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Managed by Brookhaven Science Associates for the U.S. Department of Energy

March 23, 2005

New York State Department of Environmental Conservation Division of Water Bureau of Wastewater Facilities Operation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3506

Gentlemen:

SUBJECT: State Pollutant Discharge Elimination System (SPDES) NY-0005835

**Brookhaven National Laboratory (BNL) Discharge Monitoring Report (DMR)** 

for February 2005

In accordance with our SPDES permit (NY-0005835), enclosed as Attachment I, please find the DMR for the month of February 2005. Severn Trent Laboratories, Inc. (NELAP Certification #11616) performs most of the analyses on SPDES samples, while H2M Labs, Inc. (NELAP Certification #10478) performs the BOD-5, Nitrogen series, and fecal coliform analyses and CHEMTEX Environmental Laboratory, Inc. (NELAP Certification #02077) performs specialty analyses for tolytriazole, hydroxyethilydene diphosphoric acid, and polypropylene glycol monobutyl ether. These laboratories are certified by the New York State Department of Health. Field measured parameters (pH, settleable solids, flow) are recorded and/or measured by BNL. Copies of the analytical reports will be retained in our files and will be made available upon request.

With the exception of four excursions for total nitrogen and ammonia at Outfall 001, maximum pH at Outfall 006A, and Oil & Grease concentration at Outfall 006, review of the analytical data shows that all other parameters met their respective SPDES effluent limitations this reporting period. With regard to total nitrogen, the sample collected on February 7, 2005, exhibited a total nitrogen concentration of 12.7 mg/L, which exceeded the permit limit of 10 mg/L. The sample collected on February 4, 2005, from Outfall 001 exhibited an ammonia concentration of 3.7 mg/L, which exceeded the permit limit of 2 mg/L. The sample collected on February 3, 2005 from Outfall 006B exhibited an Oil & Grease concentration of 15.9 mg/L which exceeded the permit limit of 15.0 mg/L. Finally the sample collected on February 18, 2005 from Outfall 006A exhibited a pH of 9.4 SU which exceed the permit limit of 9.0 SU. Please see Attachment II for the noncompliance reports for these excursions.

Collection and analysis of these samples are performed in accordance with the BNL Quality Assurance (QA) program that specifies the standard operating procedures for collection and analysis



of samples, QA data requirements, validation of contractor analytical data, and QA inspections performed periodically on contractor laboratories. All QA data, data validation reports, contractor laboratory assessment and audit reports are available upon request. Based on this information, we believe the values reported on the DMR are representative of the effluent from BNL during the month of February 2005.

If you should have any questions, please contact Marcia Allocco or Robert Lee of my staff at (631) 344-3166 and (631) 344-3148 respectively.

Sincerely,

#### Original Signed by G. Goode

George A. Goode Environmental & Waste Management Services Division Manager

#### GAG/MA:car

Attachment I: Discharge Monitoring Report for February 2005.

Attachment II: Noncompliance Reports for SPDES Excursions at Outfall 001, Outfall 006A, and

Outfall 006B.

Attachment III: Analytical Results from H2M Labs Inc. and Severn Trent Laboratories, Inc. for

samples collected on 2/4/05 and 2/7/05 from Outfall 001 (BNL Use Only).

Attachment III: Analytical Results from Severn Trent Laboratories for samples collected

from Outfalls 002, 002B, 005, 006A, 006B, 008, and 010 (BNL Use Only).

cc: M. Allocco, w/ all Attachments M. Baldwin, w/ all Attachments W. Chaloupka, w/ all Attachments S. Dierker, w/ all Attachments G. Granzen, w/ all Attachments M. Holland, w/o Attachments

C. Johnson, w/o Attachments

R. Lee, w/ all Attachments

E. Lessard, w/ all Attachments

D. Lowenstein, w/o Attachments

E. Murphy, w/ all Attachments V. Radeka, w/ all Attachments

A. Santino, SCDHS, w/ Attachment I

R. Sorrentino, NYSDEC, w/ Attachment I

L. Tarricina and Attachment I

B. Style, w/o Attachments

J. Tarpinian, w/o Attachments

D. Van Duyne, w/ all Attachments

J. Zamirowski, TAS, CH, w/ Attachment I

EC62ER.05

#### Brookhaven National Laboratory SPDES Permit No. NY0005835 Discharge Monitoring Report for February 2005 Discharge Monitoring Report Notes:

- 1. The reported concentration is estimated at less than the method detection limit but greater than the instrument detection limit.
- 2. Flow is estimated based upon an instantaneous flow measurement and the assumption that flow continued for the entire day (i.e., 1,440 minutes).
- 3. Since flow records are maintained on a weekly or monthly basis, the flow rate provided is the daily average.
- 4. The total nitrogen concentration did not meet the permit limits for the sample collected on February 7, 2005. Please see Attachment II for the Non-Compliance Report.
- 5. The ammonia concentration did not meet the permit limits for the sample collected on February 4, 2005. Please see Attachment II for the Non-Compliance Report.
- 6. The Water Treatment Plant backwash system operated through February 9, 2005 before a switch from the western well field to the eastern well field, which does not provide water to the Water Treatment Plant. Attempts to collect the regulatory samples for pH did not start until after the Water Treatment Plant had been shutdown.
- 7. The pH did not meet the permit limits for the sample collected on February 18, 2005. Please see Attachment II for the Non-Compliance Report.
- 8. The Oil & Grease concentration did not meet the permit limits for the sample collected on February 3, 2005. Please see Attachment II for the Non-Compliance Report.
- 9. The reported average flow was calculated based on the height of water and type and size of the flume due to a malfunction in the flow monitoring equipment during the month.

