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

www.bnl.gov

April 20, 2000

Mr. George J. Malosh
Brookhaven Group Manager
U. S. Department of Energy
Brookhaven Group
Upton, NY 11973

Dear Mr. Malosh:

SUBJECT: NPDES - Discharge Monitoring Report (DMR) for March 2000
REFERENCE: Letter from Scott Mallette to K. Brog dated March 28, 2000

Included as Attachment I, please find the DMR for the month of March 2000. Chemical analyses for the reported parameters are conducted by a NYS Department of Health certified contractor laboratory. Copies of the analytical reports are contained in Attachments II, and III. Field measured parameters (pH, settleable solids, flow) are recorded and/or measured by either the Plant Engineering Division, Sewage Treatment Plant (STP) Operators or Environmental Services Division, Field Sampling Team.

Review of the analytical data shows that all parameters met their respective SPDES effluent limitations this reporting period. Please note that for the majority of the Outfalls, flow measurements are conducted either weekly or monthly; consequently, a daily maximum flow rate cannot be reported. All flow values reported for Outfalls 001A, 001B, 001D, 001E, 001F, 002, 003, 004, 005, 006A, and 006B are, therefore, daily averages.

Collection and analysis of these samples are performed in accordance with the guidelines of the BNL Quality Assurance (QA) 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 the BNL analytical services laboratory. All samples are collected by BNL personnel. A QA inspection is performed periodically on contractor laboratories. The QA documentation is available from the Environmental Services Division (ESD) and Plant Engineering (PE) Divisions. Based on this information, we believe the values reported on the DMR are representative of the effluent from the BNL during the month of March 2000.

Please sign each page of the DMR where indicated and transmit the DMR and associated attachments to the New York State Department of Environmental Conservation and the Suffolk County Department of Health Services no later than April 28, 2000.

April 20, 2000

If there are any questions regarding the information contained on the DMRs or the analytical data packages, please do not hesitate to contact R. Lee (ESD) at extension 3148 or M. Allococo (ESD) at extension 3166.

Sincerely,



E.A. Zimmerman, CEP, REM, CEA, CESM
Division Manager

EAF/MA:rt

Attachment I: Discharge Monitoring Report for March 2000,

Attachment II: Analytical Results from H2M Labs for samples collected on 3/13/00, 3/15/00 and 3/17/00 from Outfall 001,

Attachment III: Analytical Results from H2M Labs for samples collected from Outfalls 001A, 001B, 001D, 001F, 002, 003, 004, 005, 006A, 006B, 008, and 010,

Attachment IV: Analytical Results from CHEMTEX, Inc. for samples collected from Outfalls 001F, 002, 003, 005, 006A, and 006B.

cc: K. Brog w/o attachments
W. Chaloupka w/attachments
G. Granzen w/o attachments
M. Hart w/o attachments
C. Johnson w/o attachments
D. Van Duyne w/attachments
R. Lee w/attachments
E. Lessard w/o attachments
D. Lowenstein w/o attachments
E. Murphy w/attachments
S. Ozaki w/o attachments
W. Reeside w/o attachments
L. Ross w/attachments
R. Travis w/attachments



EC4220.00

ATTACHMENT I

BROOKHAVEN NATIONAL LABORATORY

SPDES PERMIT NO. NY0005835

DISCHARGE MONITORING REPORT FOR MARCH 2000

FOR OUTFALLS NO. 001 – 010

Brookhaven National Laboratory
SPDES Permit No. NY0005835
Discharge Monitoring Report for March 2000
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. There was no discharge from Outfalls 002A, 002B, 002R and 007 during this reporting period.
3. Since flow records are maintained on a weekly or monthly basis, the flow rate provided is the daily average.
4. PCBs were not detected in these samples at a method detection limit of 0.65 ppb per congener. Total PCBs have been reported as less than the individual detection limit.
5. Flow is estimated based upon an instantaneous flow measurement and the assumption that flow continued for the entire day (i.e., 1,440 minutes).
6. Photographic rinse waters discharged from Building 197B, are generated by three individual photo-processors. Wastewater samples are collected from each processor and analyzed separately. Table I summarizes the individual result. The maximum concentration and total average flow have been reported in the DMR.

