

January 21, 2004

Mr. Scott Mallette  
Director, Operations Management Division  
U. S. Department of Energy  
Brookhaven Area Office  
Upton, NY 11973

Dear Mr. Mallette:

**SUBJECT: NPDES - Discharge Monitoring Report (DMR) for December 2003**

Included as Attachment I, please find the DMR for the month of December 2003. Chemical analyses for the reported parameters are conducted by NYS Department of Health certified laboratories. As of November 1, 2003, Severn Trent Laboratories, Inc. will be performing most of the analyses on all SPDES samples with H2M Labs, Inc. performing only the BOD<sub>5</sub>, Nitrogen series, and fecal coliform analyses due to sample holding times. Copies of the analytical reports are contained in Attachments IV and V. Field measured parameters (pH, settleable solids, flow) are recorded and/or measured by the Plant Engineering Division, Sewage Treatment Plant Operators or the Environmental and Waste Management Services Division, Field Sampling Team.

With the exception of one excursion for the tolytriazole concentration at Outfall 002, review of the analytical data shows that all parameters met their respective SPDES effluent limitations for this reporting period. With regard to tolytriazole, the sample collected on October 10, 2003, exhibited a tolytriazole concentration of 0.989 mg/L. The elevated concentrations were due to a broken valve on the feed equipment for the water treatment chemicals added to a cooling tower discharging to this outfall. The problem was repaired once it was discovered. Subsequent sampling on November 6, 2003, exhibited a tolytriazole concentration of < 0.005 mg/L. Please see Attachment II for the non-compliance report on this excursion event. Attachment III contains a summary of the Water Treatment Chemical usage for Outfalls 002, 005, and 006 for calendar year 2003.

Collection and analysis of the SPDES permit samples are performed in accordance with the guidelines of the BNL Quality Assurance program. These guidelines include the routine calibration of instruments, standard operating procedures for collection and analysis of samples, use of standard methods of analysis, and validation of the contractor analytical data by BNL personnel. Brookhaven National Laboratory personnel collected all samples. A Quality Assurance inspection is performed periodically on contractor laboratories. The Quality Assurance documentation is available from the Environmental and Waste Management Services Division and Plant Engineering Divisions. Based



REGISTERED TO  
ISO 14001: 1996



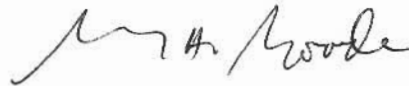
NSF's Registration Program  
is accredited by the American  
National Standards Institute  
Registrar Accreditation Board

on this information, we believe the values reported on the DMR are representative of the effluent from the BNL during the month of December 2003.

Although it is no longer necessary for BNL to include copies of the laboratory analysis when submitting the DMR, we are including them in the package submitted to you for record-keeping purposes. You do not have to forward the analytical reports to the NYSDEC-Region 1 or SCDHS when submitting the DMR.

Please sign each page of the computer generated DMR where indicated and transmit it to the New York State Department of Environmental Conservation and the Suffolk County Department of Health Services no later than January 28, 2003. If there are any questions regarding the information contained on the DMR or the analytical data packages, please do not hesitate to contact R. Lee at extension 3148 or M. Allocco at extension 3166.

Sincerely,



George A. Goode  
Environmental & Waste Management Services  
Division Manager

GAG/MA:car

- Attachment I: Discharge Monitoring Report for December 2003.
- Attachment II: Non-Compliance Report for Quarterly SPDES Excursion at Outfall 002.
- Attachment III: Annual Water Treat Chemical Usage for Calendar Year 2003
- Attachment IV: Analytical Results from H2M Labs Inc. and Severn Trent Laboratories, Inc. for samples collected on 12/10/03, 12/12/03, and 12/15/03 from Outfall 001.
- Attachment V: Analytical Results from H2M Labs Inc., the BNL Analytical Services Laboratory, GEL LLC, and CHEMTEX, Inc. for samples collected from Outfalls 001A, 001B, 001F, 002, 002B, 005, 006A, 006B, 008, and 010.