## ATTACHMENT I BROOKHAVEN NATIONAL LABORATORY SPDES PERMIT NO. NY0005835 DISCHARGE MONITORING REPORT FOR FEBRUARY 2005 FOR OUTFALLS NO. 001 – 010

NAME USDOE

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY BROOKHAVEN NATIONAL LABORATORY

LOCATION UPTON NY 11973 ATTN: MICHAEL HOLLAND, GROUP MGR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

05 02 01 05 02 28 Note: Read Instructions before completing this form

				05   02   01				Instruction				
PARAMETER		QUANTITY OR LOADING			QUA	LITY OR CO	NCENTRAT	ION NO. FRE		FREQUENCY OF	SAMPLE TYPE	
	$\overline{}$	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS		
TEMPERATURE, WATER	SAMPLE	*****	*****		*****	*****	50	(15)	0	01/01	GR	
DEG. FAHRENHEIT	MEASUREMENT						50		U	01/01	GK	
00011 1 0 0	PERMIT	*****	*****	****	*****	*****	90			DAILY	GRAB	
EFFLUENT GROSS VALUE	REQUIREMENT			****			DAILY MX	DEG.F		DAILT	GRAD	
BOD, 5-DAY	SAMPLE	*****	*****		*****	< 2	< 2	(19)	0	02/30	24	
(20 DEG. C)	MEASUREMENT					< 2	< 2		U	02/30	24	
00310 1 0 0	PERMIT	*****	*****	****	*****	10	20			ONCE/MONTH	COMP24	
EFFLUENT GROSS VALUE	REQUIREMENT			****		DAILY AV	<b>DAILY MX</b>	MG/L		ONCE/MONTH	COIVIP24	
PH	SAMPLE	*****	*****		6.6	*****	7.3	(12)	0	01/01	GR	
<u> </u>	MEASUREMENT				0.0		1.3		0	01/01	GK	
00400 1 0 0	PERMIT	*****	*****	****	5.8	*****	9.0			DAILY	GRAB	
EFFLUENT GROSS VALUE	REQUIREMENT			****	MINIMUM		MAXIMUM	SU		DAILT	GRAB	
SOLIDS, TOTAL	SAMPLE	*****	*****		*****	< 1.0	< 1.0	(19)	0	02/30	24	
SUSPENDED	MEASUREMENT					7	/ 1.0		J	02/30	24	
00530 1 0 0	PERMIT	*****	*****	****	*****	10	20			ONCE/MONTH	COMP24	
EFFLUENT GROSS VALUE	REQUIREMENT			****		DAILY AV	DAILY MX	MG/L		ONCE/MONTH	COMP 24	
SOLIDS, SETTLEABLE	SAMPLE	*****	*****		*****	*****	0.0	(25)	0	01/01	GR	
<u> </u>	MEASUREMENT						0.0			01/01	Oit	
00545 1 0 0	PERMIT	*****	*****	****	*****	*****	0.1			DAILY	GRAB	
EFFLUENT GROSS VALUE	REQUIREMENT			****			DAILY MX	ML/L		DAILI	OILAB	
NITROGEN, TOTAL	SAMPLE	*****	*****		*****	*****	40	(19)	_			
(AS N) See Note 4	MEASUREMENT					~~~~~	13		1	1 02/30	24 1	
						*****	13	` ,	1	02/30	24	
00600 1 0 0	PERMIT	*****	*****	****	*****	*****	10	, ,	1			
	PERMIT REQUIREMENT	*****	*****	**** ***	*****			MG/L	1	02/30 ONCE/MONTH	COMP24	
1		*****	*****		*****		10 DAILY MX			ONCE/MONTH	COMP24	
EFFLUENT GROSS VALUE NITROGEN, AMMONIA TOTAL (AS N) See Note 5	REQUIREMENT SAMPLE MEASUREMENT			****		*****	10 DAILY MX	MG/L	1			
EFFLUENT GROSS VALUE NITROGEN, AMMONIA	REQUIREMENT SAMPLE			****		*****	10 DAILY MX	MG/L		ONCE/MONTH	COMP24 24	
EFFLUENT GROSS VALUE NITROGEN, AMMONIA TOTAL (AS N) See Note 5 00610 1 0 0	REQUIREMENT SAMPLE MEASUREMENT	*****	*****	****	*****	*****	10 DAILY MX	MG/L		ONCE/MONTH	COMP24 24	
EFFLUENT GROSS VALUE NITROGEN, AMMONIA TOTAL (AS N) See Note 5 00610 1 0 0	REQUIREMENT SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	**** ****	*****	*****	10 DAILY MX 4 2 DAILY MX	MG/L (19)		ONCE/MONTH	COMP24  24  COMP24	
EFFLUENT GROSS VALUE  NITROGEN, AMMONIA  TOTAL (AS N) See Note 5  00610 1 0 0  EFFLUENT GROSS VALUE	REQUIREMENT SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****  *****  I certify unde	*****  *****  er penalty of law that	****  ****  at this document and	*****	*****  *****  ******  re prepared under	10 DAILY MX 4 2 DAILY MX my direction	MG/L (19)		ONCE/MONTH	COMP24  24  COMP24  Telepl	
EFFLUENT GROSS VALUE  NITROGEN, AMMONIA  TOTAL (AS N) See Note 5  00610 1 0 0  EFFLUENT GROSS VALUE  NAME/TITLE PRINCIPAL EXECUTI  Division Manager	REQUIREMENT SAMPLE MEASUREMENT PERMIT REQUIREMENT IVE OFFICER	*****  *****  I certify under	*****  *****  er penalty of law the	****  ****  at this document and th a system designe	*****  ****** d all attachments we	*****  *****  *****  re prepared under	10 DAILY MX 4 2 DAILY MX my direction operly gather	MG/L (19)		ONCE/MONTH	COMP24  24  COMP24	
EFFLUENT GROSS VALUE  NITROGEN, AMMONIA  TOTAL (AS N) See Note 5  00610 1 0 0  EFFLUENT GROSS VALUE  NAME/TITLE PRINCIPAL EXECUTION	REQUIREMENT SAMPLE MEASUREMENT PERMIT REQUIREMENT IVE OFFICER	*****  *****  I certify under  or supervision  and evaluate	*****  ******  er penalty of law the on in accordance with the information sub	****  ****  at this document and the a system designer mitted. Based on n	******  ******  d all attachments we d to assure that qua	*****  *****  *****  re prepared under  lified personnel proson or persons who	10 DAILY MX  4  2 DAILY MX  my direction operly gather or manage the	MG/L (19) MG/L	1	ONCE/MONTH  02/30  ONCE/MONTH	COMP24  24  COMP24  Telepi 631-344	4-4549
EFFLUENT GROSS VALUE  NITROGEN, AMMONIA  TOTAL (AS N) See Note 5  00610 1 0 0  EFFLUENT GROSS VALUE  NAME/TITLE PRINCIPAL EXECUTI  Division Manager	REQUIREMENT SAMPLE MEASUREMENT PERMIT REQUIREMENT IVE OFFICER	*****  I certify under or supervision and evaluate system, or those	******  ******  er penalty of law the on in accordance will the information sub persons directly re-	****  ****  at this document and the a system designer omitted. Based on no sponsible for gather	*****  ******  d all attachments we d to assure that qua ny inquiry of the per	*****  *****  ******  ire prepared under  diffied personnel preson or persons whethe information sub	10 DAILY MX  4  2 DAILY MX  my direction operly gather or manage the omitted is, to the	MG/L (19)  MG/L  Signature	1	ONCE/MONTH  02/30  ONCE/MONTH	COMP24  24  COMP24  Telepl	4-4549

YR MO DY YR MO DY

Comments and Explanation of any violations (Reference all attachments here)

QUANTITIES OR CONCENTRATIONS OF RADIOACTIVITY IN EFFLUENT ARE SUBJECT TO REQUIREMENTS OF THE USDOE INCL BUT NOT LIMITED TO USDOE ORDER 5400.5.

