

AP00045509

reproducibility based on chromatic analyses of the reactor material. The plant laboratory work has successfully developed a chromatographic technique which gives excellent checks on knowns and plant samples.

The use of 316 stainless steel seems acceptable for the reactor material. A reactor life in excess of six months can be designed, based on present knowledge, which with two reactors in parallel will allow continuous operation with no problem. It was not possible to keep the 1/4" titanium coil from plugging with polymer.

At the moment effort in the plant laboratory and pilot plant is being directed towards separating on as quantitative a basis as possible "in hand" crude amines. This will confirm the yield and product distributions obtained by chromatograph. Once this is verified, it should be possible to continue the planned program. During March, as soon as this verification of yield is obtained, the material for a projected salt separation study at Struthers Wells will be made. During the balance of March and April the separation of the crude amines into products for customer evaluation will be done.

Of the \$30,000 appropriated for operation of the plant, approximately \$15,000 is left for March and April. As is true in most pilot plant operations, it is not possible at this time to determine for sure if this will be sufficient. However, it should be sufficient to assure us that we definitely have a process.

PROCESS IMPROVEMENT

As was discussed last month, very little process improvement work in Process Development is proceeding. Mr. Scattoloni has been assigned to the NP group to work closely with Mr. Barfield on all problems in this area. Process Improvement in amines is handled by Messrs. Jones and Kersh.

LABORATORIES

The volume of laboratory work in February continued unchanged. However, in spite of the additional work, the anticipated variance is probably less than \$1,000 for the month.

While the details of the laboratory work are covered in Mr. Fowlkes' report, of particular significance is the work done on the ADE pilot plant by Mr. Tolar in the development of an analytical method for the amine components and its use to define yield. This is covered in detail in his report.

A new Durabead catalyst for methylamines has given excellent performance in the small test reactor. A charge for the plant reactor has been ordered and will be tried some time later in the year. This catalyst has greater strength characteristics, equivalent or better activity, and costs approximately 80% less than the previous catalyst.

AP00045510

ENGINEERING

A more detailed review of the major projects and many of the minor projects is presented in the Engineering monthly report developed by Messrs. Hill, Kippels, and Metcalf. This month the study includes more of the smaller projects which have been approved.

Attached to this section is a summary of the work status of these projects. It is apparent that many of the projects estimated in the last quarter of 1965 and being completed now are exceeding the original estimates for many reasons. In some instances, the estimates did not take into account the tremendous amount of construction which is proceeding in the Pensacola-Mobile area, thus making available less high quality craftsmen than have been available in times past. Further, we have experienced the need to install equipment in operating units in operation, and under inclement weather conditions. These have contributed to the cost. As we recognize this situation, in future estimates we will attempt to allow for this by adjusting our labor factors for the lower output as well as the fact that some overtime is essential to hire craftsmen. Presently at times we must almost guarantee 10 hours/day work to obtain welders and pipefitters.

We are currently completing and working on many major projects, such as methyl methacrylates, NP storage and loading, amines storage, IBN and DNT. While our design drafting group is working 50-55 hours/week per man, this has been necessary to keep up with the various projects.

MAINTENANCE

Considerable effort has been exercised during February in all of the Maintenance areas to analyze costs and provide information to the various process superintendents. This additional paper work will hopefully be of benefit in helping to control Maintenance costs from a Process viewpoint.

Maintenance costs during the current month have been about \$158,000 as compared to the budget of \$172,000. The actual cumulative Maintenance costs for the year are \$306,000 as compared to a budget of \$345,000.

Areas appreciably over the budget for the year are shown in the table below:

<u>Area</u>	<u>Actual</u>	<u>Budget</u>
Solutions Shipping	2,798	1,248
AN Prills Shipping	4,342	3,166
P ₂ O ₅	11,842	8,000

AP00045511

<u>Area</u>	<u>Actual</u>	<u>Budget</u>
NP	40,198	20,000
NP Shipping	7,052	3,334
PVC	32,933	25,998
Amines	27,843	22,166

In many cases improvements have been made in the above areas which could have been prorated over several months, or the total year. However, the total costs were taken this month and will hopefully reflect in reduced Maintenance costs in the same areas later on.

