#435

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JANUARY 1973

H3-1.4.7

73:00003

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
(Liquids)						
Ammonia(1)	K-1513 Sanitary Water Pumphouse	None	0.13	0.13	6.30	-
Chromium(2)	K-901A Lagoon (Recirculating Water Blowdown)	0.05	0.44	1.5	2.0	4000
Mercury(3)	K-1407B Effluent at Poplar Creek	0.005	0.006	0.002	0.008	160
pH(4)	K-1407B Holding Pond	None on Pond	-	Max. 10.0 Min. 2.9	Max. 10.4 Min. 4.2	- -

APPROVAL FOR RELEASE

Document: # Unnumbered ; Date _____;

Title/Subject ~~MONITORING REPORTS~~

Approval for unrestricted release of this document is authorized by the Oak Ridge K-25 Site Classification and Information Control Office, Martin Marietta Energy Systems, Inc., PO Box 2003, Oak Ridge, TN 37831-7307.

A S Quist 12/29/92

K-25 Classification & Information Control Officer Date

Remarks: (1) The reason for higher concentrations of ammonia in the Clinch River is not known at this time.

(2) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will eliminate the high concentrations of chromium. The above standard (.05 ppm) is only a guideline in Tennessee but is a regulation in the Ohio River Valley Water Sanitation Commission District.

(3) Mercury was found in the waste solution of Sodium Hypochlorite from Y-12 which is added to the K-1407B Pond. The source of mercury is being corrected.

(4) This point is shown within the plant to depict the wide variations in pH which occur during the month. A portion of the funds in the FY-74 line item entitled "Plant Liquid Effluent - Pollution Control" will correct this situation.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

February 1973

Substance	Sampling Location	Standard ppm	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
(Liquids)						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05	0.44	2.0	2.4	4800
Chromium	K-25 Pt. (K-1407-B Holding Pond at Poplar Creek)	0.05	0.12	0.05	0.11	220
Chromium	K-1203 Sewage Plant	0.05	0.10	0.06	0.09	180
Dissolved Solids	K-901-A Lagoon	500	183	534	704	141
P as PO_4	K-1203 Sewage Plant	P=1	0.72	1.03	1.3	130

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will eliminate the high concentrations of chromium. The above standard (.05 ppm) is only a guideline in Tennessee but is a regulation in the Ohio River Valley Water Sanitation Commission District.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

MARCH 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium(1)	K-901-A Lagoon (RCW Blowdown)	0.05*	0.44	2.4	0.58	1160
Chromium	K-25 Pt. (K-1407-B)	0.05*	0.12	0.11	0.12	240
Chromium	K-1203 Sewage Plant	0.05*	0.10	0.09	0.10	200
Total Dissolved Solids(2)	K-1231	500.**	1118.0	No Sample	4648.	930

Remarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) The K-1232 Facility planned with PSF Funds will decrease the high concentrations of solids at K-1231.

* Drinking Water Standard - used as a guideline in Tennessee

** AEC Standard established for K-1231 effluent

MONITOR[illegible]G REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

APRIL 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	0.58	2.1	4200.
Total Dissolved Solids[3]	K-1231	500.[4] ppm	1118.	4648.	2088.	400
C.O.D.[3]	K-1231	100.[5] ppm	1141.	9620.	11,960.	12,000
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.6	0.6	40.

Remarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) Drinking Water Standard for chromium - used as a guideline in Tennessee.

(3) The K-1232 Facility planned with PSF Funds will decrease the high concentrations of solids and C.O.D. at K-1231.

(4) AEC Standard established for K-1231 effluent.

(5) Based on AEC Standard established for K-1231 effluent. The standard was < 50. lbs/day as B.O.D. which is approximately equivalent to 100 ppm as C.O.D. based on flow rates at effluent location.

(6) Average Tennessee Ambient Air Standard for a 30-day period.

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OAK RIDGE GASEOUS DIFFUSION PLANT

May 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	2.1	1.1	2200
Chromium	K-25 Pt. (K-1407-B)	0.05[2] ppm	0.12	0.06	0.06	120
Chromium	K-1203 Sewage Plant	0.05[2] ppm	0.10	0.05	0.06	120
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[3] ppb	1.2	0.6	0.8	53

Remarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS FFUSION PLANT

JUNE 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	1.1	0.27	540
[illegible]omium	K-25 Sample location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.06	0.09	180
Chromium	K-1203 Sewage Plant	0.05[2] ppm	0.10	0.06	0.05	100
Fluoride[3]	K-901-A Lagoon	20[4] ppm	0.60	0.30	30	150
Uranium[3]	K-901-A Lagoon	----	0.012	0.004	0.455	---
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[5] ppb	1.2	0.8	1.1	73

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee

(3) Fluoride and Uranium concentrations were higher than usual because small cylinders and containers with faulty valves were punctured and cleaned in the K-901-A Lagoon.

(4) The concentration shown under standard is a guideline pertaining to industrial effluents and was issued by the Tennessee Water Quality Control Division

(5) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JULY 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	0.27	0.02	40
Chromium	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.09	0.30	600
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[3] ppm	1.2	1.1	1.0	67

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

AUGUST 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	0.02	0.60	1200
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.30	0.24	480
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP.	1.5[4] ppm	1.2	1.0	0.5	33

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. A design project to eliminate this source has been initiated which will return the blowdown to the ORGDP recirculating water system.

(4) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

SEPTEMBER 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	0.6	3.7	7400
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B	0.05[2] ppm	0.12	0.24	0.4	800
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.03	2.0	2000
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.5	0.9	60

Remarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. A design project to eliminate this source has been initiated which will return the blowdown to the ORGDP recirculating water system.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

OCTOBER 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	3.7	3.8	7600
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.4	0.18	360
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	2.0	1.2	120
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.9	0.8	53

Remarks:
(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.
(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.
(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. A design project to eliminate this source has been initiated which will return the blowdown to the ORGDP recirculating water system.
(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A.
(5) Zinc concentration used as a guideline in Tennessee.
(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

NOVEMBER 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	3.8	2.7	5400
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.18	0.05	100
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	1.2	0.26	260
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.8	1.0	67

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. A design project to eliminate this source has been initiated which will return the blowdown to the ORGDP recirculating water system.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A

(5) Zinc concentration used as a guideline in Tennessee.

(6)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

NOVEMBER 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	3.8	2.7	5400
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.18	0.05	100
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	1.2	0.26	260
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.8	1.0	67

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. A design project to eliminate this source has been initiated which will return the blowdown to the ORGDP recirculating water system.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A

(5) Zinc concentration used as a guideline in Tennessee.

(6)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

DECEMBER 1973

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	2.7	2.0	4000.
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.05	0.04	80.
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.26	0.30	300.
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	1.0	0.9	60.

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

(2) Drinking water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will be returned to the ORGDP recirculating water system.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JANUARY 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	2.0	1.2	2400.
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.04	0.06	120.
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.30	0.06	60.
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.9	1.6	107.

Remarks: [1] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

[2] Drinking water Standard for Chromium - used as a guideline in Tennessee.

[3] The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will be returned to the ORGDP recirculating water system.

[4] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

[5] Zinc concentration used as a guideline in Tennessee.

[6] Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JANUARY 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	2.0	1.2	2400.
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.04	0.06	120.
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.30	0.06	60.
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.9	1.6	107.

Remarks: [1] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

[2] Drinking water Standard for Chromium - used as a guideline in Tennessee.

[3] The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will be returned to the ORGDP recirculating water system.

[4] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901 The project is scheduled to be completed by January 15, 1975.

[5] Zinc concentration used as a guideline in Tennessee.

[6] Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

FEBRUARY 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	1.2	0.9	1800.
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.06	0.07	140.
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.06	0.04	40.
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	1.6	0.9	60.

Remarks: [1] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

[2] Drinking water Standard for Chromium - used as a guideline in Tennessee.

[3] The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

[4] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

[5] Zinc concentration used as a guideline in Tennessee.

[6] Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

FEBRUARY 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	1.2	0.9	1800.
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.06	0.07	140.
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.06	0.04	40.
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	1.6	0.9	60.

Remarks: [1] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

[2] Drinking water Standard for Chromium - used as a guideline in Tennessee.

[3] The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

[4] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

[5] Zinc concentration used as a guideline in Tennessee.

[6] Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

MARCH 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	0.9	0.07	140
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.07	0.07	140
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.04	0.10	100
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.9	0.8	53

Remarks: [1] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

[2] Drinking Water Standard for Chromium - used as a guideline in Tennessee.

[3] The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

[4] The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentrations of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

[5] Zinc concentration used as a guideline in Tennessee.

[6] Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

APRIL 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	0.07	1.8	3600
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.07	0.09	180
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.10	0.03	30
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.8	0.6	40

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT 9704-2

OAK RIDGE GASEOUS DIFFUSION PLANT

MAY 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	1.8	1.3	2600
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.09	0.05	100
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.03	0.06	60
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.6	0.7	47

Remarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for a 30-day

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JUNE 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	1.3	1.8	3600
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.05	0.3	60
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.06	0.05	50
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	0.7	2.0	133

Remarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JULY 1974

Substance	Sampling Location	Standard	Concentration			Percent Standar
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	1.8	1.0	2000
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.3	0.17	340
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.05	0.07	70
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	2.0	2.0	133

Remarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

AUGUST 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium(1)	K-901-A Lagoon (RCW Blowdown)	0.05(2) ppm	0.44	1.0	0.02	40
Chromium(3)	K-25 Sample Location (Downstream of K-1407-B)	0.05(2) ppm	0.12	0.17	0.11	220
Zinc(4)	K-901-A Lagoon (RCW Blowdown)	0.10(5) ppm	0.04	0.07	0.06	60
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5(6) ppb	1.2	2.0	1.3	87

Remarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT
9704-2
OAK RIDGE GASEOUS DIFFUSION PLANT

SEPTEMBER 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	0.02	1.70	3400
Chromium[3]	K-25 Sample Location (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.11	0.21	420
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.06	0.02	20
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	1.3	1.2	80

emarks: (1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by January 15, 1975.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by January 15, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

OCTOBER 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	1.70	2.50	5000
Chromium[3]	K-1700 (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.21	0.35	700
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.02	0.10	100
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	1.2	1.4	93

Remarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by March 31, 1975.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by March 31, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

NOVEMBER 1974

Substance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
LIQUIDS						
Chromium[1]	K-901-A Lagoon (RCW Blowdown)	0.05[2] ppm	0.44	2.50	0.85	1700
Chromium[3]	K-1700 (Downstream of K-1407-B)	0.05[2] ppm	0.12	0.35	0.05	100
Zinc[4]	K-901-A Lagoon (RCW Blowdown)	0.10[5] ppm	0.04	0.10	0.03	30
GASES						
Fluorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5[6] ppb	1.2	1.4	1.2	80

Remarks:
(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by March 31, 1975.
(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.
(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.
(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by March 31, 1975.
(5) Zinc concentration used as a guideline in Tennessee.
(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

DECEMBER 1974

stance	Sampling Location	Standard	Concentration			Percent Standard
			Avg. Last Year	Last Month	This Month	
QUIDS						
romium(1)	K-901-A Lagoon (RCW Blowdown)	0.05(2) ppm	0.44	0.85	3.50	7000
romium(3)	K-1700 (Downstream of K-1407-B)	0.05(2) ppm	0.12	0.05	0.48	960
nc(4)	K-901-A Lagoon (RCW Blowdown)	0.10(5) ppm	0.04	0.03	0.15	150
SES						
uorides	Four ambient air sampling locations within one mile radius of ORGDP	1.5(6) ppb	1.2	1.2	0.9	60

emarks:

(1) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled to be completed by March 31, 1975.

(2) Drinking Water Standard for Chromium - used as a guideline in Tennessee.

(3) The high concentration of chromium at K-1407-B is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a non-chromate corrosion inhibitor.

(4) The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of zinc at K-901-A. The project is scheduled to be completed by March 31, 1975.

(5) Zinc concentration used as a guideline in Tennessee.

(6) Average Tennessee Ambient Air Standard for a 30-day period.

MONITORING REPORT
OAK RIDGE GASEOUS DIFFUSION PLANT
JANUARY 1975

SAMPLING LOCATION	PARAMETER		QUANTITY			No. Samples Exceeding Limit	CONCENTRATION			No. Samples Exceeding Limit
			Minimum	Average	Maximum		Minimum	Average	Maximum	
K-1700 (1)	Cr^{+6}	Reported						0.10 mg/l		1 of 1
		Limit						0.05 mg/l	0.08 mg/l	Monthly Composite
K-1007-B (2)	F^-	Reported						1.8 mg/l		1 of 1
		Limit						1.0 mg/l	1.5 mg/l	Monthly Composite
K-901-A (3)	Cr^{+6}	Reported						2.0 mg/l		1 of 1
		Limit							0.05 mg/l	Monthly Composite
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

Remarks:

(1) Standard for Chromium determined by NPDES Permit No. TN0002950 applicable beginning January 1, 1977. The high concentration of chromium at K-1700 is a result of blowdown from K-1037 Cooling System. In the future the blowdown will contain a nonchromate corrosion inhibitor.

(2) Standard for Fluoride determined by NPDES Permit No. TN0002950.

(3) Standard for Chromium and Suspended Solids determined by NPDES Permit No. TN0002950 applicable beginning January 1, 1976. The Cooling Water Blowdown Recycle (1973 GPP Funds) will decrease the high concentration of Chromium at K-901-A. The project is scheduled to be completed by March 31, 1975.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

FEBRUARY 1975

SAMPLING LOCATION	PARAMETER (Liquids)		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-1700	Aluminum	Reported						1.5 mg/1		1 of 1 Monthly Grab
		Limit (1)							1.0 mg/1	
K-1700	Chromium (Total)	Reported						0.18 mg/1		1 of 1 Monthly Grab
		Limit (1)						0.05 mg/1	0.08 mg/1	
K-1203	BOD_5	Reported					44 mg/1	48 mg/1	53 mg/1	2 of 2 Weekly Grab
		Limit (2)							15 mg/1	
K-901-A	Chromium (Total)	Reported						1.5 mg/1		1 of 1 24 hr. Composite
		Limit (3)							0.05 mg/1	
K-1007-B	Fluoride	Reported					.6 mg/1	1.0 mg/1	1.6 mg/1	1 of 4 Weekly Grab
		Limit (4)						1.0 mg/1	1.5 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

Remarks:

(1) Standards determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of chromium at K-1700 is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a nonchromate corrosion inhibitor.

(2) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976. A sewage treatment plant is scheduled for completion in July 1976; this should alleviate the high BOD content.

(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1976. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-701-A. The project is scheduled for completion in September 1975.