APPROX 15% OF STP DISCHARGE CAN BE TO GW VIA EXFILT FROM SFB'S. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

NAME USDOE

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY **BROOKHAVEN NATIONAL LABORATORY** 

LOCATION UPTON NY 11973 ATTN: MICHAEL HOLLAND, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) **DISCHARGE MONITORING REPORT (DMR)** 

MAJOR NY0005835 001 M (SUBR 01) Permit Number Discharge Number F - FINAL **Monitoring Period PROCESS SANIT & STORMWTR RNOFF** \*\*\* No Discharge From To YR MO DY YR MO DY

05 02 01 05 02 28 Note: Read Instructions before completing this form FREQUENCY **SAMPLE** NO. **QUALITY OR CONCENTRATION** QUANTITY OR LOADING PARAMETER ΕX OF **TYPE** AVERAGE MAXIMUM UNITS MINIMUM AVERAGE MAXIMUM UNITS **ANALYSIS** PHOSPHORUS, TOTAL SAMPLE (19)\*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* 1.7 0 02/30 24 MEASUREMENT **PERMIT** \*\*\*\* **REPORT** \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* ONCE/MONTH COMP24 REQUIREMENT \*\*\*\* **DAILY MX** MG/L **SAMPLE** (28)\*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* < 5.0 0 02/30 GR MEASUREMENT \*\*\*\*

(ASP) 00665 1 0 0 **EFFLUENT GROSS VALUE** CYANIDE, TOTAL (AS CN) 00720 1 0 0 **PERMIT** 100 \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* TWICE/MONTH **GRAB** \*\*\*\* **EFFLUENT GROSS VALUE** REQUIREMENT DAILY MX UG/L COPPER. TOTAL SAMPLE (19)\*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* 0.040 0 02/30 24 (AS CU) MEASUREMENT 01042 1 0 0 **PERMIT** \*\*\*\* 0.15 \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* ONCE/MONTH COMP24 \*\*\*\* **EFFLUENT GROSS VALUE** REQUIREMENT **DAILY MX** MG/L IRON, TOTAL SAMPLE (19) \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* 0.14 0 02/30 24 (AS FE) MEASUREMENT 01045 1 0 0 **PERMIT** \*\*\*\* 0.37 \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* ONCE/MONTH COMP24 \*\*\*\* **EFFLUENT GROSS VALUE** REQUIREMENT **DAILY MX** MG/L LEAD. TOTAL SAMPLE (19)\*\*\*\*\* \*\*\*\*\* < 0.003 0 02/30 24 (AS PB) MEASUREMENT 01051 1 0 0 PERMIT \*\*\*\* 0.019 \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* COMP24 ONCE/MONTH **EFFLUENT GROSS VALUE** REQUIREMENT \*\*\*\* **DAILY MX** MG/L SAMPLE **NICKEL, TOTAL** (19)\*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* 0.026 0 02/30 24 (AS NI) MEASUREMENT \*\*\*\* 01067 1 0 0 **PERMIT** 0.11 \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* ONCE/MONTH COMP24 **EFFLUENT GROSS VALUE** REQUIREMENT \*\*\*\* **DAILY MX** MG/L SILVER. TOTAL SAMPLE (19)+++++ \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* 0.0011 0 02/30 24 **MEASUREMENT** (AS AG) See Note 1 01077 1 0 0 PERMIT \*\*\*\* 0.015 \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\*

ONCE/MONTH COMP24 **EFFLUENT GROSS VALUE** REQUIREMENT \*\*\*\* MG/L **DAILY MX** 

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Division Manager

**Environmental & Waste Management** 

Services Division

Typed or Printed

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

Telephone 631-344-4549

Signature of Principal Executive

Officer or Authorized Agent

Comments and Explanation of any violations (Reference all attachments here)

QUANTITIES OR CONCENTRATIONS OF RADIOACTIVITY IN EFFLUENT ARE SUBJECT TO REQUIREMENTS OF THE USDOE INCL BUT NOT LIMITED TO USDOE ORDER 5400.5.

APPROX 15% OF STP DISCHARGE CAN BE TO GW VIA EXFILT FROM SFB'S. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

Date Signed

NAME USDOE

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY BROOKHAVEN NATIONAL LABORATORY

LOCATION UPTON NY 11973
ATTN: MICHAEL HOLLAND, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

MAJOR

NY0005835 001 M (SUBR 01)

Permit Number Discharge Number F - FINAL

Monitoring Period PROCESS SANIT & STORMWTR RNOFF

From To
YR MO DY YR MO DY
05 02 01 05 02 28 No

Note: Read Instructions before completing this form

\*\*\* No Discharge

		05   02   28	<u> </u>					rm				
PARAMETER		QUAN	ITITY OR LO	ADING	QUA	LITY OR CO	NCENTRAT	TION NO.		FREQUENCY OF	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS		
ZINC, TOTAL (AS ZN)	SAMPLE MEASUREMENT	*****	*****		*****	*****	0.08	(19)	0	02/30	24	
01092 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	0.1 DAILY MX	MG/L		ONCE/MONTH	COMP24	
TOLUENE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 1.0	(28)	0	02/30	GR	
34010 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	5 DAILY MX	UG/L		TWICE/MONTH	GRAB	
METHYLENE CHLORIDE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 2.5	(28)	0	02/30	GR	
34423 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	5 DAILY MX	UG/L		TWICE/MONTH	GRAB	
1,1,1-TRICHLORO- ETHANE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 1.0	(28)	0	02/30	GR	
34506 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	5 DAILY MX	UG/L		TWICE/MONTH	GRAB	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.25	0.35	(03)	*****	*****	*****		0	99/99	RC	
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT DAILY AV	2.3 DAILY MX	MGD	*****	*****	*****	**** ***		CONTINUOUS	RCORDR	
MERCURY, TOTAL (AS HG)	SAMPLE MEASUREMENT	*****	*****		*****	*****	0.00008	(19)	0	02/30	24	
71900 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	0.0008 DAILY MX	MG/L		ONCE/MONTH	COMP24	
COLIFORM, FECAL GENERAL	SAMPLE MEASUREMENT	*****	*****		*****	< 2	< 2	(13)	0	02/30	GR	
74055 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	200 DAILY AV	400 DAILY MX	#/ 100ML		ONCE/MONTH	GRAB	
NAME/TITLE PRINCIPAL EXECU	TIVE OFFICER	I certify unde	er penalty of law that	at this document an	d all attachments we	ere prepared under	my direction					
		or supervisio	n in accordance wi	th a system designe	ed to assure that qua	alified personnel pro	operly gather				Telep	hone
Division Manager		and evaluate	the information sub	omitted. Based on r	my inquiry of the per	rson or persons who	manage the				631-34	4-4549
Environmental & Waste Man	agement	system, or those	persons directly re	sponsible for gather	ring the information,	the information sub	omitted is, to the					
Services Division		best of my know	ledge and belief, tr	ue, accurate, and o	omplete. I am awar	e that there are sign	nificant penalties	Signatur	e of Princip	al Executive	Date S	Signed
Typed or Printed		for submitting	false information,	including the possib	liity of fine and impr	isonment for knowi	ng violations.	Office	r or Authori	zed Agent		
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Comments and Explanation of any violations (Reference all attachments here)