REVISED FIVE-YEAR EXPANSION PROGRAM

Considerable effort, in cooperation with Accounting, was spent on revising the five-year expansion program. While at month's end the program was not complete, it indicates that the problem areas are what to do in the Nitrogen Division and in methacrylates.

The production of methanol in a new 800 ton/day plant appears very profitable even when charging methanol \$700,000 for CO₂ purchased from the ammonia operations. This credit to the Nitrogen Division, plus revised economics for producing and marketing NP, indicates a greater profitability in the Nitrogen Division than had earlier been expected.

The plan for presenting the five-year expansion program is to refer to the previous program as far as marketing projections are concerned and to revise the economics based on new conditions either in the sales or production area.

MISCELLANEOUS

During March three technical representatives of British Hydrocarbon Chemicals from Grangemouth, Scotland visited the plant to discuss problems with methanol production. British Hydrocarbon has a plant virtually identical to Escambia's plant. Their plant was designed by Chemical Construction and has operated approximately four years less than Escambia's. The free exchange of technical information was very helpful. While British Hydrocarbon could profit greatly from mechanical information which Escambia could supply based on its operating experience, Escambia could profit from several excellent studies made by British Hydrocarbon, particularly computer studies over the reform area and synthesis area. In general, we have established an area of mutual exchange of technical information which should be of benefit to both groups.


J. S. Dorsey, Jr.

mdc
Encl.

AP00045512

SUMMARY OF PROJECT WORK STATUS

<u>Project No.</u>	<u>Title</u>	<u>Appropriation M\$</u>	<u>Committed M\$</u>	<u>Revised M\$</u>	<u>Completion Date</u>	<u>Remarks</u>
6499	MMA Expansion	173	237	255	4-1-66	Costs continue to rise above estimates primarily because of unexpected problems, shortage of construction - personnel, and volume of important work in progress.
6524	Reactor Drop Valves PVC	12	10	24	5-1-66	Awaiting valves.
6532	New Railroad Track	26.5	22.5	25	3-11-66	Virtually complete.
6565	DNT Plant	1,070	520	1,070	8-1-66	Work in progress, completion date pushed back to 8-1-66.
6572	Dust Collector for N-P	56	54	57	4-1-66	No change, awaiting Dustex hoppers.
6573	Additional N-P Storage	228	245	260	4-1-66	Higher costs result from labor shortage and push to complete for fertilizer season.
6577	Improvements and Modifications to N-P Plant	34.5	44.8	45	2-1-66	Work complete.
6578	Freezers to Store IPP Catalyst PVC	9	9.6	9.7	Complete	Complete.
6585	Production of IBN - Amines	224	84	224	5-1-66	Project appears to be on schedule and budget.
6604	New 600# Boiler	320	132	320	11-1-66	Project appears to be on schedule and budget.
6605	Water Treating Modifi- cations - Boiler	105	none	105	11-1-66	Project appears to be on schedule and budget.
6617	Additional Bulk Car Loading Facilities - PVC	10.4	none	10.4	7-1-66	Planning.
6618	Alpine Mill Holding Bin - PVC Plant	3.6	2.6	3.6	4-1-66	Nearly complete.
6620	Spare Reactor Agitator Motor - PVC Plant	4.1	3.5	4.1	7-1-66	Spare - awaiting delivery.
6621	20-Ton Refrigeration Unit PVC Plant	12	none	12	Indefinite	Planning.
6622	Spare Gas End on Monomer Recovery Compressor (PVC)	14.3	13.0	14.3	6-1-66	Awaiting delivery.
6626	New Bag Packaging Equip- ment - PVC Plant	18	10	18	6-1-66	Awaiting delivery.
6629	Control Room Chromatographs	9.6	7.3	9.6	5-1-66	Awaiting delivery.
6631	Additional Electrical Heat &	8	5	35	5-10-66	Awaiting approval on location for heater.
6636	New Converter for #1 Plant	15				
6632	Well Water to HP Scrubber No. 1 Amines Plant	4	1.4	4	4-1-66	In progress.
6633	Install 2 DMA Check Tanks No. 1 Amines Plant	12.4	3	12.4	4-1-66	In progress.
6634	Aqua Mix Tank - No. 1 Amines Plant	5.6	1.8	5.6	4-1-66	In progress.
6676	Nitrogen Sales Bagging Facilities	47.2	22	47.2	4-1-66	Work in progress, early April completion.

