

Sacramento Cogeneration

Authority P.O. Box 15830, Sacramento, CA 95852 330 91 (1282 2258 1994

DOCKET 93-AFC-2

DATE: FEB 2 5 1994

Procter & Gamble Cogeneration Project

SCA 94-019

February 25, 1994

Mr. B.B. Blevins California Energy Commission 1516 Ninth Street Sacramento, CA 95814 Dockets Unit Attn:

COPY OF NPDES PERMIT APPLICATION SUBMITTED TO THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD FOR THE PROCTER & GAMBLE COGENERATION PROJECT (Docket No. 93-AFC-02)

Dear Mr. Blevins:

As requested at the January 10, 1994 data response workshop for the Procter and Gamble Cogeneration Project, please find enclosed 12 copies of the NPDES permit application submitted to the Central Valley Regional Water Quality Control Board (CVRWQCB) on February 24, 1994. As you recall the AFC for the project calls for the wastewater to be discharged to the Sacramento County Regional Sanitation District. The District has requested that we evaluate disposal alternatives because the discharge of cooling water does not routinely contain conventional pollutants which are treatable at the Regional Plant and the acceptance of additional salt loads: to the Regional Plant which would tend to increase the overall concentration could compromise the Sanitation District reclamation capabilities.

Please telephone Diana Parker (916-732-6540) if you have questions.

Sincerely,

Susan Strachan

Jana Vaiker

Manager, Permitting & Licensing

Enclosure

cc: Ron Simms, Walsh

Rich Chapman, Black & Veatch

STATE OF CALIFORNIA

State Resources Conservation and Development Commission

| In the matter of: |) | Docket No. 93-AFC-2 |
|--------------------------------|---|---------------------|
| |) | |
| Application for Certification |) | PROOF OF SERVICE |
| of the Sacramento Cogeneration |) | (rev. 12/3/93) |
| Authority's Procter & Gamble |) | |
| Cogeneration Project |) | |
| |) | |

PROOF OF SERVICE

I, Evangeline Parchamento, declare that on February 25, 1994, I deposited copies of the attached copy of NPDES Permit Application submitted to the Central Valley Regional Water Quality Control Board for the Procter & Gamble cogeneration project (Docket No. 93-AFC-02) in the United States mail at Sacramento, California, with first class postage thereon fully prepaid and addressed to the following:

APPLICANT

Ms. Susan Strachan, Manager Projects Permitting & Licensing SMUD Box 15830 Sacramento, CA 95852-1830

Steve Cohn
Senior Attorney
SMUD
P.O. Box 15830
Sacramento, CA 95852-1830

INTERESTED AGENCIES

Richard Johnson Division Chief Sacramento Metro AQMD 8411 Jackson Road Sacramento, CA 95826

Ray Menebroker, Chief Project Assessment Branch Stationary Source Division California Air Resources Board P. O. Box 2815 Sacramento, CA 95814

Ed Schnabel Sacramento Metropolitan Water District 5331 Walnut Avenue Sacramento, CA 95841

CALIFORNIA ENERGY COMMISSION (Docket Unit - 12 copies required)

Docket Unit, MS-4 1516 Ninth Street Sacramento, CA 95814

I declare under penalty of perjury that the foregoing is true and correct.

Signature

Attachment

P.O. Box 15830, Sacramento, CA 95852-1830 • 916/732-5218

Procter & Gamble Cogeneration Project

SCA 94-016/

February/24, 1994

Mr. Joseph J. Henao
Water Quality Control Engineer
Central Valley Regional Water Quality
Control Board
34:43 Routier Road, Suite A
Sacramento, CA 95827-3098

NPDES PERMIT APPLICATION FOR THE WASTEWATER DISCHARGE OF THE PROPOSED PROCTER AND GAMBLE COGENERATION PROJECT

Dear Mr. Henao:

Please find enclosed an application for a NPDES Permit for the cooling wastewater from the proposed Procter Cogeneration Project. The permit is being sought as a result of October 1993 correspondence(enclosed) from the Water Quality Division staff of the County of Sacramento Department of Public The correspondence indicates that the Sacramento County Regional Sanitation District staff concludes that the discharge of cooling water does not routinely contain conventional pollutants which are treatable at the Regional Plant, that the acceptance of additional salt loads to the Regional Plant which would tend to increase the overall concentration could compromise the Sanitation District reclamation capabilities, and that viable discharge options exist. The Sacramento Cogeneration Authority concurs that the wastewater from the cogeneration plant doesn't contain constituents that are treated by the Sanitation District and believes that discharging to Morrison Creek is an appropriate alternative.

We look forward to working with you during the processing of the permit. I shall be telephoning you soon to schedule an appointment to review the application and solicit your comments. Please call me at 916-732-6540 if you have any questions or need additional information.

With Regards,

Diana Parker

Environmental Specialist

Enclosures(2)

bcc: J. Glaubitz J. Larsen

S. Strachan
C. Taylor
D. Thorpe
Chron File
Corp File

COUNTY OF SACRAMENTO



WATER QUALITY DIVISION ROBERT F. SHANKS, Chief

COLLECTION SYSTEM, R. BEDEGREW ENGINEERING, MICHAEL A. MAGGI TREATMENT PLANT, W.H. KIDO

Mr. John Larsen Sacramento Municipal Utility District 6201 S Street Box 15830 Sacramento, CA 95852-1830

DEPARTMENT OF PUBLIC WORKS

DOUGLAS M. ERAL FIGH. Director

| SMUD WH. HARA | | |
|--------------------------|--------------------------|---------|
| Procter & Gample Project | NS, Deputy CE, Deputy | Directi |
| RECEIVED 11/12/93 | | |
| FROSCOCTOBER 7 1993 | | |
| ENVIRONETSSO. 000 | | |
| CONTRACT ADMIN. | | |
| Po | | |
| Dhinay Oil | | |
| FILE NO. COAP | | |
| | | |

SUBJECT: WASTEWATER DISCHARGE FROM PROPOSED SMUD COGENERATION

PLANTS TO THE SACRAMENTO REGIONAL COUNTY SANITATION

DISTRICT

Based on recent discussion with you and the SMUD consultants it is staff understanding that there are two cogeneration projects currently applying for certification through the California Energy Commission for construction and operation in the District service area. These are the facilities to be located at the Campbell Soup and Procter & Gamble sites. In the past few months, staff has met with you and the consultants and discussed, on a preliminary basis, the potential for discharge of wastewater generated from these facilities to the sanitary sewer. In addition, the consultants (Black & Veatch: P&G site; Malcolm Pierny: Campbell Soup site) have been given wastewater discharge applications which when filed will initiate a formal review process.

Throughout these discussions the issue of the discharge of total dissolved solids (TDS) has been referenced. Recently staff held a meeting internally to discuss TDS loadings and develop a policy approach. Staff determinations specific to the subject projects are detailed in the attached report.

In summary, the District concludes that the discharge of cooling water does not routinely contain conventional pollutants which are treatable at the Regional Plant and viable discharge alternatives exist. In addition, the Regional Plant influent/effluent is currently approaching a critical concentration of TDS and the acceptance of additional salt loads which would tend to increase the overall concentration could compromise the District reclamation capabilities. Therefore, prior to any further evaluation of sewer discharge, SMUD should formally investigate alternative disposal options, notably a direct discharge to surface water.

The projects will need appropriate sewer disposal for domestic waste associated with the facilities and discussions on this aspect can proceed as needed.

If you have any questions or comments or would like to arrange a meeting to discuss these issue further, please contact me at 855-8454.

Sincerely,

Glen Del Sarto

Industrial Waste Program Manager

cc: James O Connor, Black & Veatch

John McNaboe, Siemens

SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT STAFF REPORT

SUBJECT: SMUD COGENERATION PLANTS DISCHARGE TO THE REGIONAL PLANT AND TDS LOADING

Proposed Discharge.

During the past few months SMUD has questioned staff as to the possibility of discharging wastewater related to the operation of two cogeneration facilities to be located in Sacramento. The facilities are to be located adjacent to the Campbell Soup and P&G manufacturing sites. The SMUD representatives have been issued applications for wastewater discharge permits, however no formal application has been filed, hence all information in this report is based on preliminary information supplied by SMUD.

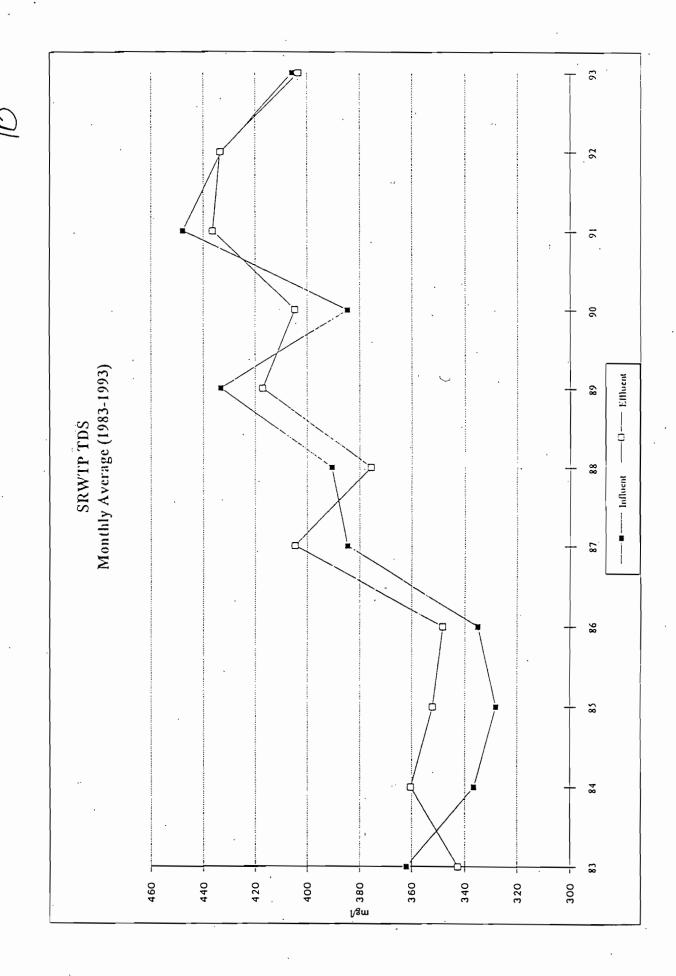
It is staff understanding that the main wastestreams associated with these projects are noncontact cooling tower wastewater and blowdown. Depending upon the cycling regime of water through the towers, the concentration of total dissolved solids (TDS) can very considerably. However, a working concentration appears to be 2000 ppm. The projects may discharge from 250,000 - 600,000 gallons per day of this wastewater.

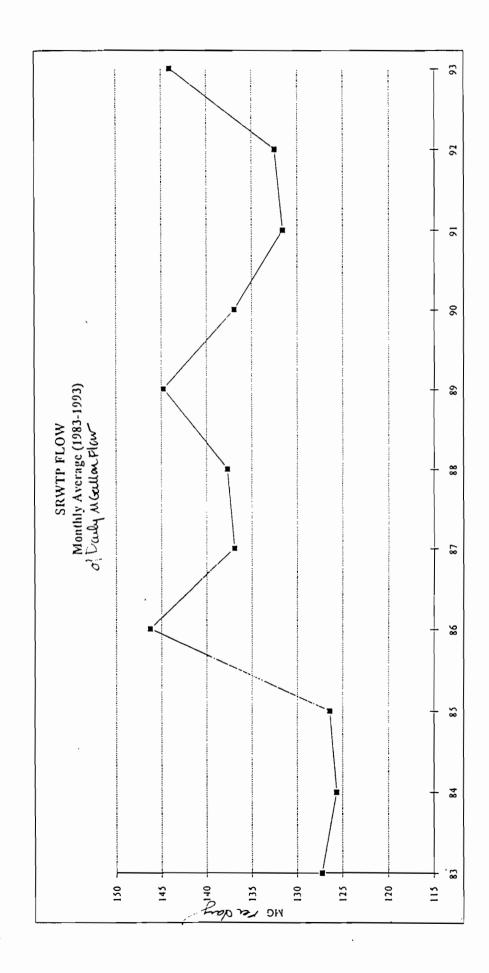
TDS Loadings to the Regional Treatment Plant.

The District is developing a program to use Regional Plant effluent for reclamation uses. The District consultant has established an Regional Plant influent/effluent criteria of 450 ppm TDS. The Regional Plant is not designed to treat for TDS removal and there is no plan to do so in the future. The three year average influent concentration for TDS (1990 - 1993) is 420 ppm (Attachment 1). The average for 1991 was 448 ppm, just slightly below the critical concentration.

