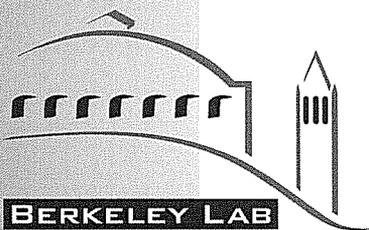


Stormwater Discharges Associated with Industrial Activity

prepared for the State of California
State Water Resources Control Board



ERNEST ORLANDO LAWRENCE
BERKELEY NATIONAL LABORATORY

July 1, 2004



Environment, Health & Safety Division
Environmental Services Group

Mr. Rico Duazo
San Francisco Bay Regional Water Quality Control Board
1515 Clay St., Suite 1400
Oakland, CA 94612

June 11, 2004
ES-04-020

HAND DELIVERED

Subject: Transmittal of Storm Water Annual Report
General Industrial Permit
Facility WDID No. 2 01S002421

Dear Mr. Duazo:

In accordance with the terms of the California general permit referenced above, enclosed you will find Berkeley Lab's 2003-2004 Annual Report for storm water discharges associated with industrial activities. We have used the forms provided by the State Water Resources Control Board on its website for this purpose, and have also included backup information on our own forms, plus the required analytical laboratory reports. If you have any further questions on the report, please call me at (510) 486-7413.

"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 information, this 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."

Sincerely,

Regina Lackner
Environmental Specialist

REL
Attachment

cc: wo/attachment
J. Jelinski
R. Pauer
N. Ware
H. Carwell DOE/BSO

w/partial attachment
S. Benson
C. Schwab DOE/BSO

w/attachment
R. Wendt
N. Al-Hadithy, COB

State of California
STATE WATER RESOURCES CONTROL BOARD

2003-2004
ANNUAL REPORT
FOR
STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2003 through June 30, 2004

An annual report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

If any information contained in Items A, B, C, and D below differs from the information provided in your Notice of Intent (NOI), circle or highlight the information that differs from your NOI so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility is relocated or changes ownership.

If you have any questions, please contact your Regional Board Storm Water Program Contact. The address of the Regional Board (where the Annual Report must be filed) along with the name, telephone number and e-mail address of the contact is indicated on page 9 of this Annual Report. To find your Regional Board information, match the first digit of your WDID number with the corresponding number that appears in parenthesis on the first line of each Regional Board office.

GENERAL INFORMATION:

Facility WDID No: 2 01S002421

A. Facility Location:

Facility Name: Lawrence Berkeley National Laboratory

Address: 1 Cyclotron Road, 85B0198

City: Berkeley State: CA Zip: 94720 Phone: (510) 486-7413

B. Facility Operator Information:

Operator Name: Lawrence Berkeley National Laboratory Contact Person: Regina Lackner

Mailing Address: 1 Cyclotron Road, 85B0198 Title: Environmental Specialist

City: Berkeley State: CA Zip: 94720 Phone: (510) 486-7413

Standard Industrial Classification (SIC) Code(s): 8733, 3499, 4214

C. Facility Information: (Complete if different from facility mailing address in Item A above)

Street Address: _____

City: _____ State: _____ Zip: _____

2003-2004
ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

YES Go to Item D.2

NO Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

i. Participating in an Approved Group Monitoring Plan

Group Name: _____

ii. Submitted **No Exposure Certification (NEC)**

Date Submitted: _____

Re-evaluation Date: _____

Does facility continue to satisfy NEC conditions?

YES

NO

iii. Submitted **Sampling Reduction Certification (SRC)**

Date Submitted: _____

Re-evaluation Date: _____

Does facility continue to satisfy SRC conditions?

YES

NO

iv. Received Regional Board Certification

Certification Date: _____

v. Received Local Agency Certification

Certification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

YES Go to Section E

NO Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 2

If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit).

YES

NO, attach explanation (Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)

3. How many storm water discharge locations are at your facility?

3 Discharge, 1 Influent

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ANNUAL REPORT

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**

Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

- a. Do authorized non-storm water discharges occur at your facility?

YES NO Go to Item F.2

- b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers.** Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September YES NO N/A October-December YES NO N/A

January-March YES NO N/A April-June YES NO N/A

- c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

- i. name of each authorized non-storm water discharge
- ii. date and time of observation
- iii. source and location of each authorized non-storm water discharge
- iv. characteristics of the discharge at its source and impacted drainage area/discharge location
- v. name, title, and signature of observer
- vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**

Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

- a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July -September YES NO October-December YES NO

January-March YES NO April-June YES NO

- b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

YES NO Go to Item F.2D

- c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

YES NO **Attach explanation**

- d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

- i. name of each unauthorized non-storm water discharge.
- ii. date and time of observation.
- iii. source and location of each unauthorized non-storm water discharge.
- iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
- v. name, title, and signature of observer.
- vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

2003-2004
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G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers.** Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

October <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	February <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
November <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	March <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
December <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	April <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
January <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	May <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

2. Report monthly wet season visual observations using **Form 4** or provide the following information.
- a. date, time, and location of observation
 - b. name and title of observer
 - c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
 - d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete an ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? The following areas should be inspected: YES NO

<ul style="list-style-type: none"> • areas where spills and leaks have occurred during the last year. • outdoor wash and rinse areas. • process/manufacturing areas. • loading, unloading, and transfer areas. • waste storage/disposal areas. • dust/particulate generating areas. • erosion areas. 	<ul style="list-style-type: none"> • building repair, remodeling, and construction • material storage areas • vehicle/equipment storage areas • truck parking and access areas • rooftop equipment areas • vehicle fueling/maintenance areas • non-storm water discharge generating areas
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2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? YES NO

3. Have you inspected the entire facility to verify that the SWPPP's site map is up-to-date? The following site map items should be verified: YES NO

<ul style="list-style-type: none"> • facility boundaries • outline of all storm water drainage areas • areas impacted by run-on 	<ul style="list-style-type: none"> • storm water discharges locations • storm water collection and conveyance system • structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.
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ANNUAL REPORT

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? YES NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- sampling and analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? YES NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? YES NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? YES NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? YES NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

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ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

- 1. Have you attached Forms 1,2,3,4, and 5 or their equivalent? YES (Mandatory)
- 2. If you conducted sampling and analysis, have you attached the laboratory analytical reports? YES NO NA
- 3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications? YES NO NA
- 4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J? YES NO NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and 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 ensure 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 person 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.

Printed Name: Regina Lackner

Signature: Regina Lackner Date: June 14, 2004

Title: Environmental Specialist

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DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC), and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at <http://www.swrcb.ca.gov>. It is contained in the Sampling and Analysis Reduction Certification.

ATTACHMENTS/EXPLANATIONS

E.10.c

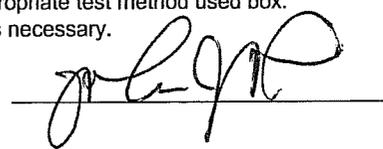
This question pertains to analysis of all storm water samples for applicable Table D parameters. We monitor for all applicable parameters (NH₃, Mg, COD, TSS, Fe, Al, Zn, N+N) except cyanide and the metals As, Cd, Pb, Hg, Se, and Ag. As explained in previous years, cyanide is no longer in general use on this site. The only outfall where cyanide monitoring would be required by the permit would be the outfall that drains the area where the Hazardous Waste Handling Facility (HWHF) is located. As stated in our Storm Water Monitoring Program, cyanide will not be monitored for at StW05 (East Canyon, the outfall that drains the area of the HWHF). Berkeley Lab had previously monitored the entire site for cyanide from 1992 through 1995 (3 storm water years, 6 samplings). The lack of any significant results justifies no further monitoring for this parameter in accordance with Section B.5.c.iii of the General Permit, and was first noted in our 1994/95 Annual Report. Additionally, baseline monitoring before the facility was built and placed in operation in 1997 showed no cyanide in runoff.

Similarly, during the review and revision of the Storm Water Monitoring Program in 2001, it was determined that many total metals had not been detected in several years. And under an agreement with the City of Berkeley, since 1996 LBL had been analyzing metals once a year for dissolved metals in addition to total metals as required by the permit. These analyses had also shown no detectable levels of these metals for at least two years, and in many cases longer. After the City of Berkeley had been duly notified and had raised no objections, the Storm Water Monitoring Program was revised to discontinue analysis of dissolved metals and of total arsenic, cadmium, lead, mercury, selenium, and silver. Starting with the 2001/2002 storm water season, and in accordance with B.5.c.iii of the General Permit, metals analyses have been reduced to four (Mg, Al, Fe, and Zn).

FORM 1-SAMPLING & ANALYSIS RESULTS

FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): John Jelinski TITLE: Quality Coordinator SIGNATURE: 

DESCRIBE DISCHARGE LOCATION	DATE / TIME OF SAMPLE LOCATION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS (For First Storm Event)											
			BASIC PARAMETERS					OTHER PARAMETERS						
			pH	TSS	SC	O & G	TPH Diesel	Total Metals (Mg, Al, Fe, Zn)	Ammonia as NH3	Nitrate Nitrite	COD	Gross Alpha	Gross Beta	Tritium
STW 2 N. Fork Straw Crk. Effluent	11/6/2003 <input type="checkbox"/> AM 20:15 <input checked="" type="checkbox"/> PM	11/6/2003 <input type="checkbox"/> AM 19:15 <input checked="" type="checkbox"/> PM	8.03	9.4	381	ND	440	15 0.17 ND ND	0.04	0.92	47	ND	ND	ND
STW 3 B69 Manhole Influent	11/6/2003 <input type="checkbox"/> AM 20:10 <input checked="" type="checkbox"/> PM	11/6/2003 <input type="checkbox"/> AM 19:15 <input checked="" type="checkbox"/> PM	7.43	3.8	602	ND	240	14 ND 0.73 ND	ND	0.84	25	ND	ND	765
STW 4 Chicken Crk. Effluent	11/6/2003 <input type="checkbox"/> AM 20:07 <input checked="" type="checkbox"/> PM	11/6/2003 <input type="checkbox"/> AM 19:15 <input checked="" type="checkbox"/> PM	8.45	1	530	ND	180	21 ND ND ND	0.04	0.32	25	ND	ND	ND
STW 5 East Canyon Effluent	11/6/2003 <input type="checkbox"/> AM 21:00 <input checked="" type="checkbox"/> PM	11/6/2003 <input type="checkbox"/> AM 19:15 <input checked="" type="checkbox"/> PM	7.15	450	68	ND	230	9.1 21 24 ND	0.1	0.49	90	ND	ND	ND
TEST REPORTING UNITS:			pH Units	mg/L	umho/cm	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
TEST METHOD DETECTION LIMIT:			0.01	1-10	1.0	5.0	50	0.02-0.05	0.02	0.1	25	2	3	200
TEST METHOD USED:			PA	EPA 160.2	EPA 120.1	EPA 1664	EPA 8015M	EPA 200.7	EPA 350.1	EPA 353.2	EPA 410.4	E 900	E 900	E 906EP
ANALYZED BY (SELF/LAB):			SELF	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

TSS - Total Suspended Solids

SC - Specific Conductance

O&G - Oil & Grease

TOC - Total Organic Carbon

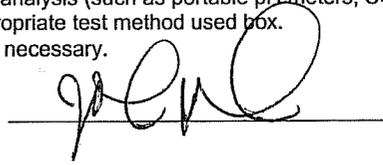
ND = Non Detected

NA = Not Sampled

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): John Jelinski TITLE: Quality Coordinator SIGNATURE: 