(4) Standard determined by NDPES Permit No. TN0002950. The high concentration of fluoride was a result of ineffective effluent treatment at K-1231. This situation has since been corrected.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

FEBRUARY 1975

SAMPLING LOCATION	PARAMETER (Gases)		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901 Pumphouse	F^-	Reported					0.7 ppb	1.2 ppb	2.0 ppb	In Compliance
		Limit (5)						1.5 ppb	3.5 ppb	
K-1206-D Trailer	F^-	Reported					0.3 ppb	2.1 ppb	5.0 ppb	Monthly Average 1 of 3 24 Hour Samples
		Limit (5)						1.5 ppb	3.5 ppb	
K-805-B Radio Tower	F-	Reported					0.7 ppb	1.8 ppb	2.8 ppb	Monthly Average
		Limit (5)						1.5 ppb	3.5 ppb	
Blair Road	F^-	Reported					0.3 ppb	1.2 ppb	2.0 ppb	In Compliance
		Limit (5)						1.5 ppb	3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

NOTE: All samples collected are 24 hour samples which are averaged for the month.

Remarks: (5) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

MARCH 1975

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Chromium (total)	Reported						0.85 mg/1		1 of 1 Monthly Composite
		Limit(1)							0.05 mg/1	
K-1800	Chromium (total)	Reported						0.25 mg/1		1 of 1 Monthly Grab
		Limit						0.05 mg/1	0.08 mg/1	
K-1203	BOD_5	Reported					28 mg/1	39 mg/1	49 mg/1	4 of 4 Weekly Grab
		Limit							15 mg/1	
K-1203	Cl^- Residual	Reported					0.0 mg/1	1.5 mg/1	2.0 mg/1	2 of 19 Daily Grab
		Limit					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
K-901 Pumphouse	Fluoride	Reported					0.6 ppb	1.2 ppb	2.7 ppb	0 of 4 24 Hr. Sample
		Limit(4)						1.5 ppb	3.5 ppb	
Credit Union	Fluoride	Reported					0.2 ppb	1.2 ppb	1.9 ppb	0 of 4 24 Hr. Sample
		Limit(4)						1.5 ppb	3.5 ppb	
Cabin - Watts Bar Lake	Fluoride	Reported					.6 ppb	1.2 ppb	1.5 ppb	0 of 4 24 Hr. Sample
		Limit(4)						1.5 ppb	3.5 ppb	

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled for completion in September 1975.

(2) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of chromium at K-1700 is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a nonchromate corrosion inhibitor.

(3) Standards determined by NPDES Permit No. TN0002950, effective July 1, 1976. A sewage treatment plant is scheduled for completion in July 1976; this should alleviate the high BOD content. The high chlorine residual was a result of operation error. This has since been corrected.

(4) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

APRIL 1975

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Chromium (total)	Reported						0.09 mg/1		1 of 1 Monthly 24-Hour Composite
		Limit (1)							0.05 mg/1	
K-1700	Aluminum	Reported						1.5 mg/1		1 of 1 Monthly Grab
		Limit (2)							1.0 mg/1	
K-1700	Chromium (total)	Reported						0.13 mg/1		1 of 1 Monthly Grab
		Limit (2)						0.05 mg/1	0.08 mg/1	
K-1700	pH	Reported					6.6	7.5	9.7	3 of 22 Daily Grab
		Limit (2)					6.0		9.0	
K-1203	Ammonia	Reported						5.04 mg/1		1 of 1 Monthly Composite
		Limit (3)						5.0 mg/1		
K-1203	BOD_5	Reported					32 mg/1	54 mg/1	79 mg/1	5 of 5 Weekly Grab
		Limit (3)						20 mg/1		
K-1203	Cl- Residual	Reported					0.0 mg/1	1.8 mg/1	2.0 mg/1	1 of 22 Daily Grab
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-710	BOD_5	Reported					72 mg/1	77 mg/1	82 mg/1	2 of 2 Weekly Grab
		Limit (4)						45 mg/1		
K-710	Cl- Residual	Reported					0.0 mg/1	1.0 mg/1	2.0 mg/1	7 of 20 Daily Grab
		Limit (4)					0.5 mg/1		2.0 mg/1	

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled for completion in September, 1975.

(2) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of chromium at K-1700 is a result of blowdown from the K-1037 Cooling System. In the future the blowdown will contain a nonchromate corrosion inhibitor.

(3) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976. A sewage treatment plant is scheduled for completion in July, 1976; this should alleviate the high BOD content. The low chlorine residual was a result of operation error. This has been corrected.

(4) Standard determined by NPDES Permit No. TN0002950 effective January 1, 1976. A new package sewage treatment plant is scheduled for completion in August 1976; this should alleviate the high BOD content. The low chlorine residual was a result of operation error. This has since been corrected.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

APRIL 1975

SAMPLING LOCATION	PARAMETER		QUANTITY			No. Samples Exceeding Limit	CONCENTRATION			No. Samples Exceeding Limit
			Minimum	Average	Maximum		Minimum	Average	Maximum	
K-1515	Suspended Solids	Reported					66 mg/1	591 mg/1	1295 mg/1	4 of 4 Weekly Grab
		Limit (5)						30 mg/1	50 mg/1	
		Reported								
		Limit								
K-901 Pumphouse	Fluoride	Reported					0.8 ppb	2.34 ppb	6.6 ppb	1 of 5 24-Hour Sample
		Limit (6)						1.5 ppb	3.5 ppb	
Blair Road	Fluoride	Reported					0.7 ppb	1.3 ppb	1.9 ppb	0 of 5 24-Hour Sample
		Limit (6)						1.5 ppb	3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

Remarks: (5) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976.

(6) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

MAY 1975 - WATER

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Cr (Total)	Reported						1.8 mg/1		1 of 1 Monthly 24-Hour Composite
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					8.9		9.6	3 of 4 Weekly Grab
		Limit					6.0		9.0	
K-1700	Cr (Total)	Reported						0.25 mg/1		1 of 1 Monthly Grab
		Limit (2)						0.05 mg/1	0.08 mg/1	
K-1203	Ammonia (N)	Reported						5.9 mg/1		1 of 1 Monthly Composite
		Limit (3)						5.0 mg/1		
K-1203	BOD_5	Reported					13 mg/1	22 mg/1	30 mg/1	3 of 4 Weekly Grab
		Limit (3)						15 mg/1	20 mg/1	
K-1203	Suspended Solids	Reported					16 mg/1	32 mg/1	60 mg/1	1 of 4 Weekly Grab
		Limit (3)						30 mg/1	45 mg/1	
K-1203	Chlorine Residual	Reported					0.0 mg/1	.75 mg/1	1.0 mg/1	1 of 21 Daily Grab
		Limit					0.5 mg/1		2.0 mg/1	
K-710	BOD_5	Reported					6 mg/1	35 mg/1	75 mg/1	1 of 3 Weekly Grab
		Limit (4)						30 mg/1	45 mg/1	
K-710	Chlorine Residual	Reported					0.0 mg/1	.72 mg/1	1.4 mg/1	3 of 21 Daily Grab
		Limit					0.5 mg/1		2.0 mg/1	

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled for completion in September, 1975.

(2) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of chromium at K-1700 is a result of blowdown from the K-1037 Cooling System. This system will be converted to a nonchromate corrosion inhibitor by January 1, 1977.

(3) Standards determined by NPDES Permit No. TN0002950, effective July 1, 1976. A sewage treatment plant is scheduled for completion in July, 1976; this should alleviate the high BOD_5 content.

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(Continued on next page)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

MAY 1975 - AIR

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-805 Radio Tower	Fluoride	Reported					1.7 ppb	1.9 ppb	2.2 ppb	Monthly average of 4 24-hour sample
		Limit (5)						1.5 ppb	3.5 ppb	
Blair Road	Fluoride	Reported					0.4 ppb	1.2 ppb	1.8 ppb	0 of 4 24-hour sample
		Limit (5)						1.5 ppb	3.5 ppb	
Credit Union	Fluoride	Reported					0.3 ppb	1.7 ppb	4.0	1 of 4 24-hour sample
		Limit (5)						1.5 ppb	3.5 ppb	
Cabin Watts Bar Lake	Fluoride	Reported					0.3 ppb	1.3 ppb	1.9 ppb	0 of 4 24-hour sample
		Limit (5)						1.5 ppb	3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

Remarks: (4) Standard determined by NPDES Permit No. TN0002950 effective January 1, 1976. A new package sewage treatment plant is scheduled for completion in August 1976; this should alleviate the high BOD_5 content.

(5) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JUNE 1975

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Cr (Total)	Reported						1.8 mg/1	1.8 mg/1	1 of 1 Mo'ly
		Limit (1)							0.05 mg/1	24-Hr. Composite
K-901-A	pH	Reported					9.1	9.3	9.9	All
		Limit (2)					6.0		9.0	Continuous
K-1700	pH	Reported					6.80	7.40	9.37	2 of 21
		Limit (3)					6.0		9.0	Daily Grab
K-1700	Cr (Total)	Reported						0.45 mg/1	0.45 mg/1	1 of 1
		Limit (3)						0.05 mg/1	0.08 mg/1	Monthly Grab
K-1203	BOD_5	Reported					13 mg/1	17 mg/1	20 mg/1	Monthly Average of 4 Grab Samples
		Limit (4)						15 mg/1	20 mg/1	
K-1203	Chlorine Residual	Reported					0.0	.88 mg/1	1.4 mg/1	2 of 20 Daily Grab
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-710	Chlorine Residual	Reported					.35 mg/1	1.3 mg/1	2.0 mg/1	1 of 20 Daily Grab
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-1007-B	COD	Reported					12 mg/1	18.3 mg/1	21 mg/1	0 of 4
		Limit (2)						20 mg/1	25 mg/1	Weekly Grab
K-1206-D Trailer (Air)	Ambient Fluorides	Reported					0.3 ppb	2.08 ppb	5.7 ppb	Monthly Average 1 of 4
		Limit (5)						1.5 ppb	3.5 ppb	24-hour sample

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1976. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled for completion in September, 1975.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of chromium at K-1700 is a result of blowdown from the K-1037 Cooling System. This system will be converted to a nonchromate corrosion inhibitor by January 1,1977.

(4) Standards determined by NPDES Permit No. TN0002950, effective July 1, 1976. A sewage treatment plant is scheduled for completion in July, 1976; this should alleviate the high BOD_5 content.

(2/75) (5) Standard determined by Tennessee Ambient Air Quality Standards fc Gaseous Fluorides Expressed as HF.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JULY 1975 - WATER

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Cr	Reported						1.4 mg/l	1.4 mg/l	1 of 1 Monthly 24-Hr. Composite
		Limit(1)							0.05 mg/l	
K-901-A	pH	Reported					9.3		9.8	All Continuous
		Limit(2)					6.0		9.0	
K-1700	pH	Reported					5.9		8.5	2 of 22 Daily Grab
		Limit(3)					6.0		9.0	
K-1700	Cr	Reported						0.30 mg/l	0.3 mg/l	1 of 1 Monthly Grab
		Limit(3)						0.05 mg/l	0.08 mg/l	
K-1700	NO_3	Reported						321 mg/l	321 mg/l	1 of 1 Monthly Grab
		Limit(3)							90 mg/l	
K-1203	BOD_5	Reported					9 mg/l	18 mg/l	28 mg/l	Monthly Average of 5 Grab samples
		Limit(4)						15 mg/l	20 mg/l	
K-710	Chlorine Residual	Reported					0.0 mg/l	1.1 mg/l	2.0 mg/l	4 of 24 Daily Grab
		Limit(5)					0.5 mg/l		2.0 mg/l	
K-1007-B	COD	Reported						15 mg/l	24 mg/l	0 of 5 Weekly Grab
		Limit (5)						20 mg/l	25 mg/l	
		Reported								
		Limit								

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled for completion in September, 1975.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of chromium and nitrate and the adjustment of the pH at 1700 will be corrected before the effective date of the permit.

(4) Standards determined by NPDES Permit No. TN0002950, effective July 1, 1976. A sewage treatment plant is scheduled for completion in July, 1976; this should alleviate the high BOD_5 content.

(2/75) (5) Standard determined by NPDES Permit No. TN0002950, effective now.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

AUGUST 1975 - WATER

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Cr	Reported							1.40 mg/l	1 of 1 - Monthly 24-Hr. Composite
		Limit (1)							0.05 mg/l	
K-901-A	pH	Reported					9.0	9.2	9.5	Continuously
		Limit (2)					6.0		9.0	
K-1700	pH	Reported					5.2	6.6	7.3	3 of 21 Daily Grabs
		Limit (3)					6.0		9.0	
K-1700	Al	Reported							2.0 mg/l	1 of 1 Monthly Grab
		Limit (3)							1.0 mg/l	
K-1700	Cr	Reported							0.65 mg/l	1 of 1 Monthly Grab
		Limit (3)						0.05 mg/l	0.08 mg/l	
K-1700	NO_3	Reported							103.7 mg/l	1 of 1 Monthly Grab
		Limit (3)							90.0 mg/l	
K-1203	Cl^-	Reported					0.0 mg/l	0.9 mg/l	1.5 mg/l	1 of 21 Daily Grab
		Limit (4)					0.5 mg/l		2.0 mg/l	
K-710	Cl^-	Reported					0.0 mg/l	1.1 mg/l	1.9 mg/l	6 of 21 Daily Grab
		Limit (5)					0.5 mg/l		2.0 mg/l	
K-1515	Suspended Solids	Reported							86 mg/l	1 of 4 Weekly Grab
		Limit (6)						30 mg/l	50 mg/l	

Remarks:
(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. The project is scheduled for completion in September, 1975.
(2) Standard determined by NPDES Permit No.TN0002950, effective now.
(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of chromium, nitrates and aluminum and the adjustment of the pH at K-1700 will be corrected before the effective date of the permit.
(4) Standards determined by NPDES Permit No. TN0002950, effective now. A sewage treatment plant is scheduled for completion in July, 1976; this should alleviate the Cl^- residual problem.
(5) Standard determined by NPDES Permit No. TN0002950, effective now.
(6) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

SEPTEMBER 1975 - AIR

SAMPLING LOCATION	PARAMETER		QUANTITY			No. Samples Exceeding Limit	CONCENTRATION			No. Samples Exceeding Limit
			Minimum	Average	Maximum		Minimum	Average	Maximum	
K-901 Pump House	F^-	Reported						2.6 ppb		Monthly Average of 5 24-hour Samples
		Limit(5)						1.5 ppb		
K-901 Pump House	F^-	Reported							7.0 ppb	1 of 5 Weekly 24-hour Samples
		Limit(5)							3.5 ppb	
K-805 Radio Tower	F^-	Reported							3.9 ppb	1 of 5 Weekly 24-hour Samples
		Limit(5)							3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

Remarks: (5) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

SEPTEMBER 1975 - WATER

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Cr	Reported							2.0 mg/1	1 of 1 - Month 24-Hr. Composite
		Limit(1)							0.05 mg/1	
K-901-A	pH	Reported					8.9	9.1	9.2	2 of 5 Weekly Grab
		Limit(2)					6.0		9.0	
K-1700	pH	Reported					5.1	6.7	9.2	4 of 21 Daily Grab
		Limit(3)					6.0		9.0	
K-1700	Al	Reported							1.5 mg/1	1 of 1 Monthly Grab
		Limit(3)							1.0 mg/1	
K-1700	Cr	Reported							2.0 mg/1	1 of 1 Monthly Grab
		Limit(3)							0.08 mg/1	
K-1203	Ammonia	Reported						7.0 mg/1		1 of 1 Monthly Grab
		Limit(4)						5.0 mg/1		
K-1203	BOD	Reported						20.5 mg/1		Monthly Avg. for 4 Samples
		Limit(4)						15 mg/1		
K-1203	Cl^-	Reported					0.0 mg/1	1.1 mg/1	1.5 mg/1	2 of 21 Daily Grab
		Limit(5)					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of Al and chromates and the adjustment of the pH at K-1700 will be corrected by the effective date of the permit.