QUANTITIES OR CONCENTRATIONS OF RADIOACTIVITY IN EFFLUENT ARE SUBJECT TO REQUIREMENTS OF THE USDOE INCL BUT NOT LIMITED TO USDOE ORDER 5400.5.

APPROX 15% OF STP DISCHARGE CAN BE TO GW VIA EXFILT FROM SFB'S. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

NAME USDOE

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY BROOKHAVEN NATIONAL LABORATORY

LOCATION UPTON NY 11973 ATTN: MICHAEL HOLLAND, GROUP MGR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

Note: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF		
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS		
2-BUTANONE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 2.0	(28)	0	02/30	GR	
78356 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	**** ***	*****	*****	50 DAILY MX	UG/L		TWICE/MONTH	GRAB	
BOD, 5-DAY PERCENT REMOVAL	SAMPLE MEASUREMENT	*****	*****		> 95	*****	*****	(23)	0	01/30	CA	
81010 K 0 0 PERCENTREMOVAL	PERMIT REQUIREMENT	*****	*****	**** ***	85 MO AV MN	*****	*****	PERCENT		ONCE/MONTH	CALCTD	
SOLIDS, SUSPENDED PERCENT REMOVAL	SAMPLE MEASUREMENT	*****	*****		> 99	*****	*****	(23)	0	01/30	CA	
81011 K 0 0 PERCENT REMOVAL	PERMIT REQUIREMENT	*****	*****	****	85 MO AV MN	*****	*****	PERCENT		ONCE/MONTH	CALCTD	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
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	PERMIT REQUIREMENT											
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	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECU	TIVE OFFICER	I certify und	er penalty of law th	at this document an	d all attachments we	ere prepared under	my direction					1
Division Manager		or supervision	on in accordance wi	th a system designe	ed to assure that qua	alified personnel pr	operly gather					ohone 14-4549
Environmental & Waste Mar	agement				ring the information,		=				337 0-	
Services Division	agomon.	best of my know	vledge and belief, tr	ue, accurate, and c	omplete. I am aware	e that there are sig	nificant penalties	_	e of Princip	Date \$	Signed	
Typed or Printed		for submitting	g false information,	including the possib	liity of fine and impri	sonment for knowi	ng violations.	Office	r or Author	ized Agent		

05 02 01 05 02 28

Comments and Explanation of any violations (Reference all attachments here)

QUANTITIES OR CONCENTRATIONS OF RADIOACTIVITY IN EFFLUENT ARE SUBJECT TO REQUIREMENTS OF THE USDOE INCL BUT NOT LIMITED TO USDOE ORDER 5400.5.

APPROX 15% OF STP DISCHARGE CAN BE TO GW VIA EXFILT FROM SFB'S. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY **BROOKHAVEN NATIONAL LABORATORY** 

LOCATION UPTON NY 11973 ATTN: MICHAEL HOLLAND, GROUP MGR

#### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) **DISCHARGE MONITORING REPORT (DMR)**

**MAJOR** NY0005835 002 B (SUBR 01) Discharge Number F - FINAL Permit Number **Monitoring Period** RF (1004) & BRAHMS (1002) BLOWDN \*\*\* No Discharge From То YR MO DY YR MO DY 05 02 01 05 02 28

Note: Read Instructions before completing this form

PARAMETER		QUAN	ITITY OR LO	ADING	QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS		
РН	SAMPLE MEASUREMENT	*****	*****	(07)	8.3	*****	8.9	(12)	0	02/30	GR	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	GPD	REPORT MINIMUM	*****	9.0 MAXIMUM	SU		ONCE/MONTH	GRAB	
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 5.0	(19)	0	01/30	GR	
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	**** ***	*****	*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	*****	0.11	(03)	*****	*****	*****		0	04/30	RC	
50050 1 0 0 See Note 3 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	MGD	*****	*****	*****	****		ONCE/MONTH	RCORDR	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
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	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECU		I certify und	er penalty of law that	at this document an	d all attachments we	ere prepared under	my direction					1
Division Manager		or supervision	on in accordance wi	th a system designer	ed to assure that qua my inquiry of the per	alified personnel pr	operly gather o manage the				Telep 631-34	hone 4-4549
Environmental & Waste Mar Services Division	agement			-	ring the information, omplete. I am aware			_		al Executive	Date S	Signed
Typed or Printed		for submitting	g false information,	including the possib	oliity of fine and impri	isonment for knowi	ing violations.	Office	r or Author	ized Agent		

Comments and Explanation of any violations (Reference all attachments here)

DISCHARGE MAY BE DIRECTED TO SURROUNDING LOW LYING AREA INSIDE ROADWAY THAT IS INSIDE RHIC RING. ONCE STORMWATER COLLECTION SYSTEM IS EXTENDED TO BLDG 1010 & A NEW RECHARGE BASIN IS CONSTRUCTED, DISCARGE SHOULD BE TO NEW BASIN.