| Location | Flow | pH | Total Nitrogen | Cyanide | Silver | Phenolics |
|-------------------|-----------------|--------|----------------|-------------|-----------|-----------|
| 1-93B | 14 GPD | --- | --- | --- | --- | --- |
| 1-86B | 257 GPD | 7.6 SU | 0.66 mg/L | < 10.0 µg/L | < 60 µg/L | < 5 µg/L |
| 1-93A | 999 GPD | 7.5 SU | 0.80 mg/L | < 10.0 µg/L | 53 µg/L | < 5 µg/L |
| Total Flow | 1270 GPD | | | | | |

Note: Processor 1-93B is new installed. Data available is for the flow rate only.

ADDRESS: BROOKHAVEN NATIONAL LABORATORY
53 HELL AVE., BLDG 464
FACILITY UPTON
LOCATION UPTON NY 11973 NY 11973

ATTN: GEORGE MALOSH, GROUP MGR

NY0005835
PERMIT NUMBER

001 A
DISCHARGE NUMBER

MAJOR
(SUBR 01)
F - FINAL

RINSE FROM CENTRAL DEGREASER 4:

MONITORING PERIOD
FROM 00 03 01 TO 09 03 31

*** NO DISCHARGE 1_1 ***

NOTE: Read Instructions before completing this form

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| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | | | | |
| FLOW RATE (See Note 3) | SAMPLE MEASUREMENT | ***** | (07) | ***** | ***** | ***** | ***** | | | | |
| 00056 1 0 0 EFFLUENT GROSS VALUE PH | PERMIT REQUIREMENT | ***** | REPORT DAILY MX SPD | ***** | ***** | ***** | ***** | | 0 QTRLY | RCC | |
| 00440 1 0 0 EFFLUENT GROSS VALUE CHROMIUM, TOTAL (AS CR) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | | 0 QTRLY | RCC | |
| 01034 1 0 0 EFFLUENT GROSS VALUE COPPER, TOTAL (AS CU) | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | | 0 QTRLY | GRA | |
| 01042 1 0 0 EFFLUENT GROSS VALUE IRON, TOTAL (AS FE) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | | 0 QTRLY | GRA | |
| 01045 1 0 0 EFFLUENT GROSS VALUE MANGANESE, TOTAL (AS MN) | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | | 0 QTRLY | GRA | |
| 01055 1 0 0 EFFLUENT GROSS VALUE NICKEL, TOTAL (AS NI) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | | 0 QTRLY | GRA | |
| 01067 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | | 0 QTRLY | GRA | |
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | | | | | | | | | |
| 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) | | | | | | | | | | | |
| NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL | | | | | | | | | | | |
| SAMPLES TO BE COLLECTED FROM DEDICATED DRAIN OR FROM HOLDING TANKS PRIOR TO DISCH TO SEWER COLLECTION SW | | | | | | | | | | | |
| TYPED OR PRINTED | | | | | | | | | | | |
| DATE | | | | | | | | | | | |
| TELEPHONE | | | | | | | | | | | |
| Mr. George Malosh Group Maanger | | | | | | | | | | | |
| SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | | | | | | | | | | |
| 631-344-3424 | | | | | | | | | | | |
| THIS IS A 4-PART FORM PAGE 1 OF 4 EPA Form 3320-F (Rev. 3/95) Previous editions may be used. | | | | | | | | | | | |

01279/000310-2025 THIS IS A 4-PART FORM PAGE 1 OF

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

NAME U S D O E
ADDRESS BROOKHAVEN NATIONAL LABORATORY
53 BELL AVE, BLDG 464NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved.
OMB No. 2040-0004FACILITY BROOKHAVEN NATIONAL LABORATORY
LOCATION UPTON NY 11973
ATTN: GEORGE MALOSH, GROUP MGR

NY 11973

NY 11973

MONITORING PERIOD

YEAR MO DAY
00 03 01
FROM TO
YEAR MO DAY
00 03 31

PERMIT NUMBER

NY0005835

DISCHARGE NUMBER

MAJOR
(SUBR 01)