(4) Standards determined by NPDES Permit No. TN0002950, effective July 1. A sewage treatment plant is scheduled for completion in July, 1976; This should alleviate the BOD and Ammonia problem.

(5) Standards determined by NPDES Permit No. TN0002950, effective now.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

OCTOBER 1975

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
WATER		Reported								
		Limit								
K-901-A	Cr	Reported							2.5 mg/1	1 of 1 Monthly 24-Hr. Composite
		Limit(1)							0.05 mg/1	
K-901-A	pH	Reported					8.8		9.5	3 of 4 Weekly Grab
		Limit(2)					6.0		9.0	
K-1700	Cr	Reported							0.20 mg/1	1 of 1 Monthly Grab
		Limit(3)							0.08 mg/1	
K-1203	Cl^-	Reported					0.0 mg/1	1.5 mg/1	2.0 mg/1	3 of 22 Daily Grab
		Limit(4)					0.5 mg/1		2.0 mg/1	
AIR		Reported								
		Limit								
K-805 Radio Tower	Ambient Fluorides	Reported						1.8 ppb		Monthly Average of 3 24-Hr. Samples
		Limit (5)						1.5 ppb		
		Reported								
		Limit								
		Reported								
		Limit								

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of Cr will be corrected by the effective date of the permit.

(4) Standards determined by NPDES Permit No. TN0002950, effective now. A sewage treatment plant is scheduled for completion in July 1976. This should alleviate the Cl^- residual problem.

(5) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

NOVEMBER 1975

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
WATER		Reported								
		Limit								
K-901-A	Cr	Reported							2.8 mg/1	1 of 1 Monthly 24-Hr. Composite
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					8.7		9.4	2 of 4 Weekly Grab
		Limit (2)					6.0		9.0	
K-1700	Cr	Reported							0.65 mg/1	1 of 1 Monthly Grab
		Limit (3)							0.08 mg/1	
K-1203	Cl^-	Reported					0.2 mg/1	1.2 mg/1	2.0 mg/1	1 of 18 Daily Grab
		Limit (4)					0.5 mg/1		2.0 mg/1	
AIR		Reported								
		Limit								
Credit Union	F^-	Reported							14.0 ppb	1 of 4 Weekly 24-Hr. samples.
		Limit (5)							3.5 ppb	
Credit Union	F^-	Reported						3.75 ppb		Monthly Average of 4 24-Hr. samples
		Limit (5)						1.5 ppb		
		Reported								
		Limit								

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977. The high concentration of Cr will be corrected by the effective date of the permit.

(4) Standards determined by NPDES Permit No. TN0002950, effective now. A sewage treatment plant is scheduled for completion in July 1976. This should alleviate the Cl^- residual problem.

(5) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

DECEMBER 1975

WATER

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Cr	Reported							3.5 mg/l	1 of 1 Monthly 24-Hr. Composite
		Limit(1)							0.05 mg/l	
K-901-A	pH	Reported					6.2		9.4	10 Time Periods Continuous Monitoring
		Limit(2)					6.0		9.0	
K-1700	Cr	Reported							0.22 mg/l	1 of 1 Monthly Grab
		Limit(3)							0.05 mg/l	
K-1700	pH	Reported					5.8		9.6	3 of 21 Daily Grabs
		Limit(3)					6.0		9.0	
K-1203	BOD	Reported					20 mg/l	26 mg/l	35 mg/l	Monthly Average for 4 samples
		Limit(4)						15 mg/l		
K-1203	Cl^-	Reported					0.0 mg/l	0.8 mg/l	2.0 mg/l	4 of 22 Daily Grabs
		Limit(5)					0.5 mg/l		2.0 mg/l	
K-710-A	pH	Reported					5.8		7.2	1 of 21 Daily Grabs
		Limit(6)					6.0		9.0	
K-710-A	Cl^-	Reported					0.0 mg/l	1.6 mg/l	2.0 mg/l	3 of 21 Daily Grabs
		Limit(6)					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1976. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.

(4) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976. A new sewage treatment plant is scheduled for completion by July 1976.

(5) Standard determined by NPDES Permit No. TN0002950, effective now.

(6) Standard determined by NPDES Permit No. TN0002950, effective now. Excessive chlorine feed resulted in a low pH value. The chlorine residual problem should be corrected by the acquisition of additional chlorinating equipment.

TY-5684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

DECEMBER 1975

AIR

SAMPLING LOCATION	PARAMETER		QUANTITY			No. Samples Exceeding Limit	CONCENTRATION			No. Samples Exceeding Limit
			Minimum	Average	Maximum		Minimum	Average	Maximum	
K-1206-D	F^-	Reported							26.3 ppb	2 of 5 Weekly 24-Hr. Samples
		Limit(7)							3.5 ppb	
K-1206-D	F^-	Reported						8.0 ppb		Monthly Average for 5 24-Hr. Samples
		Limit(7)						1.5 ppb		
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

Remarks: (7) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JANUARY 1976

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
WATER		Reported							3.8 mg/	1 of 1 Monthly 24-Hr. Composite
K-901-A	Cr	Limit (1)							0.05 mg/l	
		Reported					8.4	8.8	10.8	5 Time Periods Continuous Monitoring
K-901-A	pH	Limit (1)					6.0		9.0	
		Reported							10.0	1 Time Period Continuous Monitoring
K-1007-B	pH	Limit (2)					6.0		9.0	
		Reported					5.8	6.9	9.8	2 of 20 Daily Grabs
K-1700	pH	Limit (3)					6.0		9.0	
		Reported					46 mg/l	51 mg/l	56 mg/l	3 of 3 Weekly 24-Hr. Composite
K-1203	BOD	Limit (4)						15 mg/l	20 mg/l	
		Reported					0.0 mg/l	.7 mg/l	1.7 mg/l	6 of 19 Daily Grabs
K-710-A	Cl^-	Limit (5)					0.5 mg/l		2.0 mg/l	
		Reported								
AIR		Limit								
		Reported							7.9 ppb	1 of 4 Weekly 24-Hr. Samples
K-1206-D	F^-	Limit (6)							3.5 ppb	
		Reported						2.5 ppb		Monthly Average of 4 24-Hr. Samples
K-1206-D	F^-	Limit (6)						1.5 ppb		

Remarks:
(1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.
(2) Standard determined by NPDES Permit No. TN0002950, effective now.
(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.
(4) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976. A new sewage treatment plant is scheduled for completion by July 1976.
(5) Standard determined by NPDES Permit No. TN0002950, effective now.
(6) Standard determined by Tennessee Ambient Air Quality Standards for gaseous fluorides expressed as HF.

-668 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

February 1976

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Cr	Reported							3.2 mg/1	1 of 1 Monthly 24-Hour Composite
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					8.9		9.6	4 Time Periods Continuous Monitoring
		Limit (1)					6.0		9.0	
K-1007-B	pH	Reported					7.8		9.4	3 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1203	Cl	Reported					0.0 mg/1	0.7 mg/1	2.0 mg/1	4 of 19 Daily Grab
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-710	Cl	Reported					0.0 mg/1	0.9 mg/1	>2.0 mg/1	8 of 19 Daily Grab
		Limit (4)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					6.9	7.6	10.6	2 of 19 Daily Grab
		Limit (5)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.
(2) Standard determined by NPDES Permit No. TN0002950, effective now.
(3) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976. A new sewage treatment plant is scheduled for completion by July 1976.
(4) Standard determined by NPDES Permit No. TN0002950, effective now.
(5) Standard determined by NPDES Permit No. TN0002950, effective now.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

March 1976

SAMPLING LOCATION	PARAMETER		QUANTITY Minimum	QUANTITY Average	QUANTITY Maximum	No. Samples Exceeding Limit	CONCENTRATION Minimum	CONCENTRATION Average	CONCENTRATION Maximum	No. Samples Exceeding Limit
K-901-A	Cr	Reported							4.3 mg/1	1 of 1 Monthly 24-Hour Composite
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					7.8	9.0	10.1	9 Time Periods Continuous Monitoring
		Limit (1)					6.0		9.0	
K-1007-B	pH	Reported					7.5	8.7	9.8	14 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1203	Cl	Reported					0.0 mg/1	0.84 mg/1	2.0 mg/1	8 of 23 Daily Grabs
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-1203	BOD_5	Reported					2 mg/1	21 mg/1	45 mg/1	2 of 4 Weekly Samples
		Limit (4)						15 mg/1	20 mg/1	
K-1203	Settle-able Solids	Reported					<0.1 ml/1	<0.8 ml/1	2.0 ml/1	1 of 4 Weekly Grabs
		Limit (4)							0.5 ml/1	
K-710	Cl	Reported					0.0 mg/1	>1.0 mg/1	>2.0 mg/1	4 of 23 Daily Grabs
		Limit (5)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					2.4	7.3	10.6	7 of 23 Daily Grabs
		Limit (6)					6.0		9.0	
		Reported								
		Limit								

Remarks:

(1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.
(2) Standard determined by NPDES Permit No. TN0002950, effective now.
(3) Standard determined by NPDES Permit No. TN0002950, effective now.
(4) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976. A new sewage treatment plant is scheduled for completion by July 1976.
(5) Standard determined by NPDES Permit No. TN0002950, effective now.
(6) Standard determined by NPDES Permit No. TN0002950, effective now.

TY-6684 (2/75)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
April 1976

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A	Cr	Reported							4.8 mg/1	1 of 1 Monthly 24-Hour Composite
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					8.4		10.7	14 Time Periods Continuous Monitoring
		Limit (1)					6.0		9.0	
K-1007-B	pH	Reported					7.3		10.0	20 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1203	Cl	Reported					0.0 mg/1	.6 mg/1	1.0 mg/1	3 of 21 Daily Grabs
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-710	Cl	Reported					0.0 mg/1	>1.3 mg/1	>2.0 mg/1	11 of 21 Daily Grabs
		Limit (4)					0.0 mg/1		0.5 mg/1	
K-1410	pH	Reported					6.7		11.8	8 of 21 Daily Grabs
		Limit (5)					6.0		9.0	
K-1700	Cr	Reported							0.08 mg/1	1 of 1 Monthly Composite
		Limit (6)							0.08 mg/1	
K-1700	pH	Reported					5.5		9.0	1 Time Period Continuous Monitoring
		Limit (6)					6.0		9.0	
		Reported								
		Limit								

REMARKS:
(1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.
(2) Standard determined by NPDES Permit No. TN0002950, effective now.
(3) Standard determined by NPDES Permit No. TN0002950, effective now.
(4) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976. A new sewage treatment plant is scheduled for completion by July 1976.
(5) Standard determined by NPDES Permit No. TN0002950, effective now.
(6) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

May 1976

SAMPLING LOCATION WATER	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901-A	Cr	Reported					3.7 mg/1	4.7 mg/1	6.2 mg/1	4 of 4 Weekly Composite Samples
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					6.8		10.7	4 Time Periods Continuous Monitoring
		Limit (1)					6.0		9.0	
K-1007-B	pH	Reported					6.8		10.2	15 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1203	Residual Chlorine	Reported					0.0 mg/1	.9 mg/1	2.0 mg/1	3 of 20 Daily Grabs
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-710	Residual Chlorine	Reported					0.0 mg/1	1.4 mg/1	< 2.0 mg/1	13 of 20 Daily Grabs
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					7.0		11.8	12 of 20 Daily Grabs
		Limit (2)					6.0		9.0	
K-1700	Cr	Reported							0.25 mg/1	1 of 1 Monthly Composite
		Limit (4)							0.05 mg/1	
K-1700	pH	Reported					5.9		9.6	2 Time Periods Continuous Monitoring
		Limit (4)					6.0		9.0	
K-1407-B	pH	Reported					3.1		9.7	17 Time Periods Continuous Monitoring
		Limit (4)					6.0		9.0	

REMARKS:

(1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective July 1, 1976. A new sewage treatment plant is scheduled for completion by July 1976.

(4) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JUNE 1976

SAMPLING LOCATION WATER	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901-A	Cr	Reported					2.8 mg/1	3.6 mg/1	4.1 mg/1	4 of 4 Weekly Composite Samples
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					7.1		10.4	6 Time Periods Continuous Monitoring
		Limit (1)					6.0		9.0	
K-1007-B	pH	Reported					7.2		9.5	11 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1007-B	Cr	Reported					<0.01 mg/1	<0.04 mg/1	0.1 mg/1	1 of 4 Weekly Composite Samples
		Limit (2)							0.05 mg/1	
K-1203	Residual Chlorine	Reported					0.0 mg/1	>1.0 mg/1	>2.0 mg/1	4 of 19 Daily Grab Samples
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-710-A	Residual Chlorine	Reported					0.0 mg/1	>1.5 mg/1	>2.0 mg/1	10 of 22 Daily Grab Samples
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					2.2		11.5	12 of 22 Daily Grab Samples
		Limit (2)					6.0		9.0	
K-1700	Cr	Reported							0.07 mg/1	0
		Limit (3)							0.08 mg/1	
K-1700	Suspended Solids	Reported							52 mg/1	1 of 1 Monthly Grab Sample
		Limit (3)							50 mg/1	

REMARKS:

(1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) will decrease the high concentration of chromium at K-901-A. This project has been rescheduled for completion in July 1976.

(2) Standard determined by NPDES Permit No. TN0002950, effective now. The high chromium value at K-1007-B was a result of an administrative decision to use fire water to clean air filters in K-29.

(3) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.

(4) Standard determined by Tennessee Ambient Air Quality Standards for gaseous fluorides expressed as HF.