Since TDS has only recently manifested as a pollutant of concern, the District is lacking information on contributing sources in the service area (industrial, commercial, residential) and hence unable to identify trends or definite control measures. The TDS loadings to the treatment plant have steadily increased (Attachment 2). It appears that the increase in flows to the treatment plant over the past three years have resulted in the recent concentration decline. However, increased water

- o Certain process generate loadings of conventional pollutants in addition to TDS and these are limited to alternative disposal options other than the sanitary sewer. However, wastestream segregation and pretreatment for salt removal prior to sewer discharge may be necessary in the future.
- o The main wastewater stream generated by cogeneration facilities is cooling tower wastewater and is relatively low in conventional pollutants, however the process has the potential to discharge relatively large loadings of salts.
- o The current concentration acceptable for discharge to the Regional Plant is conceptually less restrictive then a direct discharge to receiving water. The sewerage system only functions as a conduit to the Sacramento River, since no treatment is afforded. Therefore direct discharge to receiving water appears to be a viable option for disposal and should be pursued with the State Regional Water Quality Control Board.





| FORM | | | HMENTAL PROTEC | | I. EPA I.D. NUMBER | |
|--|---|---|---|---|---|--|
|] | SPP | | RAL INFORM | | F | i i i |
| GENERAL | LITEMS | | eneral Instructions" | | GENERAL INSTRI | 13 14 13 |
| 1. EPA 1.D. | 777 | | | | If a preprinted tabel has be it in the designated space. If ation carefully; if any of it through it and enter the c appropriate fill—in area bek | en provided, affix Review the inform- is incorrect, cross orrect data in the ow, Also, if any of |
| V. FACILI | TY IG ADDRESS | PLEASE PLA | CE LABEL IN | THIS SPACE | the preprinted data is abser- left of the label space. Its that should appear), please proper fill—in area(s) belo- complete and correct, you | provide it in the w, if the label is need not complete |
| VI. FACIL | | | | | items I, III, V, and VI for must be completed regards items if no label has been the instructions for detail tions and for the legal su which this data is collected. | lens), Complete all provided, Refer to led item descrip- |
| II POLLUT | ANT CHARACT | EDICTICS | | | | |
| INSTRUCT questions, y if the supp | TIONS: Comple you must submit lemental form is | te A through J to determine we take form and the supplement attached. If you answer "no" juitements; see Section C of the | al form listed in the to each question, yo | parenthesis following the que ou need not submit any of the | stion. Mark "X" in the box in the forms. You may answer "no | the third column " if your ectivity terms. |
| | SPECIFIC | DUESTIONS ' | VES ATTACHED | SPECIFIC | DUESTIONS | VES TO ATTACHE |
| Which r | Pesuits in a disc 2A) | icly owned treatment works charge to waters of the U.S.? | X | include a concentrated equatic animal production discharge to waters of the | | X |
| to wate | | currently results in discharges other than those described in C. | χ | | will result in a discharge to M 2D1 | X X |
| hazardo | us wastes? (FOR | | , X , | municipal effluent below taining, within one qui | et at this facility industrial or the lowermost stratum con- arter mile of the well bore, frinking water? (FORM 4) | X ; |
| water o in conn duction oil or n hydroca | or other fluids wi section with com- i, inject fluids u setural gas, or in- arbons? (FORM | | X | cial processes such as m process, solution mining tion of fossil fuel, or re- (FORM 4) | t at this facility fluids for spe- ining of sulfur by the Frasch of minerals, in situ combus- covery of geothermal energy? | X |
| one of structio aer yes Cleen A | the 28 industri ons and which ver of any air o | sed stationary source which is ial categories listed in the in- will potentially emit 100 tons pollutant regulated under the lay affect or be located in an M 51 | Х | NOT one of the 28 ind instructions and which a per year of any air pollut | ed stationary source which is ustrial categories listed in the will potentially emit 250 tons cant regulated under the Clean or be located in an attainment | X |
| III. NAME C | OF FACILITY | | | | | |
| 11 10 - 10 10 | | R AND GAM | BLE CO | GENERATIO |) N STATIO | <u> </u> |
| IV. FACILIT | TY CONTACT | A. NAME & TITLE (last, fo | | | | |
| 2 L A R | R S F N | JOHN PROJ | | | 6 7 3 2 6 7 0 3 | - |
| 11 1 | Y MAILING AD | | | ., ., ., | <u> </u> | 1 |
| V. FACILIT | T MALE ING AD | A. STREET OR P.O. | | | | |
| 31 P 0 | ВОХ | 1 5 8 3 0 | ;; | | | |
| | | B. CITY OR TOWN | | C.STATE D. ZIP CO | DE | |
| 4 S A C | R A ME | NTO | · · · · · · · · · · · · · · · · · · · | C A 9 5 8 5 | 5 2 | |
| | TY LOCATION | | | | | |
| <u> </u> | A. STRE | ET. ROUTE NO. OR OTHER S | PECIFIC IDENTIFE | ER | | |
| 5 8 3 r | <u>d S T</u> | @ 2 4 th A V E | NUE | • | | |
| | - | B. COUNTY NAME | | | | |
| S A C R | AMEN | TO | · · · · · · · | | | |
| | | C. CITY OR TOWN | | D.STATE E. ZIP CO | (II Khowh) | |
| 6 S A C | RAME | NTO | | C'A 9'5'8'2 | 6 | |

2D NPDES

New Sources and New Dischargers PEPA Application for Permit to Discharge Process Wastewater

| I. Outfall Location | | | | | | | |
|---------------------|-------------|----------|--------|---------|--------|--------|--|
| For each outla | II, list ti | ne latit | ude ar | nd long | ilude. | and th | e name of the receiving water. |
| Outfall Number | L | atitud | е | L | ongitu | de | Receiving Water (name) |
| (list) | Degi | Min | Sec | Deg | Min | Sec | |
| 002 | 38 . | 31. | 49 | 121 | 24 | 27 | Receiving stream is the City of Sacramento storm |
| | | - | | | | - | drains located at intersection of 24th Ave. & 83rd |
| | | | | | | | Street. Storm drain lines are routed east along |
| | | ļ | | | | | 24th_Avenue to Sump No. 66, then flow southeast in |
| _ | : | | | | | | an open channel to Morrison Creek. Morrison Creek drains to the Sacramento River. (See Attachment C) |

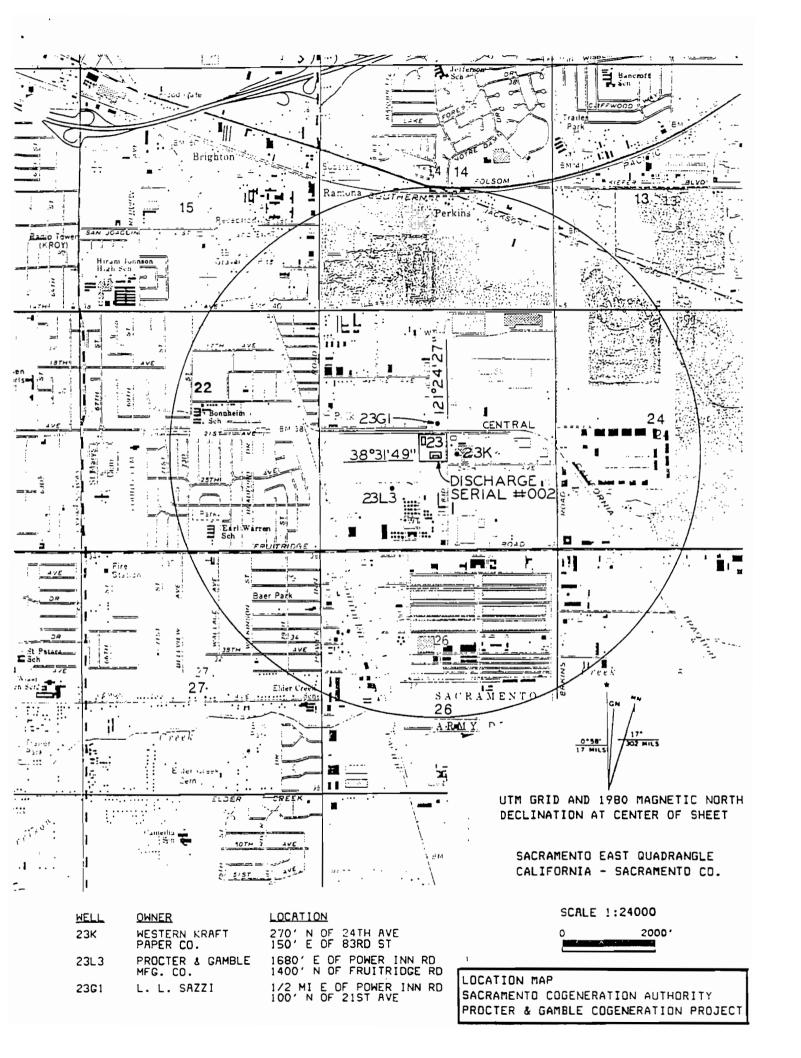
II. Discharge Date (When do you expect to begin discharging?)

October 15, 1996

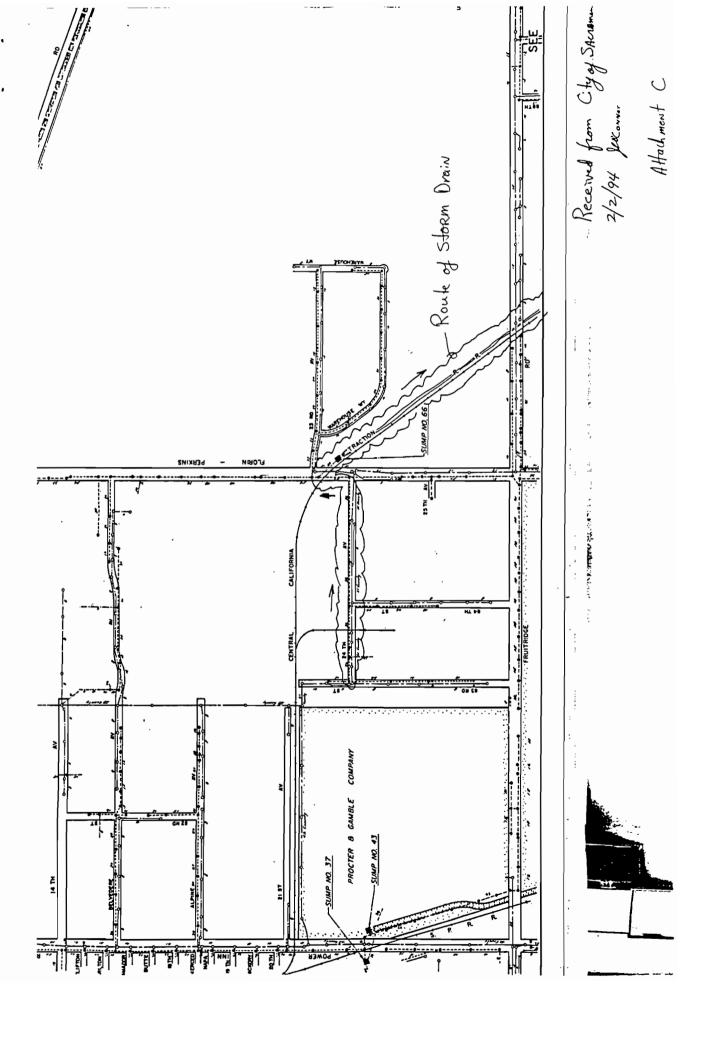
III. Flows. Sources of Pollution, and Treatment Technologies