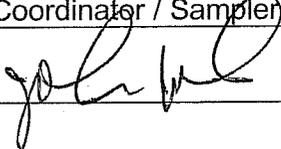
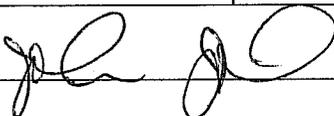
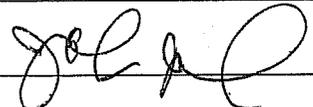
DESCRIBE DISCHARGE LOCATION	DATE / TIME OF SAMPLE LOCATION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS (For Second Storm Event)											
			BASIC PARAMETERS					OTHER PARAMETERS						
			pH	TSS	SC	O & G	TPH Diesel	Total Metals (Mg, Al, Fe, Zn)	Ammonia as NH3	Nitrate Nitrite	COD	Gross Alpha	Gross Beta	Tritium
STW 2 N. Fork Straw Crk. Effluent	2/25/2004 05:45 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	2/25/2004 04:30 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	8.25	29	324	ND	120	13 0.78 0.95 ND	0.06	0.63	50	ND	ND	ND
STW 3 B69 Manhole Influent	2/25/2004 07:30 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	2/25/2004 04:30 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	8.45	16	80	ND	78	3.3 1.1 1.2 ND	0.09	1.1	59	ND	ND	ND
STW 4 Chicken Crk. Effluent	2/25/2004 07:20 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	2/25/2004 04:30 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	8.09	420	54	ND	200	6.8 12 13 ND	0.06	0.10	70	ND	ND	ND
STW 5 East Canyon Effluent	2/25/2004 07:35 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	2/25/2004 04:30 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	7.95	87	90	ND	130	4.7 4.5 4.9 ND	0.1	0.30	36	ND	ND	ND
TEST REPORTING UNITS:			pH Units	mg/L	umho/cm	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
TEST METHOD DETECTION LIMIT:			0.01	2-5	1.0	5.0	50	0.05-0.5	0.04-0.1	0.1	25	2	3	200
TEST METHOD USED:			PA	EPA 160.2	EPA 120.1	EPA 1664	EPA 8015M	EPA 200.7	EPA 350.1	EPA 353.2	EPA 410.4	E 900	E 900	E 906EP
ANALYZED BY (SELF/LAB):			SELF	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon ND = Non Detected NA = Not Sampled

**FORM 2-QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED
NON-STORM WATER DISCHARGES (NSWDs)**

- Quarterly dry weather visual observations are required of each authorized NSWd.
- Observe each authorized NSWd source, impacted drainage area, and discharge location.

- Authorized NSWds must meet the conditions provided in Section D (pages 5-6), of the General Permit.
- Make additional copies of this form as necessary.

<p>QUARTER: JULY - SEPTEMBER</p> <p>DATE: 9/29/2003</p>	<p>Observers Name: <u>John Jelinski</u></p> <p>Title: <u>Quality Coordinator / Sampler</u></p> <p>Signature: </p>	<p><input type="checkbox"/> YES If YES, Complete the reverse side of this form</p> <p><input checked="" type="checkbox"/> NO</p> <p>WERE ANY AUTHORIZED NSWd'S DISCHARGED DURING THIS QUARTER?</p> <p>The SWPP includes a number of possible authorized NSWds, however, none were observed at this time</p>
<p>QUARTER: OCTOBER - DECEMBER</p> <p>DATE: 12/17/2003</p>	<p>Observers Name: <u>John Jelinski</u></p> <p>Title: <u>Quality Coordinator / Sampler</u></p> <p>Signature: </p>	<p><input type="checkbox"/> YES If YES, Complete the reverse side of this form</p> <p><input checked="" type="checkbox"/> NO</p> <p>WERE ANY AUTHORIZED NSWd'S DISCHARGED DURING THIS QUARTER?</p> <p>The SWPP includes a number of possible authorized NSWds, however, none were observed at this time</p>
<p>QUARTER: JANUARY - MARCH</p> <p>DATE: 2/23/2004</p>	<p>Observers Name: <u>John Jelinski</u></p> <p>Title: <u>Quality Coordinator / Sampler</u></p> <p>Signature: </p>	<p><input type="checkbox"/> YES If YES, Complete the reverse side of this form</p> <p><input checked="" type="checkbox"/> NO</p> <p>WERE ANY AUTHORIZED NSWd'S DISCHARGED DURING THIS QUARTER?</p> <p>The SWPP includes a number of possible authorized NSWds, however, none were observed at this time</p>
<p>QUARTER: APRIL - JUNE</p> <p>DATE: 6/3/2004</p>	<p>Observers Name: <u>John Jelinski</u></p> <p>Title: <u>Quality Coordinator / Sampler</u></p> <p>Signature: </p>	<p><input type="checkbox"/> YES If YES, Complete the reverse side of this form</p> <p><input checked="" type="checkbox"/> NO</p> <p>WERE ANY AUTHORIZED NSWd'S DISCHARGED DURING THIS QUARTER?</p> <p>The SWPP includes a number of possible authorized NSWds, however, none were observed at this time</p>

**FORM 2-QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED
NON-STORM WATER DISCHARGES (NSWDs)**

DATE /TIME OF OBSERVATION	SOURCE AND LOCATION OF AUTHORIZED NSWD <u>EXAMPLE:</u> Air conditioner Units on Building C	NAME OF AUTHORIZED NSWD <u>EXAMPLE:</u> Air conditioner condensate	DESCRIBE AUTHORIZED NSWD CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		DESCRIBE ANY REVISED OR NEW BMPs AND PROVIDE THEIR IMPLEMENTATION DATE
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
<input type="checkbox"/> AM <input type="checkbox"/> PM					
<input type="checkbox"/> AM <input type="checkbox"/> PM					
<input type="checkbox"/> AM <input type="checkbox"/> PM					
<input type="checkbox"/> AM <input type="checkbox"/> PM					
<input type="checkbox"/> AM <input type="checkbox"/> PM					

Lawrence Berkeley National Laboratory
 Environmental Services Group
 Stormwater Monitoring Program

Date: July - September 2003
Observer: John JEJUSKI
Observation Dates: 9/20/24/03 11:00 AM

Quarterly Visual Observations of Authorized Non-Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon	Sitewide
Visual Observations	Runoff: Slight	Runoff: NONE	Runoff: Slight	Runoff: NONE	Runoff: NONE
	Sheen: NO	Sheen: —	Sheen: NO	Sheen: —	Sheen: NO
	Water Stains: NO	Water Stains: NO	Water Stains: NO	Water Stains: NO	Water Stains: NONE
	Other:	Other:	Other:	Other:	Other: —
Non-Stormwater Discharge Observed (Y/N)	No	No	No	No	No
Corrective Action Taken	NA	NA	NA	NA	NA

Comments:

Lawrence Berkeley National Laboratory
 Environmental Services Group
 Stormwater Monitoring Program

Date: OCTOBER - DECEMBER 2003
 Observer: TEUNSKI
 Observation Dates: 12/17/2003 (WED) 1pm

Quarterly Visual Observations of Authorized Non-Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon	Sitewide
Visual Observations	Runoff: <u>moderate</u>	Runoff: <u>slight-moderate</u>	Runoff: <u>moderate</u>	Runoff: <u>slight</u>	Runoff: <u>slight</u>
	Sheen: <u>NO</u>	Sheen: <u>NO</u>	Sheen: <u>NO</u>	Sheen: <u>NO</u>	Sheen: <u>NO</u>
	Water Stains: <u>NONE</u>	Water Stains: <u>NONE</u>	Water Stains: <u>NONE</u>	Water Stains: <u>NONE</u>	Water Stains: <u>NONE</u>
	Other: <u>—</u>	Other: <u>—</u>	Other: <u>—</u>	Other: <u>—</u>	Other: <u>—</u>
Non-Stormwater Discharge Observed (Y/N)	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>
Corrective Action Taken	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Comments:

Lawren Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date:	2/23/04 11AM (MON)
Observer:	JELINSKI
Observation Dates:	2/23/04 11AM (MON)

Quarterly Visual Observations of Authorized Non-Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon	Sitewide
Visual Observations	Runoff: Moderate	Runoff: Slight/NONE	Runoff: Moderate	Runoff: Slight	Runoff: Slight/NONE
	Sheen: NO	Sheen: NO	Sheen: NO	Sheen: NO	Sheen: NO
	Water Stains: NONE	Water Stains: NONE	Water Stains: NONE	Water Stains: NONE	Water Stains: NONE
	Other: —	Other: —	Other: —	Other: —	Other: —
Non-Stormwater Discharge Observed (Y/N)	NO	NO	NO	NO	NO
Corrective Action Taken	—	—	—	—	—

Comments:

Lawren Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date: 6/3/2004	12
Observer: JELINSKI	
Observation Dates:	6/3/2004 1230

Quarterly Visual Observations of Authorized Non-Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon	Sitewide
Visual Observations	Runoff: Low	Runoff: None	Runoff: Low	Runoff: None	Runoff: None
	Sheen: No	Sheen: No	Sheen: No	Sheen: No	Sheen: No
	Water Stains: None	Water Stains: None	Water Stains: None	Water Stains: None	Water Stains: None
	Other: /	Other: /	Other: /	Other: /	Other: /
Non-Stormwater Discharge Observed (Y/N)	No	No	No	No	No
Corrective Action Taken	/	/	/	/	/

Comments:

**FORM 3 QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED
NON-STORM WATER DISCHARGES (NSWDs)**

OBSERVATION DATE (FROM REVERSE SIDE)	NAME OF UNAUTHORIZED NSWD <u>EXAMPLE:</u> Vehicle Wash Water	SOURCE AND LOCATION OF UNAUTHORIZED NSWD <u>EXAMPLE:</u> NW Corner of Parking Lot	DESCRIBE UNAUTHORIZED NSWD CHARACTERISTICS Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		DESCRIBE CORRECTIVE ACTIONS TO ELIMINATE UNAUTHORIZED NSWD AND TO CLEAN IMPACTED DRAINAGE AREAS. PROVIDE UNAUTHORIZED NSWD ELIMINATION DATE.
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
<input type="checkbox"/> AM <input type="checkbox"/> PM					
<input type="checkbox"/> AM <input type="checkbox"/> PM					
<input type="checkbox"/> AM <input type="checkbox"/> PM					
<input type="checkbox"/> AM <input type="checkbox"/> PM					
<input type="checkbox"/> AM <input type="checkbox"/> PM					

Lawrence Berkeley National Laboratory
 Environmental Services Group
 Stormwater Monitoring Program

Date: July - September 003
Observer: John JELONSKI
Observation Dates: 9/18/29/03 11AM

Quarterly Visual Observations of NON-Authorized Non-Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon	Sitewide
Visual Observations	Runoff: Slight	Runoff: NONE	Runoff: Slight	Runoff: NONE	Runoff: NONE
	Sheen: NO	Sheen: —	Sheen: NO	Sheen: —	Sheen: NO
	Water Stains: NONE	Water Stains: NONE	Water Stains: NONE	Water Stains: NONE	Water Stains: NONE
	Other: —	Other: —	Other: —	Other: —	Other: —
Non-Stormwater Discharge Observed (Y/N)	NO	NO	NO	NO	NO
Corrective Action Taken	—	—	—	—	—