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(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JUNE 1976

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1407-B	pH	Reported					6.0		9.4	2 Time Periods Continuous Monitoring
		Limit (3)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
AIR		Reported								
		Limit								
K-901 Pumphouse	F^-	Reported							13 ppb	1 of 4 Weekly 24-Hour Samples
		Limit (4)							3.5 ppb	
K-901 Pumphouse	F^-	Reported						3.1 ppb		Monthly Average for 4 24-Hour Samples
		Limit (4)						1.5 ppb		
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

AUGUST 1976

SAMPLING LOCATION WATER	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901-A	Cr	Reported					0.12 mg/1	.69 mg/1	1.9 mg/1	21 of 21 Daily Grab Samples
		Limit(1)							0.05 mg/1	
K-901-A	pH	Reported					8.5	9.4	9.9	7 Time Periods Continuous Monitoring
		Limit(1)					6.0		9.0	
K-1007-B	pH	Reported					7.8	8.9	10.1	30 Time Periods Continuous Monitoring
		Limit(2)					6.0		9.0	
K-1007-B	COD	Reported					18 mg/1	25 mg/1	33 mg/1	2 of 5 Weekly Composites
		Limit(2)						20 mg/1	25 mg/1	
K-1203	Residual Chlorine	Reported					0.0 mg/1	>1.3 mg/1	>2.0 mg/1	13 of 20 Daily Grabs
		Limit(3)					0.5 mg/1		2.0 mg/1	
K-710-A	Residual Chlorine	Reported					.2 mg/1	>1.6 mg/1	>2.0 mg/1	7 of 22 Daily Grabs
		Limit(3)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					2.3	7.0	9.9	4 of 20 Daily Grabs
		Limit(3)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP funds) completed in July will decrease the high concentration of chromium at K-901-A.

(2) Standard determined by NPDES Permit No. TN0002950. The high pH and chemical oxygen demand values are a result of biological phenomena, not the discharge of industrial effluents.

(3) Standard determined by NPDES Permit No. TN0002950, effective now. The Cl residual problem at K-1203 will be alleviated by the final installation of the automatic chlorine feed system. The pH problem at K-1410 will be remedied by the construction of a neutralization basin (GPP 1974) scheduled for completion by July 1977.

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
AUGUST 1976

SAMPLING LOCATION AIR	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
		Reported							3.5 ppb	
K-805 Radio Tower	F^-	Limit (4)							3.5 ppb	0
		Reported							10.9 ppb	1 of 4 Weekly 24 Samples
Cabin at Watts Bar Lake	F^-	Limit (4)							3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(4) Standard determined by Tennessee Ambient Air Quality Standards for gaseous fluorides expressed as HF.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

AUGUST 1976

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
WATER			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A	Cr	Reported					0.12 mg/1	.69 mg/1	1.9 mg/1	21 of 21 Daily Grab Samples
		Limit(1)							0.05 mg/1	
K-901-A	pH	Reported					8.5	9.4	9.9	7 Time Periods Continuous Monitoring
		Limit(1)					6.0		9.0	
K-1007-B	pH	Reported					7.8	8.9	10.1	30 Time Periods Continuous Monitoring
		Limit(2)					6.0		9.0	
K-1007-B	COD	Reported					18 mg/1	25 mg/1	33 mg/1	2 of 5 Weekly Composites
		Limit(2)						20 mg/1	25 mg/1	
K-1203	Residual Chlorine	Reported					0.0 mg/1	>1.3 mg/1	>2.0 mg/1	13 of 20 Daily Grabs
		Limit(3)					0.5 mg/1		2.0 mg/1	
K-710-A	Residual Chlorine	Reported					.2 mg/1	>1.6 mg/1	>2.0 mg/1	7 of 22 Daily Grabs
		Limit(3)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					2.3	7.0	9.9	4 of 20 Daily Grabs
		Limit(3)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP funds) completed in July will decrease the high concentration of chromium at K-901-A.

(2) Standard determined by NPDES Permit No. TN0002950. The high pH and chemical oxygen demand values are a result of biological phenomena, not the discharge of industrial effluents.

(3) Standard determined by NPDES Permit No. TN0002950, effective now. The Cl residual problem at K-1203 will be alleviated by the final installation of the automatic chlorine feed system. The pH problem at K-1410 will be remedied by the construction of a neutralization basin (GPP 1974) scheduled for completion by July 1977.

Called Joan Mike to call Alice 9/23/76

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
AUGUST 1976

SAMPLING LOCATION AIR	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
		Reported							3.5 ppb	
K-805 Radio Tower	F^-	Limit (4)							3.5 ppb	0
		Reported							10.9 ppb	1 of 4 Weekly 24 Samples
Cabin at Watts Bar Lake	F^-	Limit (4)							3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(4) Standard determined by Tennessee Ambient Air Quality Standards for gaseous fluorides expressed as HF.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

SEPTEMBER 1976

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A	Cr	Reported					1.0	1.8	2.8	4 of 4 Weekly Samples
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					8.1		10.5	4 Time Periods Continuous Monitoring
		Limit (1)					6.0		9.0	
K-1007-B	pH	Reported					8.1		10.3	16 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1007-B	D.O.	Reported					4.8 mg/1	7.4 mg/1	12.0 mg/1	1 Time Period Continuous Monitoring
		Limit (2)					5.0 mg/1			
K-1203	Residual Chlorine	Reported					0.0 mg/1	1.6 mg/1	2.0 mg/1	13 of 18 Daily Grabs
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-710-A	Residual Chlorine	Reported					0.0 mg/1	0.9 mg/1	2.0 mg/1	15 of 19 Daily Grabs
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					2.7		12.9	7 of 20 Daily Grabs
		Limit (4)					6.0		9.0	
K-1700	Cr	Reported							0.07 mg/1	0 of 1 Monthly Composite
		Limit (5)							0.08 mg/1	
K-805 Radio Tower	F^-	Reported					0.65 ppb	1.65 ppb	3.21 ppb	Monthly avg. of 4 24-Hr. Samples
		Limit (6)						1.5 ppb		

REMARKS: (1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) completed in July will decrease the high concentration of chromium at K-901-A.

(2) Standard determined by NPDES Permit No. TN0002950. The high pH and chemical oxygen demand values are a result of biological phenomena, not the discharge of industrial effluents.

(3) Standard determined by NPDES Permit No. TN0002950, effective now. The Cl residual problem at K-1203 will be alleviated by the final installation of the automatic chlorine feed system.

(4) Standard determined by NPDES Permit No. TN0002950, effective now. The pH problem at K-1410 will be remedied by the construction of a neutralization basin (GPP 1974) scheduled for completion by July 1977.

(5) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.

(6) Standard determined by Tennessee Ambient Air Quality Standards for gaseous fluorides expressed as HF.

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

OCTOBER 1976

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A	Cr	Reported					0.45 mg/l	1.76 mg/l	2.8 mg/l	4 of 4 Weekly
		Limit (1)							0.05mg/l	Composite Samples
K-901-A	pH	Reported					7.2		9.8	9 Time Periods Continuous
		Limit (1)					6.0		9.0	Monitoring
K-1007-B	pH	Reported					7.5		9.5	7 Time Periods Continuous
		Limit (2)					6.0		9.0	Monitoring
K-1203	Residual Chlorine	Reported					0.0 mg/l	1.9 mg/l	2.0 mg/l	12 of 21 Daily
		Limit (3)					0.5 mg/l		2.0 mg/l	Grab Samples
K-1203	BOD	Reported					1.0 mg/l	13.0 mg/l	48.0 mg/l	1 of 7 Semi-Weekl
		Limit (3)						15.0 mg/l	20.0 mg/l	Grab Samples
K-710	Residual Chlorine	Reported					0.0 mg/l	1.5 mg/l	2.0 mg/l	16 of 18 Daily
		Limit (3)					0.5 mg/l		2.0 mg/l	Grab Samples
K-1401	pH	Reported					3.3		12.0	6 of 21 Daily
		Limit (4)					6.0		9.0	Grab Samples
K-1700	Cr	Reported						0.06 mg/l	0.06 mg/l	1 of 1 Monthly
		Limit (5)						0.05 mg/l	0.08 mg/l	Composite Sampl
K-1700	pH	Reported					3.7		9.3	7 Time Periods Continuous
		Limit (5)					6.0		9.0	Monitoring

REMARKS: (1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) completed in July will decrease the high concentration of chromium at K-901-A.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective now. The K-1203 sewage plant was bypassed temporarily causing the excessive BOD at the effluent.

(4) Standard determined by NPDES Permit No. TN0002950, effective now. The pH problem at K-1410 will be remedied by the construction of a neutralization basin (GPP 1974) scheduled for completion by July 1977.

(5) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
NOVEMBER 1976

SAMPLING LOCATION WATER	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901-A	Cr	Reported					0.37 mg/1	2.3 mg/1	4.3 mg/1	5 of 5 Weekly Composite Samples
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					8.2		10.3	1 Time Period Continuous Monitoring
		Limit (1)					6.0		9.0	
K-1007-B	pH	Reported					6.8		9.2	5 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1203	Residual Chlorine	Reported					0.0 mg/1	1.4 mg/1	5.0 mg/1	27 of 187 Samples
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-710	Residual Chlorine	Reported					0.0 mg/1	>1.2 mg/1	>2.0 mg/1	31 of 138 Samples
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					3.0		12.8	4 of 20 Daily Grab Samples
		Limit (3)					6.0		9.0	
K-1700	Cr	Reported							0.04 mg/1	0 of 1 Monthly Composite Sample
		Limit (4)							0.05 mg/1	
K-1700	pH	Reported					5.0		11.5	9 Time Periods Continuous Monitoring
		Limit (4)					6.0		9.0	
K-1700	Nitrate	Reported					44.3	96.4	191.1	1 of 3 Weekly Composite Samples
		Limit (4)							90 mg/1	

REMARKS: (1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) completed in July will decrease the high concentration of chromium at K-901-A.
(2) Standard determined by NPDES Permit No. TN0002950, effective now.
(3) Standard determined by NPDES Permit No. TN0002950, effective now. The pH problem at K-1410 will be remedied by the construction of a neutralization basin (GPP 1974) scheduled for completion by July 1977.
(4) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
NOVEMBER 1976

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
AIR			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901	F^-	Reported						1.4 ppb		0
		Limit (5)						1.5 ppb		
K-1206-D	F^-	Reported							3.65 ppb	2 of 4 Weekly 24-H Samples
		Limit (5)							3.5 ppb	
K-1206-D	F^-	Reported						1.9 ppb		Monthly Average o 4 24-Hr. Samples
		Limit (5)						1.5 ppb		
Blair Road	F^-	Reported							9.35 ppb	2 of 4 Weekly 24-Hr. Samples
		Limit (5)							3.5 ppb	
Blair Road	F^-	Reported						3.54 ppb		Monthly Average o 4 Weekly 24-Hr. Samples
		Limit (5)						1.5 ppb		
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(5) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
DECEMBER 1976

SAMPLING LOCATION WATER	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901-A	Cr	Reported					2.6 mg/1	3.1 mg/1	3.4 mg/1	4 of 4 Weekly 24-Hour Composite Samples
		Limit(1)							0.05 mg/1	
K-901-A	pH	Reported					8.7		9.6	5 Time Periods Continuous Monitoring
		Limit(1)					6.0		9.0	
K-1007-B	pH	Reported					8.1		9.3	6 Time Periods Continuous Monitoring
		Limit(2)					6.0		9.0	
K-1203	Residual Chlorine	Reported					0.4 mg/1	1.2 mg/1	2.0 mg/1	2 of 168 Grab Samples
		Limit(2)					0.5 mg/1		2.0 mg/1	
K-1203	BOD	Reported					3 mg/1	18 mg/1	45 mg/1	1 of 4 Weekly Samples
		Limit(2)						15 mg/1	20 mg/1	
K-710	Residual Chlorine	Reported					.35 mg/1	1.8 mg/1	2.0 mg/1	9 of 168 Grab Samples
		Limit(2)					0.5 mg/1		2.0 mg/1	
K-1410	pH	Reported					7.0		12.4	3 of 15 Grab Samples
		Limit(3)					6.0		9.0	
K-1700	pH	Reported					4.8		10.8	16 Time Periods Continuous Monitoring
		Limit(4)					6.0		9.0	
		Reported								
		Limit								

REMARKS: (1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) completed in July will decrease the high concentration of chromium at K-901-A.

(2) Standard determined by NPDES Permit No. TN0002950, effective now. The high BOD value at K-1203 was due to temporary operational disruption for minor equipment repairs.

(3) Standard determined by NPDES Permit No. TN0002950, effective now. The pH problem at K-1410 will be remedied by the construction of a neutralization basin (GPP 1974) scheduled for completion by July 1977.

(4) Standard determined by NPDES Permit No. TN0002950, effective January 1, 1977.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
DECEMBER 1976

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
AIR			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1206-D	F^-	Reported						3.2 ppb	9.8 ppb	2 of 5 Weekly 24-Hr. and Monthly Average
		Limit (5)						1.5 ppb	3.5 ppb	
K-901	F^-	Reported						1.3 ppb		0
		Limit (5)						1.5 ppb		
K-805	F^-	Reported						1.4 ppb		0
		Limit (5)						1.5 ppb		
Blair Road	F^-	Reported						6.6 ppb	22.0 ppb	2 Of 5 Weekly 24-Hr. and Monthly Average
		Limit (5)						1.5 ppb	3.5 ppb	
Credit Union	F^-	Reported						2.8 ppb	12.0 ppb	1 of 5 Weekly 24-Hr. and Monthly Average
		Limit (5)						1.5 ppb	3.5 ppb	
Cabin	F^-	Reported						2.5 ppb	9.0 ppb	1 of 5 Weekly 24-Hr. and Monthly Average
		Limit (5)						1.5 ppb	3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (5) Standard determined by Tennessee Ambient Air Quality Standards for Gaseous Fluorides Expressed as HF.

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
JANUARY 1977

SAMPLING LOCATION WATER	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901-A	Cr	Reported					5.0 mg/1	5.2 mg/1	5.5 mg/1	4 of 4 Weekly 24-Hour Composite Samples
		Limit (1)							0.05 mg/1	
K-901-A	pH	Reported					6.6		9.6	16 Time Periods Continuous Monitoring
		Limit (1)					6.0		9.0	
K-1007-B	pH	Reported					7.8		9.3	6 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1203	Residual Chlorine	Reported					0.2 mg/1	1.2 mg/1	2.0 mg/1	7 of 162 Grab Samples
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-710	Residual Chlorine	Reported					0.0 mg/1	1.0 mg/1	2.0 mg/1	53 of 138 Grab Samples
		Limit (2)					0.5 mg/1		2.0 mg/1	
K-1700	pH	Reported					7.0		11.2	2 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1410	pH	Reported					2.4		11.6	6 of 21 Daily Grab Samples
		Limit (3)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) completed in July will decrease the high concentration of chromium at K-901-A.

(2) Standard determined by NPDES Permit No. TN0002950, effective now.

(3) Standard determined by NPDES Permit No. TN0002950, effective now. The pH problem at K-1410 will be remedied by the construction of a neutralization basin (GPP 1974) scheduled for completion by July 1977.