	PERMITTEE NAME/ADDRESS	(Include Facilit	v Name/Location i	f Differen
--	------------------------	------------------	-------------------	------------

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY BROOKHAVEN NATIONAL LABORATORY LOCATION UPTON NY 11973

ATTN: MICHAEL HOLLAND, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

ATTN. MICHAEL HOLLAND, GR	OUP WIGK		05 03 04	05 02 28		Notes Book	l Inctruction	a hafara aa	mulating this fo	· rm		
		QUAN	ITITY OR LO	•		LITY OR CO	NOTE: READ		NO.	FREQUENCY	SAMPLE	
PARAMETER		AVERAGE MAXIMUM		шите	MINIMUM	AVERAGE MAXIMUM		LIMITS	EX	OF ANALYSIS	TYPE	
PH	SAMPLE			ONITO				(12)				1
• ••	MEASUREMENT	*****	*****		7.0	*****	8.2	(1-)	0	04/30	GR	
00400 1 0 0	PERMIT	*****	*****	****	REPORT	*****	9.0			ONCE/MONTH	GRAB	
EFFLUENT GROSS VALUE	REQUIREMENT			****	MINIMUM		MAXIMUM	SU		ONCE/WONTH	GRAD	
OIL & GREASE	SAMPLE	*****	*****		*****	*****	< 5.0	(19)	0	02/30	GR	
	MEASUREMENT						< 3.0			02/30	Oi.	
00556 1 0 0	PERMIT	*****	*****	****	*****	*****	15			ONCE/MONTH	GRAB	
EFFLUENT GROSS VALUE	REQUIREMENT			****			DAILY MX	MG/L		OITOL/IIIOITI11	ONAB	
FLOW, IN CONDUIT OR	SAMPLE	0.12	*****	(03)	*****	*****	*****		0	04/30	RC	
THRU TREATMENT PLANT	MEASUREMENT	0.12								0-7/00	NO	
50050 1 0 1	PERMIT	REPORT	*****		*****	*****	*****	****		ONCE/MONTH	RCORDR	
EFFLUENT GROSS VALUE	REQUIREMENT	DAILY AV		MGD				****		ONOL/MONTH	ROORDR	
	SAMPLE											
	<b>MEASUREMENT</b>											
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	PERMIT			Ī								
	REQUIREMENT											
NAME/TITLE PRINCIPAL EXECU	ITIVE OFFICER	I certify und	ler penalty of law th	at this document an	d all attachments we	ere prepared under	my direction					
		or supervision	on in accordance w	ith a system designe	ed to assure that qua	alified personnel pr	operly gather				Telep	ohone
Division Manager		and evaluate	the information su	bmitted. Based on i	my inquiry of the per	son or persons wh	o manage the				631-34	4-454
Environmental & Waste Mar	nagement	system, or those	persons directly re	esponsible for gathe	ring the information,	the information sul	bmitted is, to the					
Services Division		best of my know	vledge and belief, to	rue, accurate, and c	omplete. I am awar	e that there are sig	nificant penalties	Signatur	e of Princip	al Executive	Date S	Signe
Typed or Printed		for submitting	g false information,	including the possib	oliity of fine and impr	isonment for knowi	ng violations.	Office	er or Author	ized Agent		

Comments and Explanation of any violations (Reference all attachments here)

SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS. SAMPLING FOR THIS OUTFALL SHALL BE CONDUCTED AT A LOCATION DOWNSTREAM OF WHERE EXISTING DISCHARGE MIXES WITH THE COOLING TOWER BLOWDOWN FROM THE STAR DETECTOR.

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY BROOKHAVEN NATIONAL LABORATORY

LOCATION UPTON NY 11973 ATTN: MICHAEL HOLLAND, GROUP MGR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

				, ,	MAJOR
NY0005835				005 M	(SUBR 01)
Permit Num	ber			Discharge Number	F - FINAL
Monitorin	ng Pe	eriod	l		NSLS COOLING TOWR BLDN ETC(HS)
From		То		***	No Discharge ****
YR MO DY	YR	МО	DY		

Note: Read Instructions before completing this form

PARAMETER			ITITY OR LO		QUA MINIMUM		ONCENTRAT		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
РН	SAMPLE MEASUREMENT	*****	*****	UNITS	7.2	*****	8.4	(12)	0	04/30	GR	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	*****	8.5 MAXIMUM	SU		ONCE/MONTH	GRAB	
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 5.0	(19)	0	02/30	GR	
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.17	*****	(03)	*****	*****	*****		0	04/30	RC	
50050 1 0 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT DAILY AV	*****	MGD	*****	*****	*****	****		ONCE/MONTH	RCORDR	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECU	TIVE OFFICER	1			d all attachments we ed to assure that qua		-				hone	
Division Manager Environmental & Waste Man	agement	and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the									631-34	
Services Division  Typed or Printed		1	=		omplete. I am awar	_	•	_	e of Princip or Author	al Executive ized Agent	Date S	Signed

05 02 01 05 02 28

Comments and Explanation of any violations (Reference all attachments here) SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.

ADDRESS BROOKHAVEN NATIONAL LABORATORY

BROOKHAVEN AREA OFFICE

UPTON NY 11973

FACILITY BROOKHAVEN NATIONAL LABORATORY
LOCATION UPTON NY 11973
ATTN: MICHAEL HOLLAND, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

						, ,	MAJOR					
NY0005835						007 M	(SUBR 01)					
Permit Number						Discharge Number F - FINAL						
Monitoring Period							WATER TREATMENT PLT BKWSH (HX)					
From To						***	No Discharge ****					
YR	МО	DΥ	YR	МО	DY							
05 02 01 05 02 28						Note: Read	Instructions before completing this form					

PARAMETER		QUAN	ITITY OR LO	ADING	QUA	LITY OR CO	ONCENTRAT	EX OF			SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	<b>AVERAGE</b>	MAXIMUM	UNITS		ANALYSIS		
LOW RATE	SAMPLE MEASUREMENT	*****	200000	(07)	*****	*****	*****		0	07/30	IN	
0056 1 0 0 FFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	GPD	*****	*****	*****			ONCE/MONTH	INSTAN	
H See Note 6	SAMPLE MEASUREMENT	*****	*****			*****		(12)			GR	
0400 1 0 0 FFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	**** ***	REPORT MINIMUM	*****	9.0 MAXIMUM	SU		ONCE/ MONTH	GRAB	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECUT	TIVE OFFICER	I certify und	er penalty of law th	at this document an	nd all attachments we	ere prepared under	my direction					
Division Manager	or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the									Teleph 631-344		
Environmental & Waste Mana Services Division	agement	system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties						Signature of Principal Executive			Date Si	igned
Typed or Printed		for submitting	g false information,	including the possib	oliity of fine and impri	isonment for know	ing violations.	_	r or Author			

Comments and Explanation of any violations (Reference all attachments here)

