Environmental Services Division

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NATIONAL LABORATORY

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

www.bnl.gov

April 20, 2001

Mr. Michael Holland Brookhaven Area Manager U. S. Department of Energy Brookhaven Group Upton, NY 11973

Dear Mr. Holland:

SUBJECT: NPDES - Discharge Monitoring Report (DMR) for March 2001 REFERENCE: Letter from Robert Desmarais to Cunniff dated March 27, 2001

Included as Attachment I, please find the DMR for the month of March 2001. 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 the Plant Engineering Division, Sewage Treatment Plant Operators or the Environmental Services Division, Field Sampling Team.

With the exception of two excursions for zinc measured at Outfall 001, review of the analytical data shows that all parameters met their respective SPDES effluent limitations this reporting period. A Noncompliance Report regarding the continued release of zinc from the BNL sewage treatment plant and a description of the investigations conducted to date are included as Attachment V.

On March 13, 2001, Laboratory staff confirmed the release of heat transfer fluid from the Building 902 helium compressors to the cooling water system. This system rejects heat via the Building 902 cooling tower, which discharges to the BNL sewage treatment plant. A summary of this incident is included as Attachment VI.

Please note that for the majority of the Outfalls, flow measurements are conducted 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 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 the BNL analytical services laboratory. 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 Services Division and Plant Engineering Divisions.

Cunniff to Holland

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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 2001.

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, 2001. 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. Ver (Fan) L. Cunniff. CEP

Division Manager

LEC/MA:pvg

Attachment I: Discharge Monitoring Report for March 2001.

- Attachment II: Analytical Results from H2M Labs for samples collected on 3/5/01, 3/7/01 and 3/9/01 from Outfall 001.
- Attachment III: Analytical Results from H2M Labs for samples collected from Outfalls 001A, 001B, 001D, 002, 003, 004, 005, 006A, 006B, 007, 008, and 010.
- Attachment IV: Analytical Results from CHEMTEX, Inc. for samples collected from Outfalls 001F, 002, 003, 005, 006A, and 006B.
- Attachment V: Non-Compliance Report for March SPDES Permit Excursion at Outfall 001 and previous excursion investigation report.
- Attachment VI: Summary of March 13, 2001 loss of heat transfer fluid from the Building 902 helium compressor cooling water system.

cc:	M. Allocco	w/attachments	W. Chaloupka	w/attachments
	L. Cunniff	w/o attachments	G. Granzen	w/o attachments
	J. Higbie	w/attachments	C. Johnson	w/o attachments
	S. Krinsky	w/o attachments	R. Lee	w/attachments
	E. Lessard	w/o attachments	D. Lowenstein	w/o attachments
	E. Murphy	w/attachments	A. Queirolo	w/o attachments
	T. Sheridan	w/o attachments	R. Travis	w/attachments
•	D. Van Duyne	w/attachments		

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ATTACHMENT I

BROOKHAVEN NATIONAL LABORATORY

SPDES PERMIT NO. NY0005835

DISCHARGE MONITORING REPORT FOR MARCH 2001

FOR OUTFALLS NO. 001 - 010

Brookhaven National Laboratory SPDES Permit No. NY0005835 Discharge Monitoring Report for March 2001 Discharge Monitoring Report Notes:

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- 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 and 002B 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 results. The maximum concentration and total average flow have been reported in the DMR.

Location	Flow	pH	Total Nitrogen	Cyanide	Silver	Phenolics
1-86B	92 GPD	5.7 SU	65.2 mg/L	< 10 µg/L	1030 μg/L	< 5.0 μg/L
1-93A ^(a)	No	No	No	No	No	No
	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge
1-93B	13 GPD	6.7 SU	23.1 mg/L	< 10 µg/L	3080 μg/L	< 5.0 μg/L
Total Flow	105 GPD *					

Notes:

- a. The photographic processor in room 1-93A was not used in the first quarter of 2001 and was taken off-line on March 30, 2001.
- 7. The laboratory duplicate analysis wasn't within the control limits.
- 8. The concentration is an estimated value. In addition, the analyte was found in the associated laboratory blank.
- 9. The total zinc concentration was above the SPDES limit for two samples collected in March. Please see Attachment V for a description of this excursion and a summary investigation report for previous excursions at Outfall 001.
- 10. On March 13, 2001 there was a loss of heat transfer fluid to the Building 902 helium compressor cooling water system. A summary report of this incident is included in Attachment VI.

11. There was no discharge of treatment chemicals to Outfall 003 during the monitoring period due to the removal of the High Flux Beam Reactor (HFBR) cooling towers in association with the permanent shutdown of the facility.

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EE PERMIT FOR ADDITIONAL NOTES, COMMENTS & REQUIREMENTS

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NAME/TITLE PRINCIPAL EXECUTIVE OF Michael Holland	this document and all attact pervision in accordance w properly gather and evalua of the person or persons w	rith a system designed ate the information ho manage the system,					E		TE .		
Area Office Manager	submitt I am aw	ed is , to the best of my known are that there are significant	ant penalties for submitting false information,				631 344-34 PRINCIPAL EXECUTIVE AUTHORIZED AGENT AREA CODE			EAR M	D DAY
OMMENTS AND EXPLANATION OF AN			d Imprisonment for knowin	g violations.			C	DE LINOMBER	· 1 '		

OMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

O ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL EF PERMIT FOR ADDITIONAL NOTES, COMMENT AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Fac NAME USD DE	ility Name/Location if l	Different)	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)					Form Approved. OMB No. 2040-0004					
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Michael Holland Area Office Manager	submitt or thos	re that qualified personnel ted. Based on my inquiry e persons directly respons ted is , to the best of my ki	of the person or persons ible for gathering the info nowledge and bellaf, true.	who manage the rmation, the info accurate, and o	e system, mation complete.	SIGNATURE OF PRINCIPAL EXECUTIVE			424 i				
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SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS & REQUIREMENTS

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Michael Holland	to assu	re that qualified personnel ted. Based on my inquiry (properly gather and evalu	uate the information	on .	•			i .	
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SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

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