

FROM: PATRICK R. ATKINS

TO: MR. JOHN WIJNGAARDE
MR. PIM GEERDINK

PITTSBURGH OFFICE

SURALCO

March 3, 1977

RE: PERIODIC ENVIRONMENTAL REPORTS

As we discussed during my recent visit to Suralco, periodic reports on environmental activities are of benefit to us in Pittsburgh. I suggest that a monthly report be considered describing your activities, progress and problem areas. If you prefer, the reporting process could be initiated on a semi-monthly basis or even a quarterly basis and expanded at a later date to monthly if you find that your time schedule allows for this additional paperwork. The typical format which I recommend is as follows:

I. Environmental Contacts

1. Government regulatory agency contacts and visits.
2. Other government agency contacts or visits related to planning, resource conservation, etc.
3. Complaints received from all sources.

II. Sampling information

1. Emission Sampling Results.

<u>Source</u>	<u>Measured Emissions</u>	<u>Allowable or</u> <u>Target Emissions</u>	<u>Plume Opacity</u>
	<u>Kg/hour</u>	<u>Kg/ton</u>	<u>Kg/hour</u>

2. Ambient data.

<u>Site Number</u>	<u>Particulate Concentration</u>	<u>Sulfur Dioxide</u>	<u>Fluoride</u>
	<u>Minimum</u> <u>Average</u> <u>Maximum</u>	<u>Min.</u> <u>Avg.</u> <u>Max.</u>	<u>Min.</u> <u>Avg.</u> <u>Max.</u>

(Specify sampling time. Note whether fluoride is gaseous, particulate or total.)

3. Vegetation results. - See attached reporting form
4. Discharge water sample results - See attached U. S. Environmental Protection Agency reporting form. Complete one form for each discharge sampled.

III. Environmental Program Status

1. Approved R/A's - status of construction program. Describe program, project status, anticipated completion date and any expected problems.



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2. R/A's anticipated or submitted for approval. Describe need for the project and the proposed solution.

IV. Areas Which Need Attention

1. Air pollution.
2. Water pollution.
3. Solid waste management.
4. Land reclamation - list problem areas which you or others feel should be studied and approved. Examples include: leaks in mud lake area, leaching from landfills, high fluoride concentrations at some downwind point, dust problems in the power house, etc.

V. Environmental Personnel Activities

1. Schools or short courses attended by environmental personnel.
2. Environmental manpower changes, actual or anticipated.
3. New equipment acquired or ordered.
4. Participation in seminars.
5. Presentations given or anticipated by environmental personnel to in-company groups or outside groups.

I realize that a number of these items will be blank for Suralco at the present time. However, in case that situation changes, I decided that the format should be provided you so that if activities occur in these areas you could report them in the standard format. I anticipate that vegetation sampling will be eliminated at least for the present time. I would hope that in the future some ambient air monitoring and water sampling programs will be undertaken.

I have attached a copy of a recent environmental report from Point Comfort Operations since their activities are similar to many of yours. After you have reviewed this suggested program, I would appreciate your comments concerning how you feel it would be best to keep the Pittsburgh Office informed of environmental needs, programs and activities at Suralco.

Patrick R. Atkins

PRA:mh

Attachments

468415 0073

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 158-R0073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY", and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT.".
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-3 ST	14-15 PERMIT NUMBER	117-119 DIS	120-231 YEAR MO DAY	122-231 YEAR MO DAY	124-231 SIC	126-271 LATITUDE	128-311 LONGITUDE
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REPORTING PERIOD FROM TO

PARAMETER	QUANTITY (13-2-31)			CONCENTRATION (14-2-31)			FREQUENCY OF ANALYSIS (15-2-31)			SAMPLE TYPE
	MINIMUM (13-2-31)	AVERAGE (14-2-31)	MAXIMUM (15-2-31)	MINIMUM (14-2-31)	AVERAGE (15-2-31)	MAXIMUM (16-2-31)	NO. EX (15-2-31)	UNITS (16-2-31)	NO. EX (17-2-31)	
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IN PROGRESS

468415 0075

~~ORA, VWR, REC, DAB, RES, JEB, DAB, ISO, #PE, #U~~ (11)