F - FINAL

RINSE FROM CENTRAL DEGREASER 4

*** NO DISCHARGE 1 1 ***

NOTE: Read Instructions before completing this form

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

Mr. George Malosh

Group Manager

GROUP MANAGER

REPRINT

DATE

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 DEDICATED DRAIN OR FROM HOLDING TANKS PRIOR TO DISCH TO SEWER CONSTRUCTION

SEE PERMIT FOR ADDITIONAL NOTES - COMMENTS - REPRINTS

| PARAMETER | QUANTITY OR LOADING | | | | QUANTITY OR CONCENTRATION | | | | NO. EX | NO. FREQUENCY OF ANALYSIS |
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| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | | | |
| ZINC TOTAL (AS ZN) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | 26.1 | (28) | 0 QTRLY GR |
| 01092 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | <1 | (28) | 0 QTRLY GR |
| 1, 2-DICHLOROETHANE | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | 1 | (28) | 0 QTRLY GR |
| 32103 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| CHLOROFORM | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| 32106 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| 1,1,1-TRICHLORO-ETHANE | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| 34506 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| BROMODICHLOROMETHANE | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| EFFLUENT | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| 38693 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| BIS (2-ETHYLHEXYL) PHTHALATE (See Note 1) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
| 39100 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |
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| 39110 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | REPORT DAILY MX UG/L | (28) | 0 QTRLY GR |

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.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

AHEA NUMBER

CODE

631-344-3424

DATE

NEW YORK HARBOR NATIONAL LABORATORY
53 BELL AVE., BLDG 464
FACILITY BROOKHAVEN NATIONAL LABORATORY
LOCATION UPTON NY 11973
ATTN: GEORGE MALOSH, GROUP MGR

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*** NO DISCHARGE 1-1 ***
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| | PERMIT REQUIREMENT | | | | | | | | | | |

NAME U S D O E
ADDRESS BROOKHAVEN NATIONAL LABORATORY
53 REELL AVE, BLDG 464
UPTON

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

Form Approved.
OMB No. 2040-0004

FACILITY BROOKHAVEN NATIONAL LABORATORY
LOCATION NY 11973
ATTN: GEORGE MALOSH, GROUP MGR

NY0005835
PERMIT NUMBER

MAJOR
(SUBR 01)
F - FINAL

PROCESS SANIT & STORMWTR RNOFF

*** NO DISCHARGE ! ! ! ***
NOTE: Read Instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|---------------------|---------|-------|---------------------------|---------|---------|--------|-----------------------|-------------|
| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | | | |
| TEMPERATURE, WATER DEG. FAHRENHEIT | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | (15) | Daily | GRAB |
| DO011 1 0 0 | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | (19) | DAILY | GRAB |
| EFFLUENT GROSS VALUE BOD, 5-DAY | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | 3/mo comp24 |
| DO010 1 0 0 | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | 3/mo comp24 |
| EFFLUENT GROSS VALUE PH | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | (12) | 0 | DAILY GRAB |
| DO0400 1 0 0 | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | 3/Mo comp24 |
| SOLIDS, TOTAL SUSPENDED | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |
| DO0530 1 0 0 | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |
| EFFLUENT GROSS VALUE SOLIDS, SETTLEABLE | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |
| DO0545 1 0 0 | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |
| EFFLUENT GROSS VALUE NITROGEN, TOTAL (AS N) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |
| DO0600 1 0 0 | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |
| EFFLUENT GROSS VALUE NITROGEN, AMMONIA TOTAL (AS N) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |
| DO0610 1 0 0 | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |
| EFFLUENT GROSS VALUE NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | ***** | ***** | ***** | ***** | ***** | ***** | (19) | 0 | DAILY GRAB |

| | |
|---|---|
| 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. |
| TYPED OR PRINTED | Mr. George Malosh Group Manager |
| TELEPHONE | DATE |
| AREA NUMBER | 631-344-3424 |
| CODE | |

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

EF-PEF-MIT-FEF3/99 APPENDIX-NOTES-COMMENTS-AND-REQUIREMENTS
EPA Form 3320-1 (REV 3/99) Previous editions may be used.