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
FEBRUARY 1977

SAMPLING LOCATION WATER	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901-A	Cr	Reported					2.5 mg/1	3.4 mg/1	5.0 mg/1	4 of 4 Weekly 24-Hour Composite Samples
		Limit(1)							0.05 mg/1	
K-901-A	pH	Reported					9.0		10.3	2 Time Periods Continuous Monitoring
		Limit(1)					6.0		10.0	
K-1007-B	pH	Reported					7.9		9.2	7 Time Periods Continuous Monitoring
		Limit(2)					6.0		9.0	
K-1203	Residual Chlorine	Reported					0.0 mg/1	1.4 mg/1	2.5 mg/1	13 of 139 Grab Samples
		Limit(2)					0.5		2.0 mg/1	
K-1203	Suspended Solids	Reported					< 5.0 mg/1	29 mg/1	83 mg/1	1 of 4 Weekly Composite Samples
		Limit(2)						30 mg/1	45 mg/1	
K-710	Residual Chlorine	Reported					0.0 mg/1	.5 mg/1	2.0 mg/1	77 of 112 Grab Samples
		Limit(2)					0.5 mg/1		2.0 mg/1	
K-1700	pH	Reported					6.2		9.5	1 Time Period Continuous Monitoring
		Limit(2)					6.0		9.0	
AIR		Reported								
		Limit								
Credit Union		Reported					< 0.01 ppb	1.8 ppb	4.0 ppb	1 of 4 Weekly and Monthly Average
		Limit (3)						1.5 ppb	3.5 ppb	

REMARKS:

(1) Standard determined by NPDES Permit No. TN0002950, effective now. The recently installed RCW Blowdown Recycle-Resoften System should, when completely functional, significantly reduce chromium discharges from K-901A. However, due to startup problems, this system is not expected to be operational before August 1, 1977.

(2) Standard determined by NPDES Permit No. TN0002950, effective now. The K-1203 sewage treatment plant was overloaded with organic wastes resulting in the buildup of suspended solids.

(3) Standard determined by Tennessee Ambient Air Quality Standards for gaseous fluorides expressed as HF.

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
MARCH 1977

SAMPLING LOCATION WATER	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901-A	Cr	Reported					2.0	3.0	3.8	4 of 4 Weekly 24-Hour Composite Samples
		Limit (1)							0.05 mg/1	
K-1007-B	pH	Reported					7.6		9.4	5 Time Periods Continuous Monitoring
		Limit (2)					6.0		9.0	
K-1007-B	Cr	Reported							0.08 mg/1	1 of 4 Weekly 24-Hour Composite Samples
		Limit (2)							0.05 mg/1	
K-1203	Residual Chlorine	Reported					0.2 mg/1	1.0 mg/1	2.0 mg/1	17 of 171 Grab Samples
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-710	Residual Chlorine	Reported					0.1 mg/1	1.1 mg/1	<2.0 mg/1	14 of 115 Grab Samples
		Limit (3)					0.5 mg/1		2.0 mg/1	
K-1700	Nitrate NO_3	Reported							153.8 mg/1	1 of 4 Weekly 24-Hour Composite Samples
		Limit (4)							90 mg/1	
K-1410	pH	Reported					5.5		8.6	2 of 23 Daily Grab Samples
		Limit (4)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Standard determined by NPDES Permit No. TN0002950, effective now. The Cooling Water Blowdown Recycle Project (1973 GPP Funds) when operable will decrease the high concentration of chromium at K-901-A.

(2) Standard determined by NPDES Permit No. TN0002950 effective now. The draining of concrete waste trucks into the pond coupled with biological activity resulted in the high pH at K-1007-B Holding Pond. Administrative actions have been taken which will hopefully eliminate the discharge of caustic material from the concrete trucks. There was an accidental release of chromated water from the K-1004-L cooling tower during piping modification that resulted in the high chromium value at K-1007-B Holding Pond.

(3) Standard determined by NPDES Discharge Permit No. TN0002950, effective now.

(4) Standard determined by NPDES Discharge Permit No. TN0002950, effective now. The K-1407-B Holding Pond has been drained for upgrading and modification work. The effluent from the K-1420 Decontamination Facility is consequently flowing directly into Poplar Creek via K-1700, resulting in

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
MARCH 1977

SAMPLING LOCATION AIR	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-901 Pumphouse		Reported							13.7 ppb	1 of 5 Weekly 24-Hour Samples
		Limit(5)							3.5 ppb	
K-901 Pumphouse		Reported						3.7 ppb		Monthly Average of 5 24-Hour Samples
		Limit(5)						1.5 ppb		
Blair Road		Reported							4.4 ppb	1 of 5 Weekly 24-Hour Samples
		Limit(5)							3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

high nitrate concentration. This condition is expected to last for two or three months. A project to adequately neutralize the effluent from the K-1410 Nickel Plating Facility is nearing completion and should be operable by the first of July.

(5) Standard determined by Tennessee Ambient Air Quality Standards for gaseous fluorides expressed as HF.

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
APRIL 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1007-B	pH	Reported					6.5		9.5	3 time periods cont. monitoring
		Limit (1)					6.0		9.0	
K-1007-B	COD	Reported						23 mg/1	60 mg/1	1 of 4 weekly 24 hr. composite samples
		Limit (2)						20 mg/1	25 mg/1	
K-1407-B	Oil and Grease	Reported							18 mg/1	1 of 1 quarterly grab sample
		Limit (3)							15 mg/1	
K-1407-B	pH	Reported					2.8		8.5	8 time periods cont. monitoring
		Limit (3)					6.0		9.0	
K-1700	Al	Reported							10 mg/1	1 of 1 monthly 24 hr. composite sample
		Limit (3)							1.0 mg/1	
K-1700	pH	Reported					1.2		9.0	7 time periods cont. monitoring
		Limit (3)					6.0		9.0	
K-1203	Chlorine Residual	Reported					0.1 mg/1	1.1 mg/1	2.5 mg/1	14 of 155 grab samples
		Limit (4)					0.5 mg/1		2.0 mg/1	
K-1203	BOD	Reported					< 5 mg/1	<33 mg/1	144 mg/1	1 of 8 semi-weekly grab samples
		Limit (5)						15 mg/1	20 mg/1	
K-1203	Suspended Solids	Reported							80 mg/1	1 of 8 semi-weekly grab samples
		Limit (5)							45 mg/1	

REMARKS:

(1) Standard determined by NPDES Permit No. TN0002950. The draining of concrete waste from trucks into the pond coupled with biological activity resulted in the high pH at K-1007-B. Administrative actions have been taken which will hopefully eliminate the discharge of caustic material from the concrete trucks.

(2) Standard determined by NPDES Permit No. TN0002950. As a result of excessive flood conditions, a high level of suspended organic matter accumulated in the K-1007-B pond which caused the COD to exceed the discharge limit.

(3) Standard determined by NPDES Permit No. TN0002950. The K-1407-B holding pond has been drained for modification and upgrading. The accumulated sludge contains quantites of oil and grease which are seeping out with the effluent. This modification also accounts for the high pH levels experienced at this location. The water that seeps from K-1407-B flows to station K-1700 which caused the aluminum and pH concentrations to exceed the discharge limits at K-1700.

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
APRIL 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-710	Chlorine Residual	Reported					0.2 mg/1	<1.3 mg/1	2.0+ mg/1	12 of 95 grab samples
		Limit (6)					0.5 mg/1		2.0	
K-901-A	pH	Reported					7.3		12.5	1 time period cont. monitoring
		Limit					6.0		9.0	
K-901-A	Cr	Reported					0.1	2.2	3.2 mg/1	4 of 4 weekly 24 hr. composite samples
		Limit (7)							0.05mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (4) Standard determined by NPDES Permit No. TN0002950. Chlorinator malfunctioning resulted in chlorine residual concentrations that exceeded discharge limits.

(5) Standard determined by NPDES Permit No. TN0002950. Excessive infiltration of surface drainage following extreme flood conditions resulted in hydraulic overloading of the treatment facility, which subsequently resulted in high suspended solids and BOD levels in the facility effluent.

(6) Standard determined by NPDES Permit No. TN0002950. The small flows through this facility have proven to be extremely difficult to treat with the existing chlorination system. A new hypochlorite addition system is being installed in an effort to effect better control.

(7) Standard determined by NPDES Permit No. TN0002950. The high chromium levels, which emanate from the RCW System blowdown, should be reduced when the recently-installed blowdown resoften-recycle system becomes fully functional.

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

May 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1700	Al	Reported							1.1 mg/1	1 of 1 monthly 24 hr. comp. sample
		Limit (1)							1.0 mg/1	
K-1700	pH	Reported					2.2		10.5	10 time periods cont. monitoring
		Limit (1)					6.0		9.0	
K-1700	NO_3	Reported					10 mg/1	70 mg/1	126 mg/1	2 of 4 weekly 24 hr. comp. samples
		Limit (1)							90 mg/1	
K-1700	Suspended Solids	Reported					7 mg/1	57 mg/1	200 mg/1	1 of 4 weekly comp. samples
		Limit (1)						30 mg/1	50 mg/1	
K-1407-B	pH	Reported					2.0		10.5	44 time periods cont. monitoring
		Limit (1)					6.0		9.0	
K-901-A	Cr	Reported					0.9 mg/1	1.9 mg/1	2.9 mg/1	4 of 4 weekly 24 hr. comp. samples
		Limit (2)							0.05 mg/1	
K-1410	pH	Reported					2.6		10.4	2 of 21 daily grab samples
		Limit (3)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: NOTE: All liquid effluent standards determined by NPDES Permit No. TN0002950.

1. The K-1407-B holding pond has been drained for modification and upgrading which caused the pH violations at this location. This modification also accounts for the violations which occurred at K-1700. The water that seeps from K-1407-B flows to station K-1700 which caused the aluminum, nitrate, pH, and suspended solid concentrations to exceed the discharge limits. The K-1407-B holding pond should be back in operation by July 1, 1977.
2. The high chromium levels, which emanate from the RCW System blowdown, should be reduced when the recently installed blowdown resoften-recycle system becomes fully functional.
3. The pH violations at this location are due to the solutions used in cleaning and plating of machines at the nickel plating facility. A neutralization pit has been installed and should be in operation by July 1, 1977.

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MONITORING REPORT

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1007-B	COD	Reported					2 mg/1	22 mg/1	26 mg/1	1 of 4 weekly comp. samples
		Limit (4)						20 mg/1	25 mg/1	
K-1203	Cl_2 Residual	Reported					0.2 mg/1	1.1 mg/1	2.5 mg/1	10 of 166 grab samples
		Limit (5)					0.5 mg/1		2.0 mg/1	
K-710	Cl_2 Residual	Reported					0.1 mg/1	1.3 mg/1	2.0+ mg/1	20 of 115 grab samples
		Limit (6)					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:
4. During the excessive flood conditions, a high level of suspended matter accumulated in the K-1700-B pond causing the COD to exceed the discharge limit.
5. Chlorinator malfunctioning resulted in chlorine residual concentrations that exceeded discharge limits.
6. The small flows through this facility have found to be extremely difficult to treat with the existing chlorination system. A new hypochlorite addition system is being installed in an effort to eliminate this situation.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JUNE, 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A	Cr	Reported					0.89 mg/l	2.17 mg/l	4.10 mg/l	
		Limit(4)							0.05 mg/l	
K-901-A	Suspended Solids	Reported					9 mg/l	32 mg/l	75 mg/l	1 of 4- 24 hr. comp. samples
		Limit (5)						30 mg/l	50 mg/l	
K-710-A	Cl_2 Residual	Reported					0.5 mg/l	>1.8 mg/l	+2.0 mg/l	28 of 96 grab samples
		Limit (6)					0.5 mg/l		2.0 mg/l	
K-1203	Cl_2 Residual	Reported					0.1 mg/l	1.1 mg/l	2.8 mg/l	6 of 169 grab samples
		Limit (7)					0.5 mg/l		2.0 mg/l	
K-1203	Suspended Solids	Reported					8 mg/l	66 mg/l	311 mg/l	4 of 13- 24 hr. comp. samples
		Limit (8)						30 mg/l	45 mg/l	
K-1203	Settleable Matter	Reported					<0.1 mg/l	<4.5 mg/l	30 mg/l	4 of 8- 24 hr. comp. samples
		Limit (8)							0.5 mg/l	
K-1203	BOD	Reported					<5 mg/l	<81 mg/l	300 mg/l	3 of 8- 24 hr. comp. samples
		Limit (8)						15 mg/l	20 mg/l	
K-1203	Dissolved Oxygen	Reported					2.5 mg/l	7.1 mg/l	8.6 mg/l	1 of 5 grab samples taken weekly
		Limit (8)					5.0 mg/l			
		Reported								
		Limit								

REMARKS: NOTE: All liquid effluent standards are determined by NPDES Permit No. TN0002950.

4. The high chromium levels which emanate from the RCW System blowdown are being reduced since the blowdown resoften-recycle system has become fully functional.
5. This violation was due to the heavy rainfall which was experienced during the month of June.
6. The small flows through this facility have been found to be extremely difficult to treat with the existing chlorination system.
7. Chlorinator malfunctioning resulted in chlorine residual concentration that exceeded discharge limits.
8. The violations that were experienced at the K-1203 sewage treatment plant were a result of the mechanical failures during June 9 and 10, 1977.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JUNE, 1977

WATER REPORT

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1407-B	pH	Reported					2.0	7.2	8.1	22 time periods cont. monitoring
		Limit (1)					6.0		9.0	
K-1407-B	Suspended Solids	Reported							71 mg/l	1 of 1 monthly grab sample
		Limit (1)						30 mg/l	50 mg/l	
K-1700	pH	Reported					3.0	7.0	8.1	10 time periods cont. monitoring
		Limit (1)					6.0		9.0	
K-1700	Cr	Reported							0.28mg/l	1 of 1 monthly grab sample
		Limit (1)						0.05 mg/l	0.08mg/l	
K-1700	NO_3	Reported					1 mg/l	39 mg/l	133 mg/l	1 of 4-24 hr. comp. samples
		Limit (1)							90 mg/l	
K-1700	Suspended Solids	Reported					9 mg/l	27 mg/l	89 mg/l	1 of 4-24 hr. comp. samples
		Limit (1)						30 mg/l	50 mg/l	
K-1007-B	Cr	Reported					0.02 mg/l	0.04 mg/l	0.08 mg/l	1 of 4-24 hr. comp. samples
		Limit (2)							0.05 mg/l	
K-1007-B	Dissolved Oxygen	Reported					4.2 mg/l	8.6 mg/l	13.0 mg/l	1 time period, cont. monitoring
		Limit (3)					5.0 mg/l			
		Reported								
		Limit								

REMARKS: NOTE: All liquid effluent standards are determined by NPDES Permit No. TN0002950.

1. The K-1407-B holding pond had been drained for modification and upgrading which caused the violations that occurred at K-1407-B and K-1700. This project was completed and the pond refilled at the end of June, 1977.
2. The violation resulted from the flushing of fire water valves which contained chromated water. Since this violation, however, a nonchromated fire water system has been put into operation.
3. Due to the high temperatures, low flow into lake, and the biodegradation of algae, the dissolved oxygen fell below the discharge limit at 5.0 mg/l.