cc:	M. Allocco	w/ attachments	M. Baldwin	w/ attachments
	M. Bebon	w/o attachments	W. Chaloupka	w/ attachments
	S. Dierker	w/o attachments	G. Goode	w/o Attachments
	G. Granzen	w/o attachments	C. Johnson	w/o attachments
	R. Lee	w/ attachments	K. Klaus	w/ attachments
	E. Lessard	w/o attachments	D. Lowenstein	w/o attachments
	E. Murphy	w/ attachments	V. Radeka	w/o attachments
	B. Style	w/o attachments	J. Tarpinian	w/o attachments
	D. Van Duyne	w/ attachments		

EC62ER.03

**Brookhaven National Laboratory**  
**SPDES Permit No. NY0005835**  
**Discharge Monitoring Report for December 2003**  
**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. The analyte was also found in the associated laboratory blank.
3. Flow is estimated based upon an instantaneous flow measurement and the assumption that flow continued for the entire day (i.e., 1,440 minutes).
4. Since flow records are maintained on a weekly or monthly basis, the flow rate provided is the daily average.
5. PCBs were not detected above the detection limit for any congener. Total PCBs have been reported as less than the maximum of the individual detection limits.
6. Two individual photographic processors had generated photographic rinse waters discharged from Building 197B. However, in late 2003 the photographic processors were shutdown resulting in no discharge from Outfall 001D for this time period. The processors were removed from service as part of the Laboratory's continued efforts in pollution prevention and waste minimization. A new plate setter has replaced one processor and uses lasers to burn an image. Rinse waters from the imaged plates were sampled and the results will be submitted shortly to determine if SPDES permitting is still needed.
7. A compliance sample for Outfall 001F was collected on October 3, 2003 with a polypropylene glycol monobutyl ether (PPGMBE) concentration of < 0.5 mg/L. After sampling the cooling tower was shutdown and emptied for cleaning. A sample was collected on November 10, 2003, after startup with a PPGMBE concentration of 7.38 mg/L. A review of the cooling tower system did not reveal a system leak or a source for the elevated concentration of PPGMBE. A third sample was collected on December 4, 2003, with a PPGMBE concentration of < 0.5 mg/L.
8. The tolytriazole concentration at Outfall 002 was 0.989 mg/L on 10/10/2003, which exceeded the permit limit of 0.2 mg/L. Please see Attachment II for an explanation of this excursion.

**ATTACHMENT I**

**BROOKHAVEN NATIONAL LABORATORY**

**SPDES PERMIT NO. NY0005835**

**DISCHARGE MONITORING REPORT FOR DECEMBER 2003**

**FOR OUTFALLS NO. 001 – 010**

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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 ACID/CAUSTIC CLEANG RINSE 535B  
 \*\*\* No Discharge \*\*\*

NY0005835 001 A Discharge Number  
 Permit Number  
 Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	MAXIMUM			
FLOW RATE	100	*****	*****	*****	0	03/90	RC
00056 1 0 1 EFFLUENT GROSS VALUE	REPORT DAILY AV	*****	*****	*****	0	QTRLY	RCORDR
PH	*****	*****	7.0	*****	0	01/90	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	REPORT MINIMUM	*****	0	QTRLY	GRAB
BIS (2-ETHYLHEXYL) PHTHALATE	*****	*****	*****	*****	0	01/90	GR
39100 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0	QTRLY	GRAB
DI-N-BUTYL PHTHALATE	*****	*****	*****	*****	0	01/90	GR
39110 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0	QTRLY	GRAB

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.