U S O O E
ADDRESS: BROOKHAVEN NATIONAL LABORATORY
53 BELL AVE, BLDG 464
UPTON
FACILITY: BROOKHAVEN NATIONAL LABORATORY
LOCATION: UPTON NY 11973
ATTN: GEORGE MALOSH, GROUP MGR

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

| | |
|-----------|------------------|
| NYQ005835 | PERMIT NUMBER |
| 002 | DISCHARGE NUMBER |

| | | | | | |
|-------------------|-------|--------|---------|-------|--------|
| MONITORING PERIOD | | | | | |
| YEAR 00 | MO 03 | DAY 01 | YEAR 03 | MO 03 | DAY 31 |
| TO 00 | | | | | |

NOTE: Read Instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | | | | | QUANTITY OR CONCENTRATION | | | | | |
|-----------------------------------|---------------------|--------------------|-------|---------|---------|---------|---------------------------|----------|--------|---------|-------|------------|
| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | MAXIMUM | UNITS | MAXIMUM | UNITS | NO. OF EX |
| CHLOROFORM | ***** | ***** | ***** | ***** | ***** | ***** | ***** | <1 | (28) | 0 | QTRLY | GRAB |
| 32106 1 0 0 | SAMPLE MEASUREMENT | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 7 | QTRLY | GRAB |
| EFFLUENT GROSS VALUE | ***** | ***** | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 5 | QTRLY | GRAB |
| 1,1,1-TRICHLOROETHANE | ***** | ***** | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 0 | QTRLY | GRAB |
| 34506 1 0 0 | SAMPLE MEASUREMENT | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 1 | QTRLY | GRAB |
| EFFLUENT GROSS VALUE | ***** | ***** | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 50 | QTRLY | GRAB |
| BROMODICHLOROMETHANE | ***** | ***** | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | (19) | 0 | QTRLY GRAB |
| 38693 1 0 0 | SAMPLE MEASUREMENT | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 0 | QTRLY | GRAB |
| EFFLUENT GROSS VALUE | ***** | ***** | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 0.5 | QTRLY | GRAB |
| 1-HYDROXY-ETHYLIDENE POLYTRIAZOLO | ***** | ***** | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 0.005 | QTRLY | GRAB |
| 85812 1 0 0 | SAMPLE MEASUREMENT | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 0.2 | QTRLY | GRAB |
| EFFLUENT GROSS VALUE | ***** | ***** | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 0.005 | QTRLY | GRAB |
| 85813 1 0 0 | SAMPLE MEASUREMENT | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 0 | QTRLY | GRAB |
| EFFLUENT GROSS VALUE | ***** | ***** | ***** | ***** | ***** | ***** | ***** | DAILY MX | UG/L | 0 | QTRLY | GRAB |

| | |
|--|---|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | 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 this 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. (Reference all attachments here) |
| Mr. George Malosh Group Manager | TELEPHONE DATE |
| TYPED OR PRINTED | 631-344-3424 |
| | AREA NUMBER |

NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL
SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS
EPA Form 3320-1 (Rev 3/99) Previous editions may be used.
ATTACHMENT 1
EXISTS WITH DISCHARGE FROM FORM 3325 PAGE 1

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

YEAR MO DAY

NAME U S D O E
 ADDRESS BROOKHAVEN NATIONAL LABORATORY
 53 BELL AVE, BLDG 464
 UPTON
 FACILITY BROOKHAVEN NATIONAL LABORATORY
 LOCATION NY 11973
 ATTN: GEORGE MALOSH, GROUP MGR

| | | | |
|-----------------------------------|--|------------------|-----------|
| DISCHARGE MONITORING REPORT (LMR) | | | |
| NY0005835 | | 004-H | (SUBR 01) |
| PERMIT NUMBER | | DISCHARGE NUMBER | F - FINAL |
| MRR NON-CONTACT COOLG WTR (HP) | | | |
| *** NO DISCHARGE <u>1</u> *** | | | |