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MONITORING REPORT
OAK RIDGE GASEOUS DIFFUSION PLANT
JUNE, 1977

AIR REPORT

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901 Pumphouse	F^-	Reported					< 0.001 ppb	<2.3 ppb	3.7 ppb	1 of 3- 24 hr. comp. samples.
		Limit						1.5 ppb	3.5 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

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MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

JULY, 1977

WATER REPORT

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1410	pH	Reported					6.6		11.8	3 of 19 monthly grab samples
		Limit (1)					6.0		9.0	
K-901-A	Cr	Reported					0.3 mg/1	1.7 mg/1	4.1 mg/1	4 of 4 weekly comp. samples
		Limit (2)							0.05 mg/1	
K-1007-B	Dissolved Oxygen	Reported					4.0 mg/1	6.9 mg/1	10.8 mg/1	12 samples cont. monitoring
		Limit (3)					5.0 mg/1			
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

1. The pH violations at this location are due to the solutions used in the cleaning and plating of equipment at the nickel plating facility. A neutralization pit has been installed and should be in operation by September 15, 1977.
2. The high chromium levels which emanate from the RCW System blowdown are continuing to decrease since the blowdown resoften-recycle system has become fully functional.
3. The low Dissolved Oxygen levels which occurred were a result of the hot and dry weather experienced during the month. Recent sampling data revealed that 1007-B influents contained COD levels of less than 8 mg/1 and dissolved oxygen concentrations of 7-8 mg/1. Therefore, it is believed that the low Dissolved Oxygen levels are a result of natural occurrences rather than ORGDP activities. The Dissolved Oxygen levels are expected to return to normal as the temperatures begin to decrease.

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
JULY, 1977

WATER REPORT

SAMPLING LOCATION	PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	NO. SAMPLES EXCEEDING LIMIT
K-1203	Settleable Solids	Reported					<0.1 mg/1	<0.7 ml/1	6.5 ml/1	1 of 10 - 24 hr. comp. samples
		Limit (4)							0.5 ml/1	
K-1203	Suspended Solids	Reported					<5 mg/1	<21 mg/1	125 mg/1	1 of 11-24 hr. comp. samples
		Limit (4)						30 mg/1	45 mg/1	
K-1203	Chlorine Residual	Reported					0.1 mg/1	1.1 mg/1	2.5 mg/1	9 of 169 monthly grab samples
		Limit (5)					0.5 mg/1		2.0 mg/1	
K-710	Chlorine Residual	Reported					0.3 mg/1	1.6 mg/1	2.0 + mg/1	17 of 99 monthly grab samples
		Limit (6)					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

4. The violations which occurred at the Sewage Treatment Plant were a result of the infiltration of rain water into the sewage pipelines. A study is being performed in order to determine where repairs should be made in the sewage lines.
5. Chlorinator malfunctioning resulted in chlorine residual concentrations that exceed discharge limits. Modifications are being made to curtail the number of chlorine residual violations.
6. The small flows through this facility are extremely difficult to treat with the existing chlorination system. Plans are being made to install a facility which would effectively treat the small flows.

MONITORING REPORT

AIR REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
JULY, 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A Pumphouse	F-	Reported					0.8 ppb	1.4 ppb	2.2 ppb	1 of 4 - 24 hr samples.
		Limit						1.5 ppb	2.0 ppb	
K-1206-D Trailer	F-	Reported					1.4 ppb	1.7 ppb	2.1 ppb	1 of 4 - 24 hr samples
		Limit						1.5 ppb	2.0 ppb	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
AUGUST 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1700	NO_3	Reported					53 mg/1	66 mg/1	91 mg/1	1 of 4 weekly (a) 24 hr. comp. samples
		Limit (1)							90 mg/1	
K-1410	pH	Reported					6.0		12.4	7 of 21 grab (b) samples
		Limit (1)					6.0		9.0	
K-1007-B	Cr	Reported					<0.05 mg/1	<0.06 mg/1	0.2 mg/1	1 of 5 weekly (c) 24 hr. comp. samples
		Limit (1)							.05 mg/1	
K-1007-B	Dissolved Oxygen	Reported					3.2 mg/1	7.7 mg/1	11.0 mg/1	2 time periods (d) cont. monitoring
		Limit (1)					5.0 mg/1			
K-901-A	Cr	Reported					0.05 mg/1	0.06 mg/1	0.09 mg/1	3 of 5 weekly (e) 24 hr. comp. samples
		Limit (1)							0.05 mg/1	
K-710	Chlorine Residual	Reported					0.1 mg/1		+2.0 mg/1	48 of 135 (f) grab samples
		Limit (1)					0.5 mg/1		2.0 mg/1	
K-1203	Settleable Solids	Reported					<0.1 ml/1	<0.4 ml/1	1.0 ml/1	3 of 15 (g) 24 hr. comp. samples
		Limit (1)							0.5 ml/1	
K-1203	Chlorine Residual	Reported					0.2 mg/1		2.5 mg/1	5 of 173 (h) grab samples
		Limit (1)					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								

REMARKS: See attached page.

UCN-11990
(2 4-76)

REMARKS:

(1) Standard determined by NPDES Permit No. TN0002950.

(a) The nitrate violation was a result of the nitric acid condensate from the pre- and post-evaporators that are associated with the uranium recovery system in K-1420.

(b) The pH violations at this location are due to the solutions used in the cleaning and plating of equipment at the nickel plating facility. A neutralization pit is being installed and should be in operation by October 1, 1977.

(c) There was no definite explanation for the chromium violation. An investigation failed to locate a source which may have been responsible for the discharge violation. Other high chromium levels have not been experienced since this violation was reported.

(d) The dissolved oxygen violations were a result of the hot and dry atmospheric conditions during the month. The dissolved oxygen levels are expected to return to normal as the temperature decreases.

(e) The high chromium levels which emanate from the RCW Blowdown System are continuing to decrease since the Blowdown Resoften-Recycle System has become fully functional.

(f) The small flows through this facility are extremely difficult to treat with the existing chlorination system. Plans are being made to install a facility which would effectively treat the small flows.

(g) The settleable solids violation was a result of the anaerobic sludge that was pumped from the Imhoff tanks into the sewage treatment plant for biological treatment. The sewage plant could not adequately biodegrade the sludge thus resulting in an increase of solids being discharged through the effluent.

(h) Chlorinator malfunctioning resulted in chlorine residual concentrations that exceeded discharge limits. Modifications are being made which should curtail the number of chlorine residual violations.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
SEPTEMBER 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1515	pH	Reported					5.8		6.8	1 of 4 weekly grab samples (1)
		Limit					6.0		9.0	
K-710	Cl_2 Residual	Reported					0.1 mg/1	1.6 mg/1	2.0+ mg/1	50 of 135 grab samples (2)
		Limit					0.5 mg/1		2.0 mg/1	
K-1203	Suspended Solids	Reported					6 mg/1	62 mg/1	282 mg/1	2 of 12 comp. samples (3)
		Limit						30 mg/1	45 mg/1	
K-1203	Settleable Solids	Reported					0.2 ml/1	1.9 ml/1	15.0 ml/1	3 of 11 comp. samples (3)
		Limit							0.5 ml/1	
K-1203	Cl_2 Residual	Reported					0.3 mg/1	1.1 mg/1	5.0 mg/1	7 of 173 grab samples (4)
		Limit					0.5 mg/1		2.0	
K-1700	Nitrate (NO_3)	Reported					12 mg/1	59 mg/1	138 mg/1	1 of 4 24 hr. comp. samples (5)
		Limit							90 mg/1	
K-1700	pH	Reported					4.0		7.9	10 time periods cont. monitoring (6)
		Limit					6.0		9.0	
K-1410	pH	Reported					3.1		10.4	11 of 20 grab samples (7)
		Limit					6.0		9.0	
		Reported								
		Limit								

REMARKS: See attached page.

UCN-11990
(2 4-76)

REMARKS:

All discharge limits are determined by Permit No. TN0002950.

1. The pH violation at K-1515 Sanitary Treatment Plant was a result of a ruptured chlorine line. The gas which settled on the ground was washed into the K-1515 Pond causing a reduction in the pH.
2. The small flows through this facility are extremely difficult to treat with the existing chlorination system. Because of the small flows, septic tanks are being installed to treat the sewage generated in this area. This method will not produce a surface discharge, therefore eliminating the need for chlorination.
3. These violations were a result of the infiltration of rainwater into the sewage lines. This additional load increased the flow to K-1203 beyond its peak capacity. Efforts are currently being made to correct this problem.
4. Chlorinator malfunctioning resulted in chlorine residual concentration to be out of compliance. Certain modifications have been made and the number of violations are being reduced.
5. This nitrate violation was a result of discharging a nitric acid solution used in the electroless nickel plating facility at K-1420.
6. The pH violations were apparently due to the acidic runoff from the K-1501 coal yard area during the heavy rainfall experienced during the month. Efforts are being made to neutralize this runoff with the caustic runoff discharged from the steam plant.
7. The pH violations at this location are due to the solutions used in the cleaning and plating of equipment at the nickel plating facility. Final modifications are being made on a neutralization pit and should be in operation in the near future.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
OCTOBER, 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1410	pH	Reported					5.2		9.0	1 of 17 samples during the month (1)
		Limit					6.0		9.0	
K-901-A	Cr	Reported					<.05 mg/1	<0.06 mg/1	0.1 mg/1	1 of 4-24 hr. comp. samples (2)
		Limit							0.05 mg/1	
K-1203	Settleable Solids	Reported					<0.1 ml/1	<0.3 mg/1	1.5 mg/1	1 of 9-24 hr. comp. samples (3)
		Limit							0.5 ml/1	
K-1203	Chlorine Residual	Reported					0.5 mg/1	1.3 mg/1	2.5 mg/1	5 of 159 grab samples (4)
		Limit					0.5 mg/1		2.0 mg/1	
K-710-A	Chlorine Residual	Reported					0.0 mg/1	1.3 mg/1	2.0 + mg/1	34 of 85 grab samples (5)
		Limit					2.5 mg/1		2.0 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: All discharge limits are determined by Permit No. TN0002950.

1. The pH violation at this location was due to the solutions used in the cleaning and plating of equipment at the nickel plating facility. Final modifications are being made on a neutralization pit and should be in operation in the near future.
2. It is believed that this violation was due to an unauthorized discharge of chromated water from the condenser cleaning facility. A recent study showed that high concentrations of chromated water were entering the storm drain lines in this area.
3. This violation was a result of the infiltration of rainwater into the sewage lines. The infiltration increased the flow to K-1203 beyond its peak flow capacity.
4. Chlorinator malfunctioning caused chlorine residual concentrations to be out of compliance. Certain modifications are being made and the number of violations are being reduced.
5. The small flows through this facility are extremely difficult to treat with the existing chlorination system. Because of the small flows, septic tanks are being installed to treat the sewage generated in this area which will eliminate a surface discharge and the need for chlorination.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
November, 1977

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1410	pH	Reported					5.8		11.0	3 of 18 grab (1) samples
		Limit					6.0		9.0	
K-1203	Settleable Solids	Reported					<0.1 ml/1	<1.5 ml/1	12.0 ml/1	4 of 11-24 hr.(2) comp. samples
		Limit							0.5 ml/1	
K-1203	Suspended Solids	Reported					10 mg/1	45 mg/1	26 mg/1	2 of 11-24 hr. (2) comp. samples
		Limit						30 mg/1	45 mg/1	
K-1203	Chlorine Residual	Reported					0.2 mg/1	1.1 mg/1	1.9 mg/1	1 of 167 grab (3) samples
		Limit					0.5 mg/1		2.0 mg/1	
K-710	Chlorine Residual	Reported					0.3 mg/1	1.5 mg/1	2.0+ mg/1	23 of 78 grab (4) samples
		Limit					0.5 mg/1		2.0 mg/1	
K-901-A	Chromium	Reported					-.01 mg/1	0.05 mg/1	0.1 mg/1	2 of 4-24 hr. (5) comp. samples
		Limit							0.05 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: All discharge limits are determined by Permit No. TN0002950.

1. The pH violations of this location were due to the solutions used in the cleaning and plating of equipment at the nickel plating facility. Final modifications are still being made on a neutralization pit and should be in operation in the near future.
2. These violations were a result of the infiltration of rainwater into the sewage lines. The infiltration increased the flow to K-1203 beyond its peak flow capacity. Personnel from the Environmental Management Group are presently conducting a survey to determine where the infiltration is occurring.
3. This violation was the result of a chlorinator malfunctioning. Modifications have been made and the number of violations have been reduced significantly.
4. The small flows through this facility are extremely difficult to treat with the existing chlorination system. Because of the small flows, septic tanks are being installed to treat the sewage generated in this area. This method will not produce a surface discharge, therefore eliminating the need for chlorination.
5. It is believed that this violation was a result of a cooling water system leak of less than 10 gpm and/or an unapproved discharge of a few hundred gallons of chlorinated water. A search for leaks is being conducted while all process building floor drains are being capped and welded.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

December, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	BOD	Reported					<5 mg/1	<15 mg/1	42 mg/1	1 of 8 24- (1) hour comp. samples
		Limit						15 mg/1	20 mg/1	
K-1203	Suspended Solids	Reported					9 mg/1	97 mg/1	515 mg/1	1 of 4- 24 (1) hour comp. samples
		Limit						30 mg/1	45 mg/1	
K-1203	Settleable Solids	Reported					<0.1 ml/1	<3.7 ml/1	31 ml/1	3 of 4-24 (1) hour comp. samples
		Limit							0.5 ml/1	
K-1203	Chlorine Residual	Reported					0.2 mg/1	0.9 mg/1	1.7 mg/1	4 of 167 (2) grab samples
		Limit					0.5 mg/1		2.0 mg/1	
K-710-A	Chlorine Residual	Reported					0.1 mg/1	1.7 mg/1	2.0+mg/1	44 of 124 (3) samples
		Limit					0.5 mg/1		2.0 mg/1	
K-1700	Aluminum	Reported							13.3 mg/1	1 of 1-24 hr (4) monthly comp. sample
		Limit							1.0 mg/1	
K-1410	pH	Reported					6.0		9.8	4 of 20 grab (5) samples
		Limit					6.0		9.0	
		Reported								58/328
		Limit								
		Reported								
		Limit								

REMARKS: All discharge limits determined by NPDES Discharge Permit No. TN0002950.

1. These violations were a result of the infiltration of rainwater into the sewage lines. These lines are being studied to determine the location(s) of the infiltration to determine where future repairs should be made.
2. The chlorine residual violations were a result of a temporary mechanical malfunction in the chlorination system.
3. These violations are due to the low flow rates which are experienced at this location. It has been found that these flow rates are extremely difficult to chlorinate with the existing system. Septic tanks are being installed which will adequately treat the waste generated in this area. This system will not require a NPDES discharge permit, thus eliminating the need for chlorination.
4. The cause of this violation is unknown. The areas which discharge aluminum reported no discharges which would result in a violation. It is possible that the violation could have been the result of an analytical error.
5. The pH violations which occurred at this location are a result of the solutions used in the nickel plating facility. A flow equalization system is being installed and should be in operation in the near future.