A. For each outfall, provide a description of (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

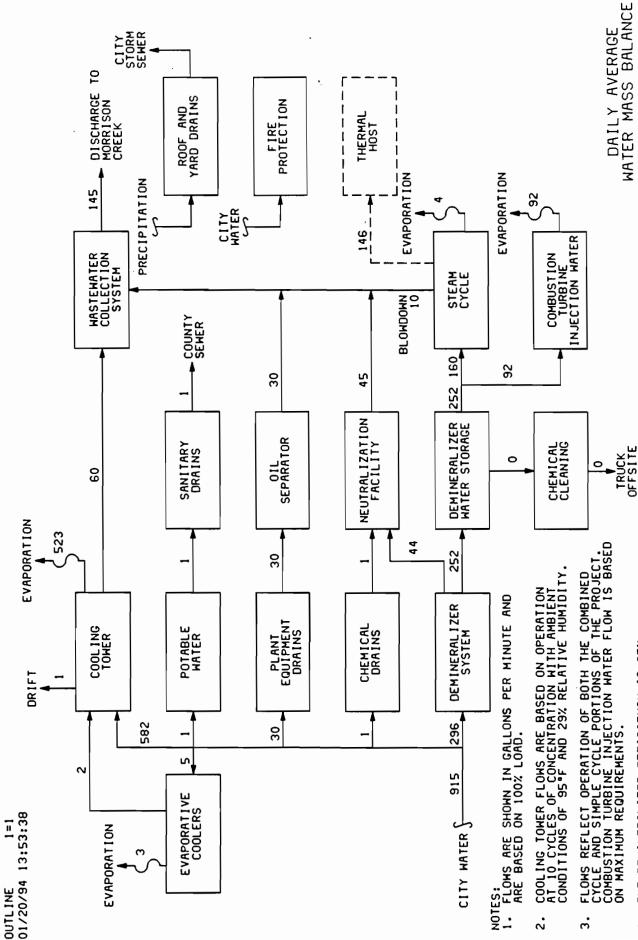
| Outfail Number | Operations Contributing Flow (list) | 2. Average Flow (include units) | 3. Treatment (Description or List Codes from Table 2D-1) |
|-------------------|---|---------------------------------|--|
| 002A | HRSG BLOWDOWN | 10 GPM | * |
| 002B | COOLING TOWER BLOWDOWN | 60 GPM | * |
| 002C | NEUTRALIZATION FACILITY EFFLU | ENT 45 GPM | 2-K* |
| 002D | PLANT EQUIPMENT DRAINS | 30 GPM | 1-H* |
| 002 | WASTEWATER COLLECTION | 145 GPM | 4-A* |
| | | | 1 |
| | * See Attachment B which prov | ides a narrative (| description of each Afream. |
| | | | |
| DESCRIPTI | ION OF CODES: 1-H OIL SI | EPARATION | |
| | 2-K pH NE | TRALIZATION | |
| | 4-A DISCHA | ARGE TO SURFACE W | ATER |
| | | | |
| | | | |
| | | | |
| | | | |



| . SIC CODES 14-dient, in order or amonty i | | | | | | | · |
|--|---|-----------------|--|---|---|---|---|
| A. FIRST | | | .225. | | <u> </u> | 10 | |
| 4 0 1 1 (Pecify) — | | | 7 | (specify) | | | |
| ELECTRIC SERVI | | • | 11111 | - | | | |
| C. THIRD | ./ut | . 26 | · orme | | D. FC JR | TH | |
| (specify) | • | | 7 13CT VO | (Specil).) | | | |
| 19 19 1 | | | | | | | |
| II. OPERATOR INFORMATION | | | <u> </u> | | | | |
| | A. N | AME | | | | | 8. Is the name Hetas (Itam VIII-A also t |
| SACRAMENTO CO | | T 7 0 | . , | | - v | | owner? |
| | GENERA | 1 1 0 | N AU | T H O R I | 1 Y | | T YES 🗆 NO |
| •• | | <u> </u> | | | | " | |
| C. STATUE OF OPERATOR (Enter the all F = FEDERAL M = PUBLIC (other the | | | | r". mecify.) | | D. PHONE IS | TE COSE & RO. / |
| F - FEDERAL M = PUBLIC (otner the S = STATE O = OTHER (specify) | in jegeres or state) | M (3) | peci/y _/ | | A 9 | 1645 | 2 3 2 1 1 |
| P - PRIVATE | | | | | 1.00 | | 10 11 10 |
| E. STREET | OR P.O. BOX | | | | | 1 31 | •- |
| 0 B 0 X 1 5 8 3 0 | | | | ' . | | 1. ,ett | o. - |
| | | | | | | | |
| F. CITY OR TO | - NWN | | IG.STA | TE H. ZIP CO | | | |
| SACRAMENTO . | | , , , | · · ITc | 9 5 8 | 52 | | on thouse useds? |
| | | | | 11 | <u> </u> | YES | ⊡ ио |
| 1.0 | | | 44 41 41 | 47 - | ••• | | |
| EXISTING ENVIRONMENTAL PERMITS | | | F | | | · 'F | |
| A. HPOES (Discharges to Surface Water) | | r Emission | I from Proposed | Sourcesi | | | |
| INI NONE | 9 PI N | ONE | | | | | 'm w - |
| 111010 | 15 19 10 17 19 | | | 10 | | | 1Decies- |
| 2. UIC (Underground Interior of Fluids) | 1 | E. OTHE | R (specify) | | | | |
| IUI NONE | 9 1 i N | ONF | | | specify. | | |
| 101010 | 30 100 101 10 | | | 10 | | | |
| C. RCRA (Hasardous Wastes) | | E. OTHE | R (specify) | | | | |
| RI NONE | 9 1 N | O. N. F. | | . , , , | specify, | | |
| LMAP | | 71. N. F. | _ | 10 | | | |
| Attach to this application a topographic the outline of the facility, the location of treatment, storage, or disposal facilities, water bodies in the mapping. See instruct | if each of its exit and each well w | nting and phone | proposed intai ects fluids uni ets. | ke and discha perground. In | rge structur | s, gach of it | hazardous waste |
| III. NATURE OF BUSINESS (provide & priet de | scription | | | Jesta 02 | · | | 254 |
| | | 7.00 | | | · | / 11117X2G | |
| The - 1 - 1 - 1 - 1 | electric pov | ver and | Draces | steam. T | | act ic a | 171 |
| The plant will produce combined cycle, cogener Sacramento Municipal Ut & Gamble. | ation facil [.] | ity. T | he electr | ic power | will be | sold to | the |
| combined cycle, cogener Sacramento Municipal Ut | ation facil [.] | ity. T | he electr | ic power | will be | sold to | the |
| combined cycle, cogener Sacramento Municipal Ut & Gamble. | ation faciliality Distribution for the personally examinating of those poon is true, account | ity. Tict (SM | am familiar w modistely resumplets. I am | ic power rocess st | will be ceam will metion submitted the submitted submitted to the submitted | sold to be sold interesting this information ificant peneit | the to Procter |
| COMBINED Cycle, cogener Sacramento Municipal Ut & Gamble. CIN. CERTIFICATION (see instructions) I certify under penelty of ISW that I have attachmen: and that based on my including the post. :ilid. COLIN TAYLOR DIRECTOR, PROJECTS DEVELOR. | ation facilility Distributed in the personally examinating of those pages is true, eccuraty of fine ar. | nined and | am familiar w modistely resumplets. I am | rocess st | will be ceam will metion submitted the submitted submitted to the submitted | sold to be sold inted in this information ificant penal | the to Procter application and all contained in the ties for submitting |
| COMBINED CYCLE, cogener Sacramento Municipal Ut & Gamble. CILL CERTIFICATION (see instructional) I certify under penalty of ISW that I have attachmen: and that, based on my including the poss. :ilid comments in the information of the infor | ation facilility Distributed Personally examination of those pages of the pages of | nined and | am familiar w modistely resumplets. I am | rocess st | mation subministration for submining the | sold to be sold inted in this information ificant penal | the to Procter application and all contained in the ties for submitting |
| COMBINED CYCLE, cogener Sacramento Municipal Ut & Gamble. CHI. CERTIFICATION (see inservenent) I certify under penetry of ISW that I have attachmen: and that, based on my interpolication believe that the information false information, including the poss. ::life COLIN TAYLOR DIRECTOR, PROJECTS DEVELORMENTS FOR OFFICIAL USE ONLY | ation facilility Distributed Personally examination of those pages of the pages of | nined and | am familiar was madistely resumed. | rocess st | mation subministration for submining the | inted in this information ifficant penal | the to Procter application and all contained in the ties for submitting |



| В. | operation detailed between certain r | ons contributi descriptions nintakes, ope nining activit | ing wastewat in Item III-A. trations, treat | er to the effluer Construct a wat ment units, and pictorial descrip | nt, and treatmen er balance on th outfalls. If a wat | it units labeled t ne line drawing l ter balance cann | sources of intak o correspond to by showing avera ot be determined f any sources of v | the more ige flows I (e.g., for |
|------|--------------------------------------|---|---|--|--|---|---|---------------------------------------|
| C. | Except f | <u>.[</u> ? | | | _ | described in ite | m III-A be intern | nittent or |
| | | ☐ Yes (complete | the following ta | | (go to item IV) | | | |
| | | Outell | | | quency | . Mauienuen | 2. Flow | c. Duration |
| | | Outfall Number | | a. Days Per Week (specily average) | b. Months Per Year (specify average) | a. Maximum Daily Flow Rate (in mgd) | b. Maximum Total Volume (specify with units) | (in days) |
| If t | tual produ st 3 years Year | ction level, not of operation. If a. Quantity Per Day | design), express production is lib b Units of Measure | sed in the terms an | d units used in the ay also submit alte c. Operate | applicable effluent | ed level of productic I guideline or NSPS (attach a separate s | for each of the |
| | | 200110H-DI | | 30.522.11 | _ · | | | |
| | | | | | | | | |
| 1 | | | | | | | | |



ACAD 12_c1b

23933-031-W 13903EVANS

4. THE DEMINERALIZER EFFICIENCY IS 85%.

S. COGENERATION STEAM FLOW IS BASED ON AVERAGE REQUIREMENTS.

| CONTINUED FROM THE FRONT | EPA ID Number (cc | opy from Hem 1 of Fo | orm 1) | Outtail Number 002 -WASTEWATER COLLECTION |
|---|---|---|---------------------|--|
| V. Effluent Characteristics | | | | |
| A, and B. These items require you to be discharged from each of your out be completed in accordance with t separate page. Attach additional sh | talls. Each part of the specific instracts neets of paper if | of this item addresses to the tructions for that necessary. | esses a | different set of pollutants to different set of pollutants and should at a for each outfall should be on a |
| the source of information. Data for the permitting authority. For all ou | o provide an esti all pollutants in (atfalls, data for p r are limited dire | mated daily max Group A, for all o ollutants in Gro | utfalls, up B sh | nd average for certain pollutants and must be submitted unless waived by could be reported only for pollutants trions guideline or NSPS or indirectly |
| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | | 4. Source (see instructions) |
| GROUP A | | | | |
| FLOW | 334,080 gpd | 208,800 gpd | 4 | |
| BOD | * | * | 4 | |
| COD | *: | * | 4 | |
| тос | * | * | 4 | |
| TSS | 45 mg/l (57 kg) | 30 mg/l (24 kg) | 4 | |
| TEMP (WINTER) | 120° F | 80° F | 4 | |
| TEMP (SUMMER) | 125° F | 100° F | 4 | |
| рН | 7.2 to 8.4 | 8.0 | 4 | |
| AMMONIA (as N) | 'L0 mg/l | 0.5 mg/1 | 4 | |
| | | <u> </u> | | |
| | | <u> </u> | | • • |
| | | | | |
| * Constituent is present | only to the | extent it is | prese | nt in the water supply. The |
| plant processes do not | add to the m | ass of the c | onstit | uent in this wastewater. The |
| cooling tower process m | ay reduce the | e level of t | nis co | nstituent. |
| | | <u> </u> | <u> </u> | |
| | | | <u> </u> | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

CONTRIGED FROM THE FRONT STAND Number (copy from them 1 of Form 1) Outland Number COLLECTION OC - WASTEWATER COLLECTION

V. Ellivent Characteristics

A, and B: These items require you to report estimated amounts (both concentration and mass) of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

