October 16, 2008

United States Department of Energy
Brookhaven Site Office
P.O. Box 5000
Upton, NY 11973

RE: Permit No.: 1-4722-00032/00113
Facility No.: W-4786

Dear Permittee:

In conformance with the requirements of the State Uniform Procedures Act (Article 70, ECL) and its implementing regulations (6 NYCRR, Part 621) we are enclosing your permit. Please read all conditions carefully.

If you are unable to comply with any conditions, please contact us at the above address.

Sincerely,

Mark Carrara
Permit Administrator

MCC/Is
Enclosure
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PERMIT
Under the Environmental Conservation Law

DEC PERMIT NUMBER
1-4722-00032/00113

FACILITY/PROGRAM NUMBER(S)
W-4786

EFFECTIVE DATE
October 16, 2008

EXPIRATION DATE(S)
September 13, 2018

TYPE OF PERMIT
☐ New  ☐ Modification  ☐ Permit to Construct  ☐ Permit to Operate

☐ Article 15, Title 5: Protection of Waters
☐ Article 15, Title 15: Water Supply
☐ Article 15, Title 15: Water Transport
☐ Article 15, Title 15: Long Island Wells
☐ Article 15, Title 27: Wild, Scenic and Recreational Rivers
☐ 6NYCRR 608: Water Quality Certification

☐ Article 17, Titles 7, 8: SPDES
☐ Article 19: Air Pollution Control
☐ Article 23, Title 27: Mined Land Reclamation
☐ Article 24: Freshwater Wetlands
☐ Article 25: Tidal Wetlands
☐ Article 27, Title 7; 6NYCRR 360: Solid Waste Management

☐ Article 27, Title 9; 6NYCRR 373: Hazardous Waste Management
☐ Article 34: Coastal Erosion Management
☐ Article 36: Floodplain Management
☐ Articles 1, 3, 17, 19, 27, 37, 6NYCRR 380: Radiation Control

PERMIT ISSUED TO
United States Department of Energy

ADDRESS OF PERMITTEE
Brookhaven Site Office, P.O. Box 5000, Upton, NY 11973

CONTACT PERSON FOR PERMITTED WORK
Michael D. Holland, Site Manager

TELEPHONE NUMBER
(631) 344-4089

ADDRESS OF PROJECT/FACILITY
Brookhaven National Laboratory, 53 Bell Avenue

LOCATION OF PROJECT/FACILITY
Upton

COUNTY
Suffolk

TOWN/CITY/VILLAGE
Brookhaven

WATERCOURSE

NYTM COORDINATES

DESCRIPTION OF AUTHORIZED ACTIVITY:
Withdraw groundwater from eight water supply wells as stipulated on the attached NYSDEC approved list of wells
(Special Condition No. 3).

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified (see page 2 & 3) and any Special Conditions included as part of this permit.

PERMIT ADMINISTRATOR:
Mark Carrara

ADDRESS
Region 1 Headquarters,
SUNY @ Stony Brook, 50 Circle Road, Stony Brook, NY 11790-3409

AUTHORIZED SIGNATURE

DATE
October 15, 2008
NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee has accepted expressly, by the execution of the application, the full legal responsibility for all damages and costs, direct or indirect, of whatever nature and by whomever suffered, for liability it incurs resulting from activity conducted pursuant to this permit or in noncompliance with this permit and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from such activity.

Item B: Permittee to Require its Contractors to Comply with Permit

The permittee shall require its independent contractors, employees, agents and assigns to read, understand and comply with this permit, including all special conditions, and such persons shall be subject to the same sanctions for violations of this permit as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required for this project.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

GENERAL CONDITIONS

General Condition 1: Facility Inspection by the Department

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when written or verbal notification is provided by the Department at least 24 hours prior to such inspection.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

General Condition 2: Relationship of this Permit to Other Department Orders and Determinations

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

General Condition 3: Applications for Permit Renewals or Modifications

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

The permittee must submit a renewal application at least:

a) 180 days before expiration of permits for State Pollutant Discharge Elimination System (SPDES), Hazardous Waste Management Facilities (HWMF), major Air Pollution Control (APC) and Solid Waste Management Facilities (SWMF); and

b) 30 days before expiration of all other permit types.

Submission of applications for permit renewal or modification are to be submitted to:
NYSDEC Regional Permit Administrator, Region 1
SUNY @ Stony Brook, 50 Circle Road, Stony Brook, NY 11790-3409.

General Condition 4: Permit Modifications, Suspensions and Revocations by the Department

The Department reserves the right to modify, suspend or revoke this permit when:

a) the scope of the permit's activity is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;

b) the permit was obtained by misrepresentation or failure to disclose relevant facts;

c) new material information is discovered; or

d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.
SPECIAL CONDITIONS FOR ARTICLE 15, TITLE 15 (Long Island Wells)

1. The United States Department of Energy will assume responsibility for all Long Island well permits and permit modifications, including all general and special conditions contained therein, previously issued to Associated Universities, Inc.

2. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent, or approval which may be required. Water used for potable purposes must meet all Federal and State Health Department standards and requirements.

3. The wells shall be used for the purposes stated below and each well's pumpage rate shall not exceed the pumpage rate listed below:

<table>
<thead>
<tr>
<th>DEC Well No.</th>
<th>Pumpage Rate</th>
<th>Purpose</th>
<th>BNL Well No.</th>
<th>Long Island Well Permit No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-15950</td>
<td>1200 gpm</td>
<td>Cooling</td>
<td>102</td>
<td>W-1656</td>
</tr>
<tr>
<td>S-17836</td>
<td>1200 gpm</td>
<td>Potable</td>
<td>4</td>
<td>W-1656</td>
</tr>
<tr>
<td>S-22150</td>
<td>1200 gpm</td>
<td>Cooling/Potable</td>
<td>7</td>
<td>W-2210</td>
</tr>
<tr>
<td>S-22151</td>
<td>1200 gpm</td>
<td>Cooling/Potable</td>
<td>6</td>
<td>W-2210</td>
</tr>
<tr>
<td>S-63771</td>
<td>10 gpm</td>
<td>Process/Aquarium</td>
<td>9</td>
<td>W-3117</td>
</tr>
<tr>
<td>S-66944</td>
<td>1200 gpm</td>
<td>Potable</td>
<td>10</td>
<td>W-3156</td>
</tr>
<tr>
<td>S-72038</td>
<td>1200 gpm</td>
<td>Potable</td>
<td>11</td>
<td>W-3156</td>
</tr>
<tr>
<td>S-85965</td>
<td>1200 gpm</td>
<td>Potable</td>
<td>12</td>
<td>W-3389</td>
</tr>
</tbody>
</table>

4. The permittee shall install, maintain and operate meters or other devices to measure and record the amount of water pumped from each well. The meters must be maintained in satisfactory working order. The meters and pumpage records shall be available at all reasonable hours for inspection by representatives of this Department.

5. The water from wells to be used for non-contact cooling water with no mixture of industrial or process wastewater and/or contaminants must be returned to the same aquifer through the use of diffusion wells.

6. This permit shall not be held to grant exemption from general restrictions of the use of water for these particular purposes which may at any time be imposed by other authorities.

7. No cross connections to any other source of water supply may be installed or maintained.