SAMPLES TO BE COLLECTED AT EFFLUENT PIPE TO WHICHEVER BASIN IS IN OPERATION AT THE TIME. STANDING WATER IN EITHER BASIN SHALL NOT BE COLLECTED FOR DMR SAMPLING PURPOSES. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different
---

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY BROOKHAVEN NATIONAL LABORATORY LOCATION UPTON NY 11973

ATTN: MICHAEL HOLLAND, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

Note: Read Instructions before completing this form

PARAMETER		QUAN	ITITY OR LO	ADING	QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS		
FLOW RATE See Note 2	SAMPLE MEASUREMENT	*****	31000	(07)	*****	*****	*****		0	01/30	IN	
00056 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	GPD	*****	*****	*****	****		ONCE/MONTH	INSTAN	
PH	SAMPLE MEASUREMENT	*****	*****		7.6	*****	7.6	(12)	0	01/30	GR	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	*****	8.5 MAXIMUM	SU		ONCE/MONTH	GRAB	
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	4.8	(19)	0	01/30	GR	
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****		*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB	
1,1-DICHLOROETHYLENE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 1.0	(28)	0	01/30	GR	
34501 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	5 DAILY MX	UG/L		ONCE/MONTH	GRAB	
1,1,1-TRICHLORO- ETHANE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 1.0	(28)	0	01/30	GR	
34506 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	5 DAILY MX	UG/L		ONCE/MONTH	GRAB	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECU	NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			at this document an	d all attachments we	re prepared under	my direction					•
Division Manager	Division Manager			-	ed to assure that quarry my inquiry of the per						-	ohone 14-4549
Environmental & Waste Mar	Environmental & Waste Management			sponsible for gathe	ring the information,							
Services Division		best of my know	ledge and belief, tr	ue, accurate, and c	omplete. I am aware	that there are sig	nificant penalties	_	•	al Executive	Date S	Signed
Typed or Printed		for submitting	g false information,	including the possib	liity of fine and impri	sonment for know	ing violations.	Office	r or Authori	zed Agent		

05 02 01 05 02 28

Comments and Explanation of any violations (Reference all attachments here)

PARAMETERS EXCEPT FOR FLOW TO BE SAMPLED MONTHLY DURING A STORM EVENT. (IF NO DISCHARGE, ENTER AN "X" IN THE "NO DISCHARGE" BOX AT THE UPPER RIGHT.) SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.

PERMITTEE NAME/ADDRESS	(Include Facility	y Name/Location	if Different)
------------------------	-------------------	-----------------	---------------

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY **BROOKHAVEN NATIONAL LABORATORY** LOCATION UPTON NY 11973

ATTN: MICHAEL HOLLAND, GROUP MGR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) **DISCHARGE MONITORING REPORT (DMR)** 

							WAJOR
NY	0005	335				010 M	(SUBR 01)
Per	mit N	lum	ber			Discharge Number	F - FINAL
	Moni	torir	ng P	erioc	t		STORMWTR R O CENTRAL STEAM (H)
	Fron	ņ		То		***	No Discharge ****
YR	МО	DY	YR	МО	DY		
05	02	01	05	02	28	Note: Rea	d Instructions before completing this for

PARAMETER		QUAN	ITITY OR LO	ADING	QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS		
FLOW RATE See Note 2	SAMPLE MEASUREMENT	*****	40000	(07)	*****	*****	*****		0	01/30	IN	
00056 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	GPD	*****	*****	*****	****		ONCE/MONTH	INSTAN	
РН	SAMPLE MEASUREMENT	*****	*****		7.4	*****	7.4	(12)	0	01/30	GR	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	*****	8.5 MAXIMUM	SU		ONCE/MONTH	GRAB	
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	< 5.0	(19)	0	01/30	GR	
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECU	NAME/TITLE PRINCIPAL EXECUTIVE OFFICER				d all attachments we	-				Ŧ. ·		
Division Manager	and evaluate	the information sul	omitted. Based on	ed to assure that qua my inquiry of the per	son or persons wh	o manage the					hone 4-4549	
Environmental & Waste Mar Services Division	Environmental & Waste Management Services Division			system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties						Signature of Principal Executive		
Typed or Printed		for submitting	g false information,	including the possib	liity of fine and impri	sonment for know	ing violations.	Office	r or Author	zed Agent		

Comments and Explanation of any violations (Reference all attachments here)

PARAMETERS EXCEPT FOR FLOW TO BE SAMPLED MONTHLY DURING A STORM EVENT. (IF NO DISCHARGE, ENTER AN "X" IN THE "NO DISCHARGE" BOX AT THE UPPER RIGHT.) SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON NY 11973

FACILITY **BROOKHAVEN NATIONAL LABORATORY** LOCATION UPTON NY 11973

ATTN: MICHAEL HOLLAND, GROUP MGR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) **DISCHARGE MONITORING REPORT (DMR)** 

								MAJOR						
NY0005835							06A M	(SUBR 01)						
	Per	mit N	lum	ber			Discharge Number	F - FINAL						
	N	/loni	torir	ng P	erioc	ł		LINAC NCCW, FLOOR DNS,ETC(HT1						
		Fron	1		То		**	* No Discharge **						
	YR	МО	DΥ	YR	МО	DΥ								
	05	02	01	05	02	28	Note: Rea	ad Instructions before completing this						

Note: Read Instructions before completing this form

PARAMETER		QUAN	ITITY OR LO	ADING	QUA	LITY OR CO	DNCENTRAT	EX		FREQUENCY OF	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS		
PH See Note 7	SAMPLE MEASUREMENT	*****	*****		7.2	*****	9.4	(12)	1	04/30	GR	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	*****	9.0 MAXIMUM	SU		ONCE/MONTH	GRAB	
OIL & GREASE See Note 1	SAMPLE MEASUREMENT	*****	*****		*****	*****	3.2	(19)	0	02/30	GR	
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.088	*****	(03)	*****	*****	*****		0	04/30	RC	
50050 1 0 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT DAILY AV	*****	MGD	*****	*****	*****	**** ***		ONCE/MONTH	RCORDR	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECU		I certify unde	er penalty of law th	at this document an	d all attachments we	ere prepared under	my direction					• 
Division Manager	Division Manager				ed to assure that quarry inquiry of the per							ohone 14-4549
	Environmental & Waste Management			sponsible for gathe	ring the information,							
Services Division		1	=		omplete. I am aware	_	•	Signature of Principal Executive			Date S	Signed
Typed or Printed		for submitting	false information,	including the possib	liity of fine and impr	sonment for knowi	ng violations.	Office	r or Author	ized Agent		

Comments and Explanation of any violations (Reference all attachments here)

SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.