Comments:

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date: OCTOBER-DECEMBER 2003
 Observer: TEJINSKI
 Observation Dates: 12/17/2003 (WED) 1pm

Quarterly Visual Observations of NON-Authorized Non-Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon	Sitewide
Visual Observations	Runoff: <u>Moderate</u>	Runoff: <u>Slight-moderate</u>	Runoff: <u>Moderate</u>	Runoff: <u>Slight</u>	Runoff: <u>Slight</u>
	Sheen: <u>NO</u>	Sheen: <u>NO</u>	Sheen: <u>NO</u>	Sheen: <u>NO</u>	Sheen: <u>NO</u>
	Water Stains: <u>NONE</u>	Water Stains: <u>NONE</u>	Water Stains: <u>NONE</u>	Water Stains: <u>NONE</u>	Water Stains: <u>NONE</u>
	Other: <u>/</u>	Other: <u>/</u>	Other: <u>/</u>	Other: <u>/</u>	Other: <u>/</u>
Non-Stormwater Discharge Observed (Y/N)	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>
Corrective Action Taken	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

Comments:

**Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program**

Date: JANUARY - March
Observer: DELINSKI
Observation Dates: 2/23/04 HAM (Man)

Quarterly Visual Observations of NON-Authorized Non-Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon	Sitewide
Visual Observations	Runoff: Moderate	Runoff: Slight/None	Runoff: Moderate	Runoff: Slight	Runoff: Slight/None
	Sheen: NO	Sheen: NO	Sheen: NO	Sheen: NO	Sheen: NO
	Water Stains: None	Water Stains: None	Water Stains: None	Water Stains: None	Water Stains: None
	Other: _____	Other: _____	Other: _____	Other: _____	Other: _____
Non-Stormwater Discharge Observed (Y/N)	NO	NO	NO	NO	NO
Corrective Action Taken	_____	_____	_____	_____	_____

Comments:

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date:	April - June 20.
Observer:	JELINSKI
Observation Dates:	6/3/2004 1230

Quarterly Visual Observations of NON-Authorized Non-Stormwater Discharges

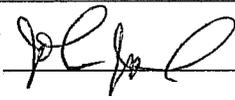
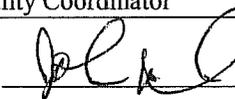
Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon	Sitewide
Visual Observations	Runoff: low	Runoff: NONE	Runoff: low	Runoff: NONE	Runoff: NONE
	Sheen: NONE	Sheen: <u>NONE</u>	Sheen: NONE	Sheen: NONE	Sheen: NONE
	Water Stains: NONE	Water Stains: <u>NONE</u>	Water Stains: NONE	Water Stains: NONE	Water Stains: NONE
	Other: —	Other: —	Other: —	Other: —	Other: —
Non-Stormwater Discharge Observed (Y/N)	NO	NO	NO	NO	NO
Corrective Action Taken	✓	✓	✓	✓	✓

Comments:

FORM 4-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

Storm water discharge visual observations are required for at least one storm event per month between October 1 and May 31.
 Visual observations must be conducted during the first hour of discharge at all discharge locations.
 Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

- Indicate "None" in the first column of this form if you did not conduct a monthly visual observation.
- Make additional copies of this form as necessary.
- Until a monthly visual observation is made, record any eligible storm events that do not result in a storm water discharge and note the date, time, name, and title of who observed there was no storm water discharge.

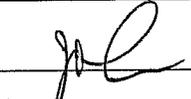
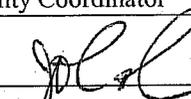
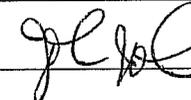
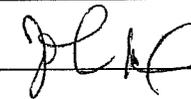
Observation Date: October 31 2003	Drainage Location Description	STW 2	STW 3	STW 4	STW 5
Observers Name: <u>John Jelinski</u>		N. Fork Strawberry	B69 Manhole	Chicken Creek	East Canyon
Title: <u>Quality Coordinator</u>	Observation Time	10/31/2003 12:00	10/31/20 12:00	10/31/200 12:00	10/31/2003 12:00
	Time Discharge Began	10/31/2003 10:00	10/31/20 10:00	10/31/200 10:00	10/31/2003 10:00
Signature: 	Were Pollutants observed (if YES, complete reverse side)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
Observation Date: November 7 2003	Drainage Location Description	STW 2	STW 3	STW 4	STW 5
Observers Name: <u>John Jelinski</u>		N. Fork Strawberry	B69 Manhole	Chicken Creek	East Canyon
Title: <u>Quality Coordinator</u>	Observation Time	11/7/2003 12:00	11/7/200 12:00	11/7/2003 12:00	11/7/2003 12:00
	Time Discharge Began	11/6/2003 20:00	11/6/200 20:00	11/6/2003 20:00	11/6/2003 20:00
Signature: 	Were Pollutants observed (if YES, complete reverse side)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
Observation Date: December 10 2003	Drainage Location Description	STW 2	STW 3	STW 4	STW 5
Observers Name: <u>John Jelinski</u>		N. Fork Strawberry	B69 Manhole	Chicken Creek	East Canyon
Title: <u>Quality Coordinator</u>	Observation Time	12/10/2003 09:00	12/10/20 09:00	12/10/200 09:00	12/10/2003 09:00
	Time Discharge Began	12/9/2003 12:00	12/9/200 12:00	12/9/2003 12:00	12/9/2003 12:00
Signature: 	Were Pollutants observed (if YES, complete reverse side)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
Observation Date: January 9 2004	Drainage Location Description	STW 2	STW 3	STW 4	STW 5
Observers Name: <u>John Jelinski</u>		N. Fork Strawberry	B69 Manhole	Chicken Creek	East Canyon
Title: <u>Quality Coordinator</u>	Observation Time	1/9/2004 15:00	1/9/2004 15:00	1/9/2004 15:00	1/9/2004 15:00
	Time Discharge Began	1/9/2004 13:30	1/9/2004 13:30	1/9/2004 13:30	1/9/2004 13:30
Signature: 	Were Pollutants observed (if YES, complete reverse side)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			

ID = No significant storm events occurred for that month

FORM 4-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

- Storm water discharge visual observations are required for at least one storm event per month between October 1 and May 31.
- Visual observations must be conducted during the first hour of discharge at all discharge locations.
- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

- Indicate "None" in the first column of this form if you did not conduct a monthly visual observation.
- Make additional copies of this form as necessary.
- Until a monthly visual observation is made, record any eligible storm events that do not result in a storm water discharge and note the date, time, name, and title of who observed there was no storm water discharge.

Observation Date: February 2004	Drainage Location Description	STW 2	STW 3	STW 4	STW 5
Observers Name: <u>John Jelinski</u>		N. Fork Strawberry	B69 Manhole	Chicken Creek	East Canyon
Title: <u>Quality Coordinator</u>	Observation Time	2/25/2004 <input checked="" type="checkbox"/> AM 10:00 <input type="checkbox"/> PM	2/25/2004 <input checked="" type="checkbox"/> AM 10:00 <input type="checkbox"/> PM	2/25/2004 <input checked="" type="checkbox"/> AM 10:00 <input type="checkbox"/> PM	2/25/2004 <input checked="" type="checkbox"/> AM 10:00 <input type="checkbox"/> PM
	Time Discharge Began	2/25/2004 <input checked="" type="checkbox"/> AM 05:00 <input type="checkbox"/> PM	2/25/2004 <input checked="" type="checkbox"/> AM 05:00 <input type="checkbox"/> PM	2/25/2004 <input checked="" type="checkbox"/> AM 05:00 <input type="checkbox"/> PM	2/25/2004 <input checked="" type="checkbox"/> AM 05:00 <input type="checkbox"/> PM
Signature: 	Were Pollutants observed (if YES, complete reverse side)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
Observation Date: March 2004	Drainage Location Description	STW 2	STW 3	STW 4	STW 5
Observers Name: <u>John Jelinski</u>		N. Fork Strawberry	B69 Manhole	Chicken Creek	East Canyon
Title: <u>Quality Coordinator</u>	Observation Time	3/25/2004 <input type="checkbox"/> AM 15:00 <input checked="" type="checkbox"/> PM	3/25/2004 <input type="checkbox"/> AM 15:00 <input checked="" type="checkbox"/> PM	3/25/2004 <input type="checkbox"/> AM 15:00 <input checked="" type="checkbox"/> PM	3/25/2004 <input type="checkbox"/> AM 15:00 <input checked="" type="checkbox"/> PM
	Time Discharge Began	3/25/2004 <input type="checkbox"/> AM 13:30 <input checked="" type="checkbox"/> PM	3/25/2004 <input type="checkbox"/> AM 13:30 <input checked="" type="checkbox"/> PM	3/25/2004 <input type="checkbox"/> AM 13:30 <input checked="" type="checkbox"/> PM	3/25/2004 <input type="checkbox"/> AM 13:30 <input checked="" type="checkbox"/> PM
Signature: 	Were Pollutants observed (if YES, complete reverse side)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
Observation Date: April 2004	Drainage Location Description	STW 2	STW 3	STW 4	STW 5
Observers Name: <u>John Jelinski</u>		N. Fork Strawberry	B69 Manhole	Chicken Creek	East Canyon
Title: <u>Quality Coordinator</u>	Observation Time	4/21/2004 <input checked="" type="checkbox"/> AM 10:00 <input type="checkbox"/> PM	4/21/2004 <input checked="" type="checkbox"/> AM 10:00 <input type="checkbox"/> PM	4/21/2004 <input checked="" type="checkbox"/> AM 10:00 <input type="checkbox"/> PM	4/21/2004 <input checked="" type="checkbox"/> AM 10:00 <input type="checkbox"/> PM
	Time Discharge Began	4/21/2004 <input checked="" type="checkbox"/> AM 9:30 <input type="checkbox"/> PM	4/21/2004 <input checked="" type="checkbox"/> AM 9:30 <input type="checkbox"/> PM	4/21/2004 <input checked="" type="checkbox"/> AM 9:30 <input type="checkbox"/> PM	4/21/2004 <input checked="" type="checkbox"/> AM 9:30 <input type="checkbox"/> PM
Signature: 	Were Pollutants observed (if YES, complete reverse side)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
Observation Date: May 2004	Drainage Location Description	STW 2	STW 3	STW 4	STW 5
Observers Name: <u>John Jelinski</u>		N. Fork Strawberry	B69 Manhole	Chicken Creek	East Canyon
Title: <u>Quality Coordinator</u>	Observation Time	5/28/2004 <input checked="" type="checkbox"/> AM 9:30 <input type="checkbox"/> PM	5/28/2004 <input checked="" type="checkbox"/> AM 9:30 <input type="checkbox"/> PM	5/28/2004 <input checked="" type="checkbox"/> AM 9:30 <input type="checkbox"/> PM	5/28/2004 <input checked="" type="checkbox"/> AM 9:30 <input type="checkbox"/> PM
	Time Discharge Began	5/28/2004 <input checked="" type="checkbox"/> AM 3:00 <input type="checkbox"/> PM	5/28/2004 <input checked="" type="checkbox"/> AM 3:00 <input type="checkbox"/> PM	5/28/2004 <input checked="" type="checkbox"/> AM 3:00 <input type="checkbox"/> PM	5/28/2004 <input checked="" type="checkbox"/> AM 3:00 <input type="checkbox"/> PM
Signature: 	Were Pollutants observed (if YES, complete reverse side)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			