General Instructions (See table 2D-2 for Pollutants)

| 1. Poliutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | 4. Source (see instructions) |
|-------------------------------|---|---|-------------------------------|
| GROUP B | | <u> </u> | |
| TOTAL RESIDUAL CHLORINE | 0.5 mg/l (126 g) | 0.0 mg/l | 4 |
| FLUORIDE* | 0.68 mg/l (860 g) | 0.0 mg/l | 4 |
| NITRATE-NITRITE (AS N)* | 5.8 mg/l | 2-8 mg/1 (2.2.kg) | 4 |
| SULFATE (AS SO _L) | 1750 mg/1 (2213 kg) | 1450 mg/l (1146 kg) | 4 |
| MAGNESIUM, TOTAL | 50 mg/l (63 kg) | 40 mg/l (32 kg) | 4 |
| CHROMIUM, TOTAL | 0.007 mg/l (8.9 g) | (4.7 g) | 4 |
| ARSENIC, TOTAL | 0.008 mg/l | (5.5 g) | 4 |
| COPPER, TOTAL | 0.05 mg/l (63 g) | 0.045 mg/1 (36 g) | 4 |
| DICHLOROBROMOMETHANE | 0.02 mg/l (25 g) | 0.017 mg/1 (13 g) | 4 |
| CHLOROFORM | 0.35 mg/l | 0.269 mg/1 (213 g) | i. |
| OIL AND GREASE | 15 mg/l (19 kg) | 3 mg/l (2:4 kg) | . <u>4</u> |
| | <u> </u> | <u> </u> | |
| *BASED ON THE CONCENT | TRATION OF CO | ONSTITUENTS F | ROM 1991-92 OPERATIONAL DATA |
| PROVIDED BY CITY OF | ACRAMENTO DI | PARTMENT OF | UTILITIES FOR THE SACRAMENTO |
| RIVER WATER TREATMENT | PLANT AND | THE E. A. FAI | RBAIRN WATER TREATMENT PLANT. |
| | | | 1 |
| | | | |
| | | | |
| | | | ĺ |

| DNTINUED FROM THE FRONT | | copy from Item 1 of Form 1) | Outlall Number 002A HRSG BLOWDOWN |
|--|--|---|--|
| be discharged from each of y | e you to report estimate our outfalls. Each part with the specific inst | of this item addresses | entration and mass) of the pollutants to a different set of pollutants and should Data for each outfall should be on a |
| the source of information. Do the permitting authority. Fo | ts you to provide an est ata for all pollutants in r all outfalls, data for p esent or are limited dire | imated daily maximum Group A, for all outfall pollutants in Group B | and average for certain pollutants and s, must be submitted unless waived by should be reported only for pollutants tations guideline or NSPS or indirectly |
| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | 4. Source (see instructions) |
| GROUP, A | | ! | |
| FLOW | 14,400 gpd | 14,400 gpd | 1 |
| BOD | 0.0 mg/l | 0.0 mg/1 | 1 |
| COD | 0.0 mg/l | 0.0 mg/1 | 1 |
| тос | 0.0 mg/l | 0.0 mg/1 | 1 |
| TSS | (5 mg/1 (272 g) | (5 mg/1 (272 g) | 1 |
| TEMP (WINTER) | 212° F | 212° F | 1 |
| TEMP (SUMMER) | 212° F | 212° F | 1 |
| рН | 9.0 to 10.0 | 0 9.2 - 9.7 | 1 |
| AMMONIA (AS N) | 0.0 mg/1 | 0.0 mg/1 | 1 |
| | | | ••; |
| | | | |
| | | | |
| · | | | |
| | | 1 : | |
| | | | |
| | | | |
| | | | |
| | | | |

| CONTINUED FROM THE FRONT | EPA ID Number (copy from Item 1 of Form 1) | Outtall Number 002A - HRSG BLOWDOWN |
|--------------------------|--|--|
| 11 7 10 21 | | |

A, and B: These items require you to report estimated amounts (both concentration and mass) of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

General Instructions (See table 2D-2 for Pollutants)

| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | 4. Source (see instructions) |
|-------------------------------|---|---|------------------------------|
| GROUP B | | <u> </u> | |
| NITRATE-NITRITE (AS N) | 0.0 mg/l | 0.0 mg/l | 4 |
| PHOSPHORUS (AS P), TOTAL | 1.0 mg/1 (55 g) | 0.6 mg/l (33 g) | 4 |
| SULFATE (AS SO ₄) | 0.0 mg/l | 0.0 mg/l | 4 |
| MAGENSIUM | 0.0 mg/l | 0.0 mg/l | 4 |
| CHROMIUM, TOTAL | 0.0 mg/1 | 0.0 mg/l | 4 |
| ARSENIC, TOTAL | 0.0 mg/l | 0.0 mg/l | 4 |
| COPPER, TOTAL | 0.0 mg/l | 0.0 mg/l | 4 |
| DI CHLOROBROMOMETHANE | 0.0 mg/l | 0.0 mg/l | 4 |
| CHLOROFORM | 0.0 mg/l | 0.0 mg/l | 4 |
| | | ! | |
| | ! | : | |
| | İ | | |
| | | | |
| | | <u> </u> | |
| | | ! | |
| | | | |
| | | | |
| | |] | |
| | - | | |
| | İ | İ | |
| | | | |
| PA Form 3510-2D (7-89) | | Page 3 of 5 | CONTINUE ON RE |

| CONTINUED FROM THE FRONT | EPA ID Number red | ppy from item 1 of fi | orm 1) | Outlail Number 002 B - COOLING TOWER | BLOWI |
|--|--|---|---------------------|---|----------|
| V. Effluent Characteristics | | | | : | |
| A. and B: These items requirely be discharged from each of you be completed in accordance wiseparate page. Attach addition | r outfalls. Each part o with the specific instr | of this item address | esses a | different set of pollutants and | should |
| General Instructions (See tab. | le 2D-2 for Pollutant | s <i>)</i> | | | |
| Each part of this item requests the source of information. Data the permitting authority. For a which you believe will be presentiough limitations on an indication. | a for all pollutants in (all outfalls, data for p ent or are limited dire | Group A, for all o | utfalls, up B si | must be submitted unless wa nould be reported only for pol | lived by |
| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | | 4 Source (see instructions) | |
| GROUP A | | | | | |
| FLOW | 144,000 gpd | 86,400 gpd | 4 | | |
| BOD | * | * | 4 | | |
| COD | * | * | 4 | | |
| тос | * | * | 4 | | |
| TSS | 45 mg/l . (25 kg) | 30 mg/l (9.8 kg) | 4 | | |
| TEMP (WINTER) | 120° F | 80° F | 4 | | |
| TEMP (SUMMER) | 125° F | 100° F | 4 | | |
| рН | 7.5 to 8.5 | 8.0 to 8.5 | : 4 | | |
| AMMONIA (AS N) | 0.0 mg/l | 0.0 mg/l | : 4 | | |
| | | ! | | | |
| | | : | | • · | |
| | | : | : | | |
| * Constituent is pre | esent only to the | e extent it | is pre | sent in the water supp | ly. The |
| plant processes do | not add to the | mass of the | const | ituent in this wastewa | ter. Th |
| cooling tower proc | ess may reduce | the level of | this | constituent. | |
| | | <u> </u> | | | |
| | | | | | |
| | | | ! | | |
| | | | | | |
| | | | | | |
| | | | | | |
| EPA Form 3510-2D (7-89) | | Page 3 of 5 | | CONTINUE | ON REVER |

| CONTINUED FROM THE FRONT | EPA ID Number (copy from item 1 of form 1) | Outlatt Number | | |
|--------------------------|--|----------------|-------|----------|
| | | 002 B-COOLING | TOWER | BLOWDOWN |

A. and B: These items require you to report estimated amounts (both concentration and mass) of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

General Instructions (See table 2D-2 for Pollutants)

| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | 4. Source (see instructions) |
|-------------------------------|---|---|--------------------------------------|
| GROUP B | | | |
| TOTAL RESIDUAL CHLORINE | 1.0 mg/l (136 g) | 0.1 mg/l (8.2 g) | . 4 |
| FLUORIDE* | 1.4 mg/l (763 g) | 0.0 mg/l | 4 |
| NITRATE_NITRITE (AS N) | 12 mg/1 | 6.0 mg/l (2.0 kg) | 4 |
| SULFATE (AS SO ₄) | 600 mg/l (327 kg) | 500 mg/l (164 kg) | <u> </u> |
| MAGNESIUM, TOTAL | 75 mg/l. (41 kg) | 60 mg/l (20 kg) | 4 |
| CHROMIUM, TOTAL ** | 0.05 mg/l (27 g) | 0.01 mg/1 (3.3 g) | 4 |
| ARSENIC, TOTAL ** | 0.05 mg/l (27 g) | 0.01 mg/1 (3.3 g) | . 4 |
| COPPER, TOTAL ** | 0.1 mg/1 (55 g) | 0.07 mg/l (23 g) | 4 |
| DICHLOROBROMCMETHANE ** | 0.05 mg/l | 0.03 mg/l (9.8 g) | 4 |
| CHLOROFORM ** | 0.60 mg/l (327 g) | 0.42 mg/1 (137 g) | 4 |
| | | <u> </u> | **: |
| *BASED ON THE CONCENTR | ATION OF CONS | TITUENTS FRO | CM 1991-92 OPERATIONS DATA |
| PROVIDED BY CITY OF SA | CRAMENTO DEP | RTMENT OF U | TILLITIES FOR THE SACRAMENTO |
| RIVER WATER TREATMENT | PLANT AND THE | E.A. FAIRBA | A.IRL WATER TREATMENT PLANT. |
| | | | |
| **BASED ON SAMPLE OF C | LTY WATER PG- | 1, ANALYSES | ATTACHED. |
| | | | |
| CONSTITUENTS MARKED WI | TH * OR ** A | RE PRESENT C | NLY TO THE EXTENT THEY ARE PRESENT |
| IN THE WATER SUPPLY. | THE PLANT PR | OCESSES DO N | dT ADD TO THE MASS OF THE CONSTITUEN |
| IN THIS WASTEWATER. | | | |
| | | | |

| ONTHINED FROM THE FRONT | EPA 10 Number red | nov trom tiem I ut f | ormi 1) | Outral Number NEUTRALIZATION OOZ C-FACILITY EFFLUENT |
|--|--|---|-----------------------|--|
| Effluent Characteristics | | | | |
| in and 8: These items require be discharged from each of your be completed in accordance separate page. Attach additional discourage is a separate page. | our outfalls. Each part of with the specific instrong on all sheets of paper if | i this item addructions for that necessary. | esses a | tration and mass) of the pollutants different set of pollutants and shou ata for each outfall should be on |
| the source of information. Da the permitting authority. For | s you to provide an estite for all pollutants in (all outfalls, data for person or are limited dire | mated daily max Group A, for all o | outfalls. oup B st | nd average for certain pollutants a must be submitted unless waived rould be reported only for pollutar ations guideline or NSPS or indirec |
| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | | 4 Source (see instructions) |
| GROUP A | | | ! | |
| FLOW** | 89,280 gpd | 64,800 gpd | 4 | |
| BOD | * | * | ! 4 | |
| COD | <u></u> | * | : 4 | |
| TOC | * | * | 4 | |
| TSS | 45 mg/l . (15.2 kg) | 30 mg/l (7.4 kg) | 4 | |
| TEMP (WINTER) | 90° F | 80° F | 4 | |
| TEMP (SUMMER) | 100° F | 85° F | 4 | |
| pH | 6.0 to 9.0 | 6.5 | ! 4 | |
| AMMONIA (AS N) | 0.0 mg/1 | 0.0 mg/l | : 4 | |
| *CONSTITUENT IS PRES | ENT UNTA LU THE E | XTENT IT IS | PRESEN | IT IN THE WATER SUPPLY. TH |
| PLANT PROCESSES DO NO | OT ADD TO THE MAS | S OF THE COM | ISTITUE | NT IN THIS WASTEWATER. |
| **THIS IS A BATCH PRO | DCESS! MAXIMUM D | SCHARGE OCC | ŲRS WE | EN NEUTRALIZATION |
| FACILITY TRANSFER PU | MPS ARE OPERATING | ∔ | i | |
| | | ! | : | |
| | | | ! | - |
| | | | | |
| | | | <u> </u> | |
| | | İ | | |
| | | | 1 | |
| | | | | |
| | 1 | 1 | | |

| CONTINUED FROM THE FRONT | EPA ID Number (copy from flem 1 of Form 1) | Outtall Number MEUTRALIZATION OOZ CFACILITY EFFLUENT |
|--------------------------|--|--|
|--------------------------|--|--|

A, and B: These items require you to report estimated amounts (both concentration and mass) of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