PERMITTEE NAME/ADDRESS (Include)	Facility Name/Location if Different)
----------------------------------	--------------------------------------

NY 11973

NAME USDOE

ADDRESS BROOKHAVEN NATIONAL LABORATORY

**BROOKHAVEN AREA OFFICE** 

UPTON

FACILITY BROOKHAVEN NATIONAL LABORATORY

LOCATION UPTON NY 11973 ATTN: MICHAEL HOLLAND, GROUP MGR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

							MAJOR
NYO	0005	835				06B M	(SUBR 01)
Permit Number						Discharge Number	F - FINAL
	Moni	torii	ng P	erioc	ł		COOLING TOWR FROM 919 ETC(HT2)
From To						***	No Discharge ****
YR	МО	DY	YR	МО	DY		
05	02	01	05	02	28	Note: Read	d Instructions before completing this form

PARAMETER		QUAN	ITITY OR LO	ADING	QUA	LITY OR CO	NCENTRAT	ION	NO. EX	FREQUENCY OF	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS		
РН	SAMPLE MEASUREMENT	*****	*****		7.3	*****	8.4	(12)	0	04/30	GR	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	*****	9.0 MAXIMUM	SU		ONCE/MONTH	GRAB	
OIL & GREASE See Note 8	SAMPLE MEASUREMENT	*****	*****		*****	*****	16	(19)	1	02/30	GR	
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.012	*****	(03)	*****	*****	*****		0	04/30	RC	
50050 1 0 1 See Note 9 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT DAILY AV	*****	MGD	*****	*****	*****	****		ONCE/MONTH	RCORDR	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
SAMPLE MEASUREME												
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECU	I certify und	er penalty of law th	at this document an	d all attachments we	ere prepared under	my direction						
	or supervision	on in accordance wi	th a system designe	ed to assure that qua	alified personnel pro	operly gather				Telep	hone	
Division Manager	Division Manager			omitted. Based on i	my inquiry of the per	son or persons who	o manage the				631-34	4-4549
Environmental & Waste Man	agement	system, or those	persons directly re	sponsible for gathe	ring the information,	the information sul	omitted is, to the					
Services Division		best of my know	ledge and belief, tr	ue, accurate, and o	omplete. I am aware	e that there are sign	nificant penalties	Signature of Principal Executive			Date S	Signed
Typed or Printed		for submitting	g false information,	including the possib	oliity of fine and impri	isonment for knowi	ng violations.	Officer or Authorized Agent				

Comments and Explanation of any violations (Reference all attachments here)

SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.

# ATTACHMENT II BROOKHAVEN NATIONAL LABORATORY SPDES PERMIT NO. NY0005835 DISCHARGE MONITORING REPORT FOR FEBRUARY 2005 NONCOMPLIANCE REPORTS



#### New York State Department of Environmental Conservation Division of Water



## Report of Noncompliance Event

To: DEC Water Contact R. Sorrentino	DEC Region:1
Report Type: 5 Day Permit Violation Order Violation Ant	icipated Noncompliance Bypass/Overflow
SECTION 2	
SPDES #: NY-0005835 Facility: US Department o	f Energy/Brookhaven National Laborator
Date of noncompliance: 2 /3 /05 Location (Outfall) Treatment Uni	t, or Pump Station): 006B
Description of noncompliance(s) and cause(s): A grab sample was collected of that had an Oil & Grease concentrations of 15.9 mg/L which	on February 3, 2005 from Outfall 006B exceeds the permit limit of 15.0
ng/L.	
Has event ceased? (Yes) (No) If so, when? 2/28/05 Was event due to plant upset? (	Yes) (No) SPDES limits violated? (Yes) (No)
Start date, time of event: 2 / 3 /05 , 9 : 37 (AM) (PM) End date, time of event:	2/28 / 05, 3 : 58 (AM) (PM)
Date, time or al notification made to DEC?/,: (AM) (PM) DEC Officia	al contacted:
mmediate corrective actions: Upon receipt of the analytical results all results met the OA requirements. Additional samples we sampled on the original sample date. The Oil & Grease conc	
Outfall 006B was 3.3 mg/L.	
reventive (long term) corrective actions: The discharge to Outfall 006B is stormwater runoff. All cooling towers and once through cool this outfall are not in use. Due to the low volume of whe cause is runoff from parking lot discharges. The Labor to reduce incidental parking lot spillage in order to reduce	ling water systems that discharge mater discharged (primarily snow melt) atory is currently looking at ways
SECTION 3 Complete this section if event was a bypass:	
Bypass amount: Was prior DEC authorization rec	eived for this event? (Yes) (No)
DEC Official contacted: Date of DE	eC approval: /
Describe event in "Description of noncompliance and cause" area in Section 2. Detail the	start and end dates and times in Section 2 also.
SECTION 4	
Facility Representative: George A. Goode Title: Division Manager	Date: 3 /24 / 05
Phone #: ( 631)344 - 4549 Fax #: ( 631 ) 344 - 7334	
I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information	10 / 0

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

Signature of Principal Executive Officer or Authorized Agent



#### New York State Department of Environmental Conservation Division of Water



## Report of Noncompliance Event

To: DEC Water Contact N. Soffencino DEC Region:1
Report Type: 5 Day X Permit Violation Order Violation Anticipated Noncompliance Bypass/Overflow
SECTION 2
SPDES #: NY-0005835 Facility: U.S. Department of Energy/Brookhaven National
Date of noncompliance: 2 / 18 / 05 Location Outfall, Treatment Unit, or Pump Station): 006A
Description of noncompliance(s) and cause(s): A grab sample was collected on February 18, 2005 from Outfall
006A that had a pH of 9.39 SU which exceeds the permit limit of 9/0 SU. The pH was checked
40 minutes later and it was 9.43 SU.
Has event ceased? (Yes) (No) If so, when? 2/18/05 Was event due to plant upset? (Yes) (No) SPDES limits violated? (Yes) (No)
Start date, time of event: 2 / 18 / 05 , 1 :58 (AM) (PM) End date, time of event: 2 / 18 / 05 , 5 : 00 (AM) (PM)
Date, time oral notification made to DEC?/_ / : (AM) (PM) DEC Official contacted:
mmediate corrective actions: Upon discovery of the elevated pH at Qutfall 006A an investigation into
the source was initiated. The discharge to this outfall is mainly non-contact cooling water.
Therefore, personnel in theCollider Accelerator Department (CAD) water group checked the cooling tower discharging to this Outfall for possible chemical overdose. Follow-up with CAD
(see attached sheet for the rest of the Immediate Corrective Actions info) reventive (long term) corrective actions: The Standard Operating Procedures for the Water Treatment Facility
vill be reviewed to improve communicationduring abnormal occurrences and to address caustic additions when the eastern well field is in use to prevent occurrences of this nature in the
uture.
SECTION 3 Complete this section if event was a bypass:
Bypass amount: Was prior DEC authorization received for this event? (Yes) (No)
DEC Official contacted: Date of DEC approval:/
Describe event in "Description of noncompliance and cause" area in Section 2. Detail the start and end dates and times in Section 2 also.
SECTION 4
Facility Representative: George A. Goode Title: Division Manager Date: 3 / 24/05
Phone #: (631) 344 - 4549 Fax #: (631) 344 - 7334
Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information