Telephone  
631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCH TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 UPTON  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 RINSE FROM CENTRL DEGREASR 498

NY0005835  
 Permit Number  
 Discharge Number  
 001 B

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31

\*\*\* No Discharge \*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE			
FLOW RATE	382	*****	(07)	*****	*****	0	01/90	RC
00056 1 0 1 EFFLUENT GROSS VALUE	REPORT DAILY AV	*****	GPD	*****	*****	0	QTRLY	RCORDR
PH	*****	*****		3.3	3.3	0	01/90	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	REPORT MINIMUM	REPORT MAXIMUM		QTRLY	GRAB
CHROMIUM, TOTAL (AS CR)	*****	*****	*****	*****	53.2	0	01/90	GR
01034 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	REPORT DAILY MX		QTRLY	GRAB
COPPER, TOTAL (AS CU)	*****	*****	*****	*****	725	0	01/90	GR
01042 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	REPORT DAILY MX		QTRLY	GRAB
IRON, TOTAL (AS FE)	*****	*****	*****	*****	2550	0	01/90	GR
01045 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	REPORT DAILY MX		QTRLY	GRAB
MANGANESE, TOTAL (AS MN)	*****	*****	*****	*****	17.8	0	01/90	GR
01055 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	REPORT DAILY MX		QTRLY	GRAB
NICKEL, TOTAL (AS NI)	*****	*****	*****	*****	17.5	0	01/90	GR
01067 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	REPORT DAILY MX		QTRLY	GRAB

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.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager  
 Telephone 631-344-3424  
 Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCH TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS



PERMITTEE NAME/ADDRESS (include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 RINSE FROM CENTRL DEGREASR 498

NY0005835 Permit Number  
 001 B Discharge Number

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31  
 \*\*\* No Discharge \*\*\*

Note: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
ZINC, TOTAL (AS ZN)		*****	*****	*****	*****	*****	(28)	0	01/90	GR
01092 1 0 0 EFFLUENT GROSS VALUE		*****	*****	*****	*****	*****	UG/L	0	QTRLY	GRAB
1,2-DICHLOROETHANE		*****	*****	*****	*****	*****	(28)	0	01/90	GR
32103 1 0 0 EFFLUENT GROSS VALUE		*****	*****	*****	*****	*****	UG/L	0	QTRLY	GRAB
CHLOROFORM		*****	*****	*****	*****	*****	(28)	0	01/90	GR
32106 1 0 0 EFFLUENT GROSS VALUE		*****	*****	*****	*****	*****	UG/L	0	01/90	GR
1,1,1-TRICHLOROETHANE		*****	*****	*****	*****	*****	(28)	0	QTRLY	GRAB
34506 1 0 0 EFFLUENT GROSS VALUE		*****	*****	*****	*****	*****	UG/L	0	01/90	GR
DICHLOROBROMOMETHANE EFFLUENT		*****	*****	*****	*****	*****	(28)	0	QTRLY	GRAB
32101 1 0 0 EFFLUENT GROSS VALUE		*****	*****	*****	*****	*****	UG/L	0	01/90	GR
BIS (2-ETHYLHEXYL) PHTHALATE		*****	*****	*****	*****	*****	(28)	0	QTRLY	GRAB
39100 1 0 0 EFFLUENT GROSS VALUE		*****	*****	*****	*****	*****	UG/L	0	QTRLY	GRAB
DI-N-BUTYL PHTHALATE		*****	*****	*****	*****	*****	(28)	0	01/90	GR
39110 1 0 0 EFFLUENT GROSS VALUE		*****	*****	*****	*****	*****	UG/L	0	QTRLY	GRAB

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.

