

James H. Lindley

FROM: Robert Edson

SUBJECT: Necessary Pollution Control Expenditures in 1975 and 1976

DATE: April 29, 1975

WHAT WE MUST DO

After more than two years study of our pollution control problems versus the local county, state and federal laws, I have come to the conclusion that we must move promptly to stop all discharge of chemicals to ground water and modify or add to our air pollution control equipment to meet an opacity standard of less than 20% (Ringelmann 1). The requirements have been clear for some time but the solutions are only now taking shape. The necessary steps and their suggested financing means are as follows:

1975

1. Relocate gypsum water pond to a new asphalt lined pond east of Howland Avenue.

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| (New) Pond Cost | \$110,000 | AFE 168-451 (Approved |
| (New) Pipe Tunnel | \$ 95,000 | " " " in 1974) |
| (Relocate) Gyp Water Trench and Piping | \$103,000 | Expense PRO requested |

2. Pipe pellet plant cooling systems to the pond instead of the cooling tower and replace the mix tank condenser.

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| (New) Pumps | \$ 40,000 | AFE 168-451 (Approved in 1974) |
| (Relocate and Replace) Pipe and Condenser | \$242,000 | Expense PRO requested |

3. Dry up existing waste water pond and line it with a double plastic membrane. Build a waste steam heat exchanger system to provide 20 GPM evaporation and install basic caustic pre-treatment tanks for partial decontamination.

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| Pond and Heat Exchangers | \$250,000 | Capital AFE requested |
| Treatment Tanks | \$ 45,000 | " " " " |

4. Initiate design study for modification or addition to pellet plant dryer scrubber

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| Engineering (see attached report) | \$ 30,000 | Expense directly to pellet plant on a time plus expense purchase order to Aerosols Control Corporation. |
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EXHIBIT 19

- 5. Obtain variances as necessary from the EPA to stay in opera. present variances will hold us to July 31, 1975. After that must deal directly with the EPA.
- 6. Price and order additional air pollution equipment for our fertilizer plant dryer. After quotations are obtained we can budget for 1976. Equipment can be ordered in November of 1975 for delivery and payment from 1976 budget in 1976. If a second clean-up electrostatic scrubber is indicated, we can budget it for capital. If only modifications are required, we can expense the costs. If the EPA decides to shut us down, we will request emergency unbudgeted funds immediately.

1976

- 1. Replace pellet plant dust scrubber with a bag house.

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| Dust Collector | \$ 50,000 | 1976 Expense PRO |
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 - 2. Replace sulfate plant scrubber with a condenser for fumes and a bag house for dust collection.

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| Dust Collector | \$ 50,000 | 1976 Expense PRO |
| Condenser and Piping | \$250,000 | " " " |
 - 3. Relocate phosphoric acid condenser cooling ponds and fire ponds to a lined pond.

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| Not more than | \$1,000,000 | 1976 capital - Budget estimate will be ready in July, 1975. |
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 - 4. Install modifications or additions to our pellet plant dryer scrubber.

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| Not more than | \$350,000 | 1976 capital - Budget estimate will be ready in July, 1975. |
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| Total 1975 Capital | \$ 540,000 (1) |
| Total 1975 Expense | 345,000 |
| Total 1976 Capital (maximum estimate) | 1,350,000 |
| Total 1976 Expense (maximum estimate) | 350,000 |

(1) Includes \$245,000 approved in 1974 - AFE 168-451.

Yes, all this is very complex and expensive. Evaluation of the problem has been difficult and the costs were not known, so budget estimates have been rough. We do have a good plan now and we should proceed without delay to avoid any more problems with regulatory agencies.

The engineering and construction coordination of the facilities involved is a difficult problem and since we operate under compliance schedules

with the County Air Pollution Control District now, and after July 1975 with the EPA, we should clear our own fund approval systems as quickly as possible. Each problem or delay creates two more and so forth, until it often becomes almost impossible to get jobs done.

WHY WE MUST DO ALL THESE THINGS

Air Pollution Control

The EPA has made it quite clear that they expect us to meet Ringelmann 1 opacity standards or they will act against us.

Our pellet plant stacks do not meet Ringelmann 1 because we have ammonia, ammonium chloride and fine particulate fertilizer dust passing through our existing scrubbing equipment. It now appears that technology is available to correct this problem so we have no choice but to go ahead with the necessary modifications.

Water Pollution Control

Recently published California State Water Quality Control laws clearly state that we cannot percolate chemicals to ground water. The laws are extremely stringent about pesticides. We percolate all of our gypsum water, our pesticide wastes and 11 to 31 of our product to the ground in the form of production losses. Not only must we stop this by law, but it will recover \$20,000 to \$40,000 per month in losses. To date the water quality control people do not know about our pesticide waste percolation. They do know about our gypsum water and have called me a number of times to discuss the problem. I have assured them that we have a program to reduce and eventually stop our percolation of chemicals to the ground.

Our neighbors are concerned about the quality of water from their wells. Recently water from our waste pond percolated into our neighbor's field. His dog got in it, licked himself and died. Our laboratory records indicate that we are slowly contaminating all wells in our area and two of our own wells are contaminated to the point of being toxic to animals or humans. THIS IS A TIME BOMB THAT WE MUST DE-FUSE.

ADDITIONAL ADVANTAGES

Use of waste heat to evaporate water from our waste disposal pond will condense steam now lost to atmosphere and reduce heat loading on ammonia plant cooling towers. This will help in our efforts to increase ammonia production and reduce condensate loss.

The gypsum water cooling pond may be useful if we build other plants on our property east of Howland Avenue.

The tunnel under Howland Avenue and railroad will provide a pipeway for development of a tank farm east of Howland Avenue.

Use of gypsum water instead of fresh water for scrubbing will reduce our fresh water pumping costs. The low temperature and pH of the gypsum water will assure that we fix and recover the ammonia that now passes through our scrubbing systems.

Removal of pellet plant condenser water from our sulfate plant cooling tower will increase its life by decreasing chemical attack on the equipment.

RE/cs

- cc: A. Osborn
- D. Kirk
- B. Gibbons
- M. Frickey
- M. Stanek

Robert J. [Signature]