ND = No significant storm events occurred for that month

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date / Time: 10/31/03 12:00
 Observer: J. JELINSKI
 Date / Time Discharge Began: 10/31/03 ~10am

Monthly Visual Observations of Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon
Weather Observations	Raining, cloudy → → → →			
Flow	low	NONE	LOW	NONE
Total Discharge	NA	NA	NA	NA
Floating or Suspended Material Present	NONE	—	NONE	—
Oil and Grease Observed	NONE	—	NONE	—
Discolorations	NONE	—	NONE	—
Turbidity	NO	—	NO	—
Odor	NONE	—	NONE	—
Measurements	pH: —	pH: —	pH: —	pH: —
	Air Temp: —	Air Temp: —	Air Temp: —	Air Temp: —
	Water Temp: —	Water Temp: —	Water Temp: —	Water Temp: —
	Conductivity: —	Conductivity: —	Conductivity: —	Conductivity: —
Comments	—	—	—	—

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date / Time: 11/7/03 12:00
 Observer: J. J. Lewis
 Date / Time Discharge Began: 11/6/03 ~8pm

Monthly Visual Observations of Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon
Weather Observations	Cloudy, wet (Not Raining) →	→	→	→
Flow	low-moderate	Low	low-moderate	trickle
Total Discharge	NA	NA	NA	NA
Floating or Suspended Material Present	NONE	NONE	NONE	NONE
Oil and Grease Observed	NO	NO	NO	NO
Discolorations	NONE	NONE	NONE	NONE
Turbidity	NO	NO	NO	NO
Odor	NONE	NONE	NONE	NONE
Measurements	pH: —	pH: —	pH: —	pH: —
	Air Temp: —	Air Temp: —	Air Temp: —	Air Temp: —
	Water Temp: —	Water Temp: —	Water Temp: —	Water Temp: —
	Conductivity: —	Conductivity: —	Conductivity: —	Conductivity: —
Comments	Collected 1st STW samples →	→	→	→

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date / Time: 12/10/2009 (WED), 9 AM

Observer: Jelinski

Date / Time Discharge Began: 12/9/09 (12 pm)

Monthly Visual Observations of Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon
Weather Observations	Cloudy, Light Rain →	→	→	→
Flow	Moderate	Light-Moderate	Moderate	Moderate
Total Discharge	NA	NA	NA	NA
Floating or Suspended Material Present	NO	NO	NO	NO
Oil and Grease Observed	NO	NO	NO	NO
Discolorations	NONE	NONE	NONE	NONE
Turbidity	NO	NO	NO	NO
Odor	NONE	NONE	NONE	NONE
Measurements	pH: X	pH: X	pH: X	pH: X
	Air Temp: X	Air Temp: X	Air Temp: X	Air Temp: X
	Water Temp: X	Water Temp: X	Water Temp: X	Water Temp: X
	Conductivity: X	Conductivity: X	Conductivity: X	Conductivity: X
Comments	—	—	—	—

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date / Time: 1/9/04 (Fri) 3pm

Observer: TELENSKI

Date / Time Discharge Began: 1/9/04 1:30pm

Monthly Visual Observations of Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon
Weather Observations	RAINING Moderate →	→	→	→
Flow	Moderate	Moderate	Moderate	Moderate
Total Discharge	NA	NA	NA	NA
Floating or Suspended Material Present	NO	NO	NO	NO
Oil and Grease Observed	NO	NO	NO	NO
Discolorations	NONE	NONE	NONE	NONE
Turbidity	NO	NO	NO	NO
Odor	NONE	NONE	NONE	NONE
Measurements	pH:	pH:	pH:	pH:
	Air Temp: X	Air Temp: X	Air Temp: X	Air Temp: X
	Water Temp: X	Water Temp: X	Water Temp: X	Water Temp: X
	Conductivity: X	Conductivity: X	Conductivity: X	Conductivity: X
Comments	—	—	—	—

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date / Time: 2/25/04 10AM
 Observer: John JELINEK
 Date / Time Discharge Began: 2/25/04 ~5AM (WED)

Monthly Visual Observations of Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon
Weather Observations	HEAVY RAIN STORM	→	→	→
Flow	HEAVY	HEAVY	HEAVY	HEAVY
Total Discharge	NA	NA	NA	NA
Floating or Suspended Material Present	YES	YES	YES	YES
Oil and Grease Observed	NO	NO	NO	NO
Discolorations	HEAVY Sedimentation	HEAVY Sedimentation	HEAVY Sedimentation	HEAVY Sedimentation
Turbidity	YES HIGH	YES HIGH	YES HIGH	YES HIGH
Odor	NO	NO	NO	NO
Measurements	pH: <u>8.25</u>	pH: <u>8.45</u>	pH: <u>7.95</u>	pH: <u>8.07</u>
	Air Temp: <u> </u>	Air Temp: <u> </u>	Air Temp: <u> </u>	Air Temp: <u> </u>
	Water Temp: <u> </u>	Water Temp: <u> </u>	Water Temp: <u> </u>	Water Temp: <u> </u>
	Conductivity: <u> </u>	Conductivity: <u> </u>	Conductivity: <u> </u>	Conductivity: <u> </u>
Comments	Extremely High Flow	Extremely High flow	Extremely High flow in Tributary 10x that of Crk	Conduit Overflowing

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date / Time: 3/25/2004 3pm
 Observer: John Jelinski
 Date / Time Discharge Began: ~ 13:30pm

Monthly Visual Observations of Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon
Weather Observations	RAINING Heavy →	→	→	→
Flow	low-moderate	low	low-moderate	low
Total Discharge	— NA —	NA	NA	NA
Floating or Suspended Material Present	NONE	NONE	NONE	NONE
Oil and Grease Observed	NO	NO	NO	NO
Discolorations	NONE	NONE	NONE	NONE
Turbidity	NO	NO	Slight	NO
Odor	NONE	NONE	NONE	NONE
Measurements	pH:	pH:	pH:	pH:
	Air Temp: X	Air Temp: X	Air Temp: X	Air Temp: X
	Water Temp: X	Water Temp: X	Water Temp: X	Water Temp: X
	Conductivity: X	Conductivity: X	Conductivity: X	Conductivity: X
Comments	←	—	—	—

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date / Time: 4/21/2004 11^{AM}
 Observer: SELINSKI
 Date / Time Discharge Began: 4/21/04 9³⁰AM

Monthly Visual Observations of Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon
Weather Observations	cloudy light rain	cloudy light rain →	→	→
Flow	low	low	low	low
Total Discharge	—	—	—	—
Floating or Suspended Material Present	NONE	NONE	NONE	NONE
Oil and Grease Observed	NO	NO	NO	NO
Discolorations	NONE	NONE	NONE	NONE
Turbidity	NONE	NONE	NONE	NONE
Odor	NONE	NONE	NONE	NONE
Measurements	pH: /	pH: /	pH: /	pH: /
	Air Temp: /	Air Temp: /	Air Temp: /	Air Temp: /
	Water Temp: /	Water Temp: /	Water Temp: /	Water Temp: /
	Conductivity: /	Conductivity: /	Conductivity: /	Conductivity: /
Comments	—	—	—	—

Lawrence Berkeley National Laboratory
Environmental Services Group
Stormwater Monitoring Program

Date / Time: 5/28/2004 9:30 AM
 Observer: JELINSKI
 Date / Time Discharge Began: 5/28/04 3am

Monthly Visual Observations of Stormwater Discharges

Site	STW 2 North Fork Strawberry Creek	STW 3 B69 Manhole	STW 4 Chicken Creek	STW 5 East Canyon
Weather Observations	CLOUDY RAINED EARLIER →	→	→	→
Flow	LOW	LOW	LOW	LOW
Total Discharge	—	—	—	—
Floating or Suspended Material Present	NONE	NONE	NONE	NONE
Oil and Grease Observed	NO	NO	NO	NO
Discolorations	NONE	NONE	NONE	NONE
Turbidity	NO	NO	NO	NO
Odor	NONE	NONE	NONE	NONE
Measurements	pH:	pH:	pH:	pH:
	Air Temp:	Air Temp:	Air Temp:	Air Temp:
	Water Temp:	Water Temp:	Water Temp:	Water Temp:
	Conductivity:	Conductivity:	Conductivity:	Conductivity:
Comments	←	—	—	—

Preliminary LBNL Monitoring Data

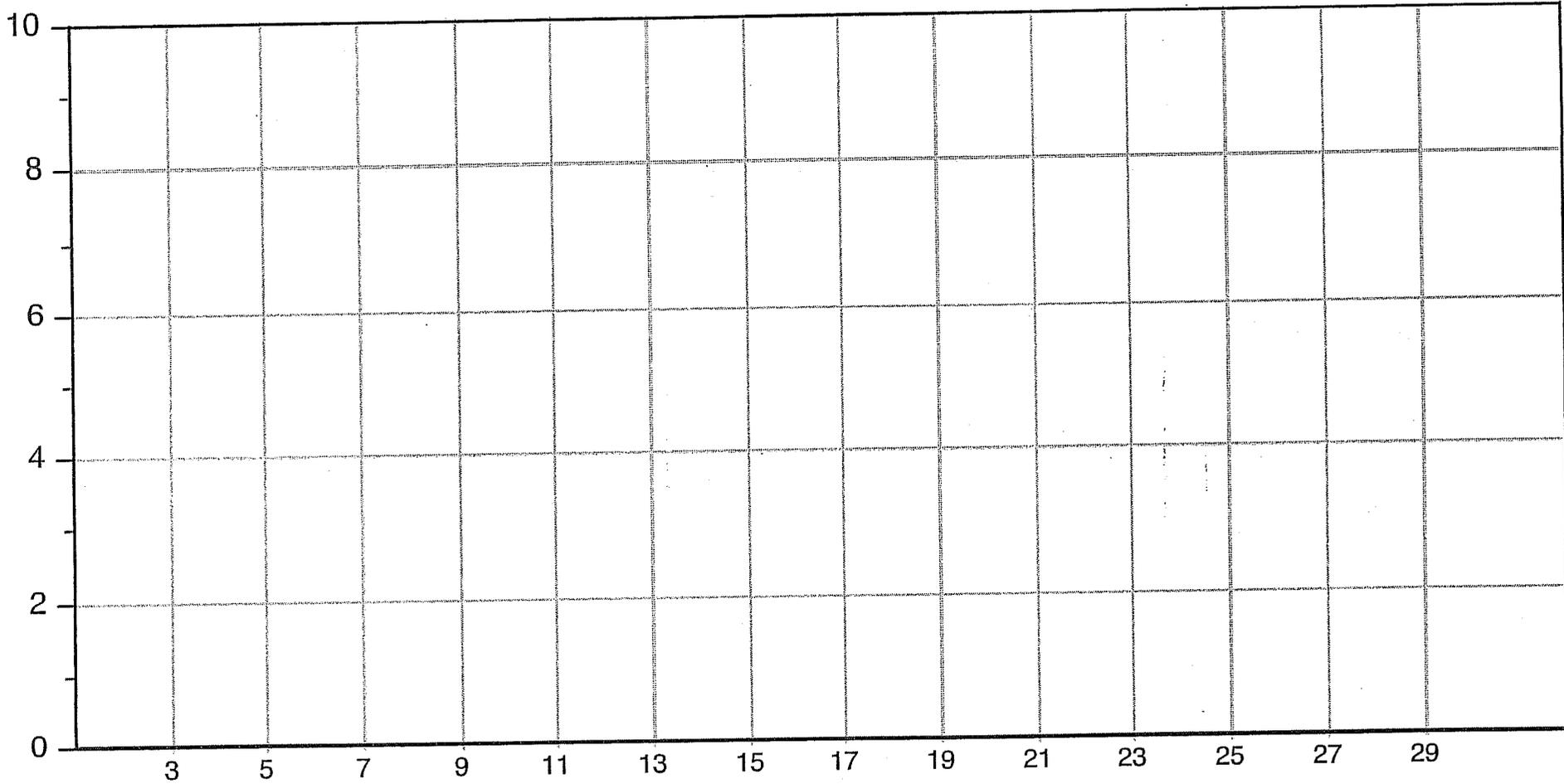
Met Tower next to B44

Time Frame: 1 Month(s)