General Instructions (See table 2D-2 for Pollutants)

| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | 4. Source (see instructions) |
|-------------------------------|---|---|-------------------------------------|
| GROUP B | | | |
| TOTAL RESIDUAL CHLORINE | 0.1 mg/l (33.7 g) | 0.0 mg/l | 4 |
| FLUORIDE* | 0.14 mg/l | 0.0 mg/l | 4 |
| NITRATE-NITRITE (AS N) * | 1.2 mg/l (406 e) | 0.6 mg/l (147 g) | 4 |
| SULFATE (AS SO ₄) | 4700 mg/l (1588 kg) | 3900 mg/l (957 kg) | 4 |
| MAGNESIUM, TOTAL | 50 mg/l (16.9 kg) | 40 mg/l (9.8 kg) | 4 |
| CHROMIUM, TOTAL ** | 0.01 mg/l (3.4 g) | .007 mg/l (1.7 g) | 4 |
| ARSENIC, TOTAL** | 0.01 mg/l (3.4 g) | .008 mg/l (2.0 g) | 4 |
| COPPER, TOTAL** | 0.06 mg/l (20 g) | 0.05 mg/l (12.3 g) | 4 |
| DICHLOROBROMOMETHANE** | 0.03 mg/l (10 g) | 0.02 mg/l (4.9 g) | 4 |
| CHLOROFORM** | 0.35 mg/l (118 g) | 0.27 mg/l (66 g) | . 4 |
| | | 1 | • '; |
| *BASED ON THE CONCENTRA | TION OF COMS | TITUENTS FRO | M 1991-92 OPERATIONAL DATA |
| PROVIDED BY CITY OF SAC | CRAMENTO DEPA | RTMENT OF UT | LLITIES FOR THE SACRAMENTO |
| RIVER WATER TREATMENT F | LANT AND THE | E. A. FAIRE | AIRN WATER TREATMENT PLANT. |
| | | | |
| **BASED ON SAMPLE PG-1, | CITY WATER, | ANALYSES AT | TACHED. |
| | | | |
| CONSTITUENTS MARKED | WITH * OR ** | ARE PRESENT | ONLY TO THE EXTENT THEY ARE PRESENT |
| IN THE WATER SHPPLY | THE PLANT | PROCESSES D | ON NOT ADD TO THE MASS OF THE |
| CONSTITUENTS IN TH | IS WASTEWATER | ₹. | |
| | | | |
| FPA Form 3510-2D (7-89) | | Page 3 of 5 | CONTINUE ON REVERS |

| NTIFILED FROM THE FRONT | EPA 10 Number 100 | oy trom tem 1 of F | ון יחוס | Outtall Number | EOUIPMENT | DRAI |
|---|---|---|----------|---------------------------------------|----------------------------------|--------|
| Effluent Characteristics | | | | 300 - 22.2 | : | |
| A. and B: These items require be discharged from each of yo be completed in accordance separate page. Attach additional | ur outfalls. Each part o with the specific instr | t this item addri | esses a | different set of pe | ollutants and s | houic |
| General Instructions (See tal Each part of this item requests the source of information. Da the permitting authority. For which you believe will be pres through limitations on an inc | s you to provide an estir ta for all pollutants in C all outfalls, data for po sent or are limited direc | nated daily max Group A, for all c ollutants in Gro | outfalls | , must be submitt hould be reporte | ed unless war d only for poll | ved bi |
| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | | 4 Source/se | e instructions) | |
| GROUP A | | | ! | | | |
| FLOW | 86,400 gpd | 43,200 gpd | . 4 | | | |
| BOD | * | * | 4 | | | |
| COD | * | * | : 4 | | | |
| TOC | * | * | . 4 | | | |
| TSS | 45 mg/l. | 30 mg/1 4.9 g) | ! 4 | | | |
| TEMP (WINTER) | 75° F | 65° F | 1 4 | | | |
| TEMP (SUMMER) | 80° F | 70° F | 1 4 | | | |
| рН | 6.0 to 9.0 | 7.5 | : 4 | | | |
| AMMONIA (AS N) | 0.0 mg/l | 0.0 mg/l | : 4 | | | |
| | | | | | | |
| *CONSTITUENT IS PRESE | NT ONLY TO THE EX | TENT IT IS | PRESE | T IN THE WATE | EK SUPPLY. | The |
| PLANT PROCESSES DO NO | T ADD THE MASS | OF THE CON | STITU | ENT IN THIS WA | ASTEWATER. | |
| | | İ | i | | | |
| | | i 1 | : | | | |
| | | | · _ | | | |
| | | i | | | | |
| | | | ! | | | |
| | | | 1 | | | |
| | | | İ | | | |
| | | | | | | |
| | | 1 | 1 | | | |

| CONTINUED FROM THE FRONT | EPA ID Number (copy from Item 1 of Form 1) | Outlail Number 002D PLANT EQUIPMENT DRAINS |
|--------------------------|--|---|
| | | I DOZ- FLANT EUUTPMENT DRAINS |

A, and B: These items require you to report estimated amounts (both concentration and mass) of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

General Instructions (See table 2D-2 for Pollutants)

| 1. Pollutant | 2. Maximum Daily Value (include units) | 3. Average Daily Value (include units) | 4. Source (see instructions) |
|-------------------------------|---|---|-------------------------------------|
| GROUP B | | | |
| TOTAL RESIDUAL CHLORINE | 0.1 mg/1 (32.7 g) | 0.0 mg/l | 4 |
| FLUORIDE* | 0.14 mg/1 (45.8 g) | 0.0 mg/l | 4 |
| NITRATE-NITRITE (AS N)* | 1.2 mg/l (392 g) | 0.6 mg/l (98 g) | 4 |
| SULFATE (AS SO ₄) | 20 mg/l (6.5 kg) | 16 mg/l (2.6 kg) | 4 |
| MAGNESIUM, TOTAL | 7 mg/l (2.3 kg) | 6 mg/l (981 g) | 4 |
| CHROMIUM, TOTAL | .002 mg/l (0.7 g) | .001 mg/l (0.2 g) | 4 |
| ARSENIC, TOTAL | .002 mg/l (0.7 g) | .001 mg/1 (0.2 g) | 4 |
| COPPER, TOTAL | .01 mg/l (3.3 g) | .007 mg/l (1.1 g) | 4 |
| DI CHLOROBROMOMETHANE | .005 mg/l (1.6 g) | .003 mg/l (0.5 g) | 4 |
| CHLOROFORM | .05 mg/l (16.4 g) | 0.042 mg/l (6.9 g) | 4 |
| OIL AND GREASE | 15 mg/1 (4.9 kg) | (2.5 kg) | 4 |
| | | | |
| *BASED ON THE CONCENTRATI | ON OF CONSTI | TUENTS FROM | 1991-92 OPERATIONAL DATA |
| PROVIDED BY CITY OF SACRA | MENTO DEPART | MENT OF UTIL | ITIES FOR THE SACRAMENTO |
| RIVER WATER TREATMENT PLA | NT AND THE E | . A. FAIRBAI | RN WATER TREATMENT PLANT. |
| | | <u> </u> | İ |
| **BASED ON SAMPLE PG-1, C | ITY WATER, A | NALYSIS ATTA | CHED. |
| | | | |
| CONSTITUENTS MARKED WITH | * OR ** ARE | PRESENT ONLY | TO THE EXTENT THEY ARE PRESENT |
| IN THE WATER SUPPLY. THE | PLANT PROCE | SSES DO NOT | ADD TO THE MASS OF THE CONSTITUENTS |
| IN THE WATER. | | | |
| | | Page 3 of 5 | CONTINUE ON BEVER |

| CONTINUED FROM THE FRONT | EPA ID Number (copy from Item 1 of form 1) |
|--|--|
| | |
| C. Use the space below to list any of reason to believe will be discharg believe it will be present. | the pollutants listed in Table 2D-3 of the instructions which you know or have ed from any outfall. For every pollutant you list, briefly describe the reasons you . |
| 1. Pollutant | 2. Reason for Discharge |
| | |
| | |
| | |
| · | |
| | |
| MONE RELIEVED TO RE PO | ESENT IN ANY OF THE OUTFALLS. |
| NONE BELIEVED TO BE IN | SERI IN ART OF THE COTTABLE. |
| | |
| | j |
| | |
| | |
| | |
| - | |
| | |
| · | |
| | · |
| | |
| | |
| | |
| | |
| i | } |
| | |
|] | |
| J | |
| } | |
| | |
| | |
| VI. Engineering Report on Wastewater Treatm | |
| If there is any technical evaluation conce appropriate box below. | erning your wastewater treatment, including engineering reports or pilot plant studies, check the |
| Report Available | X No Report |
| B. Provide the name and location | of any existing plant(s) which, to the best of your knowledge, resembles this |
| production facility with respect to | production processes, wastewater constituents, or wastewater treatments. |
| Name | Location |
| | |
| | |
| | The same of the sa |
| THIS PLANT IS NOT EXACT | LY LIKE ANY EXISTING PLANTS. THE WASTEWATER TREATMENT |
| AND WASTEWATER CONSTITUTE WHICH USES CITY WATER AS | ENTS ARE EXPECTED TO BE SIMILAR TO A TYPICAL POWER PLANT |
| WHICH USES CITI WATER A | I LANT WATER SOURCE. |
| 1 | |
| | |
| | |
| | |
| İ | |

EPA ID Number (copy from item one of Form 1)

| VII. Other Information (Optional) | | |
|---|---|--|
| Use the space below to expand upon any of the above questions or to bring to other information you feel should be considered in establishing permit lin Attach additional sheets if necessary. | o the attention nitations for th | of the reviewer any ne proposed facility. |
| | | |
| | | |
| | | |
| s · | | |
| | | |
| | | |
| | | |
| | , | |
| | | |
| | | |
| | | |
| | | |
| .t. | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| /III. Certification | | |
| I certify under penalty of law that this document and all attachments wer supervision in accordance with a system designed to assure that qualified evaluate the information submitted. Based on my inquiry of the person or per those persons directly responsible for gathering the information, the information knowledge and belief, true, accurate, and complete. I am aware that there are false information, including the possibility of tine and imprisonment for knowledge. | ed personnel persons who ma ation submitted significant per | properly gather and anage the system, or d is, to the best of my nalties for submitting |
| A Name and Official Title (type or print) | | B. Phone No. |
| COLIN TAYLOR DIRECTOR, PROJECTS DEVELOPMENT | 916 | 732-6724 |
| C Signature | | D. Date Signed |

 \mathfrak{F}



REPORT DATE : December 17, 1993

INVOICE #12199

LABORATORY ID: 693-6345.1

AMENDED REPORT

PAGE 1 of 48

DATE SAMPLED : 11-10-93 at 1400

by L. Maier

DATE RECEIVED: 11-11-93 at 1040 from L. Maier

ATTENTION

: Lonn Maier

CLIENT

SMUD Projects Development

P.O. Box 15830; MS 37

Sacramento, CA 95852-1830

PROJECT

1 Procter & Gamble Cogen

PROJECT MGR

: John Larsen

ANALYZED BY REVIEWED BY : L. Houser

R. Stafford

DATE ANALYZED: 11-24-93

CLIENT BAMPLE ID: PG-1

SAMPLE TYPE: Drinking Water

PURGEABLE HALOCARBONS

METHOD: EPA 601

| | result (ug/l) | DLR (ug/L) | CONSTITUENT | RESULT (ug/L) | DLR (ug/L) |
|---|---|------------------|---|------------------|--|
| Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chloromethane 2-dhloroethane 2-dhloroethane Chloromethane Chloromethane 1,2-Dichloromethane 1,3-Dichloromethane 1,4-Diphloromethane 1,4-Diphloromethane 1,1-Dichloroethane | 2.6 ND ND ND ND ND ND ND ND ND ND ND ND ND | 0010001101000010 | 1,2-Dichlorosthans 1,1-Dichlorosthylens trans-1,2-Dichlorosthylens 1,2-Dichloropropans cis-1,3-Dichloropropens trans-1,3-Dichloropropens Hethylens Chlorids 1,1,2,2-Tetrachlorosthans Tetrachlorosthylens 1,1,1-Trichlorosthans 1,1,2-Trichlorosthans Trichlorosthylens Trichlorosthylens Trichlorosthylens Trichlorosthylens Trichlorosthylens Trichlorosthylens Trichlorosthylens Trichlorosthylens Trichlorosthylens Trichlorosthylens Trichlorosthylens | | 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 |

CALIFORNIA DEPARTMENT OF HEALTH SERVICES CERTIFICATE NO. 1371

i midrograms per Liter (perts per billion) DLR : Detection Limit for Reporting purposes

Vice President Chemistry Division

RAV. ____ 10/91 (601)

Debra K. Lehman QA Manager

CORPORATE DEFICE: 2527 Freamp Street Frasno, CA 93721 (209) 288-7021 - Fax 268-7126 Chemistry Fax 258-0740

MODESTO 4230 Xiernan Ave. Bulte 105 Modesto, CA 95358 (209) 545-1050 Fax 545-1147

VIBALIA 2521 E. Valley Daks Orive Visalla, CA 93292 (209) 828-1712 Fax 625-1714

BAKERSFIELD 3701 Pagasus Drive, Bulta 124 Bakarsfield, CA 93308 (805) 383-5088 Fex 393-4843



REPORT DATE : November 30, 1993

INVOICE #12199

LABORATORY ID: 693-6345.1

PAGE 9 of 48

DATE SAMPLED: 11-10-93 at 1400 by L. Maier DATE RECEIVED: 11-11-93 at 1040 from L. Maier

ATTENTION

: Lonn Maier

CLIENT

SMUD Projects Development

P.O. Box 15830; MS 37

Sacramento, CA 95852-1830

PROJECT

: Procter & Gamble Cogen

PROJECT MGR : John Larsen

ANALYZED BY

: L. Houser

REVIEWED BY

: R. Stafford

DATE ANALYZED: 11-24-93

CLIENT SAMPLE ID: PG-1

SAMPLE TYPE: Drinking Water

PURGEABLE AROMATICS

METHOD: EPA 602

Debra K. Lehman QA Manager

| CONSTITUENT | RESULT (ug/L) | DLR (ug/L) | |
|---------------------|---------------|---------------|--|
| Benzene | ND | 0.5 | |
| Chlorobenzene | ND | 0.5 | |
| 1,2-Dichlorobenzene | ND | 0.5 | |
| 1,3-Dichlorobenzene | ND | 0.5 | |
| 1,4-Dichlorobenzene | ND | 0.5 | |
| Ethylbenzene | ND | 0.5 | |
| Toluene | ND | 0.5 | |
| Xylenes | ND | 0.5 | |

CALIFORNIA DEPARTMENT OF HEALTH SERVICES CERTIFICATE NO. 1371

ug/L : micrograms per Liter (parts per billion)
DLR: Detection Limit for Reporting purposes
RD : None Detected

mrl

Robert B. Flay, Ph.D.