AP00045513

<u>Project No.</u>	<u>Title</u>	<u>Appropriation M\$</u>	<u>Committed M\$</u>	<u>Revised M\$</u>	<u>Completion Date</u>	<u>Remarks</u>
6675	Nitrogen Sales Warehouses Appropriation for 12 Appropriation for 4	33.3 11.1		16.8	3-15-66	Four of Engineering responsibility will over- run because of use of sales cost estimate.
W-5066	Additional Amines Storage	250	239	277	4-1-66	In progress - 13 tanks in service, 4 on site.
W-5082	ADE Pilot Plant	50	54	56	4-1-66	Completed. Overrun caused by weather and overtime.
1580-18829	Independent Raw Water Supply - FVC	9.7	1.8	9.7	9-1-66	Only overhead spent.
1580-18841	New Condenser Column T-68102 - Amines	8.5	7.8	8.5	Complete	
1580-18842	New Condenser Column T-68103 - Amines	9.9	7.9	9.9	Complete	
1580-80001	Temporary Centrifuge for MMA	9.3	1.2	9.3	4-1-66	

AP00045514

ESCAMBIA CHEMICAL CORPORATION
INTEROFFICE MEMORANDUM

To: Mr. T. L. Carey **Date:** March 1, 1966
From: E. M. Spurlock **Copies:**
Re: Monthly Report - Personnel Department - February, 1966

PERSONNEL

Activity for the Month

<u>Division</u>	<u>No. of Employees 1/31/66</u>	<u>February Additions</u>	<u>February Separations</u>	<u>No. of Employees 2/28/66</u>	<u>1966 Budget</u>
Executive	56	2	1	57	64
Research	53	1	0	54	59
Agricultural Chemicals	156	13	5	164	160
Industrial Chemicals	15	0	0	15	18
Production	<u>386</u>	<u>9</u>	<u>2</u>	<u>393</u>	<u>398</u>
Totals	666	25	8	683	699

There were 161 walk-in applicants, 114 applications issued and 6 received by mail. Thirty-seven applicants were interviewed and 57 were tested.

TRAINING

Schools were held for the operation of trackmobiles and forklifts. There were 8 trackmobile operators licensed and 11 forklift operators licensed.

SAFETY

The Corporation has worked 53 days or approximately 224,000 man-hours without a disabling injury. The various division records are as follows:

<u>Division</u>	<u>Man-hours</u>	<u>Days</u>
New York Office	331,000	1,669
Research Division	786,500	3,149
Atlanta Division	56,500	53
Pensacola Plant	1,779,000	770
Corporation	224,000	53

AP00045515

SAFETY (Cont'd.)Medical Section

The Medical Section treated 12 injuries for Escambia and 20 for Carroll, performed 14 pre-employment and 16 annual physicals and gave a total of 8 immunization injections.

EMPLOYEE RELATIONS

One 5-year service award and three 10-year service awards were presented.

All of the work has been completed on the first edition of the new house organ, The Sphere, and it should be mailed to the employees by March 10, 1966.

Work is continuing on Job Descriptions and Job Performance Standards for the first four levels of supervision in the Production and Agricultural Sales groups.

LABOR RELATIONS

There has been and is continuing to be a great deal of union organizing activity in the Pensacola area and particularly in the case of our next door neighbor, American Cyanamid. The Textile Workers Union of America has handbilled American Cyanamid at their gates on two different occasions and have held at least two group meetings. This effort is continuing and we are endeavoring to determine whether or not any of this unrest is filtering into our plant.