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

Signature of Principal Executive Officer or Authorized Agent

#### Immediate Corrective Actions for noncompliance of Outfall 006A continued:

Showed no problems with chemical additions to the tower. The pH of potable water within Bldg. 930 (closest building) was 9.4 SU and pH of the cooling tower basin water was 8.8 SU. Personnel at the Potable Water Treatment Facility were contacted who stated that there was an elevated pH in the system but the problem was thought to be under control. Due to sampling requirements in the Laboratory's RCRA permit, the source water was switched from the western to the eastern well field. The eastern well field uses caustic addition to adjust the pH of the potable water to approximately 7.5-8.0 SU. Upon this discovery, actions were taken to flush the system and the pH as tested in several buildings at 5:00 pm on February 18, 2005 was 7.6 SU.



#### New York State Department of Environmental Conservation Division of Water



### Report of Noncompliance Event

10: DEC Water Contact DEC Region:
Report Type: 5 Day _w_Permit Violation Order Violation Anticipated Noncompliance Bypass/Overflow
SECTION 2
SPDES #: NY-0005835 Facility: US Department of Energy/Brookhaven National Laborator
Date of noncompliance: 2 / 4 /05 Location (Outfall, Treatment Unit, or Pump Station): 001
Description of noncompliance(s) and cause(s): A 24-hour composite sample was collected on February 4, 2005 from Outfall 001 that had an ammonia concentration of 3.7 mg/L, which exceeds the permit limit of
2 mg/L. The compsite sample collected on February 7, 2005 had an ammonia concentration of
Has event ceased? (Yes) (No) If so, when? 2/7/05 Was event due to plant upset? (Yes) (No) SPDES limits violated? (Yes) (No)
Start date, time of event: 2 / 4 / 05, 10:40 (AM) (PM) End date, time of event: 2 / 7/05, 11 00 (AM) (PM)
Date, time oral notification made to DEC?/,: (AM) (PM) DEC Official contacted:
Immediate corrective actions: None. Due to the lag time between sample collection, analysis, and receipt of results no immediate actions were possible.
Preventive (long term) corrective actions: Since the compliance sample collected on February 7, 2005 was within the permit limits for ammonia this is being considered a one-time excursion. The operating
logs were reviewed and personnel at the Sewage Treatment Plant were interviewed to determine
the cause of the elevated ammonia. No abnormal conditions were found. The Sewage Treatment
Plant operators will be monitoring the treatment processes closely to prevent further exceedance
SECTION 3 Complete this section if event was a bypass:
Bypass amount: Was prior DEC authorization received for this event? (Yes) (No)
DEC Official contacted: Date of DEC approval:/
Describe event in "Description of noncompliance and cause" area in Section 2. Detail the start and end dates and times in Section 2 also.
SECTION 4
Facility Representative: George A. Goode Title: Division Manager Date: 3/24/05
Phone #: (631) 344 - 4549 Fax #: (631) 344-7334
Contiference by Characteristic description and all an arrangements

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

× My. Nood

Signature of Principal Executive Officer or Authorized Agent



#### New York State Department of Environmental Conservation Division of Water



## Report of Noncompliance Event

To: DEC Water Contact R. Sorrentino	DEC Region: 1
Report Type: 5 Day Y Permit Violation Order Violation	Anticipated Noncompliance Bypass/Overflow
\$	. Dypusa Overgion
SECTION 2	
SPDES #: NY-0005835 Facility: US Department	of Energy/Brookhaven National Laborato
Date of noncompliance: 2 / 7 / 05 Location Outfall Treatment	Unit, or Pump Station): 001
Description of noncompliance(s) and cause(s): A 24-hour composite sample Outfall 001 that had a total nitrogen concentration of 1 of 10 mg/L. Samples collected by the NYSDEC on February	2.7 mg/L. which exceeds the permit limit
The composite samples collected on March 7 and 9, 2005 h	ad total nitrogen concentrations of
13.3 and 9.3 mg/L respectively. Has event ceased? (Yes) (No) If so, when? 3/9/05 Was event due to plant upset	? (Yes) (No) SPDES limits violated? (Yes) (No)
Start date, time of event: 2 / 7 / 05, 11:00 (AM) (PM) End date, time of event:	3 / 9 /05 , 10 .00 (AM) (PM)
Date, time oral notification made to DEC?/, : (AM) (PM) DEC Off	icial contacted:
Immediate corrective actions: None. Due to the lag time between sar of results no immediate actions were possible. Analysis	nple collection, analysis, and receipt
to evaluate nitrogen levels for the month of March.	J. J
Preventive (long term) corrective actions: Periodic episodes of high nity Samples collected over the weekend (i.e., Sunday morning	rogen levels are being evaluated.
nitrogen than weekday results. Numerous additional samp for evaluation of cause. Potential contributing factors	les are being collected through March
of activated sludge due to colder weather and reduced flo	ow rates. Sample collection points
(see attached sheet for the rest of the Preventative Corn <u>SECTION 3</u> <u>Complete this section if event was a bypass:</u>	rective Actions info)
Bypass amount: Was prior DEC authorization in	received for this event? (Yes) (No)
DEC Official contacted: Date of	DEC approval:/
Describe event in "Description of noncompliance and cause" area in Section 2. Detail t	he start and end dates and times in Section 2 also.
SECTION 4	
Facility Representative: George A. Goode Title: Division Manage	er Date: 3 / 24/ 05
Phone #: ( 631 ) 344 - 4549 Fax #: ( 631 ) 344 - 733	44
Certify under nepalty of law that this document and all attachments were	

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

× Ma. Korde

Signature of Principal Executive Officer or Authorized Agent

### Immediate Corrective Actions for noncompliance of Outfall 001 continued:

are being established at the plant influent, effluent from the primary clarifier, effluent from the secondary clarifiers, and the final point of discharge to establish a nitrogen concentration profile across the plant.