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCH TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS





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

NAME U S O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 PHOTOPROCESSING RINSE FROM 197B  
 \*\*\* No Discharge  \*\*\*\*

NY0005835 Permit Number  
 001 D Discharge Number  
 Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31

Note: Read Instructions before completing this form

PARAMETER	SAMPLE MEASUREMENT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW RATE See Note 6			*****	(07)	*****	*****				RC
00056 1 0 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT DAILY AV	*****	GPD	*****	*****		QTRLY	RCORDR	
PH	SAMPLE MEASUREMENT REQUIREMENT	*****	*****		*****	(12)			GR	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	REPORT MAXIMUM	SU	QTRLY	GRAB	
NITROGEN, TOTAL (AS N)	SAMPLE MEASUREMENT REQUIREMENT	*****	*****	****	*****	*****	(19)		GR	
00600 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT DAILY MX	MG/L	QTRLY	GRAB	
CYANIDE, TOTAL (AS CN)	SAMPLE MEASUREMENT REQUIREMENT	*****	*****	****	*****	*****	(28)		GR	
00720 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT DAILY MX	UG/L	QTRLY	GRAB	
SILVER, TOTAL (AS AG)	SAMPLE MEASUREMENT REQUIREMENT	*****	*****	****	*****	*****	(28)		GR	
01077 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT DAILY MX	UG/L	QTRLY	GRAB	
PHENOLICS, TOTAL RECOVERABLE	SAMPLE MEASUREMENT REQUIREMENT	*****	*****	****	*****	*****	(28)		GR	
32730 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT DAILY MX	UG/L	QTRLY	GRAB	
	SAMPLE MEASUREMENT REQUIREMENT									

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.

Telephone  
631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

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

NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM MANHOLE NEAREST THE BUILDING. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS





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

NAME U S O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 PROCESS SANIT & STORMWTR RNOFF

NY0005835 Discharge Number  
 001 M  
 Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31

\*\*\* No Discharge  \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
TEMPERATURE, WATER	*****	*****	*****	*****	*****	*****	(15)	0	01/01	GR
DEG. FAHRENHEIT	*****	*****	*****	*****	*****	*****	DEG.F	0	DAILY	GRAB
00011 1 0 0	*****	*****	*****	*****	*****	*****	< 2	0	03/30	24
BOD, 5-DAY (20 DEG. C)	*****	*****	*****	*****	*****	*****	10 DAILY AV	0	ONCE/MONTH	COMP24
00310 1 0 0	*****	*****	*****	*****	*****	*****	6.6	0	01/01	GR
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	*****	9.0 MAXIMUM	0	DAILY	GRAB
PH	*****	*****	*****	*****	*****	*****	< 1	0	03/30	24
00400 1 0 0	*****	*****	*****	*****	*****	*****	20 DAILY MX	0	ONCE/MONTH	COMP24
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	*****	0.0	0	01/01	GR
SOLIDS, TOTAL SUSPENDED	*****	*****	*****	*****	*****	*****	0.1 DAILY MX	0	DAILY	GRAB
00530 1 0 0	*****	*****	*****	*****	*****	*****	7.8	0	03/30	24
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	*****	10 DAILY MX	0	ONCE/MONTH	COMP24
SOLIDS, SETTLEABLE	*****	*****	*****	*****	*****	*****	0.1	0	01/01	GR
00645 1 0 0	*****	*****	*****	*****	*****	*****	10 DAILY MX	0	DAILY	GRAB
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	*****	7.8	0	03/30	24
NITROGEN, TOTAL (AS N)	*****	*****	*****	*****	*****	*****	10 DAILY MX	0	ONCE/MONTH	COMP24
00600 1 0 0	*****	*****	*****	*****	*****	*****	0.1	0	03/30	24
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	*****	2 DAILY MX	0	ONCE/MONTH	COMP24
NITROGEN, AMMONIA TOTAL (AS N)	*****	*****	*****	*****	*****	*****	0.1	0	03/30	24
00610 1 0 0	*****	*****	*****	*****	*****	*****	2 DAILY MX	0	ONCE/MONTH	COMP24
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	*****	*****	0	ONCE/MONTH	COMP24

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.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager  
 Telephone 631-344-3424  
 Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

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 EXFILTRATION FROM SFB. SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.



