

CERTIFIED MAIL
(Return Receipt Requested)
Certified Mail No. 7005 2570 0000 6630 1990

July 25, 2012

Mr. Robert Fox
Lawrence Berkeley National Laboratory
1 Cyclotron Road, 75R0123
Berkeley, CA 94708

Dear Mr. Fox:

Re: Wastewater Discharge Permit No. 5023891 1

Enclosed is the Wastewater Discharge Permit Renewal for Lawrence Berkeley National Laboratory (LBNL). The permit expiration date is April 7, 2017. EBMUD has made the following adjustment in accordance with federal pretreatment streamlining regulations:

- Reduced inspection and sampling by EBMUD from two events per year to one event every other year. The District may revise the permit to increase monitoring as necessary.

Please read the EBMUD Wastewater Discharge Permit Standard Terms and Conditions, most recent edition. As a permit holder, you are legally responsible for complying with all permit conditions and requirements.

LBNL shall report to the Environmental Services Division any changes, either permanent or temporary, to the premises or operation that significantly affect the volume or quality of the wastewater discharged or that deviate from the Terms and Conditions under which this Permit is granted.

If you have any questions regarding this Permit, please contact Audrey Comeaux of the Environmental Services Division at (510) 287-1199.

Sincerely,



BENNETT K. HORENSTEIN
Manager of Environmental Services

BKH:ALC:alc
Enclosures



July 14, 2014

Mr. Robert Fox
Lawrence Berkeley National Laboratory
1 Cyclotron Road, 75R0123
Berkeley, CA 94720

Dear Mr. Robert Fox:

RE: Wastewater Discharge Permit Rate Revisions - Permit No. 50238911

The East Bay Municipal Utility District Board of Directors has approved changes to the wastewater system rates and charges, effective July 1, 2014. Wastewater treatment charges **and** monitoring fees have increased. The table below compares the treatment unit rates effective for the past year, fiscal year 2014 (FY14), with the new unit rates effective July 1, 2014 for the new fiscal year 2015 (FY15).

	Rates Effective		
	FY15	FY14	% Change
Flow (\$/Ccf)	0.787	0.735	+ 7.1%
CODF (\$/lb)	0.294	0.268	+ 9.7%
TSS (\$/lb)	0.431	0.396	+ 8.8%

The billing conditions for your Wastewater Discharge Permit have been revised to reflect the revised rates and charges. New permit pages incorporating the above revisions are enclosed. Please replace the relevant pages in your Permit with the enclosed pages. As a Permit holder, you are legally responsible for complying with all Permit conditions and requirements.

If you have any questions regarding the Permit revisions, please contact your Wastewater Control Representative, Audrey Comeaux at (510) 287-1199.

Sincerely,

JACQUELINE T. KEPKE
Manager Environmental Services Division

JTK:ALC:jso

Enclosures



WASTEWATER DISCHARGE PERMIT

Terms and Conditions

Lawrence Berkeley National Laboratory, Building 77
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GENERAL CONDITIONS

- I. Lawrence Berkeley National Laboratory shall comply with all items of the attached *Standard Terms and Conditions (STC)*, most recent edition.
- II. Lawrence Berkeley National Laboratory shall practice pollution prevention techniques to reduce or eliminate pollutants released from Building 77. Remaining wastes should be recycled whenever possible.
- III. Lawrence Berkeley National Laboratory shall review its waste generating process and practices to identify pollution prevention opportunities.

COMPLIANCE REQUIREMENTS

- I. Lawrence Berkeley National Laboratory shall pretreat all process wastewater from Building 77 prior to discharging to the sanitary sewer. Pretreatment shall consist of unit operations depicted in diagram *Building 77 Upgrade Waste Treatment Process Flow Diagram*, at a minimum.
- II. Lawrence Berkeley National Laboratory shall maintain a flow totalizer on the pretreatment system. The totalizer shall record the volume of wastewater discharged to the sanitary sewer. All pertinent information which documents operation and maintenance of the flow meter shall be kept on site and available for review by EBMUD staff.
- III. In lieu of monitoring for total toxic organics at Building 77, Lawrence Berkeley National Laboratory shall continue to implement the following solvent management plans:
 - Toxic Organic Management Plan.
 - Accidental Spill Prevention and Containment Plan /Toxic Organic Management Plan Building 77, Ultra High Vacuum Cleaning Facility.
- IV. Lawrence Berkeley National Laboratory shall maintain a Slug Control Plan to eliminate or minimize the potential for an accidental or slug discharge of pollutants into the sanitary sewer system, in accordance with Section A, Part IV, item f of Standard Terms and Conditions, the most recent edition. EBMUD shall be notified immediately of changes that occur at the facility with potential for a slug discharge.



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REPORTING REQUIREMENTS

I. Lawrence Berkeley National Laboratory shall submit an annual Total Toxic Organics (TTO) Compliance Report certifying:

1. Building 77 is implementing the applicable solvent management plans,
 - Accidental Spill Prevention and Containment Plan/Toxic Organic Management Plan, Building 77, Ultra High Vacuum Cleaning Facility.
2. No dumping of concentrated toxic organics into the wastewaters has occurred.

The TTO Compliance Report is due December 1 of every year this permit is effective. Failure to submit the TTO Compliance Report will subject Lawrence Berkeley National Laboratory to TTO monitoring at Building 77.