Vice President

Chemistry Division

Rev. 1 10/93 (602)

MODESTO 4230 Kiernan Ave. Suite 105 Modesto, CA 95356 (209) 545-1050

VISALIA 2521 E. Valley Oaks Drive Visalia, CA 93292 (209) 625-1712 Fax 625-1714

BAKERSFIELD 3701 Pegasus Drive, Suite 124 Bakersfield, CA 93308 (805) 393-5088 Fax 393-4643

CORPORATE OFFICE: 2527 Fresno Street Fresno, CA 93721 (209) 268-7021 • Fax 268-7126 Chemistry Fax 268-0740

Fax 545-1147



GEOTECHNICAL ENGINEERING . DRILLING SERVICES CONSTRUCTION INSPECTION & MATERIALS TESTING

REPORT DATE : November 30, 1993

LABORATORY ID: 693-6345.1

INVOICE #12199

PAGE 17 of 48

DATE SAMPLED: 11-10-93 at 1400 by L. Maier DATE RECEIVED: 11-11-93 at 1040 from L. Maier

ATTENTION

: Lonn Maier

CLIENT

SMUD Projects Development

P.O. Box 15830; MS 37

Sacramento, CA 95852-1830

PROJECT

: Procter & Gamble Cogen

PROJECT MGR : John Larsen

ANALYZED BY : B. Meadows REVIEWED BY : R. Stafford

DATE PREPARED: 11-11-93 DATE ANALYZED: 11-15-93 CLIENT SAMPLE ID: PG-1 ORGANOCHLORINE PESTICIDES

SAMPLE TYPE: Drinking Water

METHOD: EPA 608

| CONSTITUENT | RESULT (ug/L) | DLR (ug/L) | |
|---|------------------|--|--|
| Aldrin alpha BHC beta BHC delta BHC gamma BHC (Lindane) Chlordane p,p-DDD p,p-DDE p,p-DDT Dieldrin Endrin Endrin Aldehyde Endosulfan I Endosulfan II Endosulfan Sulfate Heptachlor Heptachlor PCB | ND ND ND | 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 | |
| Toxaphene | <u></u> | 2.5 | |

CALIFORNIA DEPARTMENT OF HEALTH SERVICES CERTIFICATE NO. 1371

ug/L : micrograms per Liter (parts per billion)
ND : None Detected
mrl

DLR: Detection Limit for Reporting purposes

Robert B. Flay, Ph.D.

Vice President

Liter Ser

Chemistry Division

Rev. <u>1</u> 8/93 (608)

Debra K. Lehman

QA Manager

CORPORATE OFFICE: 2527 Fresno Street Fresno, CA 93721 (209) 268-7021 - Fax 268-7126 Chemistry Fax 268-0740

MODESTO 4230 Kiernan Ave. Suite 105 Modesto, CA 95356 (209) 545-1050 Fax 545-1147

VISALIA 2521 E. Valley Oaks Drive Visalia, CA 93292 (209) 625-1712 Fax 625-1714

BAKERSFIELD 3701 Pegasus Drive, Suite 124 Bakersfield, CA 93308 (805) 393-5088 Fax 393-4643



ANALYTICAL CHEMISTRY - ENVIRONMENTAL SERVICES GEOTECHNICAL ENGINEERING - DRILLING SERVICES CONSTRUCTION INSPECTION & MATERIALS TESTING

REPORT DATE : November 30, 1993

INVOICE #12199 PAGE 25 of 48

LABORATORY ID: 693-6345.1

er

DATE SAMPLED: 11-10-93 at 1400 by L. Maier DATE RECEIVED: 11-11-93 at 1040 from L. Maier

ATTENTION

: Lonn Maier

CLIENT

SMUD Projects Development

P.O. Box 15830; MS 37

Sacramento, CA 95852-1830

PROJECT

: Procter & Gamble Cogen

PROJECT MGR : John Larsen

ANALYZED BY: S. King REVIEWED BY: R. Stafford DATE PREPARED: 11-17-93 DATE ANALYZED: 11-24-93

CLIENT SAMPLE ID: PG-1

SAMPLE TYPE: Drinking Water

ACID & BASE/NEUTRAL ORGANICS METHOD: EPA 625 (PART A)

| | ESULT ug/L) | DLR (ug/L) | CONSTITUENT | RESULT (ug/L) | DLR (ug/L) |
|----------------------------|----------------|---------------|-----------------------------|---------------|---------------|
| Acenaphthene | ND | 10 | 2-Chloronaphthalene | ND | 10 |
| Acenaphthylene | ND | 10 | 4-Chloro-3-methylphenol | ND | 10 |
| Aniline | ND | 10 | 2-Chlorophenol | ND | 10 |
| Anthracene | ND | 10 | 4-Chlorophenyl phenyl ether | - ND | 10 |
| Benzidine | ND | 20 | Chrysene | ND | 10 |
| Benzoic Acid | ND | 10 | Dibenzo (a,h) Anthracene | ND | 10 |
| Benzo (a) anthracene | ND | 10 | Dibenzofuran | ND | 10 |
| Benzo (b) fluoranthene | ND | 10 | Di-n-butylphthalate | ND | 10 |
| Benzo (k) fluoranthene | ND | 10 | 1,3-Dichlorobenzene | ND | 10 |
| Benzo (g,h,i) perylene | ND | 10 | 1,4-Dichlorobenzene | ND | 10 |
| Benzo (a) pyrene | ND | 10 | 1,2-Dichlorobenzene | ND | 10 |
| Benzyl Alcohol | ND | 10 | 3,3'-Dichlorobenzidine | ND | 20 |
| Bis(2-chloroethoxy)methane | ND | 10 | 2,4-Dichlorophenol | ND | 10 |
| Bis(2-chloroethyl)ether | ND | 10 | Diethylphthalate | ND | 10 |
| Bis(2-chloroisopropyl)ethe | r ND | 10 | Dimethylphthalate | ND | 10 |
| Bis(2-ethylhexyl)phthalate | | 10 | 2,4-Dimethylphenol | ND | 10 |
| 4-Bromophenyl phenyl ether | ND | 10 | 4,6-Dinitro-2-methylphenol | ND | 10 |
| Butyl benzyl phthalate | ND | 10 | 2,4-Dinitrophenol | ND | 10 |
| 4-Chloroaniline | ND | 10 | 2,4-Dinitrotoluene | ND | 10 |

CALIFORNIA DEPARTMENT OF HEALTH SERVICES CERTIFICATE NO. 1371

ug/L: micrograms per Liter (parts per billion)
DLR: Detection Limit for Reporting purposes

Robert B. Flay, Ph.D.

Vice President Chemistry Division

Rev. _ 1 8/93 (625)

Debra K. Lehman

QA Manager

ND: None Detected

CORPORATE OFFICE: 2527 Fresno Street Fresno. CA 93721 (209) 268-7021 • Fax 268-7126 Chemistry Fax 268-0740 MODESTO 4230 Kiernan Ave. Suite 105 Modesto, CA 95356 (209) 545-1050 Fax 545-1147 VISALIA 2521 E. Valley Oaks Drive Visalia, CA 93292 (209) 625-1712 Fax 625-1714 BAKERSFIELD 3701 Pegasus Drive. Suite 124 Bakerstield. CA 93308 (805) 393-5088 Fax 393-4643



REPORT DATE : November 30, 1993

INVOICE #12199

LABORATORY ID: 693-6345.1

PAGE 26 of 48

DATE SAMPLED: 11-10-93 at 1400 by L. Maier DATE RECEIVED: 11-11-93 at 1040 from L. Maier

ATTENTION

: Lonn Maier

CLIENT

SMUD Projects Development

P.O. Box 15830; MS 37

Sacramento, CA 95852-1830

PROJECT

: Procter & Gamble Cogen

PROJECT MGR : John Larsen

ANALYZED BY

: S. King

REVIEWED BY : R. Stafford DATE PREPARED: 11-17-93 DATE ANALYZED: 11-24-93

CLIENT SAMPLE ID: PG-1

SAMPLE TYPE: Drinking Water

ACID & BASE/NEUTRAL ORGANICS

METHOD: EPA 625 (PART B)

| | RESULT (ug/L) | DLR (ug/L) | CONSTITUENT | RESULT | DLR (ug/L) |
|---|--|--|--|--|--|
| 2,6-Dinitrotoluene 1,2-Diphenylhydrazine (Azobenzene) Di-n-octylphthalate Fluoranthene Fluorene Hexachlorobenzene Hexachlorocyclopentadiene Hexachlorocethane | ND ND ND ND ND ND ND ND | 10 10 10 10 10 10 10 | 2-Nitroaniline 3-Nitroaniline 4-Nitroaniline Nitrobenzene 2-Nitrophenol 4-Nitrophenol N-Nitrosodimethylamine N-Nitrosodi-n-propylamine Pentachlorophenol | ND ND ND ND ND ND ND ND ND | 10 10 10 10 10 10 10 10 |
| Hexachioroethane Indeno (1,2,3-cd) pyrene Isophorone 2-Methylnaphthalene 2-Methylphenol (0-cresol) 4-Methylphenol (p-cresol) Naphthalene | | 10 10 10 10 10 10 | Pentachlorophenol Phenanthrene Phenol Pyrene 1,2,4-Trichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol | ND ND ND ND ND ND | 10 10 10 10 10 10 |

CALIFORNIA DEPARTMENT OF HEALTH SERVICES CERTIFICATE NO. 1371 ND: None Detected

ug/L: micrograms per Liter (parts per billion) DLR: Detection Limit for Reporting purposes

Robert B. Flay, Ph.D.