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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 PROCESS SANIT & STORMWTR RNOFF  
 \*\*\* No Discharge  \*\*\*\*

NY0005835		001 M	
Permit Number		Discharge Number	
Monitoring Period			
From	To		
YR MO DAY	YR MO DAY		
03 10 01	03 12 31		

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
PHOSPHORUS, TOTAL (AS P)	*****	*****	*****	*****	*****	1.4	(19)	0	03/30	24
00665 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	*****	REPORT DAILY MX	MG/L		ONCE/MONTH	COMP24
CYANIDE, TOTAL (AS CN)	*****	*****	*****	*****	*****	< 5	(28)	0	03/30	GR
00720 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	*****	100 DAILY MX	UG/L		TWICE/MONTH	GRAB
COPPER, TOTAL (AS CU)	*****	*****	*****	*****	*****	0.042	(19)	0	03/30	24
01042 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	*****	0.15 DAILY MX	MG/L		ONCE/MONTH	COMP24
IRON, TOTAL (AS FE)	*****	*****	*****	*****	*****	0.17	(19)	0	03/30	24
01045 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	*****	0.37 DAILY MX	MG/L		ONCE/MONTH	COMP24
LEAD, TOTAL (AS PB)	*****	*****	*****	*****	*****	0.0011	(19)	0	03/30	24
01051 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	*****	0.019 DAILY MX	MG/L		ONCE/MONTH	COMP24
NICKEL, TOTAL (AS NI)	*****	*****	*****	*****	*****	0.0042	(19)	0	03/30	24
01067 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	*****	0.11 DAILY MX	MG/L		ONCE/MONTH	COMP24
SILVER, TOTAL (AS AG)	*****	*****	*****	*****	*****	0.0021	(19)	0	03/30	24
01077 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	*****	0.015 DAILY MX	MG/L		ONCE/MONTH	COMP24

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.

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 EXFLT FROM SFBS. SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.

Telephone  
631-344-3424

Date Signed

Signature of Principal Executive Officer or Authorized Agent

Typed or Printed

Mr. Michael Holland  
Area Office Manager



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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 DISCHARGE NUMBER 001 M

PROCESS SANIT & STORMWTR RNOFF  
 \*\*\* No Discharge  \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
ZINC, TOTAL (AS ZN)	*****	*****	*****	*****	*****	0.05	(19)	0	03/30	24
01092 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	0.1 DAILY MX	MG/L	0	ONCE/MONTH	COMP24
TOLUENE	*****	*****	*****	*****	*****	0.6	(28)	0	03/30	GR
See Note 1										
34010 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	5 DAILY MX	UG/L		TWICE/MONTH	GRAB
METHYLENE CHLORIDE	*****	*****	*****	*****	*****	< 1	(28)	0	03/30	GR
34423 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	5 DAILY MX	UG/L		TWICE/MONTH	GRAB
1,1,1-TRICHLORO-ETHANE	*****	*****	*****	*****	*****	< 1	(28)	0	03/30	GR
34506 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	5 DAILY MX	UG/L		TWICE/MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	0.28	0.50	(03)	*****	*****			0	99/99	RC
50050 1 0 0 EFFLUENT GROSS VALUE	REPORT DAILY AV	2.3 DAILY MX	MGD	*****	*****			0	CONTINUOUS	RCORDR
MERCURY, TOTAL (AS HG)	*****	*****	*****	*****	*****	0.0002	(19)	0	03/30	24
See Note 1										
71900 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	0.0008 DAILY MX	MG/L		ONCE/MONTH	COMP24
COLIFORM, FECAL GENERAL	*****	*****	*****	*****	*****	< 2	(13)	0	03/30	GR
74055 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	400 DAILY MX	100ML		ONCE/MONTH	GRAB

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.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager  
 Telephone 631-344-3424  
 Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

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 SFBS. SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.