NOTE: Read Instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--|---------------------|--------------------|--------------------|---------------------------|---------|-------------|--------|-----------------------|----------------|
| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | | | |
| PH | ***** | ***** | ***** | 7.5 | ***** | 7.5 | (12) | 0 | 1/MO GRAB |
| DO400 | 1 0 0 | PERMIT REQUIREMENT | SAMPLE MEASUREMENT | REPORT MINIMUM | ***** | 8.5 MAXIMUM | 0 | 1/MONTH | ONCE / GRAB |
| EFFLUENT GROSS VALUE FLOW IN CONDUIT OR THRU TREATMENT PLANT | 0.001 | (0.001) | SAMPLE MEASUREMENT | ***** | ***** | ***** | 0 | 1/MO | RCORDED |
| 50050 | 1 0 0 | PERMIT REQUIREMENT | REPORT DAILY MGD | ***** | ***** | ***** | 0 | 1/MONTH | ONCE / RCORDED |
| EFFLUENT GROSS VALUE (See Note 3) | | | 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 | | | | | | |

| | | | |
|---|---|-------------|-------------|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | 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, or those persons directly responsible for gathering 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. | | |
| Mr. George Malosh Group Manager | | | |
| TYPED OR PRINTED | TELEPHONE | DATE | |
| | | | |
| COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) | | | |
| SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS & REQUIREMENTS | | | |
| SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 631-344-3424 | AREA NUMBER | YEAR MO DAY |

ME U S G E
DRESSBROOKHAVEN NATIONAL LABORATORY
53 ELL AVE, BLDG 464
UPTON
CITY BROOKHAVEN NATIONAL LABORATORY
NY 11973
LOCATION UPTON NY 11973
ITIN: GEORGE MALOSH, GROUP MGR

NY0005835
PERMIT NUMBER

005 4
DISCHARGE NUMBER

Major
(SUBR 01)

F

NSLS COOLING TOWER BLDN ETC (HS)

DISCHARGE NUMBER

YEAR MO DAY
00 03 01
TO 00 03
DAY 31

*** NO DISCHARGE 1 1
NOTE: Read Instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE | |
|--|---------------------|---------|-------|---------------------------|----------------|---------|--------------|-----------------------|-------------|-------|
| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | | | | UNITS |
| SAMPLE MEASUREMENT | ***** | ***** | | 7.6 | ***** | 8.1 | (12) | 0 | 4/MO | GRAB |
| PERMIT REQUIREMENT | ***** | ***** | | | REPORT MINIMUM | 8.5 | | | ONCE/ MONTH | |
| SAMPLE MEASUREMENT | ***** | ***** | | ***** | ***** | ***** | (19) | | 0 1/MO | GRAB |
| PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | ***** | | | ONCE/ MONTH | |
| SAMPLE MEASUREMENT | ***** | ***** | | ***** | DAILY MX | 15 | | | | |
| PERMIT REQUIREMENT | ***** | ***** | | ***** | DAILY MX | 15 | | | | |
| 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 | ***** | ***** | | ***** | ***** | ***** | | | | |
| SAMPLE MEASUREMENT | ***** | ***** | | ***** | ***** | ***** | | | | |
| PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | ***** | | | | |
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | | | | | TELEPHONE | | | DATE |
| Mr. George Malosh Group Manager | | | | | | | 631-344-3424 | | | |
| TYPED OR PRINTED | | | | | | | AREA NUMBER | YEAR | MO | DAY |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS & REQUIREMENTS

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 this 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.

631-344-3424

631-344-3424

AREA NUMBER

YEAR

MO

DAY

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

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

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved.
OMB No. 2040-0004NAME U S D O E
ADDRESS BROOKHAVEN NATIONAL LABORATORY
53 REELL AVE., BLDG 464
UPTONFACILITY BROOKHAVEN NATIONAL LABORATORY
LOCATION UPTON
NY 11973
NY 11973

ATTN: GEORGE MALOSH, GROUP NGR

PERMIT NUMBER
NY00058335MONITORING PERIOD
YEAR MO DAY
FROM 00 03 01
TO 00 03 31*** NO DISCHARGE ! ! ! ***
NOTE: Read Instructions before completing this form.