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
January, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Suspended Solids	Reported					22 mg/1	329 mg/1	2038 mg/1	4 of 10- 24 hr. comp. samples
		Limit						30 mg/1	45 mg/1	
K-1203	Settleable Solids	Reported					< 0.1 ml/1	<14 ml/1	100 ml/1	4 of 10- 24 hr. compl samples
		Limit							0.5 ml/1	
K-1203	Chlorine Residual	Reported					0.40 mg/1	1.04 mg/1	1.70 mg/1	7 of 158 grab samples
		Limit					0.5 mg/1		5.0 mg/1	
K-1007-B	COD	Reported					< 5 mg/1	<19 mg/1	36 mg/1	1 of 4- 24 hr.(1) comp. samples
		Limit						20 mg/1	25 mg/1	
K-901-A	Chromium	Reported					0.02 mg/1	0.04 mg/1	0.06 mg/1	1 of 4- 24 hr.(2) comp. samples
		Limit							0.05 mg/1	
K-710	Chlorine Residual	Reported					0.0 mg/1	1.1+ mg/1	2.0+ mg/1	34 of 90 grab samples
		Limit					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: All limits determined by NPDES Permit No. TN0002950.

1. This violation was apparently due to a discharge of an organic solution from the laboratory storm drains or the K-1231 process area. Should high COD levels be experienced again, samples will be collected to determine the source of the discharge.
2. This violation was a result of an unauthorized discharge of chromated water into the storm drain system emptying into the K-901-A Holding Pond. Administrative action is being taken to see that those discharges are discontinued.

MONITORING REPORT

Oak Ridge Gaseous Diffusion Plant
February 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT (1)
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1700	Suspended Solids	Reported					14 mg/l	33 mg/l	70 mg/l	1 of 4 - 24 hr. comp. samples
		Limit						30 mg/l	50 mg/l	
K-1410	pH	Reported					5.6		11.6	4 out of 19 samples
		Limit					6.0		9.0	
K-1203	Chlorine Residual	Reported					0.2 mg/l	1.0 mg/l	1.4 mg/l	1 of 157 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
K-710	Chlorine Residual	Reported					0.0 mg/l	1.5 mg/l	2.0 mg/l	4 of 84 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) This violation was a result of the fly ash from the electrostatic precipitators at K-1501 entering the drainage ditch which flows to K-1700.

Standards determined by NPDES Permit No. TN0002950.

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
March, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Chlorine Residual	Reported					0.1 mg/l	1.0 mg/l	2.0 mg/l	12 of 167 Grab Samples
		Limit					0.5 mg/l		2.0 mg/l	
K-710	Chlorine Residual	Reported					0.2 mg/l	1.8 mg/l	+2.0 mg/l	8 of 80 Grab Samples
		Limit					0.5 mg/l		2.0 mg/l	
K-1410	pH	Reported					3.0		8.6	3 of 22 Grab Samples
		Limit					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: Standards determined by NPDES Permit No. TN0002950.

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT
April, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1410	pH	Reported					6.8		10.1	2 of 20 Grab Samples
		Limit					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
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		Limit								

REMARKS: Standards determined by NPDES Permit No. TN0002950.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP MAY, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Suspended Solids	Reported					<5 mg/l	<117 mg/l	1284 mg/l	2 of 15 comp. samples
		Limit						30 mg/l	45 mg/l	
K-1203	Chlorine Residual	Reported					0.2 mg/l	0.9 mg/l	2.0 mg/l	10 of 174 Grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: Standards determined by NPDES Permit No. TN0002950.

MONITORING REPORT

ORGDP JUNE, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1410	pH	Reported					6.1		12.2	3 out of 22 Grab samples
		Limit					6.0		9.0	
K-1203	Suspended Solids	Reported					<5 mg/l	<50 mg/l	212 mg/l	3 out of 12 composite samples
		Limit						30 mg/l	45 mg/l	
K-1203	Settleable Solids	Reported					<0.1 ml/l	<1.6 ml/l	8.0 ml/l	3 out of 12 composite samples
		Limit							0.5 ml/l	
K-1203	Dissolved Oxygen	Reported					2.3 mg/l	6.8 mg/l	8.6 mg/l	2 out of 22 grab samples
		Limit					5.0 mg/l			
K-1203	Chlorine Residual	Reported					0.2 mg/l	1.1 mg/l	2.0 mg/l	4 of 168 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP JULY, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Settleable Solids	Reported					<0.1 ml/l	<0.3 ml/l	2.1 ml/l	1 of 12 composite samples
		Limit							0.5 ml/l	
K-1203	Suspended Solids	Reported					<5.0 mg/l	<13.0 mg/l	79.0 mg/l	1 of 12 composite samples
		Limit						30 mg/l	45 mg/l	
K-1203	Chlorine Residual	Reported					0.4 mg/l	1.3 mg/l	2.0 mg/l	1 of 162 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP JULY, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203 Sewage Plant	Chlorine Residual	Reported					0.3 mg/l	1.1 mg/l	2.0 mg/l	2 of 165 time periods. Continuous monitoring.
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP AUGUST, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Chlorine Residual	Reported					0.2 mg/l	1.2 mg/l	2.5 mg/l	4 of 163 readings
		Limit					0.5 mg/l		2.0 mg/l	
K-1007-B	Dissolved Oxygen	Reported					2.0 mg/l	4.6 mg/l	9.0 mg/l	3 time periods (continuous monitoring
		Limit					5.0 mg/l			
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: Standards determined by NPDES Permit No. TN0002950.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP OCTOBER, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A	Chromium	Reported					0.01 mg/l	0.03 mg/l	0.06 mg/l	1 of 5 - 24 hour composite samples
		Limit							0.05 mg/l (1)	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Limits determined by NPDES Permit No. TN0002950

MONITORING REPORT

ORGDP MONTHLY MONITORING REPORT NOVEMBER, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1700	pH	Reported					3.2		7.8	1 time period for three hours
		Limit (1)					6.0		9.0	
K-1203	Seattleable Solids	Reported					<0.1 ml/l	<9.0 ml/l	35 ml/l	6 of 10 composite samples
		Limit (1)							0.5 ml/l	
	Suspended Solids	Reported					<5 mg/l	<138 mg/l	425 mg/l	5 of 10 composite samples
		Limit (1)						30 mg/l	45 mg/l	
	Chlorine Residual	Reported					0.1 mg/l	1.1 mg/l	2.5 mg/l	4 time periods continuous monitoring
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Standards determined by NPDES Permit NO. TN0002950

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP DECEMBER, 1978

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203 Sewage Treatment Plant	Settleable Solids(2)	Reported					<0.1 ml/l	<8.4 ml/l	25 ml/l	9 of 12 composite samples (1)
		Limit							0.5 ml/l	
	Suspended Solids(2)	Reported					18 mg/l	156 mg/l	405 mg/l	8 of 12 composite samples (1)
		Limit								
	BOD (2)	Reported					<5 mg/l	<22 mg/l	54 mg/l	3 of 7 composite samples (1)
		Limit						15 mg/l	20 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Standards Determined by NPDES Permit No. TN000295

(2) Violations were a result of sewer infiltration due to the heavy rainfall experienced during the month causing a hydraulic overload to the sewage plant.

MONITORING REPORT

ORGDP JANUARY, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	settleable solids	Reported					<0.1 ml/l	<2.9 ml/l	34 ml/l	6 of 15 composite samples (2)
		Limit							0.5 ml/l	
K-1203	suspended solids	Reported					<5.0 mg/l	<70 mg/l	518 mg/l	6 of 15 composite samples (2)
		Limit						30 mg/l	45 mg/l	
K-901-A	chromium	Reported					0.035 mg/l	0.054 mg/l	0.068 mg/l	1 of 4 composite samples
		Limit							0.05 mg/l	
K-1700	pH	Reported					1.8		7.2	1 time period continuous monitoring
		Limit					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: 1. Limits determined by NPDES Discharge Permit No. TN0002950.

2. These noncompliances were a result of an hydraulic overload at the sewage plant caused by the infiltration of water into the sewage lines during periods of heavy rainfall in January 1979.

MONITORING REPORT

ORGDP FEBRUARY, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	BOD	Reported					<5 mg/l	<42 mg/l	76 mg/l	5 of 8 24-hour composite samples (2)
		Limit						15 mg/l	20 mg/l	
K-1203	Settleable Solids	Reported					<0.1 ml/l	<8.8 ml/l	40 ml/l	8 of 12 24-hour composite samples (2)
		Limit							0.5 ml/l	
K-1203	Suspended Solids	Reported					14 mg/l	187 mg/l	752 mg/l	8 of 12 24-hour composite samples (2)
		Limit						30 mg/l	45 mg/l	
K-1203	Chlorine Residual	Reported					0.2 mg/l	1.1 mg/l	2.5 mg/l	11 of 150 grab samples
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

1. Limits determined by NPDES Permit No. TN0002950.
2. These noncompliances were caused by the infiltration of rain water into the sewage system which resulted in a hydraulic overload to the sewage treatment plant.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP MARCH, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1007-B	pH	Reported					7.6		9.5	9 time periods continuous (2) monitoring
		Limit					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

1. Limits determined by NPDES Permit No. TN0002950
2. The cause of the pH excursions at K-1007-B has not been determined. Samples have been collected at all influents to the pond which showed no high pH values. It is believed that the high pH levels are naturally occuring depending upon climatic conditions.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP APRIL, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Suspended Solids	Reported					7	17	79	1 of 12 - 24 hour composite samples
		Limit						30	45	
K-1203	Setteable Solids	Reported					<0.1	<0.2	1.3	1 of 12 - 24 hour composite samples
		Limit							0.5	
K-1203	Chlorine Residual	Reported					0.1	1.2	5.0	5 of 175 grab samples
		Limit					0.5		2.0	
K-1007-B	pH	Reported					7.9		9.4	5 time periods - continuous monitoring
		Limit					6.0		9.0	
K-901-A	Total Chromium	Reported					0.04	0.06	0.08	3 of 4 - 24 hour(2) composite samples
		Limit							0.05	
K-710	Chlorine Residual	Reported					1.0	1.2	2.8	24 of 42 grab samples
		Limit					0.5		2.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

1. Limits determined by NPDES Permit No. TN0002950.
2. The reasons for the chromium noncompliances at K-901-A has not been determined. However, it is believed that the chromium leaving the pond maybe a result of poor settling of the Cr^{+3} compounds produced in the electrolytic reduction system (ANDCO).

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP MAY, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Settleable Solids	Reported					<0.1 ml/l	<6.8 ml/l	14.0 ml/l	3 of 14 - 24 hour composite samples
		Limit							0.5 ml/l	
K-1203	Suspended Solids	Reported					<5.0 mg/l	121 mg/l	1441 mg/l	3 of 16 - 24 hour composite samples
		Limit					30 mg/l		45 mg/l	
K-1203	Chlorine Residual	Reported					0.2 mg/l	1.3 mg/l	2.5 mg/l	7 of 181 grab samples
		Limit								
K-901-A	Total Chromium	Reported					0.02 mg/l	0.03 mg/l	0.06 mg/l	1 of 5 - 24 hour composite samples
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: 1. Limits determined by NPDES Permit No. TN0002950.

MONITORING REPORT

ORGDP JUNE, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A	Total Chromium	Reported					0.3 mg/l	0.04 mg/l	0.09 mg/l	1 of 4 - 24 hour composite samples
		Limit							0.05 mg/l	
K-1203	Chlorine Residual	Reported					0.4 mg/l	1.2 mg/l	1.7 mg/l	2 of 184 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: 1. Limits determined by NPDES Permit No. TN0002950.

UCN-11990
(2 4-76)

MONITORING REPORT

OAK RIDGE GASEOUS DIFFUSION PLANT

July 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K- 901-A	Total Chromium	Reported					<0.01	< 0.04	0.06	1 of 5 - 24 hr. Composite samples
		Limit							0.05 mg/l	
K- 1203	Suspensed Solids	Reported					<5.0 mg/l	< 32 mg/l	264 mg/l	1 of 11 - 24 hr. Composite samples
		Limit						30 mg/l	45 mg/l	
	Settable Solids	Reported					<0.1 ml/l	< 1.7 ml/l	18 ml/l	1 of 11 - 24 hr. Composite samples
		Limit							0.5 ml/l	
	B O D	Reported					<5 mg/l	< 18 mg/l	62 mg/l	1 of 6-24 hr. Composite samples
		Limit						15 mg/l	20 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

1. Limits determined by NPDES Permit NO. TN0002950

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP AUGUST, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Suspended Solids	Reported					<5 mg/l	<25 mg/l	283 mg/l	1 of 15 - composite sample
		Limit						30 mg/l	45 mg/l	
	Settleable Solids	Reported					<0.1 ml/l	<0.5 ml/l	7.5 ml/l	1 of 15 - composite sample
		Limit							0.5 ml/l	
	Chlorine Residual	Reported					0.1 mg/l	1.1 mg/l	1.5 mg/l	3 of 156 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
K-901-A	Total Chromium	Reported					0.03 mg/l	0.04 mg/l	0.05 mg/l	1 of 5 - 24 hour composite sample
		Limit							0.5 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

1. Limits determined by NPDES Permit No. TN0002950.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP SEPTEMBER, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1700	pH	Reported					5.8	7.2	8.5	1 - 4-hour time period
		Limit					6.0		9.0	
K-1203	Suspended Solids	Reported					5 mg/l	18 mg/l	152 mg/l	1 of 12 composite samples
		Limit						30 mg/l	45 mg/l	
	Chlorine Residual	Reported					0.1 mg/l	1.0 mg/l	1.7 mg/l	8 of 80 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: 1. Limits determined by NPDES Permit No. TN0002950.

MONITORING REPORT

ORGDP OCTOBER, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	BOD	Reported					<5 mg/l	<10 mg/l	52 mg/l	1 of 10 (2) composite samp
		Limit						15 mg/l	20 mg/l	
	Suspended Solids	Reported					<5 mg/l	<29 mg/l	341 mg/l	1 of 16 (2) composite samp
		Limit						30 mg/l	45 mg/l	
	Settleable Solids	Reported					<0.1 ml/l	<2.0 ml/l	22.0 ml/l	1 of 15 (2) composite samp
		Limit							0.5 ml/l	
	Chlorine Residual	Reported					0.4 mg/l	1.4 mg/l	2.5 mg/l	3 of 168 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Limits determined by NPDES Permit No. TN0002950.