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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 PROCESS SANIT & STORMWTR RNOFF  
 \*\*\* No Discharge  \*\*\*\*

NY0005835 Permit Number  
 001 M Discharge Number  
 Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
2-BUTANONE	*****	*****	*****	*****	*****	< 2	(28)	0	03/30	GR
78356 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	50 DAILY MX	UG/L	0	TWICE/ MONTH	GRAB
BOD, 5-DAY PERCENT REMOVAL	*****	*****	*****	> 95	*****	*****	(23)	0	01/30	CA
81010 K 0 0 PERCENT REMOVAL	*****	*****	*****	85 MO AV MN	*****	*****	PERCENT	0	ONCE/ MONTH	CALCTD
SOLIDS, SUSPENDED PERCENT REMOVAL	*****	*****	*****	> 99	*****	*****	(23)	0	01/30	CA
81011 K 0 0 PERCENT REMOVAL	*****	*****	*****	85 MO AV MN	*****	*****	PERCENT	0	ONCE/ MONTH	CALCTD
SAMPLE MEASUREMENT										
PERMIT REQUIREMENT										
SAMPLE MEASUREMENT										
PERMIT REQUIREMENT										
SAMPLE MEASUREMENT										
PERMIT REQUIREMENT										
SAMPLE MEASUREMENT										
PERMIT REQUIREMENT										
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.										
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER										Telephone
Mr. Michael Holland Area Office Manager										631-344-3424
Typed or Printed										Signature of Principal Executive Officer or Authorized Agent
Comments and Explanation of any violations (Reference all attachments here)										Date Signed
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 SFBS. SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.										

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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 PROCESS SAMIT EFFL & STORMWTR

NY0005835 Permit Number  
 001 Q Discharge Number

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31

\*\*\* No Discharge  \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
POLYCHLORINATED BIPHENYLS (PCBS) 39516 1 0 0 See Note 5 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	< 0.065	(28)	GR	
	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT DAILY MX	UG/L	QTRLY	
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									

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.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager  
 Typed or Printed

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 PCB ANALYSIS TO USE EPA METHOD 608 WITH AN MDL GOAL OF 0.065 PPB





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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01) F - FINAL  
 Discharge Number 002 M  
 Permit Number NY0005835  
 Monitoring Period From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31  
 \*\*\* No Discharge \*\*\*

AGS NON-C COOLING,PRCP,ETC (HN)

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
PH	*****	*****		7.0	*****	7.7	(12)	0	04/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	REPORT MINIMUM	*****	9.0 MAXIMUM	SU	0	ONCE/MONTH	GRAB
OIL & GREASE	*****	*****	****	*****	*****	< 5	(19)	0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	0.15	*****	(03)	*****	*****	*****		0	04/30	RC
50050 1 0 1 EFFLUENT GROSS VALUE	REPORT DAILY AV	*****	MGD	*****	*****	*****		0	ONCE/MONTH	RCORDR
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									

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.

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.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager

Telephone  
 631-344-3424

Typed or Printed  
 Signature of Principal Executive Officer or Authorized Agent  
 Date Signed



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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