Data Avg: 1 Hour

Start: Tuesday, July 01, 2003

Generated: 11/21/03



— Precipitation mm/hr

Total = 0.00E+00 mm

Preliminary LBNL Monitoring Data

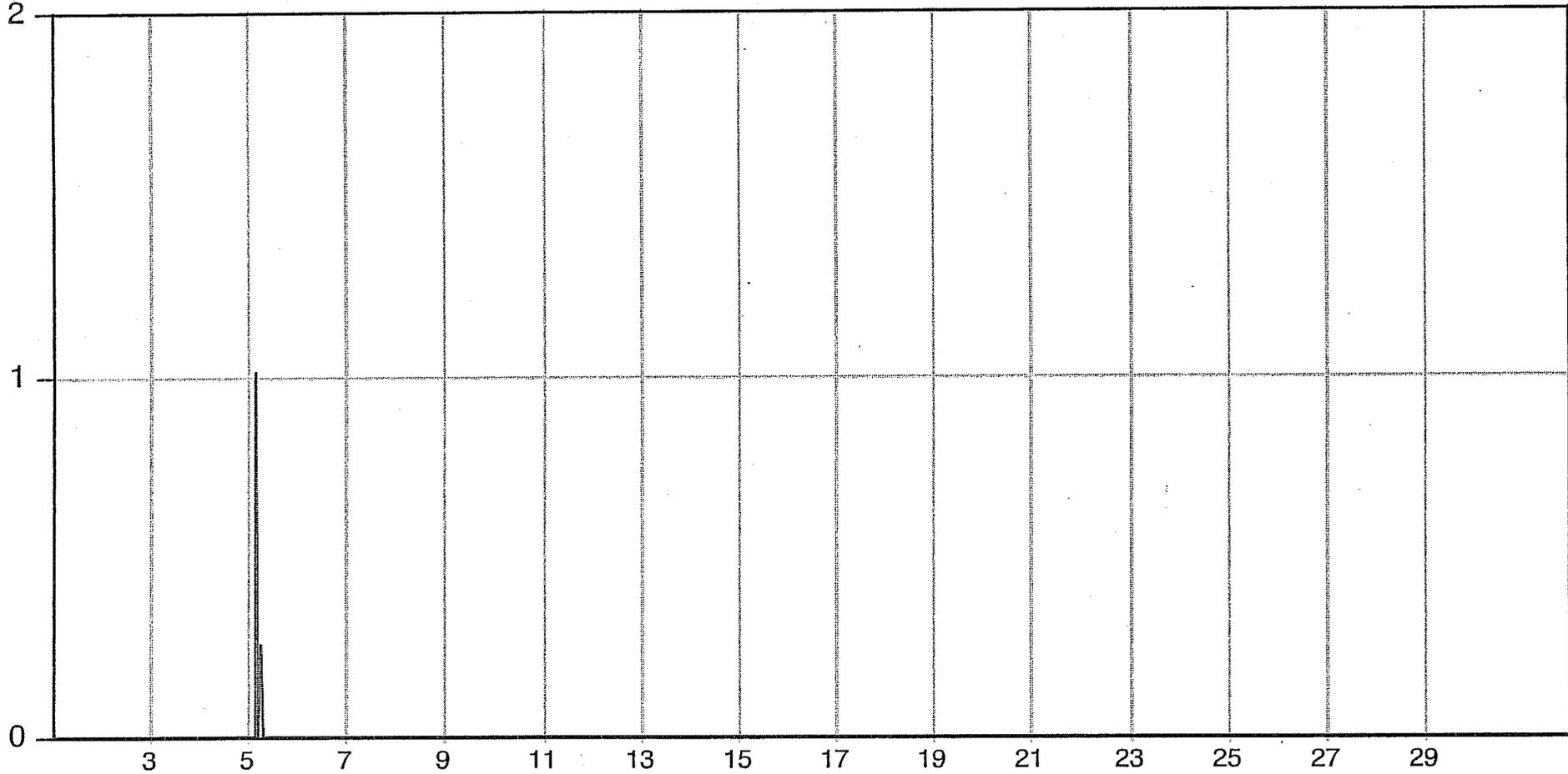
Met Tower next to B44

Time Frame: 1 Month(s)

Data Avg: 1 Hour

Start: Friday, August 01, 2003

Generated: 11/21/03



— Precipitation mm/hr

Total = 1.27E+00 mm

Preliminary LBNL Monitoring Data

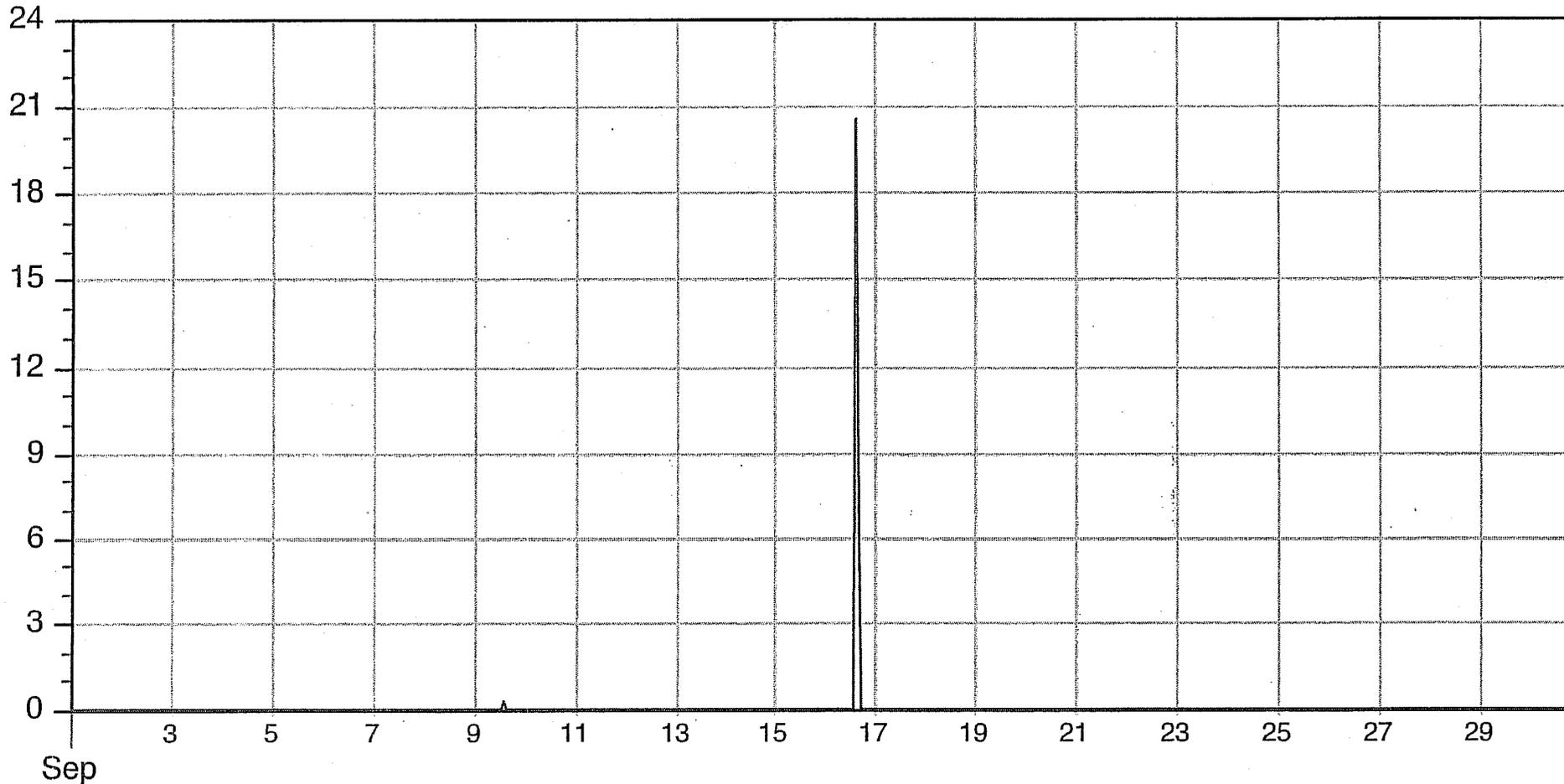
Met Tower next to B44

Time Frame: 1 Month(s)