MAJOR

(SUBR 01)

F - FINAL

NSLS COOLS TOWER BLOWDN ETC(HS)

DISCHARGE NUMBER

005 Q

NO. OF EX ANALYSIS

QTRLY

GRAB

QTRLY

U S D O E
ADDRESS BROOKHAVEN NATIONAL LABORATORY
53 BELL AVE., BLDG 464

UPTON FACILITY
LOCATION UPTON NY 11973
ATTN: GEORGE HALUSH, GROUP MGR

DISBURSEMENT MUNICIPAL WEFTEC (LMW)

NY0005835
PERMIT NUMBER

0074
DISCHARGE NUMBER

OMB No. 2040-0004

MAJOR
(SUB OI)
F - FINAL
WATER TREATMENT PLT BKWSH (HX)

*** NO DISCHARGE **1-X-1** ***
NOTE: Read Instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|---------------------|---------|---------------------|---------------------------|---------|---------|--------|-----------------------|-------------|
| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | | | |
| FLOW RATE | SAMPLE MEASUREMENT | ***** | No Discharge (07) | ***** | ***** | ***** | | | |
| 00056 1 0 0 EFFLUENT GROSS VALUE PH | PERMIT REQUIREMENT | ***** | REPORT DAILY MX GPB | ***** | ***** | ***** | | | |
| 00400 1 0 0 EFFLUENT GROSS VALUE IRON, TOTAL (AS FE) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | (12) | | |
| 01045 1 0 0 EFFLUENT GROSS VALUE IRON, DISSOLVED (AS FE) | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | | | |
| 01046 1 0 0 EFFLUENT GROSS VALUE (See Note 2) | 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.

TELEPHONE

DATE

631-344-3424

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

AREA NUMBER

YEAR

MO

DAY

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 OUR SAMPLING PURPOSES.

SEE PERMIT FOR ADDITIONAL NOTES - COMMENTS & REQUIREMENTS
EPA Form 3320-1 (REV 3/99) Previous editions may be used.

01301/00031 BISUSA4-PART FORM PAGE 1 .

OWNER - U S D O E
ADDRESS BROOKHAVEN NATIONAL LABORATORY
53 BELL AVE, BLDG 464

LOCATION - UPTON
ACILITY - BROOKHAVEN NATIONAL LABORATORY
NY 11973
ATTN: GEORGE MALOSH, GROUP MGR

NYDOO05835
PERMIT NUMBER

06A 2
DISCHARGE NUMBER

(SUBR 01)
F - FINAL

LINAC NCCW, FLOOR DNS, SW(HT1)

* * * NO DISCHARGE 1 - 1 * * *

NOTE: Read Instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | | | | | QUANTITY OR CONCENTRATION | | | | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE | |
|---|---------------------|---------|-------|---------|---------|---------|---------------------------|---------------|--------|-------|--------|-------|--------------|-----------------------|-------------|-----|
| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | MAXIMUM | MO DAY | YEAR | MO DAY | UNITS | | | | |
| -HYDROXY-ETHYLIDENE SAMPLE MEASUREMENT | ***** | ***** | | ***** | ***** | ***** | < 0.05 | (19) | 0 | QTRLY | GRAB | | | | | |
| 35812 1 0 0 EFFLUENT GROSS VALUE REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | 0.5 | DAILY MX AG/L | | | | | | | | |
| 35813 1 0 0 EFFLUENT GROSS VALUE REQUIREMENT | ***** | ***** | ***** | ***** | ***** | ***** | 0.06 | (19) | 0 | QTRLY | GRAB | | | | | |
| SAMPLE MEASUREMENT | | | | | | | | | | | | | | | | |
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| SAMPLE MEASUREMENT | | | | | | | | | | | | | | | | |
| PERMIT REQUIREMENT | | | | | | | | | | | | | | | | |
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | | | | | | | | | | | TELEPHONE | DATE | | |
| Mr. George Malosh Group Manager | | | | | | | | | | | | | 631-344-3424 | | | |
| TYPED OR PRINTED | | | | | | | | | | | | | AREA NUMBER | YEAR | MO | DAY |
| 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, COMMENT AND REQUIREMENTS | | | | | | | | | | | | | | | | |