Permit Number NY0005835  
 Discharge Number 002 Q  
 (SUBR 01)  
 F - FINAL

AGS NON-C COOLG, PRECP ETC (HN)  
 \*\*\* No Discharge  \*\*\*\*

MAJOR

Monitoring Period		From		To	
YR	MO	DAY	YR	MO	DAY
03	10	01	03	12	31

Note: Read Instructions before completing this form

PARAMETER	SAMPLE MEASUREMENT	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	UNITS			
ALUMINUM, TOTAL (AS AL) 01105 1 0 1	See Note 1	*****	*****	*****	*****	*****	*****	0	01/90	GR
EFFLUENT GROSS VALUE CHLOROFORM	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	0	QTRLY	GRAB
32106 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	0	01/90	GR
EFFLUENT GROSS VALUE 1,1,1-TRICHLOROETHANE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	0	QTRLY	GRAB
34506 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	0	01/90	GR
EFFLUENT GROSS VALUE DICHLOBROMOMETHANE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	0	QTRLY	GRAB
EFFLUENT	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	0	01/90	GR
32101 1 0 0	EFFLUENT GROSS VALUE 1-HYDROXY-ETHYLIDENE	*****	*****	*****	*****	*****	*****	0	QTRLY	GRAB
85812 1 0 0	EFFLUENT GROSS VALUE TOLYTRIAZOLE	*****	*****	*****	*****	*****	*****	0	01/90	GR
85813 1 0 0	EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	*****	0	QTRLY	GRAB
See Note 8	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	1	02/90	GR
85813 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	0	QTRLY	GRAB
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	0	QTRLY	GRAB
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	0	QTRLY	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager

Signature of Principal Executive Officer or Authorized Agent

Telephone  
 631-344-3424

Date Signed

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

NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.  
 SAMPLING TO BE DOWNSTREAM OF WHERE EXISTING DISCHARGE MIXES WITH COOLING TOWER BLOWDOWN FROM STAR DETECTOR.





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

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 NY0005935 Permit Number  
 005 Q Discharge Number

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31  
 \*\*\* No Discharge  \*\*\*\*

NLS COOLG TOWR BLOWDN ETC (HS)

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
COPPER, TOTAL (AS CU) 01042 1 0 0 See Note 1	SAMPLE MEASUREMENT	*****	*****	*****	*****	0.0036	(19)	0	01/90	GR
	PERMIT REQUIREMENT	*****	*****	*****	*****	1.0 DAILY MX	MG/L	0	QTRLY	GRAB
1-HYDROXY-ETHYLIDENE	SAMPLE MEASUREMENT	*****	*****	*****	*****	< 0.05	(19)	0	01/90	GR
	PERMIT REQUIREMENT	*****	*****	*****	*****	0.5 DAILY MX	MG/L	0	QTRLY	GRAB
85812 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	< 0.005	(19)	0	01/90	GR
	PERMIT REQUIREMENT	*****	*****	*****	*****	0.2 DAILY MX	MG/L	0	QTRLY	GRAB
TOLYTRIAZOLE	SAMPLE MEASUREMENT	*****	*****	*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****					
85813 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****					
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
Mr. Michael Holland Area Office Manager	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
Typed or Printed	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
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.										
								Telephone 631-344-3424		
								Signature of Principal Executive Officer or Authorized Agent		
								Date Signed		

Comments and Explanation of any violations (Reference all attachments here)  
 NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.



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

U S D O E  
 BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE UPTON NY 11973  
 BROOKHAVEN NATIONAL LABORATORY UPTON NY 11973  
 GEORGE MALOSH, GROUP MGR ATTN:

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

MAJOR (SUBR 01) F - FINAL  
 WATER TREATMENT PLT BKWSH (HX)  
 \*\*\* No Discharge  \*\*\*\*

NY0005835  
 Permit Number 007 M Discharge Number  
 Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW RATE	*****	240000	(07)	*****	*****	*****	0	21/30	IN
00056 1 0 0 EFFLUENT GROSS VALUE	*****	REPORT DAILY MX	GPD	*****	*****	*****	0	ONCE/MONTH	INSTAN
PH	*****	*****		7.4	*****	(12)	0	01/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	REPORT MINIMUM	*****	SU	0	ONCE/MONTH	GRAB
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									

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.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager  
 Signature of Principal Executive Officer or Authorized Agent

Telephone  
 631-344-3424  
 Date Signed

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)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

MAJOR (SUBR 01)  
 F - FINAL  
 STORMWTR RUNOFF WAREHOUSE (HW)  
 \*\*\* No Discharge  \*\*\*\*

NY0005835 008 M Discharge Number  
 Permit Number  
 Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 10 01 03 12 31