Data Avg: 1 Hour

Start: Monday, September 01, 2003

Generated: 11/21/03



— Precipitation mm/hr Total = 2.77E+01 mm

Preliminary LBNL Monitoring Data

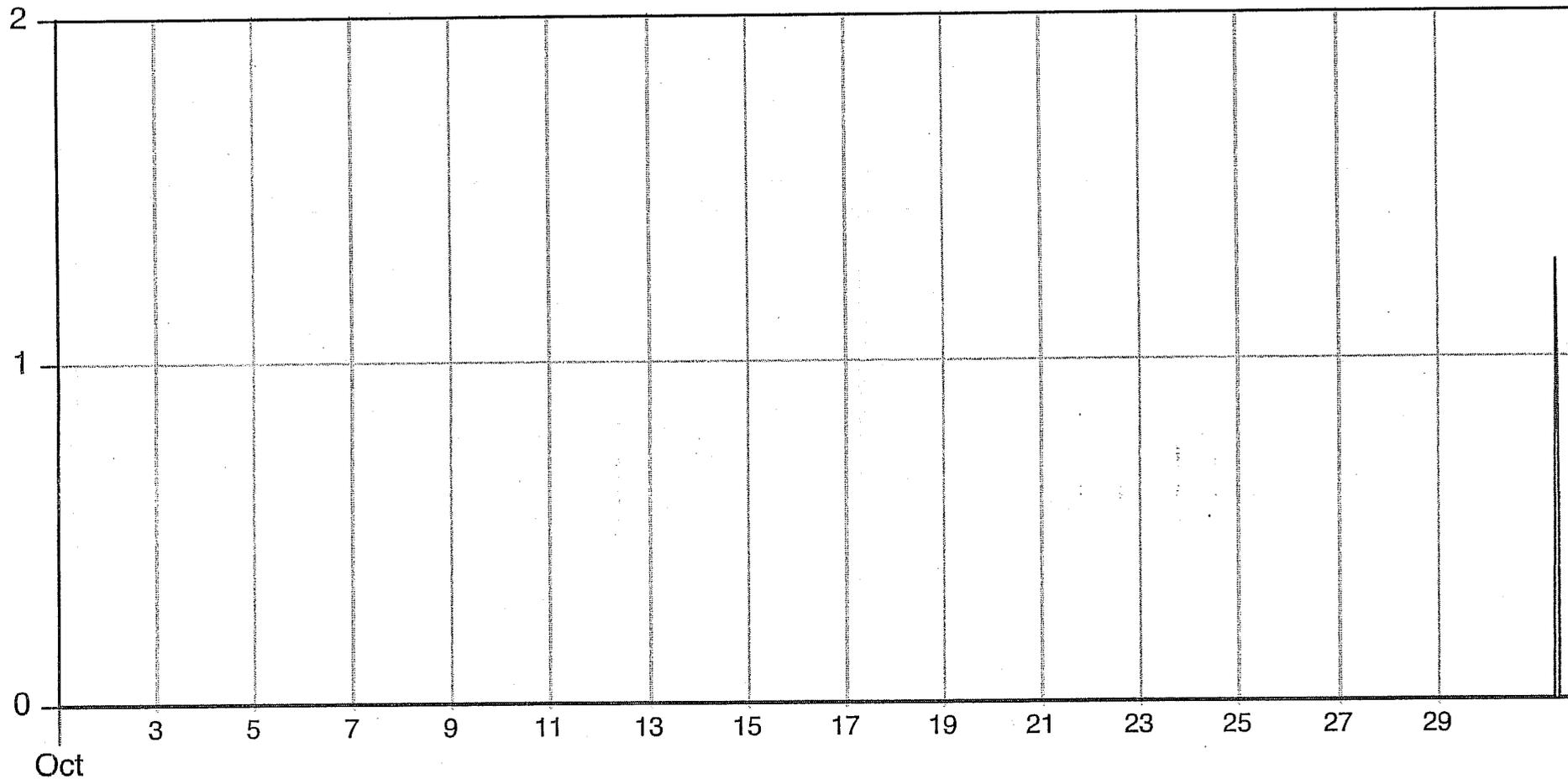
Met Tower next to B44

Time Frame: 1 Month(s)

Data Avg: 1 Hour

Start: Wednesday, October 01, 2003

Generated: 11/21/03



— Precipitation mm/hr Total = 1.78E+00 mm

Preliminary LBNL Monitoring Data

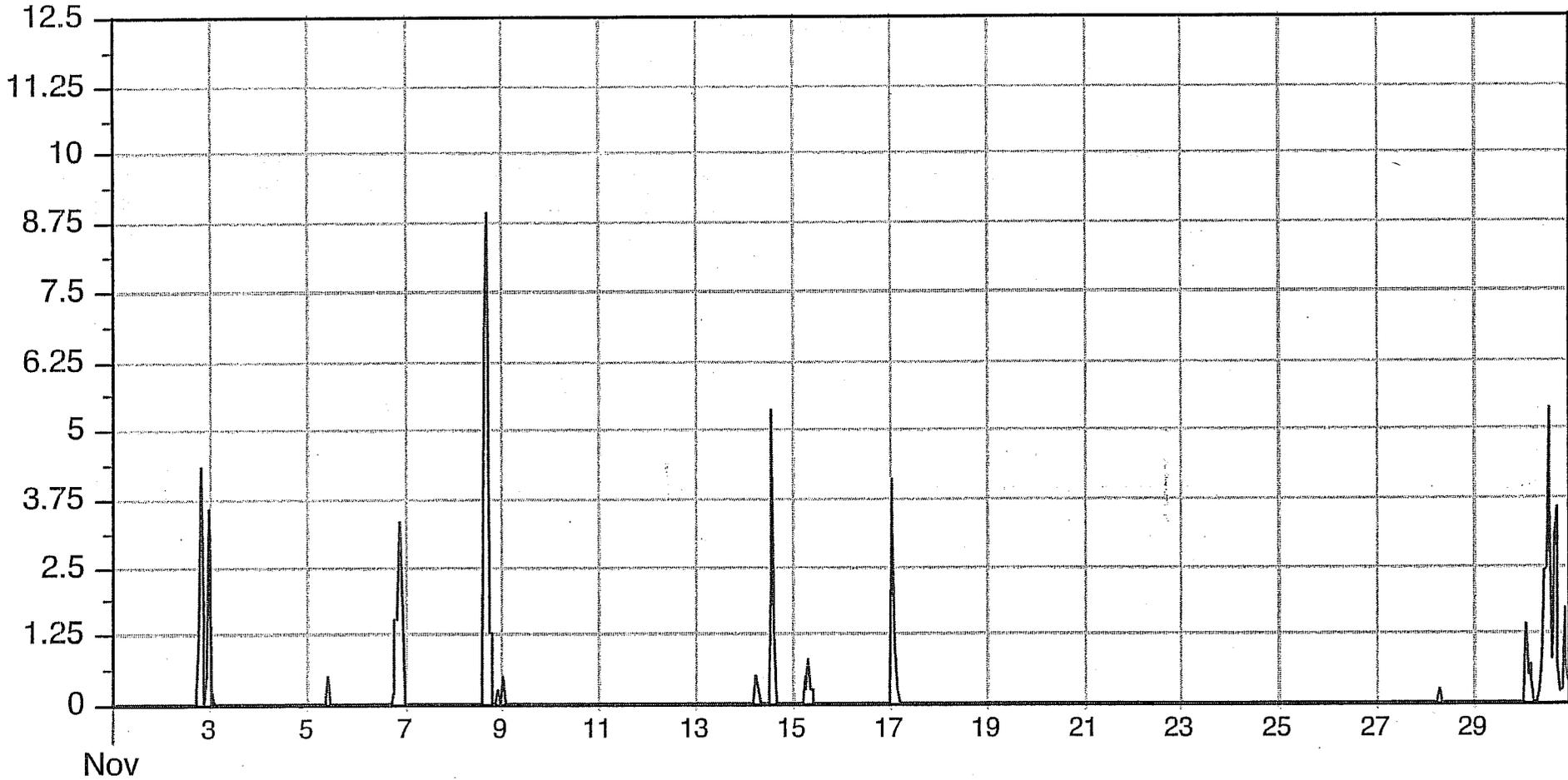
Time Frame: 1 Month(s)

Met Tower next to B44

Data Avg: 1 Hour

Start: Saturday, November 01, 2003

Generated: 2/23/04



— Precipitation mm/hr

Total = 8.79E+01 mm

Preliminary LBNL Monitoring Data

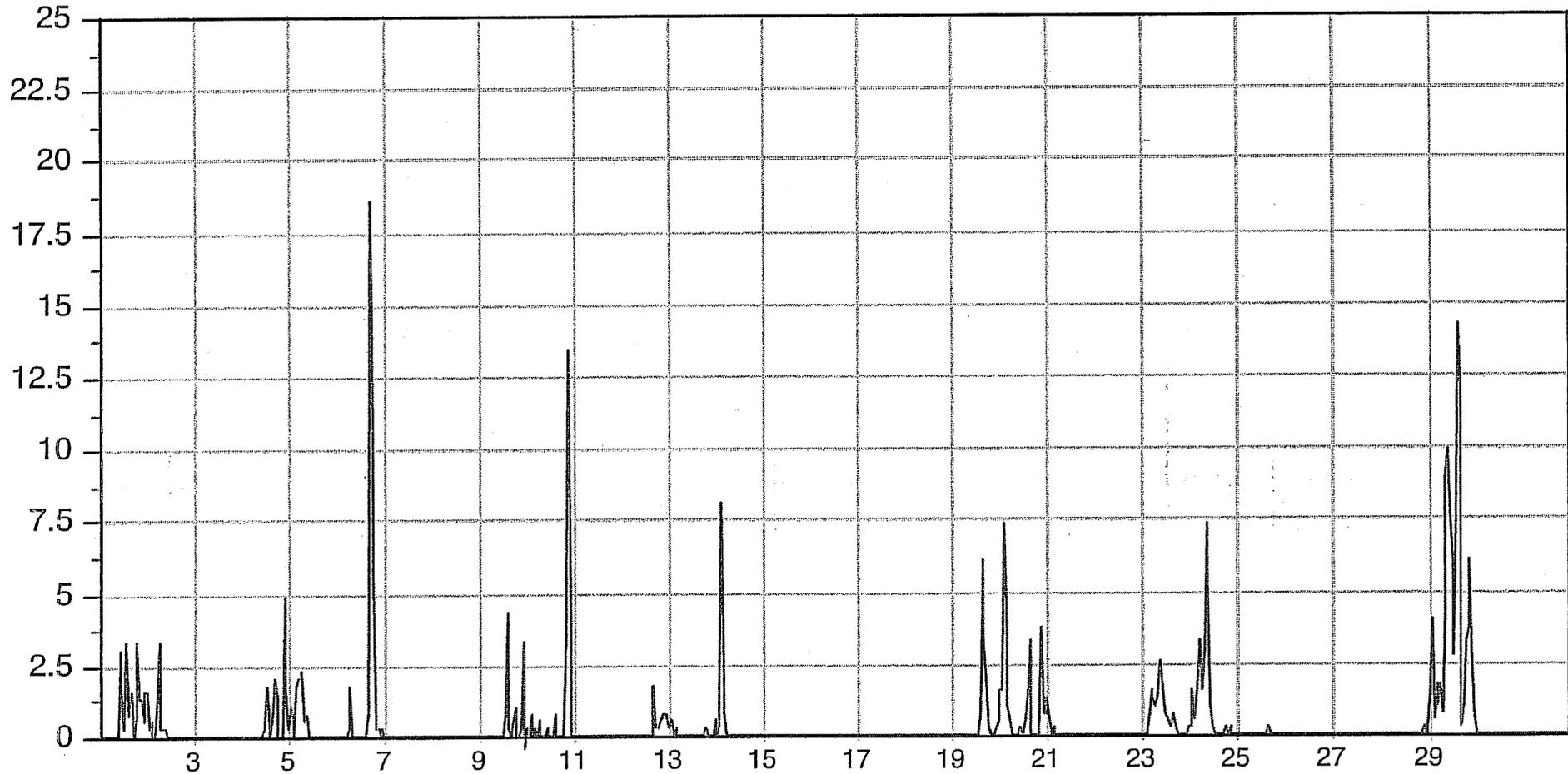
Time Frame: 1 Month(s)