INSURANCE

During the month of February, we paid 61 claims under our Group Hospitalization program which amounted to a total of \$ 11,004.55.

We have experienced considerable difficulty in placing our Fire Use and Occupancy Insurance in the London market. We were able to place 85% of this coverage without too much difficulty and have now placed 97½% with a great deal of difficulty. Whether or not we will be able to place the remaining 2½% is doubtful.

We settled the following claims during the month:

Five claims amounting to \$ 1,258.85 under our Automobile Liability and Property Damage Insurance.

Five claims amounting to \$ 2,474.55 under our Public Liability and Property Damage Insurance.

AP00045516

INSURANCE (Cont'd.)

We settled the following claims during the month; (Cont'd.)

One claim amounting to \$ 4,569.85 under our Fire policy, explosion which occurred in the Amines Plant on February 3, 1965.



E. M. Spurlock

EMS:kc

AP00045517

PRODUCTION MONTHLY REPORT

March, 1966

AP00045518

April 7, 1966

COST VARIANCES FROM STANDARD

	<u>January</u>	<u>February</u>	<u>March</u>	<u>Total To Date</u>	<u>April Estimate</u>
Steam	3,821	3,924	8,583	16,328 ✓	8,000 4499
Water	(2,310)	(4,133)	(3,178)	(9,621)	(2,500) 2492
Overhead	(889)	(6,686)	17,907	10,332	5,000 (6742)
Alloc. to MMA	-	1,226	(5,482)	(4,256)	(4,000)
Ammonia	(39,312)	(467)	(31,660)	(71,439)	(25,000) 12017
Nitric Acid	(5,582)	2,642	12,846	9,906	15,000 15002
83% AN	(6,126)	1,308	2,209	(2,609) ✓	Budget 3273
Urea	526	4,371	4,536	9,433	10,000 7705
U-34	1,731	381	1,098	3,210	2,000 1110
Bay-Sol	(4,490)	(4,454)	(10,874)	(19,818)	(5,000) 14818
Prills	(11,366)	(17,112)	(29,073)	(57,551)	(20,000) 37551
NP (P ₂ O ₅)	44,549	46,543	24,035	115,127	12,000 11092
PVC	(26,841)	(1,773)	(7,555)	(36,169)	(15,000) 21169
Methanol	(30,200)	(6,608)	(9,818)	(46,626)	Budget 11972
Methyl Amines	(10,812)	29,970	10,071	29,229	Budget 26715
Ethyl Amines	24,333	5,460	123	29,916	15,000 16013
Isopropyl Amines	-	7,734	16,999	24,733	5,000 16034
TOTAL	(62,968)	62,326	767	125	500

Methacrylates

HIBA	66,570	47,000	46,895	159,465	50,000
MAA	21,500	30,931	46,796	97,227	40,000
MMA	<u>37,500</u>	<u>30,033</u>	<u>41,484</u>	<u>107,027</u>	<u>30,000</u>
TOTAL	125,570	107,964	135,175	363,719	120,000

AP00045520

U-34 - Sales volume.

Bay-Sol - Relatively high rate of production geared to sales and favorable solution mix.

Prills - High volume as a result of good sales.

NP - Set a new production record in March and expect to set another in April. High use and high cost of P_2O_5 plus a write off of prior over-use of sulfuric acid caused the major variance. Operation changeover to 1-1-0 grade indicates a high quality product and good production rates. May will be the first month that should eliminate the negative monthly variance.

PVC - April is off to a good start volume wise and a favorable product requirement should result in an excellent month.

Methanol - Expect production to be about on budget. May make a small favorable variance.

Amines - Detailed reviews and estimates have been made for these two plants. April will be better than February or March. The total variance for the year is now estimated to be approximately \$250,000.

