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C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

8.18.1.a Water Treatment Services Agreement With Drew Industrial  
 Division of Ashland Chemical

C-A OPM Procedures in which this Attachment is used.
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8.18.1		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved: \_\_\_\_\_ *Signature on File* \_\_\_\_\_  
 Collider-Accelerator Department  
 ES&F Division Head  
 \_\_\_\_\_ Date

L. Vogt



Drew Industrial Division  
New York District Sales Office

Ashland Specialty Chemical Co.  
Division of  
Ashland Inc.

Address Reply:  
1000 Harrison Avenue  
Kearny, NJ  
Zip Code 07032  
Tel: 201-246-2510  
Fax: 201-246-1784

October 12, 2000

Mr. William Chaloupka, P.E.  
Manager, Plant Engineering  
Brookhaven National Laboratories  
Plant Engineering – Building 452  
Upton, NY 11973

Subject: Water Treatment Contract Renewal

Dear Bill:

Thank you for your continued confidence in Ashland Specialty Chemical Co./ Drew Industrial Division to continue to provide the HVAC water systems at BNL with the highest standard in water treatment services and technology over the past years. As recently discussed, we are offering a different approach to purchasing water treatment products from Ashland as detailed below.

Attached please find a copy of our Service Agreement and product list with applicable pricing for the upcoming 2001 year. The updated Service Agreement includes our hands off delivery program or UltraServe Program for chemicals delivered to your facility as well as valuable services that will be provided.

In the new price list, UltraServe Charges are built into the cost of the product thus reducing administrative work needed to balance the former system, which involved two invoices, one for the product and one for the service charge. This way, one invoice is received from one supplier for product shipped to a specific location making references much easier. Additionally, a 2% discount has been applied over last years pricing that could provide savings of up to \$5000.00 based on your last year's product usage. As always, there will be no charge for freight.

The agreement includes our Patented Performax Millennium Cooling Water Treatment Technology that will be utilized in the open cooling systems at BNL. This treatment will provide superior performance while minimizing the effect of system water discharge to the environment.



Ashland Chemical's  
Commitment to  
Quality and Productivity

Headquarters:  
One Drew Plaza  
Boonton, NJ 07005  
(201) 263-7600

Telex: 136444  
Fax: (201) 263-3323



A Responsible Care®  
Company

If there are any questions regarding the information provided in this letter, please feel free to contact me at any time. We look forward to continue to provide a results oriented water treatment program at BNL for years to come.

Sincerely,  
ASHLAND SPECIALTY CHEMICAL CO.  
DREW INDUSTRIAL DIVISION  
Division of Ashland, Inc.

*Jim Banham*

District Representative

cc: Mr. Al Barba, ASCC / DID  
JB  
BNL ContractRenu 1000.doc

Attach: Service Agreement; BNL ContractRenu 1000.xls

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Ashland Specialty Chemical Company  
Drew Industrial Division  
<http://www.drewindustrial.com>

## WATER TREATMENT SERVICE AGREEMENT

Ashland Specialty Chemicals/ Drew Industrial Division agrees to provide a comprehensive water treatment program as described below to Brookhaven National Laboratory, NY.

Maintenance chemicals, testing reagents and apparatus required to properly treat the HVAC water systems during the operating periods to provide the following basic core program:

- Corrosion Inhibitors: adequate corrosion inhibitor residuals will be maintained in all applicable/ operating systems.
- Oxidizing and Non-Oxidizing Microbiocides will be fed at effective dosage rates.
- Weekly service visits to include on-site testing of critical operating condenser water systems, every other week visits for smaller operating condenser water systems and critical closed systems. Adjustment of feed rates will be made based on testing performed, review of water treatment logs and review of equipment operation. Inventory control will be performed and a monthly, computerized report of all findings will be submitted to Plant Engineer/Manager.
- Drew Industrial Divisions UltraServe Inventory Management Program will be utilized as feasible to minimize BNL Employee exposure to treatment products. Exception will be: Bromine tablets, antifoam products and applications to closed loops.
- Corrosion Coupon Testing on all open condenser water systems will be performed on a 90 day basis for mild steel and copper metallurgy using ASTM standards; Coupon testing will be performed at various locations throughout the site for the District Chilled Water System. Metallurgical analysis of spool piece samples; analysis of deposit samples; and deterioration tests also to be provided as needed.
- Calibrations and checks on all chemical feed pumps and control equipment.
- All test kits and reagents required for regular testing of system pH, conductivity, inhibitor (molybdenum) levels, oxidizing microbiocide levels, and bacterial activity (aerobic and anaerobic) will be provided at quoted prices. Testing of related minerals (phosphate, iron, copper, etc.) will be performed as required.
- Maintain detailed water treatment operators manuals, technical bulletins, product data sheets, material safety data sheets, and water treatment control logs as needed and applicable.

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Ashland Specialty Chemical Company  
Drew Industrial Division  
<http://www.drewindustrial.com>

- Certified laboratory water analysis on all open loop systems to be performed semi-annually and all closed loop systems to be performed annually. Analysis of these systems to include a complete microbiological profile of system waters to determine biological efficacy. Relative Population Density (RPD) Tests and may also be performed (as required) at our Boonton, NJ laboratory.
- Regular annual inspection of air-conditioning equipment during shutdowns.
- Quarterly Progress Reports summarizing projects and their results; changes in the operation of the existing systems; and new technology and techniques affecting the water treatment program.
- Annual Review Meetings including graphical review of results on water treatment program; status of projects and their results; and future recommendations to improve the performance of the water treatment program.
- Annual safety training of building personnel including proper handling techniques of all treatment chemicals and interpretation of material safety data sheet information.
- Same day service for upset or emergency conditions and 24 Hour Hotline telephone numbers to be provided for emergencies.
- Training seminars for operating personnel including classroom and audio-visual based training (Note: Our classes are DEC approved for credits toward recertification of pesticide applicator in 7G by the New York State Department of Environmental Conservation).
- Pricing for all these services are included in the per pound cost of our treatment products that is attached.

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Drew Industrial Division  
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