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

Form Approved.
OMB No. 2040-0004

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

NAME U S D O E
ADDRESS BROOKHAVEN NATIONAL LABORATORY
53 JELL AVE., BLDG 464
UPTON
LOCATION UPTON
NY 11973
NY 11973

ATTN: GEORGE MALOSH, GROUP AGGR

FACILITY BROOKHAVEN NATIONAL LABORATORY
DISCHARGE NUMBER 0163 M
PERMIT NUMBER MY0005835
MONITORING PERIOD
YEAR MO DAY YEAR MO DAY
FROM 00 03 01 TO 00 03 31
COLDING TOWER FROM 919 ETC (HT 2)*** NO DISCHARGE 1 1 1 ***
NOTE: Read Instructions before completing this form.

ATTN: GEORGE MALOSH, GROUP AGGR

QUANTITY OR LOADING

| PARAMETER | QUANTITY OR LOADING | | | | QUANTITY OR CONCENTRATION | | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|--|----------------|----------------|----------------|-----------------------------------|----------------|---------------|--------|--------|-----------------------|-------------|
| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | | | | |
| 00400 1 0 0 EFFLUENT GROSS VALUE OIL & GREASE | SAMPLE MEASUREMENT PERMIT REQUIREMENT | ***** ***** | ***** ***** | ***** ***** | REPORT MINIMUM ***** | 9.0 MAXIMUM | 8.4 5.0 | (12) | 0 | 4/MO | CRAB |
| 00556 1 0 0 EFFLUENT GROSS VALUE FLOW IN CONDUIT OR THRU TREATMENT PLANT | SAMPLE MEASUREMENT PERMIT REQUIREMENT | ***** ***** | ***** ***** | ***** ***** | ***** ***** | 5 | 5 | (19) | 0 | 4/MO | CRAB |
| 00500 1 0 0 EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT PERMIT REQUIREMENT | 0.18 ***** | 0.03 ***** | 0.18 ***** | DAILY MAX REPORT DAILY MAX MGD | 15 ***** | 4G/L ***** | (12) | 0 | 4/MO | CRAB |
| (See Note 3) | SAMPLE MEASUREMENT PERMIT REQUIREMENT | | | | | | | | | | |
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(See Note 3)

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| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Mr. George Malosh Group Manager | TYPED OR PRINTED | TELEPHONE | DATE |
| | | 631-344-3424 | |
| SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA NUMBER CODE | YEAR | MO DA' |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
SEE PERMIT FOR ADDITIONAL NOTES, DOCUMENTS & REQUIREMENTS

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 this 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.

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

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved.
OMB No. 2040-0004

AMERICAN
ADDRESS BROOKHAVEN NATIONAL LABORATORY
53 BELL AVE, BLDG 464
UPTON
ACILITY BROOKHAVEN NATIONAL LABORATORY
LOCATION UPTON NY 11973
ATTN: GEORGE MALOSH, GROUP MGR

NY0005035
DISCHARGE NUMBER
PERMIT NUMBER

NY 11973
FROM **03** TO **03**
YEAR **01** DAY **01**
MONITORING PERIOD

TO **03** DAY **31**
YEAR **01** MO **03**
DAY **31**

*** NO DISCHARGE ***

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | | | QUANTITY OR CONCENTRATION | | | | NO. OF EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--|-----------------------|---------|-------|---------|---------------------------|---------|--------|----|-----------|-----------------------|-------------|
| | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | | | | |
| -HYDROXY-ETHYLIDENE 15812 1 0 0 EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | <0.05 | (19) | 0 | QTRLY | GRAB | |
| -OLYTRIAZOLE 15813 1 0 0 EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | 0.5 | DAILY | MX | QTRLY | GRAB | |
| | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | <0.005 | (19) | 0 | QTRLY | GRAB | |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | 0.02 | DAILY | MX | QTRLY | GRAB | |
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