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW RATE See Note 3	*****	527000	*****	*****	*****	(07)	0	01/30	IN
00056 1 0 0 EFFLUENT GROSS VALUE	*****	REPORT DAILY MX	*****	*****	*****	GPD	0	ONCE/MONTH	INSTAN
PH	*****	*****	6.7	*****	6.7		0	01/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	REPORT MINIMUM	*****	8.5 MAXIMUM	SU	0	ONCE/MONTH	GRAB
OIL & GREASE	*****	*****	*****	*****	< 5	(19)	0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	15 DAILY MX	MG/L	0	ONCE/MONTH	GRAB
1,1-DICHLOROETHYLENE	*****	*****	*****	*****	< 1	(28)	0	01/30	GR
34501 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	5 DAILY MX	UG/L	0	ONCE/MONTH	GRAB
1,1,1-TRICHLORO-ETHANE	*****	*****	*****	*****	< 1	(28)	0	01/30	GR
34506 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	5 DAILY MX	UG/L	0	ONCE/MONTH	GRAB

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.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager  
 Telephone 631-344-3424  
 Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

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 Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

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

Permit Number NY0005835  
 Discharge Number 06B M (SUBR 01)  
 F - FINAL

MAJOR COOLING TOWER FROM 919 ETC (HT2)

\*\*\* No Discharge  \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	UNITS			
PH	*****	*****	6.9	*****	7.7	(12)	0	04/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	REPORT MINIMUM	*****	9.0	SU	0	ONCE/MONTH	GRAB
OIL & GREASE	*****	*****	*****	*****	< 5	(19)	0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	15	MG/L	0	ONCE/MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	0.15	*****	*****	*****	*****		0	04/30	RC
50050 1 0 1 EFFLUENT GROSS VALUE	REPORT DAILY AV	*****	*****	*****	*****		0	ONCE/MONTH	RCORDR
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								

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.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Office Manager

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

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 DECEMBER 2003**  
**NON-COMPLIANCE REPORT**





### Report of Noncompliance Event

To: DEC Water Contact R. Sorrentino DEC Region: 1

Report Type: 5 Day  Permit Violation  Order Violation  Anticipated Noncompliance  Bypass/Overflow

SECTION 2

SPDES #: NY- 0005835 Facility: U.S. Department of Energy Brookhaven National Laboratory  
Laboratory

Date of noncompliance: 10 / 10 / 03 Location (Outfall, Treatment Unit, or Pump Station): 002

Description of noncompliance(s) and cause(s): The tolytriazole concentration at Outfall 002 measured on October 10, 2003, was 0.99 mg/L, which exceeds the permit level of 0.2 mg/L. An investigation revealed that the restart of cooling Tower #7 after maintenance with higher doses of water treatment chemicals (WTCs) to condition the system coupled with a significant loss of tower water (i.e., a leak as the most probable cause of the exceedance.

Has event ceased?  (Yes)  (No) If so, when? 11/6/03 Was event due to plant upset? (Yes)  (No)  SPDES limits violated?  (Yes)  (No)

Start date, time of event: 10/10/03, 2:00 (AM)  (PM) End date, time of event: 11/06/03, 9:12 (AM)  (PM)  (PM)

Date, time oral notification made to DEC?  / /,  :  (AM) (PM) DEC Official contacted: \_\_\_\_\_

Immediate corrective actions: Tower #7 could not be shut down to find the leak because it would adversely impact the operation of the RHIC facility. Therefore the WTC feed to the tower was stopped until the leak could be found and repaired.

Preventive (long term) corrective actions: During the week of November 10, 2003, a leak in the cooling tower system was found and isolated. Water treatment chemical additions were restarted once repairs were completed and restart approval by the Environmental and Waste Management Services Division. Testing by the WTC supplier shows all treatment residuals to be normal.

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: \_\_\_\_\_ Title: \_\_\_\_\_ Date:  / /

Phone #: ( ) - - Fax #: ( ) - -

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.

X  
Signature of Principal Executive Officer or Authorized Agent