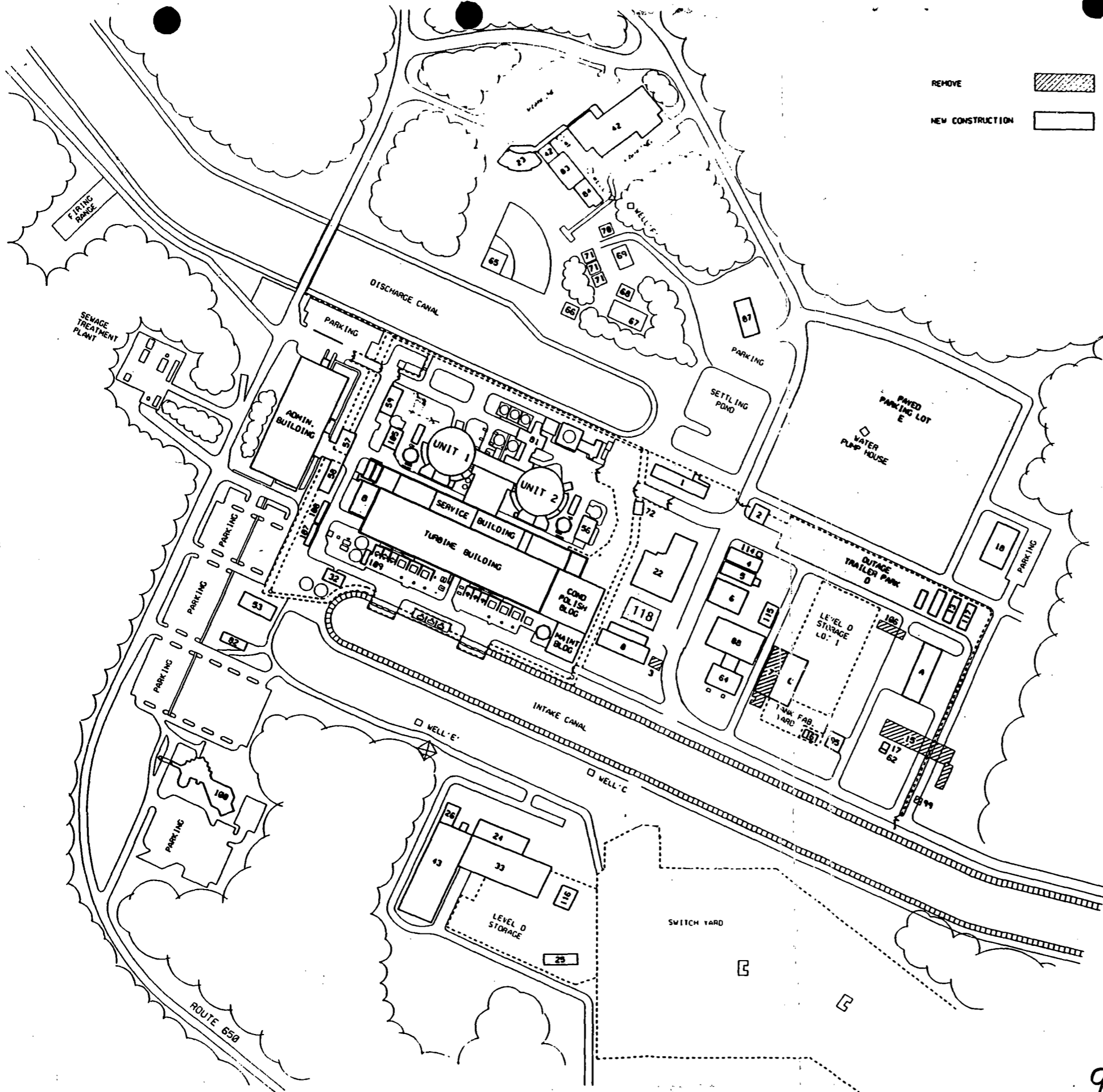
The test schedule has not been finalized.  
The schedule given above is conservative.


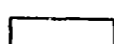
MAXIMUM FACILITY OPERATING SCHEDULE		
HOURS PER DAY 24	DAYS PER WEEK 7	WEEKS PER YEAR 52









REMOVE   
 NEW CONSTRUCTION 

BLDG. NO.	DESCRIPTION
1	SITE SERVICES BUILDING
2	SECURITY CONTROL FACILITY
REMOVE 3	TENT SHOP
4	CANTEEN
5	CONSTRUCTION OFFICES
6	CONSTRUCTION OFFICES
REMOVE 7	WAREHOUSE NO. 7 AND AIR COMPRESSOR BLDG
8	WAREHOUSE NO. 8
13	15/10E FIELD TRAILER
REMOVE 15	VEHICLE MAINTENANCE
16	PAINT STORAGE SHED
17	WEATHER TOWER
18	OFFICE BUILDING
22	RADWASTE BUILDING
23	TRAINING OFFICES
24	NUCLEAR MATERIALS
25	HAZARDOUS MATERIAL STORAGE
26	QA
32	FIRE PUMP HOUSE
33	WAREHOUSE NO. 2
42	TRAINING CENTER
43	WAREHOUSE NO. 1
53	SOUTH ANNEX
56	LAUNDRY FACILITY
57	MAIN GATE SECURITY
58	MAIN GATE SECURITY
59	PIPE REFURBISHING BUILDING
61	ELECTRICAL SUBSTATION #2
62	GAS PUMP
64	PAINT SHOP AND SANDBLASTING
65	SOFTBALL FIELD
66	HORSE SHOE PITS
67	TENNIS COURT
68	BASKETBALL COURT
69	VOLLEYBALL COURT
70	TOILETS M/F
71	PAVILIONS(PICNIC)
72	SECONDARY ACCESS CONTROL BUILDING
81	DECON BUILDING
82	ENVIRONMENTAL BUILDING
83	SIMULATOR BUILDING
84	LOCAL EMERGENCY OPERATING FACILITY
87	STEAM GENERATOR STORAGE FACILITY
88	IRONWORKERS, SHEET METAL, FAB SHOP
89	ELECTRICAL SUBSTATION #3
95	DRY ACTIVE WASTE SEGREGATION FACILITY
REMOVE 99	ICE HOUSE
108	SURRY NUCLEAR INFORMATION CENTER
105	BOTTLE GAS STORAGE
REMOVE 106	STORAGE BUILDING
107	STATION CAFETERIA (RAIL CAR)
108	STATION CAFETERIA (RAIL CAR)
109	BLACK BATTERY BUILDING
114	CANTEEN FREEZER
115	RESTROOM & LOCKERROOM
116	CHEMICAL STORAGE WAREHOUSE
117	WESTINGHOUSE ENGINEERING
118	STATION BLACKOUT BUILDING

A ----- NEW VEHICLE MAINTENANCE  
 B ----- REMODELED OLD ADMIN. BUILDING  
 C ----- NEW CRAFTS BUILDING  
 D ----- NEW OUTAGE TRAILER PARK  
 E ----- PAVED EAST PARKING LOT

SI  
 APERTURE  
 CARD

Also Available On  
 Aperture Card



FACILITIES MASTER PLAN  
 PRIORITY STAGE I

Drawing Title: Site Plan  
 Date: September 1992  
 Revision:

**VIRGINIA POWER**  
 SURRY POWER STATION



9309030146-03