(2) The noncompliance was a result of a hydraulic overload due to sewer infiltration during a period of heavy rainfall.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP NOVEMBER, 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Chlorine Residual	Reported					0.1 mg/l	1.1 mg/l	1.8 mg/l	5 of 174 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP DECEMBER 1979

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Chlorine Residual	Reported					0.2 mg/l	1.1 mg/l	2.0 mg/l	7 of 174 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Limits determined by NPDES Permit No. TN0002950.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP JANUARY 1980

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-901-A	Chromium	Reported					0.01 mg/l	.04 mg/l	0.07 mg/l	1 of 5 - 24 hr (2) composite samples
		Limit							0.05 mg/l	
K-1203	Chlorine Residual	Reported					0.0 mg/l	1.2 mg/l	2.0 mg/l	6 of 178 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
	Settleable Solids	Reported					< 0.1 ml/l	< 1.6 ml/l	19.0 ml/l	2 of 15 composite samples
		Limit							0.5 ml/l	
	Suspended Solids	Reported					< 8 ml/l	< 50 mg/l	140 mg/l	2 of 16 composite samples
		Limit						30 mg/l	45 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Limits determined by NPDES Permit No. TN0002950.

(2) Heavy rainfall increased the flow rate through the K-901-A holding pond, resuspending previously settled insoluable chromium.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP FEBRUARY 1980

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203	Chlorine Residual	Reported					0.0 mg/l	1.0 mg/l	2.0 mg/l	13 of 169 grab samples
		Limit (1)					0.5 mg/l		2.0 mg/l	
	Suspended Solids	Reported					<5 mg/l	<96 mg/l	362 mg/l	1 of 13 (2) composite samples
		Limit (1)						30 mg/l	45 mg/l	
	Settleable Solids	Reported					<0.1 ml/l	<4.7 ml/l	60 ml/l	1 of 13 (2) composite samples
		Limit (1)							0.5 ml/l	
	BOD_5	Reported					<5 mg/l	<22 mg/l	55 mg/l	1 of 9 (2) composite samples
		Limit (1)						15 mg/l	20 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

(2) Unexplained bulking of the clarifier sludge blanket resulted in carry-over to the K-1203 discharge.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP ~~APRIL~~ MARCH, 1980

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203 (2)	Chlorine Residual	Reported					0.0 mg/l	1.1 mg/l	1.9 mg/l	12 of 174
		Limit					0.5 mg/l		2.0 mg/l	grab samples
	Suspended Solids	Reported					<5 mg/l	<85 mg/l	1980	2 of 13
		Limit						30 mg/l	45 mg/l	composite samples
	Settleable Solids	Reported					<0.1 ml/l	<7.4 ml/l	155 ml/l	3 of 14
		Limit							0.5 ml/l	composite samples
	BOD_5	Reported					<5 mg/l	<25 mg/l	179	3 of 10
		Limit						15 mg/l	20 mg/l	composite samples
K-1700 (3)	pH	Reported					4.8	6.9	7.5	two hour time (4)
		Limit					6.0		9.0	period.
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

KS:

(1) Limits determined by NPDES Permit No. TN0002950.

(2) Three facility upsets were due to hydraulic overload during heavy rainfall.

(3) Acidic runoff from the K-1501 coal pile resulted in pH excursion at K-1700.

(4) Continuous pH monitoring at this location.

MONITORING REPORT

APRIL 1980, ORGDP

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1203(2)	Chlorine Residual	Reported					0.1 mg/l	1.1 mg/l	2.0 mg/l	7 of 173 grab samples
		Limit (1)					0.5 mg/l		2.0 mg/l	
	Settleable Solids	Reported					0.1 ml/l	5.4 ml/l	34 ml/l	4 of 14 composite samples
		Limit (1)							0.5 ml/l	
	Suspended Solids	Reported					<5 mg/l	101 mg/l	708 mg/l	4 of 14 composite samples
		Limit (1)						30 mg/l	45 mg/l	
	BOD_5	Reported					<5 mg/l	<22 mg/l	61 mg/l	3 of 9 composite samples
		Limit (1)						15 mg/l	20 mg/l	
K-1700(3)	pH	Reported					6.0	7.2	10.8	2-hour time period
		Limit (1)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Limits determined by NPDES Permit No. TN0002950.

(2) Four facility upsets resulted in these noncompliances.

(3) Inadvertent release of KOH solution.

UCN-11990
(2 4-76)

MONITORING REPORT

ORGDP MAY, 1980

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1700 (2)	pH	Reported					2.8	7.2	10.0	4 time intervals continuous monitoring
		Limit (1)					6.0		9.0	
K-1203 (3)	Settleable Solids	Reported					<.1 ml/l	<7 ml/l	45 ml/l	2 of 13 composite samples
		Limit (1)							0.5 ml/l	
	Suspended Solids	Reported					<5 mg/l	<61 mg/l	632 mg/l	2 of 13 composite samples
		Limit (1)						30 mg/l	45 mg/l	
	BOD_5	Reported					<5 mg/l	<32 mg/l	137 mg/l	2 of 9 composite samples
		Limit (1)						15 mg/l	20 mg/l	
	Chlorine Residual	Reported					0.1 mg/l	1.1 mg/l	2.0 mg/l	14 of 183 grab samples
		Limit (1)					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

KS: (1) Limits determined by NPDES Permit No. TN0002950.
(2) Two noncompliances at K-1700 were due to rainfall runoff from the K-1501 coal piles. One was due to an accidental release of water onto the coal pile resulting in acidic discharge, and one was due to a ruptured acid drain line leading to K-1407-A from K-1401.
(3) Two plant upsets resulted in these noncompliances.

MONITORING REPORT

ORGDP JUNE, 1980

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1700(2)	pH	Reported					2.0	7.4	9.0	two-hour time period--continuous monitoring
		Limit (1)					6.0		9.0	
K-1203(3)	Settleable Solids	Reported					<.1 ml/l	2.7 ml/l	11.0 ml/l	4 of 13 composite samples
		Limit (1)							0.5 ml/l	
	Suspended Solids	Reported					<5 mg/l	64 mg/l	282 mg/l	3 of 12 composite samples
		Limit (1)						30 mg/l	45 mg/l	
	BOD_5	Reported					<5 mg/l	25 mg/l	68 mg/l	4 of 10 composite samples
		Limit (1)						15 mg/l	20 mg/l	
	Chlorine Residual	Reported					0.1 mg/l	1.2 mg/l	2.0 mg/l	10 of 172 grab samples
		Limit (1)					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.
(2) Noncompliance resulted from ruptured acid drain line from K-1401 building to K-1407-A neutralization pit.
(3) Four facility upsets resulted in these noncompliances.

MONITORING REPORT

AUGUST 1980 ORGDP

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
Unpermitted storm drain to Poplar Creek	Chromium	Reported							6.0 mg/l	(2)
		Limit							0.05 mg/l	1
	pH	Reported							10.2	(2)
		Limit					6.0		9.0	1
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

(2) Facility component malfunction resulted in release of 500 gallons of chromium treated cooling water.

MONITORING REPORT

SEPTEMBER 1980 ORGDP

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001	pH	Reported					3.5		7.6	Two time periods, continuous (2) monitoring
		Limit					6.0		9.0	
K-1407-B	pH	Reported					3.5		8.5	One time period, continuous (2) monitoring
		Limit					6.0		9.0	
Unpermitted storm drain to Poplar Creek	Chromium	Reported							8 mg/l	1 (3)
		Limit							0.05mg/l	
005	Chlorine residual	Reported					0.2mg/l	1.0mg/l	2.0mg/l	12 of 172 grab samples
		Limit					0.5 mg/l		2.0mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:
(1) Limits determined by NPDES Permit No. TN0002950.
(2) Accidental release of acidic material on two occasions.
(3) Facility component malfunction resulted in release of 500 gallons of chromium treated cooling water.

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(2 4-76)

MONITORING REPORT

October, 1980 ORGDP

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
K-1700	pH	Reported					2.0		7.4	Two time periods, continuous monitoring (2)
		Limit (1)					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:
1) Limits determined by NPDES Permit No. TN0002950.
2) Accidental release of acidic material on two occasions.

UCN-11990
(2 4-76)

MONITORING REPORT

NOVEMBER 1980 ORGDP

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
Unpermitted Storm Drain to Poplar Creek	chromium	Reported							9 mg/l	1 (2)
		Limit							0.05 mg/l	
K-1700	pH	Reported					1.9	6.4	8.5	Two-Time Periods Continuous Monitoring (3)
		Limit					6.0		9.0	
K-1203	Chlorine Residual	Reported					0.0 mg/l	1.1 mg/l	2.0 mg/l	6 of 178 Grab Samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:
(1) Limits determined by NPDES Permit No. TN 0002950.
(2) Cooling water system start-up resulted in a 1000-gallon release.
(3) Runoff from the K-1501 coal pile resulted in an acidic discharge on two occasions.

UCN-11990
(2 4-76)

MONITORING REPORT

DECEMBER 1980, ORGDP

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001 (K-1700)	pH	Reported					2.9		7.5	One time period, continuous monitoring(2)
		Limit (1)					6.0		9.0	
005 (K-1203)	Chlorine Residual	Reported					0.1 mg/1	1.1 mg/1	2.2 mg/1	5 of 179 grab samples
		Limit (1)					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Limits determined by NPDES Permit No. TN 0002950

(2) Acidic discharge from coal pile during heavy rainfall.

MONITORING REPORT

February 1981 ORGDP

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001 (K-1700)	pH	Reported					2.8		7.1	(2)
		Limit					6.0		9.0	
005 (K-1203) (3)	Settleable Solids	Reported					<0.1 ml/1	1.3 ml/1	14 ml/1	1 of 12 composite samples
		Limit							0.5 ml/1	
	BOD_5	Reported					< 5 mg/1	15 mg/1	80 mg/1	1 of 14 composite samples
		Limit						15 mg/1	20 mg/1	
	Suspended Solids	Reported					8 mg/1	48 mg/1	235 mg/1	1 of 6 composite samples
		Limit						30 mg/1	45 mg/1	
	Chlorine Residual	Reported					0.2 mg/1	1.2 mg/1	2.2 mg/1	8 of 167 grab samples
		Limit					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

1) Limits determined by NPDES Permit No. TN 0002950.

2) Rainfall throughout February washed acids out of the K-1501 coal pile and resulted in a noncompliance of long duration, from 2/1 through 2/23, with intermittent acidic discharges from 2/16 through 2/23.

3) One facility upset, due to heavy rainfall, resulted in a noncompliance of settleable solids, BOD_5, and suspended solids.

MONITORING REPORT

ORGDP March, 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001 (K-1700)	pH	Reported					3.4		9.0	One time period (2)
		Limit					6.0		9.0	Continuous monitoring
005 (K-1203)	Chlorine residual	Reported					0.2 mg/ℓ	1.2 mg/ℓ	2.2 mg/ℓ	3 of 182
		Limit					0.5 mg/ℓ		2.0 mg/ℓ	grab samples
Unpermitted storm drain to Poplar Creek	Classified material(3)	Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:
(1) Limits determined by NPDES Permit No. TN0002950.
(2) Acidic discharge from coal pile during heavy rainfall.
(3) See noncompliance Report No. 81-004.

UCN-11990
(2 4-76)

MONITORING REPORT

Oak Ridge Gaseous Diffusion Plant
April 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001 (K-1700)	pH	Reported					3.9		8.0	7-Time Periods--Continuous Monitoring (2)
		Limit(1)					6.0		9.0	
Unpermitted Storm Drain to Poplar Creek	Chromium	Reported							9.0 mg/l	33-Hour Total-4 gpm (3)
		Limit(1)							.05 mg/l	
005 (K-1203)	Chlorine Residual	Reported					0.6 mg/l	1.1 mg/l	2.3 mg/l	2 of 177 Grab Samples
		Limit(1)					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

(2) Acidic discharge from coal pile during heavy rainfall.

(3) Cooling water for a motor-generator was discharged to the plant storm drain system.

MONITORING REPORT

Oak Ridge Gaseous Diffusion Plant
May 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001 (K-1700)	pH	Reported					5.2		8.4	3-Time Periods--Continuous Monitoring (2)
		Limit					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

(2) Acidic discharge from coal pile during heavy rainfall.

MONITORING REPORT

ORGDP June 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
005 (K-1203)	Chlorine Residual	Reported					0.2 mg/1	1.1 mg/1	3.0 mg/1	4 of 178 grab samples
		Limit					0.5 mg/1		2.0 mg/1	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Limits determined by NPDES Permit No. TN0002950.

MONITORING REPORT

ORGDP August 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
005 (K-1203)	Chlorine Residual	Reported					0.1 mg/l	1.2 mg/l	1.5 mg/l	2 of 186 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

MONITORING REPORT

ORGDP SEPTEMBER 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001 (K-1700)	pH	Reported					3.6		8.7	continuous (2) monitoring-- four time periods
		Limit					6.0		9.0	
Unpermitted Storm Drain	chromium	Reported							10.8 mg/l	(3)
		Limit							0.05 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

(2) Rainfall during the month washed acids out of the K-1501 coal pile.

(3) Chromium treated cooling water was inadvertently discharged on three occasions.

MONITORING REPORT

ORGDP OCTOBER 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001 (K-1700)	Visible Discharge	Reported								Two-Day Period(2)
		Limit								
001 (K-1700)	pH	Reported					3.2		7.9	Continuous Monitoring, One-Time Period(3)
		Limit					6.0		9.0	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS: (1) Limits determined by NPDES Permit TN 0002950.

(2) Noncompliance due to discharge of fly ash laden water from the K-1501 steam plant to the K-1700 discharge.

(3) Noncompliance due to acidic discharge from the K-1501 coal pile.

MONITORING REPORT

ORGDP NOVEMBER 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
Unpermitted Storm Drain	pH	Reported					2.4		N/A	(2)
		Limit					6.0		9.0	
Unpermitted Storm Drain	fluoride	Reported							64 mg/l	(2)
		Limit							N/A	
005 (K-1203)	chlorine residual	Reported					0.6 mg/l	1.2 mg/l	3.0 mg/l	One of 186 grab samples
		Limit					0.5 mg/l		2.0 mg/l	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

(2) Accidental release of approximately 300 gallons of material from the K-1231 facility.

MONITORING REPORT

ORGDP DECEMBER 1981

SAMPLING LOCATION	PARAMETER		QUANTITY			NO. SAMPLES EXCEEDING LIMIT	CONCENTRATION			NO. SAMPLES EXCEEDING LIMIT
			MINIMUM	AVERAGE	MAXIMUM		MINIMUM	AVERAGE	MAXIMUM	
001 (K-1700)	pH	Reported					2.6	6.9	7.6	Continuous Monitoring, Two-Time Periods (2)
		Limit					6.0		9.0	
	Aluminum	Reported							2.38 mg/l	One (3)
		Limit							1.0 mg/l	
Unpermitted Storm Drain	pH	Reported							10.9	(1)(4)
		Limit					6.0		9.0	
	Fluoride	Reported							390 mg/l	(1)(4)
		Limit							NA	
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								
		Reported								
		Limit								

REMARKS:

(1) Limits determined by NPDES Permit No. TN0002950.

(2) Discharge of acidic runoff from the K-1501 steam plant area and coal pile runoff.

(3) Source not definitively identified.

(4) Accidental release of approximately 500 gallons of material from the K-1231 facility.

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