METHACRYLATES

A new production record was set in both HIBA and MAA in March. Losses of product, however, in both the MAA and MMA sections combined to produce the largest negative variance of the year. This was very disappointing and was primarily caused by large amount of polymer formation in both sections. A revised and improved inhibitor addition system has been installed which should materially reduce these losses in April. A 60,000# order for repurified MAA is presently being filled. Following this MAA will be purified prior to conversion to MMA. Prior experience indicates that if relatively pure MAA is the feedstock, yields of MMA will be at or close to design.

AP00045521

Mr. H. F. Roderick

- 4 -

April 7, 1966

Because the "Liquid Phase Dehydration" system looks so promising, we are moving rapidly to the detailed design stage for possible plant installation. The possibility of making a major process improvement may make it desirable to make the change as early as possible, probably April. A very rough estimate of cost is \$20,000 and a plant down-time of from four to five days. During this down-time other necessary repair work in the plant can be accomplished. These estimates are being firmed up and I will keep you informed.

T. L. Carey

TLC/djs

AP00045522

ESCAMBIA CHEMICAL CORPORATION
INTEROFFICE MEMORANDUM

To: Mr. T. L. Carey **Date:** April 5, 1966
From: J. J. Dorsey, Jr. **Copies:**
Re: Summary of Technical Department
Monthly Reports - March 1966

Technical Summary

NEW PRODUCTS

DNT

All phases of this project continued to move forward satisfactorily. The location of the plant in Area B was resolved with the other operating departments of Escambia and the insurance company. It was agreed to locate the storage tanks approximately 15 feet below grade in a special revetment.

Minor revisions to process and engineering flow sheets continue to be developed with Chemico. Details of the control room and motor control center were resolved with Chemico. The control room will accommodate future expansions in production.

Some discrepancies are apparent between Biazzi flow sheets for utilizing various concentrations of nitric and sulfuric acid. These will be resolved.

On Thursday, March 31, Wyandotte notified Sales that material would not be required prior to November 1, 1966. The program to complete the plant by August 1, 1966 will be modified to allow the plant to be completed by perhaps September 1 to 15, while minimizing construction costs.

With the probable late start on Wyandotte's part, it is desirable to produce some material to establish our ability to produce quality material for possible sale during 1967 to other customers, in addition to Wyandotte. It further appears desirable to investigate the separation of various mononitration products and dinitration isomers for possible sale as pure products. This may be necessary to bring the plant operation to capacity in 1967.

ADE

During this period it was possible to demonstrate that a satisfactory yield is being obtained from EDC. The difficulty of separating crude amines

AP00045523

from the reaction products in anything short of the basic plant is difficult for the uninitiated to comprehend. Mr. Tolar has done an outstanding job in separating this material in the laboratory and in developing a method of analysis by chromatography which gives reproducible, reliable results. Further, a distillation in the laboratory indicates that products equalling or exceeding that of competitive materials can be produced. His reports of March 18 and March 30, respectively, demonstrate that a 90+% yield is obtained and compare pilot plant produced materials with commercial materials.

To obtain the type of verification which our management appears to desire for this project may require the expenditure of at least \$500,000 in a pilot plant, which will virtually duplicate the commercial plant in most respects. The fact that these products are made by all other producers from the same raw materials, in the same manner, in similar equipment seems to have little bearing. The anticipated pilot plant program will be completed at the end of May with the production of some quantity of each of the various products for possible future customer evaluation. An additional \$15,000 will be required to operate the pilot plant through May.

How to take the project on to a commercial phase remains to be resolved.

PROCESS IMPROVEMENT

Little process improvement is being carried out in any area except in NP by members of the Technical Department. Messrs. R. E. Jones and J. R. Kersh are totally involved in resolving production problems and supplying some new product information. The plant trial of the new methylamines catalyst looks excellent after several weeks of operation. Necessary process improvement work should be done in PVC, ammonia, methanol, nitric acid, urea, and ammonium nitrate. The small cost of this improvement work has always been justifiable based on the improvements made.