Vice President Chemistry Division

Rev. 1 8/93 (625)

Debra K. Lehman

QA Manager

CORPORATE OFFICE: 2527 Fresno Street Fresno, CA 93721 (209) 268-7021 • Fax 268-7126 Chemistry Fax 268-0740

MODESTO 4230 Kiernan Ave. Suite 105 Modesto, CA 95356 (209) 545-1050 Fax 545-1147

VISALIA 2521 E. Valley Oaks Drive Visalia, CA 93292 (209) 625-1712 Fax 625-1714

BAKERSFIELD 3701 Pegasus Drive, Suite 124 Bakersheld, CA 93308 (805) 393-5088 Fax 393-4643



REPORT DATE : November 30, 1993

LABORATORY ID: 693-6345.1

INVOICE #12199

PAGE 41 of 48

DATE SAMPLED: 11-10-93 at 1400 by L. Maier DATE RECEIVED: 11-11-93 at 1040 from L. Maier

ATTENTION

: Lonn Maier

CLIENT

SMUD Projects Development

P.O. Box 15830; MS 37

Sacramento, CA 95852-1830

PROJECT

: Procter & Gamble Cogen

PROJECT MGR : John Larsen

ANALYZED BY : J. Yano, T. Geringer, K. Furlow, J. Scianna, J. Strutzel

REVIEWED BY : J. Strutzel

DATE PREPARED: 11-11-93 through 11-30-93

DATE ANALYZED: 11-11-93 through 11-30-93

SAMPLE TYPE: Drinking Water

CLIENT SAMPLE ID: PG-1

| METALS SCAN | RESULTS (mg/L) | DLR (mg/L) | METHOD | |
|------------------------------|----------------|---------------|--------|--|
| Antimony (Sb) | ND | 0.005 | 204.2 | |
| Arsenic (As) | 0.0011 | 0.0005 | 206.3 | |
| Beryllium (Be) | ND | 0.001 | 200.7 | |
| Cadmium (Cd) | ND | 0.0005 | 213.2 | |
| Chromium (Cr) | 0.001 | 0.001 | 218.2 | |
| Copper (Cu) | 0.007 | 0.001 | 220.2 | |
| Lead (Pb) | ND | 0.002 | 239.2 | |
| Mercury (Hg) | ND | 0.0002 | 245.1 | |
| Nickel (Ni) | ND | 0.05 | 200.7 | |
| Selenium (Se) | ND | 0.0005 | 270.3 | |
| Silver (Ag) | ND | 0.01 | 272.1 | |
| Thallium (T1) | ND | 0.005 | 279.2 | |
| Zinc (Zn) | ND | 0.05 | 200.7 | |
| Cyanide (CN) | ND | 0.02 | 335.2 | |
| Hexavalent Chromium (Cr VI) | ND | 0.02 | 7196 | |
| Total Dissolved Solids (TDS) | 37 | 10 | 160.1 | |

CALIFORNIA DEPARTMENT OF HEALTH SERVICES CERTIFICATE NO. 1371
mg/L: milligrams per Liter (parts per million)

DLR: Detection Limit for Reporting purposes

mg/L : milligrams per Liter (parts per million)
ND : None Detected

Robert B. Flay Ph.D.

Vice President

Chemistry Division Rev. __1__ 8/93 (METAL.WAT)

Debra K. Lehman QA Manager

CORPORATE OFFICE: 2527 Fresno Street Fresno, CA 93721 (209) 268-7021 • Fax 268-7126 Chemistry Fax 268-0740

MODESTO 4230 Kiernan Ave. Suite 105 Modesto, CA 95356 (209) 545-1050 Fax 545-1147

VISALIA 2521 E. Valley Oaks Drive Visalia. CA 93292 (209) 625-1712 Fax 625-1714

BAKERSFIELD 3701 Pegasus Drive, Suite 124 Bakerstield, CA 93308 (805) 393-5088 Fax 393-4643

ACROLEIN & ACRYLONITRILE EPA METHOD 603

| EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road | Order No: 93-11-114 | ina |
|--|--|------------|
| Sacramento, CA 95828 (916) 381-7953 | Hazardous Waste Testing Certification: 1165 | |
| CLIENT: THE TWINING LABORATORIES | DATE SAMPLED: | 11/10/1993 |
| P.O. #: 11448 | DATE RECEIVED: | 11/12/1993 |
| | DATE EXTRACTED: | NA |
| | DATE ANALYZED: | 11/15/1993 |
| | INSTRUMENT ID: | SVG-7 |
| | MATRIX: | AQUEOUS |
| | % MOISTURE: | NA |
| | REPORT WT: | NA |
| ELI SAMPLE ID: 9311114-01A | SAMPLE VOL./WT: | 5 ml |
| SAMPLE ID: 693-6345.1, PG-1 | DILUTION FACTOR: | 1 |
| SMUD Projects Development PROJEC | T: Procter & Gamble Cogen | |

| COMPOUND | CONCENTRATION [ug/L (ppb)] | DETECTION LIMIT [ug/L (ppb)] |
|---------------|----------------------------|------------------------------|
| Acrolein | <0.5 | 0.5 |
| Acrylonitrile | <0.6 | 0.6 |

Susie Yang Chemist November 29, 1993

Date

ACROLEIN & ACRYLONITRILE EPA METHOD 603

| EUREKA LABORATORIES, INC. | Order No: 93-11-114 |
|---------------------------|-------------------------|
| 6790 Florin-Perkins Road | Hazardous Waste Testing |
| Sacramento, CA 95828 | Certification: 1165 |
| (916) 381-7953 | |

| CLIENT: THE TWINING LABORATORIE | DATE SAMPLED: | 11/10/1993 |
|---------------------------------|----------------------|------------|
| P.O. #: 11448 | DATE RECEIVED: | 11/12/1993 |
| · | DATE EXTRACTED: | NA |
| | DATE ANALYZED: | 11/15/1993 |
| | INSTRUMENT ID: | SVG-7 |
| | MATRIX: | AQUEOUS |
| | % MOISTURE: | NA |
| | REPORT WT: | NA |
| ELI SAMPLE ID: 9311114-02A | SAMPLE VOL./WT: | 5 ml |
| SAMPLE ID: 693-6345.2, PG-2 | DILUTION FACTOR: | 1 |
| CMID Descipate David amount | DD0 77777 D 0 0 13 0 | |

SMUD Projects Development PROJECT: Procter & Gamble Cogen

| COMPOUND | CONCENTRATION [ug/L (ppb)] | | DETECTION LIMIT [uq/L (ppb)] | |
|---------------|----------------------------|--|------------------------------|--|
| Acrolein | <0.5 | | 0.5 | |
| Acrylonitrile | <0.6 | | 0.6 | |

Susie Yanq Chemist November 29, 1993 Date



PROJECT: Procter & Gamble Cogen

ID:PG-1

PCDD & PCDF EPA METHOD 8290

Sample ID: 693-6345.1 PG-1

Lab ID: <u>12872-009-SA</u>

Matrix: Effluent

Date Received: <u>11/19/93</u>
Date Extracted: <u>11/22/93</u>

Sample Amount: 0.984 L

ICAL ID: <u>11613A</u> QC Lot: <u>LC1116E</u>

Units: pg/l

| | | | | S/N | |
|---------------------|-------|------|--------------|-------|------------------|
| <u>Compound</u> | Conc. | D.L. | <u>Ratio</u> | Ratio | <u>Oualifier</u> |
| 2,3,7,8-TCDD | ND | 2.5 | | | |
| Total TCDD | ND | 2.6 | | | |
| 1,2,3,7,8-PeCDD | ND | 1.1 | | | |
| Total Pe€DD | ND | 1.1 | | | |
| 1,2,3,4,7,8-HxCDD | ND | 0.82 | | | |
| 1,2,3,6,7,8-HxCDD | ND | 1.3 | | | |
| 1,2,3,7,8,9-HxCDD | ND | 0.76 | | | |
| Total HxCDD | ND | 1.3 | | | |
| 1,2,3,4,6,7,8-HpCDD | ND | 0.95 | | | |
| Total HpCDD | ND | 0.95 | | | |
| OCDD | ND | 5.9 | | | |
| 2,3,7,8-TCDF | ND | 0.53 | | | |
| Total TCDF | ND | 0.53 | | | |
| 1,2,3,7,8-PeCDF | ND | 0.93 | | | |
| 2,3,4,7,8-PeCDF | ND | 0.82 | | | |
| Total PeCDF | ND | 0.93 | | | |
| 1,2,3,4,7,8-HxCDF | ND | 0.78 | | | |
| 1,2,3,6,7,8-HxCDF | ND | 0.72 | | | |
| 2,3,4,6,7,8-HxCDF | ND | 2.6 | | | |
| 1,2,3,7,8,9-HxCDF | ND | 1.1 | | | |
| Total HxCDF | ND | 5.2 | | | • |
| 1,2,3,4,6,7,8-HpCDF | ND | 0.50 | | | |
| 1,2,3,4,7,8,9-HpCDF | ND | 0.70 | | | |
| Total HpCDF | ND | 0.70 | | | |
| OCDF | ND | 1.3 | | | |
| | | | | | |





PROJECT: Procter & Gamble Cogen

TD: PG-5

PCDD & PCDF EPA METHOD 8290

Sample ID: <u>693-6345.5</u> Lab ID: <u>12872-008-SA</u>

Isotopic Recovery Results

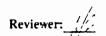
| Internal Standard: | <u>% R</u> | <u>Ratio</u> | Qualifier |
|--|------------|--------------|-----------|
| ¹³ C-2,3,7,8-TCDD | 97 | 0.79 | |
| ¹³ C-1,2,3,7,8-PeCDD | 99 | 1.54 | |
| ¹³ C-1,2,3,4,7,8-HxCDD | 75 | 1.25 | |
| ¹³ C-1,2,3,6,7,8-HxCDD | 97 | 1.25 | |
| ¹³ C-1,2,3,4,6,7,8-H _p CDD | 82 | 1.05 | |
| ¹³ C-OCDD | 77 | 0.94 | |
| ¹³ C-2,3,7,8-TCDF | 94 | 0.80 | |
| ¹³ C-1,2,3,7,8-PeCDF | 105 | 1.52 | |
| ¹³ C-2,3,4,7,8-PeCDF | 100 | 1.58 | |
| ¹³ C-1,2,3,4,7,8-HxCDF | 69 | 0.53 | |
| ¹³ C-1,2,3,6,7,8-HxCDF | 87 | 0.52 | |
| ¹³ C-2,3,4,6,7,8-HxCDF | 80 | 0.51 | |
| ¹³ C-1,2,3,7,8,9-HxCDF | 92 | 0.47 | |
| ¹³ C-1,2,3,4,6,7,8-HpCDF | 82 | 0.46 | |
| ¹³ C-1,2,3,4,7,8,9-HpCDF | 75 | 0.46 | |
| Clean-up Recovery Standard: | | | |
| ³⁷ Cl-2,3,7,8-TCDD | 100 | NA | |

Dates Analyzed:

DB-5: 11/18/93

DB-225: <u>NA</u>

SP-2331: <u>NA</u>





PROJECT: Procter & Gamble Cogen

ID:PG-1

PCDD & PCDF EPA METHOD 8290

Sample ID: <u>693-6345.1 PG-1</u> Lab ID: <u>12872-009-SA</u>

Isotopic Recovery Results

| Internal Standard: | <u>% R</u> | Ratio | <u>Qualifier</u> |
|-------------------------------------|------------|-------|------------------|
| ¹³ C-2,3,7,8-TCDD | 100 | 0.75 | |
| ¹³ C-1,2,3,7,8-PeCDD | 92 | 1.50 | |
| ¹³ C-1,2,3,4,7,8-HxCDD | 84 | 1.22 | |
| ¹³ C-1,2,3,6,7,8-HxCDD | 99 | 1.25 | |
| ¹³ C-1,2,3,4,6,7,8-HpCDD | 106 | 1.04 | |
| ¹³ C-OCDD | 118 | 0.91 | • |
| ¹³ C-2,3,7,8-TCDF | 100 | 0.80 | |
| ¹³ C-1,2,3,7,8-PeCDF | 108 | 1.58 | |
| ¹³ C-2,3,4,7,8-PeCDF | 107 | 1.59 | |
| ¹³ C-1,2,3,4,7,8-HxCDF | 86 | 0.53 | |
| ¹³ C-1,2,3,6,7,8-HxCDF | 87 | 0.50 | |
| ¹³ C-2,3,4,6,7,8-HxCDF | 89 | 0.50 | |
| ¹³ C-1,2,3,7,8,9-HxCDF | 99 | 0.51 | |
| ¹³ C-1,2,3,4,6,7,8-HpCDF | 102 | 0.44 | |
| ¹³ C-1,2,3,4,7,8,9-HpCDF | 115 | 0.44 | |
| Clean-up Recovery Standard: | | | |
| ³⁷ C1-2,3,7,8-TCDD | 111 | NA | |

Dates Analyzed:

DB-5: <u>11/24/93</u>

DB-225: <u>NA</u>

SP-2331: <u>NA</u>



Page 2 of 2

Reviewer:



PROJECT: Procter & Gamble Cogen

ID:PG-2

PCDD & PCDF EPA METHOD 8290

Sample ID: <u>693-6345.2 PG-2</u>

Lab ID: <u>12872-010-SA</u>

Matrix: Effluent

Date Received: <u>11/19/93</u>
Date Extracted: <u>11/22/93</u>

Sample Amount: 0.999 L

ICAL ID: <u>11613A</u> QC Lot: <u>LC1116E</u>

Units: pg/l

| | | | | S/N | |
|---------------------|-------------|-------------|--------------|--------------|------------------|
| Compound - | Conc. | <u>D.L.</u> | <u>Ratio</u> | <u>Ratio</u> | <u>Qualifier</u> |
| 2,3,7,8-TCDD | ND . | 1.5 | | | • |
| Total TCDD | . ND | 2.5 | | | |
| 1,2,3,7,8-PeCDD | ND | 2.1 | | | • |
| Total PeCDD | ND | 2.1 | | | |
| 1,2,3,4,7,8-HxCDD | ND | 1.0 | | • | |
| 1,2,3,6,7,8-HxCDD | ND · | 1.4 | | | • |
| 1,2,3,7,8,9-HxCDD | ND | 0.97 | | | |
| Total HxCDD | · ND | 1.4 | | | |
| 1,2,3,4,6,7,8-HpCDD | ND | 1.3 | | | : |
| Total HpCDD | ND . | 1.3 | | | |
| OCDD | ND · | 5.8 | | s. * | • |
| 2,3,7,8-TCDF | ND | 0.43 | | | |
| Total TCDF | ND | 0.43 | | | ; |
| 1,2,3,7,8-PeCDF | ND | 1.2 | | | • |
| 2,3,4,7,8-PeCDF | ND | 1.1 | | | |
| Total PeCDF | , ND | 1.2 | | | |
| 1,2,3,4,7,8-HxCDF | ND | 0.90 | | | |
| 1,2,3,6,7,8-HxCDF | $_{\pm}$ ND | 0.84 | | | |
| 2,3,4,6,7,8-HxCDF | ND | 1.7 | | • | |
| 1,2,3,7,8,9-HxCDF | ND | 1.2 | | | r |
| Total HxCDF | ND | 1.7 | | | r |
| 1,2,3,4,6,7,8-HpCDF | ND | 0.64 | | | |
| 1,2,3,4,7,8,9-HpCDF | ND | 0.90 | | | |
| Total HpCDF | ND | 0.90 | | | |
| OCDF | ND | 1.3 | ٠. | | |

Analyst: 🏤

Page 1 of 2

Reviewer:

REGIONAL WATER QUALITY CONTROL BOARD DEPARTMENT OF HEALTH SERVICES SOLID WASTE MANAGEMENT BOARD DEPARTMENT OF FORESTRY



APPLICATION FOR FACILITY PERMIT/WASTE DISCHARGE

| This form is to be used for filing a/an: (check all appropriate) | FOR OFFICE USE ONLY | | | |
|--|--|--|--|--|
| REPORT OF WASTE DISCHARGE Spursuant to Division 7 of the State Water Code) | Form 200 Rac'd | | | |
| or may | Fee (RWQCB) (SWMB) | | | |
| 2. APPLICATION FOR A HAZARDOUS WASTE FACILITY PERMIT (pursuant to Health and Safety Code Section 25200) | Letter to Discharger | | | |
| 3. APPLICATION FOR A SOLID WASTE FACILITIES PERMIT | Effective Date | | | |
| (pursuant to Government Code Section 66796.30) | CDF Notified | | | |
| 4 APPLICATION FOR A RUBBISH DUMP PERMIT (pursuant to Public Resources Code Sections 4371-4375 and 4438) | DOHS No. | | | |
| | SWMB No. | | | |
| I. FACILITY | | | | |
| DOCTED AND CAMPLE COCEMEDATION STATION | TELEPHONE + | | | |
| PROCTER AND GAMBLE COGENERATION STATION | \$1F CODE | | | |
| 83RD STREET AT 24TH AVENUE SACRAMENTO, CA 95826 | | | | |
| SACRAMENTO COGENERATION AUTHORITY | (916) 452-3211 | | | |
| P.O. BOX 15830 SACRAMENTO. CA | 95852 | | | |
| | TELEPHONE • | | | |
| SACRAMENTO COGENERATION AUTHORITY | 916 452-3211 | | | |
| P.O. BOX 15830 SACRAMENTO, CA 95852 | | | | |
| Sole Proprietorship Partnership Corporation E. NAME OF OWNER(S) OF BUSINESS OPERATING FACILITY | X Government Agency | | | |
| SACRAMENTO COGENERATION AUTHORITY | (916) 452–3211 | | | |
| ADDRESS WHERE LEGAL NOTICE MAY BE SERVED | IIP COOR | | | |
| 6201 S STREET SACRAMENTO, CA | 95819 | | | |
| II. REASON FOR FILING | 95819 | | | |
| II. REASON FOR FILING | | | | |
| TIL REASON FOR FILING CHECK ALL APPROPRIATE: | G. Change in business operating facility | | | |
| CHECK ALL APPROPRIATE: CHECK ALL APPROPRIATE: CHECK ALL APPROPRIATE: Change in character of discharge Change in place or method of disposal | G. Change in business operating facility H. Enlargement of existing facility | | | |
| TIL REASON FOR FILING CHECK ALL APPROPRIATE: | G. Change in business operating facility | | | |
| CHECK ALL APPROPRIATE: CHECK ALL APPROPRIATE: CHECK ALL APPROPRIATE: CHECK ALL APPROPRIATE: Change in character of discharge Change in place or method of disposal C. Increase in quantity of discharge F. Change in design or operation | G. Change in business operating facility H. Enlargement of existing facility | | | |
| CHECK ALL APPROPRIATE: CHECK ALL APPROPRIATE: CHECK ALL APPROPRIATE: Change in character of discharge Change in place or method of disposal | G. Change in business operating facility H. Enlargement of existing facility | | | |
| CHECH ALL APPROPRIATE: A New discharge or facility C. New discharge or facility Existing discharge or facility C. Increase in quantity of discharge F. Change in character of discharge Change in place or method of disposal Change in design or operation | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) | | | |
| CHECK ALL APPROPRIATE: | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site | | | |
| New discharge or facility Existing discharge or facility C. Increase in quantity of discharge F. Change in character of discharge C. Change in place or method of disposal C. Change in design or operation III. TYPE OF OPERATION CHECH ALL APPROPRIATE: A Transfer station D. Sewage treatment Industry (on-site disposal facility) | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. Y. Other (explain below) | | | |
| CHECK ALL APPROPRIATE: A New discharge or facility Existing discharge or facility C. Increase in quantity of discharge The Change in character of discharge C. Change in character of discharge Change in place or method of disposal Change in design or operation The Change in design or operation Change in design or operation Change in design or operation Change in design or operation Change in design or operation Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in place or method of disposal Ch | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge | | | |
| CHECK ALL APPROPRIATE: A New discharge or facility C. Increase in quantity of discharge C. Increase in quantity of discharge C. Transfer station C. Sewage treatment C. Hezaroous waste disposal site C. Industry (discharge to sewer) C. Hezaroous waste disposal site C. Change in character of discharge Change in character of discharge Change in character of discharge Change in place or method of disposal Change in place or method or method of disposal Change in place or method or me | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. Y. Other (explain below) | | | |
| CHECK ALL APPROPRIATE: A New discharge or facility Existing discharge or facility C. Increase in quantity of discharge F. Change in character of discharge Change in place or method of disposal Change in design or operation Change in design or operation Change in design or operation Change in design or operation Change in design or operation Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in place or method of disposal Change in place or method of disposal Change in place or method of disposal Change in place or method of disposal Change in place or method of disposal Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in place or method of disposal Change in place or method o | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge | | | |
| CHECK ALL APPROPRIATE: A New discharge or facility Existing discharge or facility C. Increase in quantity of discharge F. Change in character of discharge Change in place or method of disposal Change in design or operation Change in design or operation Change in design or operation Change in design or operation Change in design or operation Change in design or operation Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in character of discharge Change in place or method of disposal III. TYPE OF OPERATION CHECK ALL APPROPRIATE: IV. TYPE OF WASTE | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge torm Drain | | | |
| CHECK ALL APPROPRIATE: | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge torm Drain | | | |
| CHECK ALL APPROPRIATE: | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge torm Drain I. Inert materials J. Deed animels | | | |
| A Transfer station Solid waste disposal site C. Hazaroous waste disposal site A Sewage, sewage sludge, and/or septic tank pumpings A Sewage, sewage sludge, and/or septic tank pumpings B New discharge or facility C. Change in character of discharge C. Change in character of discharge C. Change in place or method of disposal C. Change in design or operation C. Change in design or operation C. Change in design or operation C. Change in design or operation C. Change in design or operation C. Change in character of discharge C. Change in character of discharge C. Change in character of discharge Change in character of discharge Change in place or method of disposal F. Change in design or operation C. Change in place or method of disposal III. TYPE OF OPERATION C. III. TYPE OF | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge torm Drain | | | |
| New discharge or facility Existing discharge or facility Change in character of discharge Change in place or method of disposal Cha | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge torm Drain I. Inert materials J. Dead animals K. Tires | | | |
| New discharge or facility Existing discharge or facility Change in character of discharge Change in place or method of disposal Cha | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge torm Drain I. Inert materials J. Dead animals K. Tires | | | |
| CHECK ALL APPROPRIATE: A | G. Change in business operating facility H. Enlargement of existing facility Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge torm Drain I. Inert materials J. Dead animals K. Tires L. Other (explain below) | | | |
| THECH ALL APPROPRIATE: A New discharge or facility Existing discharge or facility Existing discharge or facility Existing discharge Change in character of discharge Change in place or method of disposal III. TYPE OF OPERATION O. Sewage treatment III. TYPE OF OPERATION O. Type OF WASTE IV. TYPE OF WASTE A. Sewage sewage sludge, and/or septic tark pumpings IV. TYPE OF WASTE A. Sewage, sewage sludge, and/or septic tark pumpings Sewage treatment III. TYPE OF OPERATION O. A profit of tark pumpings IV. TYPE OF WASTE A. Sewage, sewage sludge, and/or septic tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark pumpings IV. TYPE OF WASTE O. A profit of tark p | G. Change in business operating facility H. Enlargement of existing facility I. Other (explain below) G. Woodwaste site H. X Other (explain below) neration Plant/Discharge torm Drain I. Inert materials J. Dead animals K. Tires L. Other (explain below) | | | |



| VI. QUANTITY OF WASTES | | | | | |
|--|---|---------------------------------------|---|--|--|
| A | MAXIMUM | AVERAG | B. DESIGN FLOW (IN MGO) | | |
| DAILT PLOW (IN MGD): | 0.33 | .2 | | | |
| SOLID WASTE DISPOSAL SITE (IN TONS OR CUBIC YARDS): | OAILY GUANTITY | TOTAL IN PLACE QUANT | D. AREA IN WHICH SOIL WILL BE DISTURBED FOTAL SITE AREA (IN ACRES) | | |
| | VII. L | OCATION OF POINT O | F DISPOSAL OR OPERATION | | |
| | | | MAP, 7.5 OR 15 MINUTE SERIES.) RTER CORNER, SECTION, TOWNSHIP, RANGE, BASE AND MERIDIAN: | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | |
| VIII. SOURCE OF WATER SUPPLY (CHECK ALL APPROPRIATE) | | | | | |
| A MUNICIPAL OR UTILITY SERVICE: | | | B. INDIVIDUAL (Wells) | | |
| City of Sacramento Dept. of Utilities | | Utilities_ | C. SURFACE SUPPLY | | |
| 5770 Freeport Blvd., Suite 100 | | 00 | NAME OF STREAM, LAKE, SPRING, ETC. (IF NAMED) | | |
| Sacramento, CA 95822-2911 | | | Riparian Appropriation | | |
| | | X. ENVIRONMENTAL | IMPACT REPORT (EIR) | | |
| If "Yes", pleas If "No", will a Will a negative dec | prepared for this project? se anclose a copy. in EIR be prepared? claration be prepared? se answer the following: | Yes No | An AFC for this project has been filed with CEC. The AFC discusses wastewater discharge to the County Regional Sanitation Plan. | | |
| | | | | | |
| CERTIFICATION | | | | | |
| I hereby certify under penalty of perjury that the information provided in this application and in any attachments is true and accurate to the best of my knowledge. | | | | | |
| SIGNATURE OF OWNER OF | ay w | | SIGNATURE OF OPERATOR OF FACILITY | | |
| COLIN TAYLOR | | DATE | COLIN TAYLOR | | |
| DIRECTOR, PRO | JECTS DEVELOPME | 1. 2 /2 1/1/1 | DIRECTOR, PROJECTS DEVELOPMENT 2/24/94 | | |
| CIST TITLES OF ANY ATTACK | , man 13 : | | - | | |