FROM TOM FLORES
ENVIRONMENTAL CONTROL
POINT COMFORT OPERATIONS

RECEIVED

TO MR. A. A. RAMBIKUR
ENVIRONMENTAL CONTROL SUPV.
POINT COMFORT OPERATIONS

DEC 16 1976

PATRICK R. ATKINS

cc: Mr. S. A. Jones - Pittsburgh
Mr. A. B. Kaltwasser - Pittsburgh
Mr. V. W. Rieke - Pittsburgh
Dr. P. R. Atkins - Pittsburgh
Mr. E. B. Parker - Rockdale
Mr. C. L. Green - Rockdale
Mr. R. C. Hinkle - Badin
Mr. G. B. Scott - Point Comfort
Mr. F. A. Sharkey - Point Comfort
Mr. F. J. Mabry - Point Comfort
Mr. J. K. McClain - Point Comfort
Mr. W. W. Browne - Point Comfort
Mr. C. E. Steele/Mr. J. L. Tew/
Mr. D. D. Hinds/Mr. W. L. Pou/
Mr. A. A. Dohmann/Mr. J. Sampson/
Mr. L. D. Rafalski
Mr. J. Lemezis/Mr. H. G. Keller/
Mr. J. C. Lanier/Mr. T. S. Lewis/
Mr. C. P. Kouba
Mr. W. H. Floyd/Mr. D. A. Kallock/
Mr. J. H. Hutchins/Mr. D. W. Gann/
Mr. C. A. Phillips - Point Comfort

December 14, 1976

CONFIDENTIAL

RE: MONTHLY REPORT -- ENVIRONMENTAL CONTROL -- NOVEMBER 1976

I. NPDES PERMIT

A pH excursion occurred at 005 outfall on November 30. It was caused when a watered cut-out pot was left on a railroad siding next to a ditch that empties into 005 outfall. Water dripped from the pot shell all night and drained into the ditch causing a pH of 9.3.

II. VISITS AND REPORTS OF GOVERNMENT AGENCIES

- 11-1 Received letter from TACB granting permission for excursions from certain sections of Regulation I during start-up of Line 4 - but only for 60 days
- 11-10 Dr. P. R. Atkins and Mr. C. L. Green met with TWQB in Austin to propose a less expensive outfall revision plan.
- 11-15 Received a call from Mr. Loren Marsten of TWQB setting up an appointment for a semi-annual inspection and grab sampling of our outfalls. The sampling was made on November 23, 1976 by Mr. Marsten and Mr. Bob Lewis.

III. OTHER ENVIRONMENTAL ACTIVITIES

- 11-11 Mr. C. L. Green visited Point Comfort Operations to discuss effluent parameters for proposed less expensive outfall revision.
- 11-12 Messrs. A. A. Rambikur and Joe Surovik discussed status of Blue Crab Study.



468415 0076

SP-4563 (REV 11-60)

Mr. A. A. Rambikur

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December 14, 1976

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III. OTHER ENVIRONMENTAL ACTIVITIES (Cont'd)

- 11-13 Mr. A. A. Rambikur attended an American Chemical Society Meeting and Symposium on Coastal Living Resources in Corpus Christi.
- 11-16 Mr. A. A. Rambikur attended Texas Chemical Council annual meeting in Houston.
- 11-18 Mr. A. A. Rambikur attended APCA meeting in Corpus Christi; Mr. Oscar Cabra, Chief of Air Programs for EPA Region VI, was the speaker.
- 11-19 Messrs. A. A. Rambikur and M. A. Kassing met with Mr. Jim Butcher of Nalco to discuss algae control in 006 lagoon.
- 11-30 Mr. A. A. Rambikur visited Rockdale to discuss proposed NPDES revision with Dr. P. R. Atkins and Mr. C. L. Green.

IV. TEST DATA ON INSTALLED EQUIPMENT

Date	Bldg. No.	Emission Source	#/Hour Actual	#/Hour Allowable
11-2	R-50	EP-1 East Stack	6.0	59.5
	R-50	EP-1 West Stack	9.2	57.7
11-3	R-50	EP-2 South Stack	4.1	35.9
	R-50	EP-2 North Stack	1.2	37.1
11-11	R60A	Lime Kiln Venturi	3.5	29.3

			Hg - #/Day Actual
11-9	R300	Hydrogen Line after Carbon Beds	.02
	R300	Mercury Fume Stack*	.13
	R300	Mercury Fume Stack*	.13
	R300	Mercury Fume Stack*	.11

* Three individual ten minute tests.

Visual inspections at emission sources disclosed five (5) sources with opacities in excess of allowable 30% one or more times during the month.

Bldg. No.	Emission Source
R-7	Lime Storage <u>Norblo</u>
R-50	Kiln Vent Stacks
R-73	Fine Cryolite Storage <u>Norblo</u>
R-73	Pellet <u>Norblo</u>
R-82	Spar Storage Top <u>Norblo</u>

4/5

V. CONDITIONS NEEDING ATTENTION

A. Air

(Alumina and Chemicals Area)

1. Control of gaseous fluoride losses to the atmosphere from the Aluminum Fluoride Plant.

The new type combination Carpenter 20 and steel HF user box has had all the steel plate replaced with Carpenter 20 due to excessive wear. An old type Carpenter 20 HF user box is being fabricated in the Machine Shop as a spare and for the next conversion.

No. 3 HF Kiln has the new type drain installed in the gyp box cone. With this installation, three of the six kilns are now equipped with the new drains, sprays and chlorobutyl coated fans in the HF gas scrubbers.