LABORATORY

Laboratory costs are approximately \$7,000 above budget for the first quarter of 1966, including the work in the ADE program. However, when this work is transferred to the work order taken out to accumulate operating costs in the ADE project, actual costs are estimated to be approximately \$2,000 below budget for the first quarter.

An analysis of laboratory costs indicates that four major areas share 82% of these costs; their individual percentages are as follows: MMA - 42%, amines - 17%, PVC - 13.3%, and ADE - 9.7%.

Four laboratory technicians were officially transferred to MMA production this month. During April, when the new chromatographs for amines

AP00045524

April 5, 1966

are obtained, the transfer of some laboratory technicians to amines production will be effected with an ultimate release of operators for other plant assignments. Virtually no work is being carried on in the laboratory to produce new amines.

A considerable amount of work, including a visit to the State Board of Health to discuss Escambia's effluent to the bay, was carried out by Mr. Fowlkes. The program he has developed would appear to maintain a satisfactory effluent control program as far as the State Board of Health is concerned.

Considerable work was done on evaluating new analytical methods for methylamines and comparing the precision of these new methods as well as the quality of Escambia's amines with competitive products.

ENGINEERING

A summary of the status of various construction projects is attached. A more detailed analysis is contained in the engineering report of these projects. Mr. Metcalf's report on project work is included with the engineering report. His report on instrument and electrical maintenance is covered elsewhere.

Similarly, those projects which are still handled in Maintenance are listed in the project summary. There is a need to clarify the project responsibilities in these areas.

The large major projects continue to show overrun. The worst condition appears to be in the methyl methacrylate construction work, which particularly suffers from the need to install the equipment with the plant in operation. This has led to a major overrun in the labor area. A separate report will be issued analyzing this.

Another area of substantial overrun is in the NP storage building, where it was necessary to fabricate some conveying equipment, which might normally have been purchased at a lower cost, in order to complete the plant for the fertilizer season.

REVISED FIVE-YEAR EXPANSION PROGRAM

A revision was issued on March 5, 1966. During the month various meetings were held to discuss further revisions to the program. At month's end it appears that agreement on the content of the program has been reached and it is mainly necessary to define the timetable for the various projects and to firm the economics on the methanol expansion program.


J. J. Dorsey, Jr.

mdc

AP00045525

SUMMARY OF PROJECT WORK STATUS

Project No.	Title	Appropriation M\$	Committed M\$	Revised M\$	Completion Date	Remarks
6499	Increase Capacity MMA Plant	175.0	287.0	287.0	5-1-66	Job complete.
6509	Air Condition & Enclose Wet Bay Control Room	6.0	3.3	6.0	4-30-66	
6524	Purchase Reactor Drop Valves - PVC	12.0	10.7	12.0	5-1-66	Valves are here.
6526	Amines Catalyst Test Unit	2.2	1.7	2.4	4-30-66	
6528	Expand Shop in Area A	11.3	9.3	11.1	4-30-66	
6532	Additional Rail Siding	26.5	22.9	23.5	5-1-66	Job complete.
6533	Ammonia Recovery Pressure Control System	3.3	none	3.3	7-1-66	
6565	DNT Plant	1070.0	541.0	1070.0	8-1-66	No change.
6573	New NP Warehouse	225.0	271.0	272.0	5-1-66	Job complete.
6585	Equipment to Produce IDN & DEA - Amines	223.9	108.5	224.0	5-1-66	On schedule.
6604	New 600 psi 100,000#/hr. Boiler	320.0	132.0	320.0	11-1-66	Project still on schedule and budget.
6605	Upgrading Water Treatment System - Boiler	105.0	83.0	105.0	11-1-66	Project still on schedule and budget.
6617	Additional Bulk Car Loading Facilities - PVC	10.4	2.0	10.4	7-1-66	On schedule.
6618	Holding Bin for Alpine Mill - PVC	3.6	2.7	3.6	4-1-66	Complete.
6620	Spare Reactor Agitator Motor - PVC	4.2	3.5	4.2	7-1-66	On schedule.
6621	Refrigeration Unit for Cooling Solution Tanks - PVC	12.0	none	12.0	Indefinite	Select equipment in April 1966.
6622	Spare Block for Recovery Compressors - PVC	14.3	12.0	14.3	6-1-66	On schedule.
6626	Packaging Equipment to Use Valve Bags for PVC	18.0	12.0	18.0	6-1-66	On schedule.
6629	Control Room Chromatographs	9.6	7.3	9.6	5-1-66	Awaiting delivery.
6631	Additional Electric Heat & New Converter for #1 Plant	8.0	13.7	35.0	6-1-66	Revised to include gas fired heater.
6632	H.P. Water Pump, H.P. Scrubber - #1 Plant	4.0	1.4	4.0	5-1-66	On schedule.
6633	New Methylamines Check Tanks	12.4	7.9	12.4	5-1-66	On schedule.
6634	Aqua Mix Tank - #1 Amines Plant	5.6	3.9	5.0	4-11-66	On schedule.

