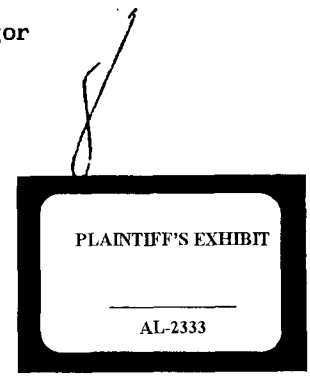
THIS COPY FOR: T. B. Bonney - Pittsburgh

FROM E. B. Parker
Rockdale Works

TO Mr. D. D. McGregor
Rockdale Works

May 6, 1974



MONTHLY LETTER - ENVIRONMENTAL ENGINEERING DEPARTMENT
APRIL, 1974

Safety

Year to date safety statistics were as follows at the end of March:

Frequency	-	7.09
Severity	-	.36
Sum	-	7.45

During the month of April, 110 Company injuries were encountered including three disabling injuries and five serious injuries.

The monthly Red Cross Multimedia First Aid Training Course was held on April 17, 1974 with Ronald Ranly of the Mechanical Maintenance Department as instructor. Twelve employees plus one member of the Rockdale Fire Department attended and successfully completed this course.

Mr. J. W. Keltner, Industrial Security Specialist with the Defense Supply Agency, visited the plant on April 24, 1974 and made an inspection of the Atomizer.

Mr. L. Patridge (Potrooms), Mr. R. V. Schneider (Ingot) and Mr. Pete Kunz (Ingot) were enrolled in the Wise Owl Club during the month.

Blood Bank was held at the plant on Friday, April 5, 1974. Our quota was 115 units and we collected 143 units which almost met the record of 146 units collected on April 14, 1972. Thirty of the employees who donated blood on April 4 were first-time donors.

The first Defensive Driving Course of 1974 was held on April 23-25 (the class elected to have three days instead of four). Seventeen (17) employees and/or their dependents graduated from this course.

Forty employees graduated from the Vehicle Operator Training Course during the month.

Government Agency Contacts

The Texas Air Control Board reported that results of their February IGC Boiler Stack tests showed SO_2 emissions to be in compliance with Regulation II.

ALCOA

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The 1973 Emissions Inventory was completed and submitted to the Texas Air Control Board.

Reports covering first quarter, 1974 progress on the Anode Baking Furnace and IGC Boiler Stacks pollution abatement projects were submitted to the Air Control Board.

An Air Control Board Construction Permit for the new coke storage facility was received.

The Air Control Board was notified that start-up of the stand-by fuel oil system for the plant steam generating facility took place on April 30. This project was covered by a Construction Permit.

Emissions Testing

Air

Opacity readings were made on emissions from Ingot Plant furnace stacks during additions of manganese using Solumang. Results of three separate observations were 7%, 25%, 35% compared with an allowable opacity of 20%. Methods of adding Solumang which result in low fume evolution must be found.

Opacity measurements of emissions from the new skim room stacks ranged from 0 to 14% compared with an allowable opacity of 20%.

Water

Total suspended solids were the highest since last October, exceeding permit limits. Fluoride, chloride and sulfate levels declined somewhat.

Other Environmental Tests

Breathing zone samples taken during milling of Marinite Properzi spouts showed excessive asbestos levels. The operation was stopped until the new dust collection system is operative.

The Spring urinary fluoride survey began April 9.

Samples taken in the ring furnace area during the packing and pulling operations showed excessive levels of particulate in the breathing zone of the packer-unpackers.

Audio dosimeter surveys showed the need for hearing protection in Towmotor cabs and in the furnace and casting areas of the new 360-inch DC casting unit.

Emissions Control Activity

Complete bag changes were accomplished on Alcoa 398 Units 74W and 76W.

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An extensive pulsor tube renovation program was begun in Alcoa 398 Unit 83W. These tubes require replacement because of leaks that developed as a result of abrasion by alumina.

A complete bag change in Alcoa 398 Unit 54N, in which the electrostatic suppression grid is being tested, is planned for early May. Installation of the redesigned insulators and high voltage cable input is expected to be complete by early June, at which time testing of suppression system will resume.

The Line 5 South Alcoa 398 system Convair line was found to be plugged with a hard gray scale. This reduced the alumina flow through the reactor and resulted in bed attrition which generated an abnormal amount of fine ore for Potroom consumption.

New Legislation and Regulations

A draft of proposed changes to TACB Regulation VIII covering emissions reductions during emergency episodes was received from Mr. A. A. Rambikur, Point Comfort.

Environmental Conditions Requiring Attention

Generation of nuisance dust during ore unloading.

No activity during the month.

High fluoride in run-off water from spent potlining.

Shipments of Point Comfort were halted and the size of the storage pile increased.

High levels of asbestos dust during sawing of Marinite.

Installation of the new dust collector was completed and bags were installed.

High dust emissions from lignite crushing area.

Shipment of the new rotoclone has been postponed from May until July 5. No activity involving the testing of the dust suppression spray nozzles.

High dust emissions from B79 dust collector.

High bag drop was found to be a result of re-entrainment of collected dust. Redesign of the dust collector gas inlet was begun to eliminate this condition.

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High dust emissions from the carbon cleaning dust collector.

Bags were changed and mechanical work on shaker mechanism was done. Emissions improved, but still appeared visually to be higher than they should. Work continued.

High dust emissions from CC-62 dust collector.

Opacity remained marginally compliant. No activity.

Excessive dust emissions from Carbon Plant precipitator during rapping and insulator cleaning.

Delivery of the rapping cycle timer is anticipated May 30.

Excessive dust emissions from upper levels of Bldg. 54 (coke grinding).

Design complete and ductwork has been received. Site visits for ductwork installation were held. Electrical installation of a fan will be required.

High dust levels in the Carbon Plant Butt Mill area.

Dusty environment is due to leaks in the mill itself in conjunction with high bag drop in the B79 dust collector. Maintenance efforts were stepped up to minimize mill leaks. Planned dust collector modifications are described elsewhere in this report. Environmental testing is to begin May 2 to establish dust levels and personal exposure.

Coal tar pitch volatiles.

Personal exposure in the anode and cathode mixing areas needs to be determined. We have repeated our request to the Environmental Health Lab for recommendations on test procedures and equipment.

Excessive dust emissions from H. B. Reed boiler slag processing facility.

Inadequate dust collection results in emissions from Reed's screening operation. No indication from Reed concerning their planned action.

E. B. Parker

EBP:ak
See Page Five for Distribution

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Copies this letter to:

P. R. Atkins - Pittsburgh
T. B. Bonney - Pittsburgh
R. C. Hinkle - Badin
A. A. Rambikur - Pt. Comfort
B. M. Starner - Rockdale
L. E. Drake - Rockdale
H. N. Mueller - Rockdale
A. G. Clayton - Rockdale

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