WASTEWATER DISCHARGE LIMITATIONS

Lawrence Berkeley National Laboratory shall not discharge wastewater from the pretreatment unit at Building 77 into the sanitary sewer if the strength of the wastewater exceeds the following local limits or Federal limits in 40 Code of Federal Regulations, Part 433.15 (Pretreatment Standards for Existing Sources):

Parameter	EBMUD Local Limits (mg/l)	40 CFR 433.15 PSES	
		Daily Maximum (mg/l)	Monthly Ave. (mg/l)
Cadmium (Total)	1	0.69	0.26
Chromium (Total)	2	2.77	1.71
Copper (Total)	5	3.38	2.07
Cyanide (Total)	5	1.20	0.65
Lead (Total)	2	0.69	0.43
Nickel (Total)	5	3.98	2.38
pH (not less than)	5.5		
Silver (Total)	1	0.43	0.24
Zinc (Total)	5	2.61	1.48
TTO ¹		2.13	

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¹ TTO (Total Toxic Organics) is the summation of all quantifiable values greater than 0.01 mg/l for the following toxic organics detected by EPA 624: 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Chloroethylvinyl Ether, Acrolein, Acrylonitrile, Benzene, Bis(2-Chloroisopropyl)Ether, Bromodichloromethane, Bromoform, Bromomethane, Carbon Disulfide, Carbon Tetrachloride, Chloroacetonitrile, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, Dibromochloromethane, Ethyl Benzene, Hexachlorobutadiene, Hexachloroethane, Methylene Chloride, Naphthalene, Nitrobenzene, Tetrachloroethene, Toluene, Trichloroethene, Vinyl Chloride

SELF-MONITORING REPORTING REQUIREMENTS

- I. Lawrence Berkeley National Laboratory shall monitor and sample the wastewater discharge from Building 77 into the community sewer in accordance with Section C of STC. The sampling shall be performed at the locations and frequency for the parameters and analyzed using methods specified below.
- II. The sampling location is:
 - Sample tap on the pretreatment system discharge line at the Lawrence Berkeley National Laboratory Building 77.
- III. Lawrence Berkeley National Laboratory shall sample the wastewater discharge on one representative operating day as follows:

Parameter	Analysis Method	PSP#2	
		Frequency	Type
pH	EPA 150.1	Once a year	Grab
Cadmium	EPA 200.7	Once a year	Composite ¹
Chromium	EPA 200.7	Once a year	Composite ¹
Copper	EPA 200.7	Once a year	Composite ¹
Lead	EPA 200.7	Once a year	Composite ¹
Nickel	EPA 200.7	Once a year	Composite ¹
Silver	EPA 200.7	Once a year	Composite ¹
Zinc	EPA 200.7	Once a year	Composite ¹

¹Each composite sample shall consist of a series of equal volume grab samples collected at a minimum of one sample per hour during the 24-hour discharge period.

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IV. Self Monitoring Schedule:

Analysis	Sample Date	Report Due
Metals, pH, Flow	During month of September throughout permit term	Each October 31 st throughout permit term

IV. The Self-monitoring Report shall contain the following information at a minimum:

1. Sample location.
2. Laboratory results and the corresponding chain of custody.
3. Sample descriptions that include qualitative and quantitative statements of color, clarity, amount of settleable and floatable solids.
4. Date and time of totalizer readings taken at beginning and end of batch discharge or the composite sampling period, as well as the difference between readings.
5. Certification and signature prepared in accordance with Section B, Part VI of STC, "Signature Requirement".



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Rates Effective July 1, 2015, or

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Revised Rate approved by EBMUD Board of Directors thereafter

MONITORING and TESTING CHARGES

EBMUD Inspections Per Year: 0.5 \$1,180.000 \$590.00 /year

Analyses Per Year:

Parameter	Tests per year	Charge per test	Total Charge per year
pH	0.5	\$25.00	\$12.50
Cyanide-Total	0.5	\$100.00	\$50.00
Metals	0.5	\$115.00	\$57.50
Total Monitoring and Testing Charge =			===== \$710.00 / year \$59.17 / month



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FEES AND WASTEWATER CHARGES

The following fees and charges are due when billed by the District:

Annual Permit Fee: \$2,450.00

Monthly Monitoring Charge: \$59.17

WASTEWATER DISPOSAL SERVICE CHARGE

NOTE: Wastewater treatment charges are collected under Permit No. 06600791, issued to Lawrence Berkeley National Laboratory

The District may change the terms and conditions of a Wastewater Discharge Permit, including changing the average limits on the elements of wastewater strength and rates and charges, from time to time as circumstances may require. Treatment rate updates shall be provided by means of a rate revision letter. The District shall allow a discharger reasonable time to comply with any District required changes in the permit except that a change in average limits of wastewater strength shall immediately affect calculation of the wastewater disposal charge.

Charges listed in this Permit will be assessed on EBMUD bills in accordance with the EBMUD Meter Reading Schedule.

Authorization

Permit Holder shall report to EBMUD, Wastewater Department any changes, permanent or temporary, to the premises or operations that significantly change the quality or volume of the wastewater discharge or deviation from the terms and conditions under which this permit is granted.

Permit Holder is hereby authorized to discharge wastewater to the community sewer, subject to said Applicant's compliance with EBMUD Wastewater Control Ordinance as well as permit terms and conditions.

Effective: April 8, 2012

Expiration: April 7, 2017

Director, Wastewater Department

July 31, 2015

Date