2. Contain dust created by unloading and storing bauxite and reduce building emissions from R-15, R-16 and R-21.

The Nalco people have completed the drawings for the test installation to be installed in Building 16. Drawings have been mailed to the Nalco field representative and he and our Project Engineer will field check the drawings prior to the test installation. The 55 gallon drum of dust suppressant chemical has arrived.

3. Reduce dusting during railroad car alumina loading.

A RFA has been written and should begin local routing in the next few days.

4. Reduce dusting during spar unloading and transporting operations, R-82.

A requisition has been written and is presently being routed for the purchase of the collector, screw conveyor, and rotary air lock. Pittsburgh Engineering is sizing the blower for the collector. Drafting is continuing on the duct layout.

5. Reduce dusting from bulk loading and handling activities, R-52 and R-53.

Because of difficulty in locating a supplier for the telescoping chute and related fabrication problems, we will be unable to make the January, 1977 installation date of the chute assembly and monorail. The installation date of these items will slip back to the same date as the installation of the dust collectors and duct work, March 1977.

6. Reduce dusting during crvolite bulk loading, R-73.

RFA is complete and being prepared for routing.

Mr. A. A. Rambikur

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7. Eliminate high opacity readings AlF₃ Area.

One of the venturis, which was received last month, has been installed. Some problems were experienced using filtrate water so the piping was switched over to scrubber water. This venturi takes care of the nuisance dust.

The other venturi will be installed on the No. 2 hydrate dryer. Installation is scheduled for the week of December 6, 1976.

8. Replacement of R-7 Norblo.

Maintenance required to keep this collector operating properly is being done until such time that it can be replaced. A RFA is being worked on for the replacement of this collector and should be ready by January 1977.

B. Water

(Alumina and Chemicals Area)

1. Reduce number of high level alarms at 003 intercept.

Construction is essentially complete. Alarm system will have a manual switch with which to check out the electrical components for proper operation. Concrete kickers for the header assembly to be completed the first week in December.

2. Chlor-Alkali waste water disposal.

The two pumps for the onshore lagoon have been shipped and should arrive the second week of December 1976. Installation of the fiberglass pipeline has been hampered by bad weather and the completion date will probably slip back about a week. The painting and installation of the prefabricated supports have also suffered due to the weather. Target completion date is still December 31, 1976.

3. Maintenance Dredging.

A booster pump station has been installed about half way on the fill line to the dredge lake. The equipment and dredge arrived during the month and dredging started on December 4, 1976.

4. Control pullovers from evaporators at R-42.

Two more tests were run the first and second weeks of November. A final report will be forthcoming shortly which will include notes on the analytical capability and the maintainability of the instrument, calibration techniques, and EPA and TWQB limits for normal operation.

5. Blue Crab Project.

Crab traps have been set out at all the locations to be monitored except in the No. 2 dredge lagoon. The first shipment of crabs should be in College Station by December 15, 1976 for analysis.

6. Waste water from Anderson County Works.

Twenty truckloads of waste water were received during November. To date, 54 truckloads have been received to add to the loading of our solar evaporation system.

7. Onshore Gyp Line.

It seems that sliplining with polyethene pipe is the most economical way of repairing the badly eroded gyp line. Efforts are being made to repair this line as soon as possible.

8. Safeguarding the bay from PCB's at R-10.

A Shop Order is out to build some curbing around the transformer to contain any spillage that may occur.

9. Tank protection of sulfuric acid, hydrochloric acid and caustic tanks.

Cost estimates are being worked on by the respective engineers on methods of containing any accidental spill from any one of these tanks. Estimates should be completed by December 17, 1976.

C. Smelting

1. Reroute waste water to chemicals plant offshore lagoon.

The contract for construction of the concrete sumps at all the Smelting outfalls and pipe supports was awarded on November 29, 1976. Site visitations for bid on pipe and pump installation have been rescheduled for the week of December 18, 1976. Electrical field installations began the week of November 13, 1976. Painting of material will begin the week of December 11, 1976.

The contract to enlarge the Smelting onshore lagoon was awarded on November 29, 1976. Equipment has been moved on site and construction should begin by mid-December.

Current negotiations between Dr. P. R. Atkins and Mr. Clois Green with TWQB have indicated a possibility of a revised permit. Mr. A. A. Rambikur is preparing a formal request to allow a discharge out of 006 lagoon. Indications are that the State and EPA may accept the modified plan. This would eliminate the cost of pumping and piping the Smelting water to the Aluminum Fluoride Plant and the offshore lagoon.

Mr. A. A. Rambikur

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2. 006 Lagoon.

No discharge from this lagoon during the month. Samples were taken for Nalco representative, Mr. Jim Butcher, to have analyzed and recommend a program for algae control.

VII. NEW LEGISLATION AND REGULATIONS

None.

VI. CONTACTS IN THE COMMUNITY

None.

Tom Flores
TOM FLORES

TF:mdm

468415 0081

*Margaret
this should have
been your baby
was you
married?
yes - I
wrote when
I married*