Met Tower next to B44

Data Avg: 1 Hour

Start: Monday, December 01, 2003

Generated: 2/23/04



— Precipitation mm/hr

Total = 3.29E+02 mm

Preliminary LBNL Monitoring Data

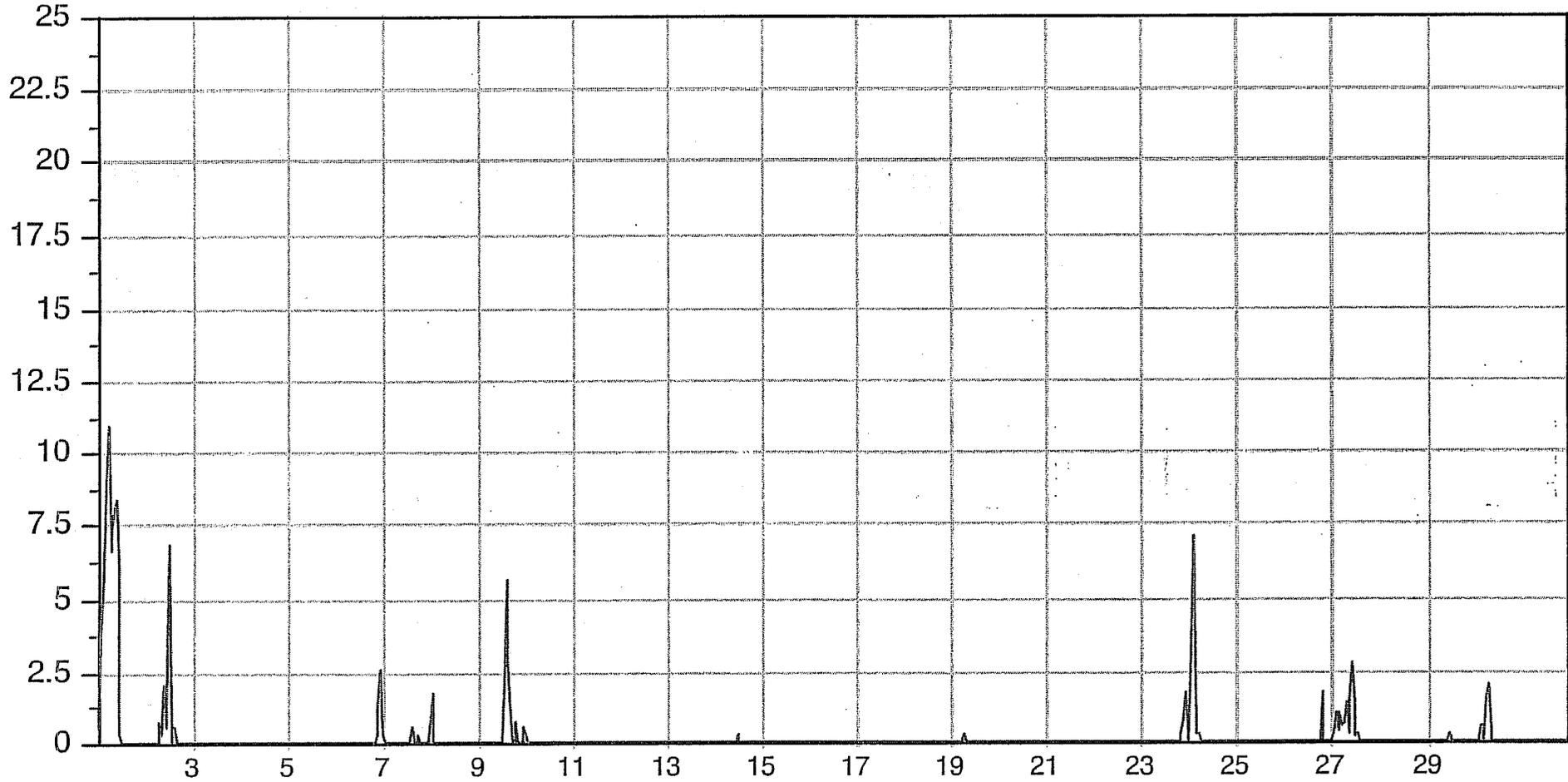
Met Tower next to B44

Time Frame: 1 Month(s)

Data Avg: 1 Hour

Start: Thursday, January 01, 2004

Generated: 2/23/04



— Precipitation mm/hr Total = 1.37E+02 mm

Preliminary LBNL Monitoring Data

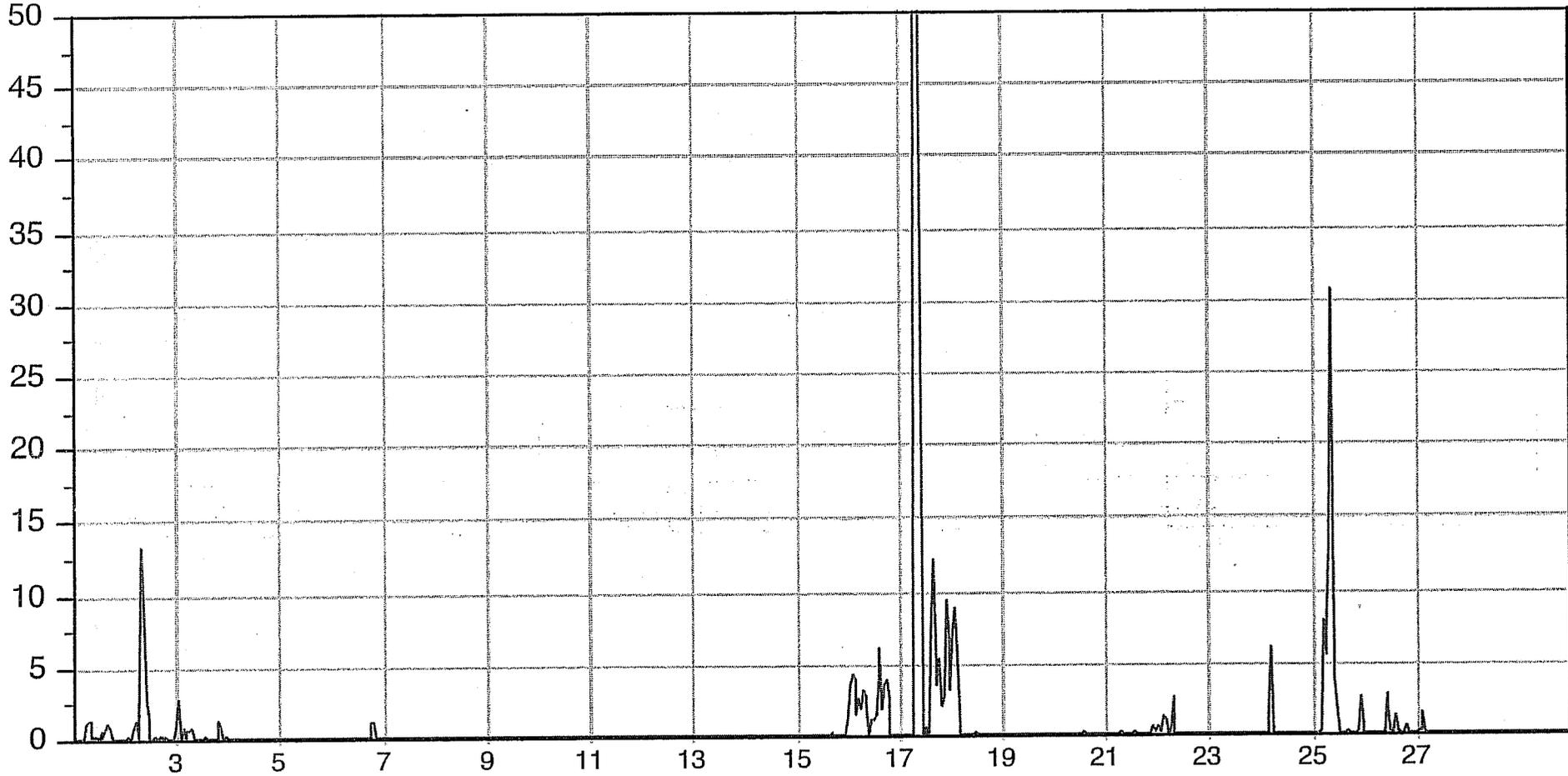
Met Tower next to B44

Time Frame: 1 Month(s)

Data Avg: 1 Hour

Start: Sunday, February 01, 2004

Generated: 3/30/04



— Precipitation mm/hr Total = 1.27E+03 mm

Preliminary LBNL Monitoring Data

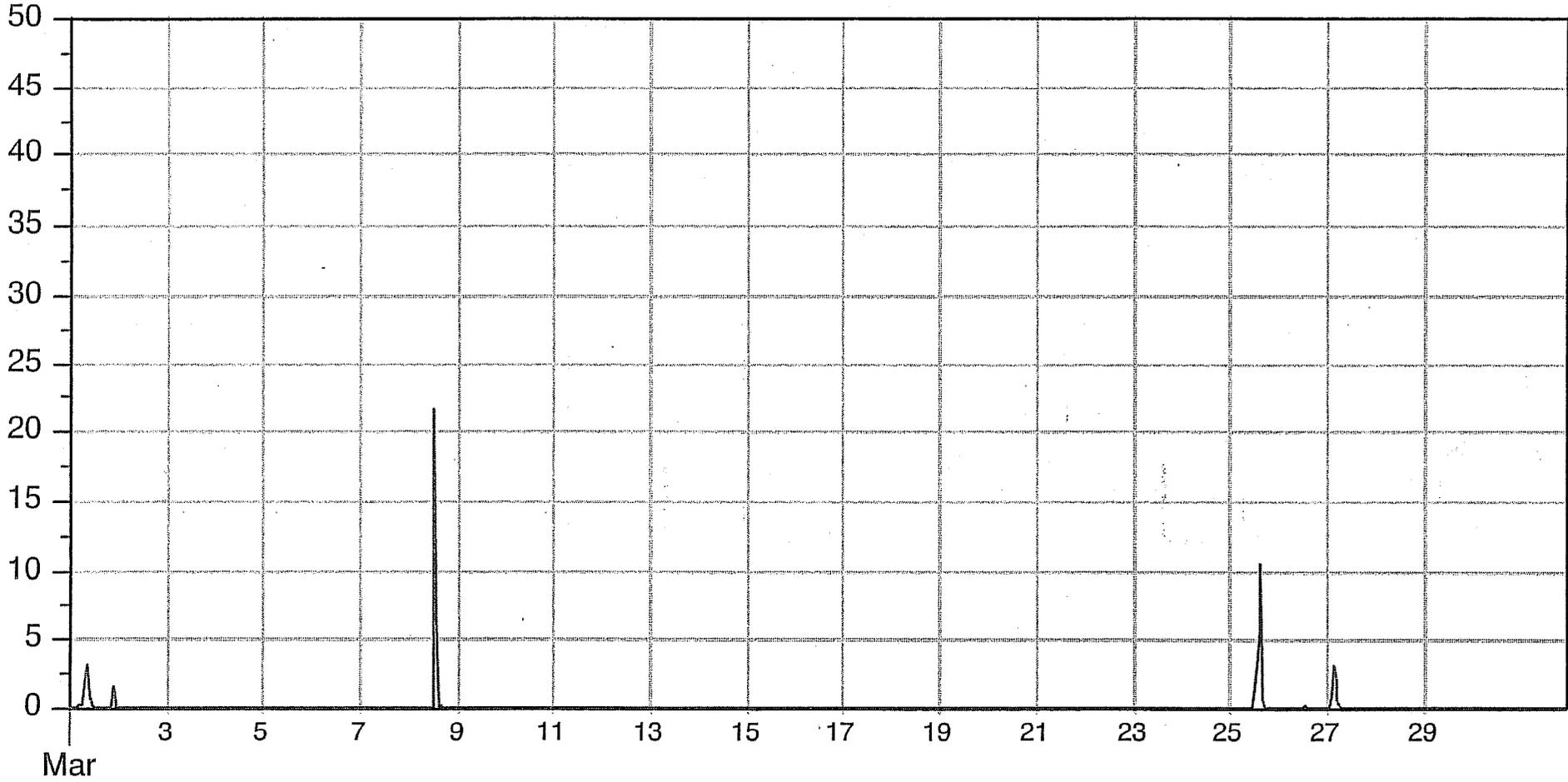
Time Frame: 1 Month(s)

Met Tower next to B44

Data Avg: 1 Hour

Start: Monday, March 01, 2004

Generated: 6/3/04



— Precipitation mm/hr

Total = 6.58E+01 mm

Preliminary LBNL Monitoring Data

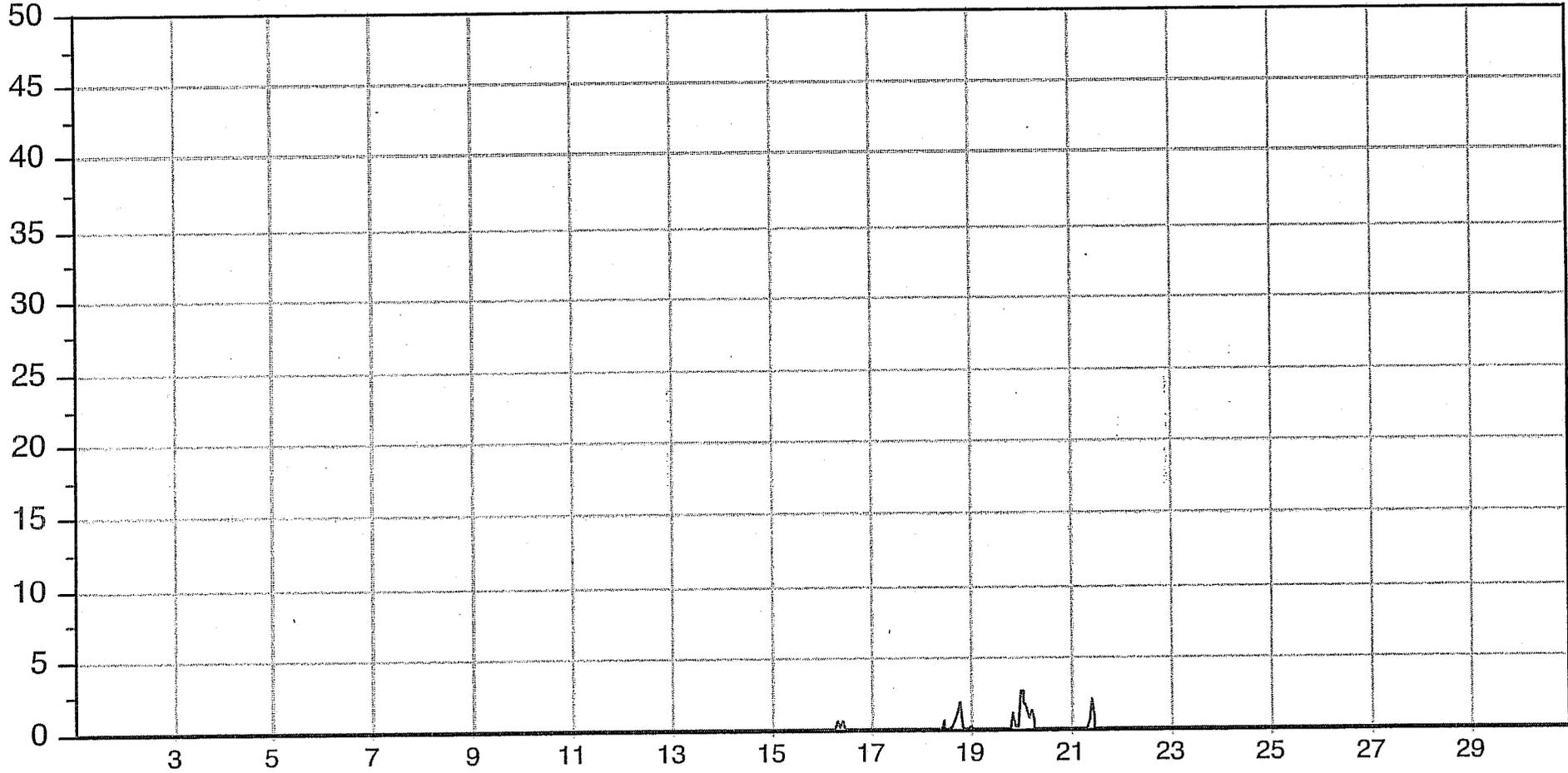
Met Tower next to B44

Time Frame: 1 Month(s)

Data Avg: 1 Hour

Start: Thursday, April 01, 2004

Generated: 6/3/04



— Precipitation mm/hr

Total = 2.26E+01 mm

Preliminary LBNL Monitoring Data

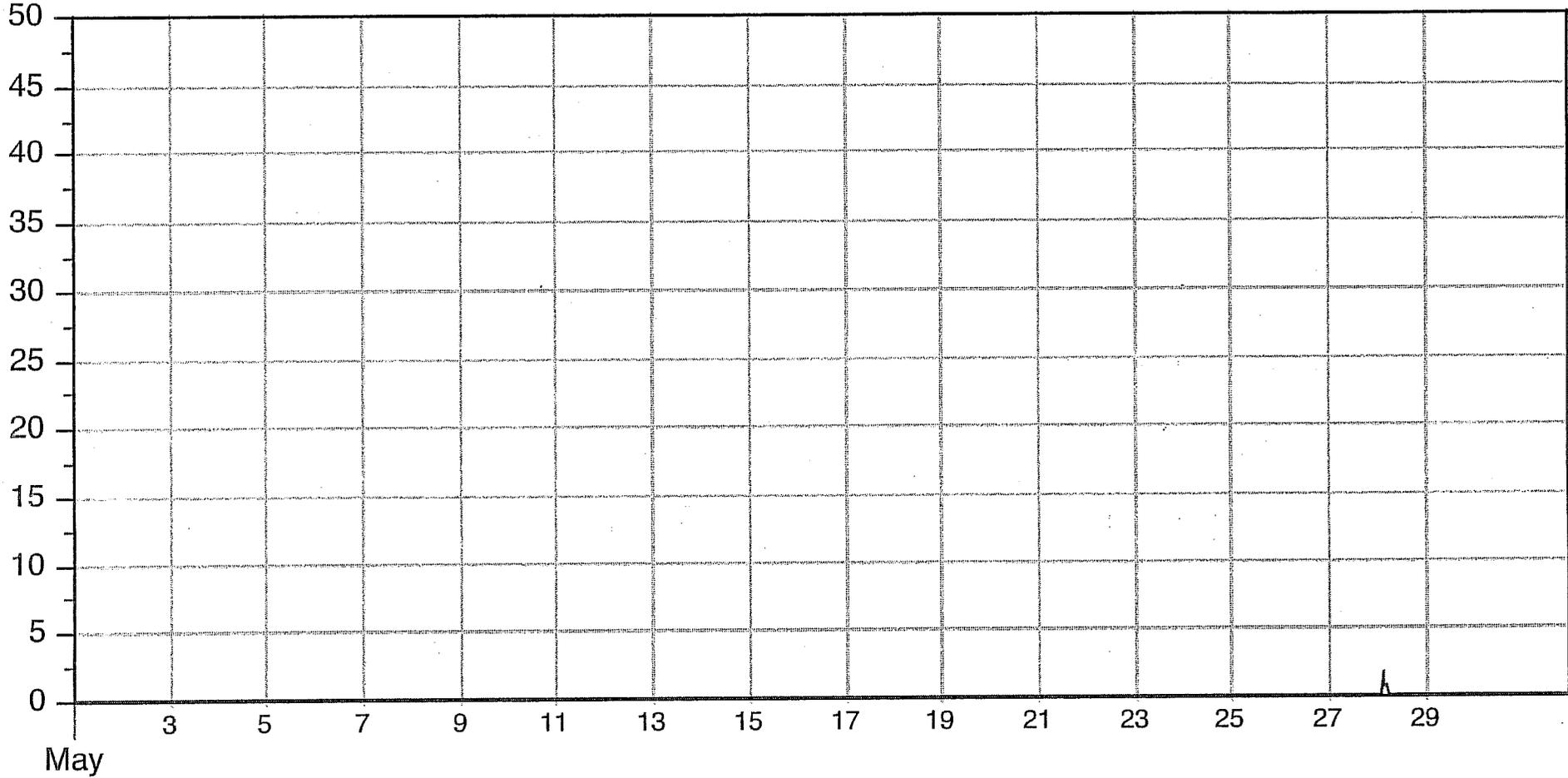
Met Tower next to B44

Time Frame: 1 Month(s)

Data Avg: 1 Hour

Start: Saturday, May 01, 2004

Generated: 6/3/04



— Precipitation mm/hr

Total = 3.05E+00 mm

**FORM 5-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS**

EVALUATION DATE: 5/24/2004 INSPECTOR NAME: Regina Lackner TITLE: Environmental Specialist SIGNATURE: Regina Lackner

<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP) <u>Loading and Unloading</u> 69 77D WAA's Various 85 (HWHF) FTU's</p>	<p>Have Any BMP's not been Fully Implemented? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>Are Additional/revised BMP's Necessary? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If YES to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p> <p align="center">No deficiencies found</p>	<p>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</p> <p align="center">Not Applicable</p>
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP) <u>Materials Storage and Use</u> WAA's, DSA's, HWHF UST's AST's Outdoor Equipment</p>	<p>Have Any BMP's not been Fully Implemented? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>Are Additional/revised BMP's Necessary? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If YES to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p> <p align="center">No deficiencies found</p>	<p>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</p> <p align="center">Not Applicable</p>
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP) <u>Vehicle Washing (Fueling) and Maintenance</u> 76 48</p>	<p>Have Any BMP's not been Fully Implemented? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Are Additional/revised BMP's Necessary? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>If YES to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p> <p align="center">There is no roof over the fueling station at Building 76.</p>	<p>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</p> <p>No funding for such capital projects exists at this time. No implementation date can be given; however, vehicle washing was moved into a covered bay as of 9/2002. See previous annual report.</p>
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP) <u>Vehicle Parking / Driving</u> Parking Lots</p>	<p>Have Any BMP's not been Fully Implemented? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>Are Additional/revised BMP's Necessary? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If YES to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p> <p align="center">No deficiencies found</p>	<p>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</p> <p align="center">Not Applicable</p>

**FORM 5 (Continued)-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS**

EVALUATION DATE: _____ INSPECTOR NAME: John Jelinski TITLE: Quality Coordinator SIGNATURE: _____

<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP) Construction / Maintenance</p>	<p>Have Any BMP's not been Fully Implemented? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>Are Additional/revise BMP's Necessary? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>If YES to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p> <p>There is no covered storage available for some heavy equipment, and some maintenance materials are not in covered.</p>	<p>Describe additional/revise BMPs or corrective actions and their date(s) of implementation</p> <p>Space and funds have been requested. Planning department cannot provide an implementation date.</p>
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP) Spills / Releases</p>	<p>Have Any BMP's not been Fully Implemented? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>Are Additional/revise BMP's Necessary? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>If YES to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p> <p>An underground leak in the water distribution system went undetected long enough to cause a release to the storm drains.</p>	<p>Describe additional/revise BMPs or corrective actions and their date(s) of implementation</p> <p>The following corrective actions were implemented by Dec. 1, 2003: Replace the existing city water chart recorder with a 24-hour circular chart recorder. Establish a monthly or semi-monthly training session with the swing and owl shift to review operation issues and emergency procedures. Review the SWPPP with swing and owl shift. Provide and review procedure for City Water to Sewer Systems. Corrosion engineer to perform inspection of broken pipe. Circulate Supervisor's Note on lessons learned to all Plant Maintenance Technicians. Mechanical Engineer to re-evaluate water line system. Develop PMT procedure for actions necessary when there is a water pressure reduction.</p>