AP00045526

Project No.	Title	Appropriation M\$	Committed M\$	Revised M\$	Completion Date	Remarks
6635	Plant Steam Recorder	1.8	none	1.8	6-1-66	On order.
6641						
1580-80001	MMA Test Centrifuge	9.3	3.9	9.3	5-1-66	On schedule.
1580-80002	Crystallizer Revisions	18.3	8.9	18.3	5-1-66	
6647	Ammo-Phos Production	200.0	45.0	200.0	6-1-66	Some delays resulted in getting equipment approved.
6675	Nitrogen Sales Warehouses					4 of Engineering responsibility will over-run because of use of Sales cost estimate - Job complete 3-28-66.
	Appropriation for 12	33.3				
	Appropriation for 4	11.1	18.0	18.0	3-28-66	
6676	Nitrogen Sales Bagging	47.2	32.0	47.2	3-18-66	Complete 3-18-66.
1580-18829	Independent Raw Water Supply - PVC	9.7	.1	9.7	9-1-66	On schedule
1580-18838	Hot gas bypass valve on refrigeration machine	1.2	1.0	1.2		
1580-18835	Aftercooler for Air Compressor	1.9	1.3	1.9		
1580-18839	New Blowdown Tank for Compressor Building	2.7	1.5	2.7	5-15-66	
1580-18851	Chunk Crusher for Slurry System	.9	.1	.9		
1580-18854	30-Ton Air Conditioning System for Field Administration Building	7.4	7.0	7.4	4-30-66	On schedule.
1580-18857	Concentrator Vent Lines	2.0	.2	2.0		
1770-5066	Additional Amines Storage	250.0	260.5	27.0	4-8-66	Complete April 1966.
1770-5082	ADE Pilot Plant	50.0	59.0	60.0	5-1-66	Job Complete.
1770-6003	PVC Reactor Reglazing	38.0	15.0	38.0		On schedule.

/fls
4/5/66

AP00045527

ESCAMBIA CHEMICAL CORPORATION

Interoffice Memorandum

To: Mr. T. L. Carey

Date: April 4, 1966

From: E. M. Spurlock

Re: Monthly Report - Personnel Department - March, 1966

PERSONNEL

Activity for the Month

<u>Division</u>	<u>No. of Employees 2/28/66</u>	<u>March Additions</u>	<u>March Separations</u>	<u>No. of Employees 3/31/66</u>	<u>1966 Budget</u>
Executive	57	4	1	60	64
Research	54	3	1	56	59
Agricultural Chemicals	164	15	7	172	199 *
Industrial Chemicals	15	0	0	15	18
Production	<u>393</u>	<u>17</u>	<u>4</u>	<u>406</u>	<u>398</u>
Totals	683	39	13	709	738

* This includes 160 as listed on the budget sheet plus 39 temporary employees who were not shown in number on the budget sheets.

There were 193 walk-in applicants, 134 applications were issued and 11 received by mail. Sixty-one applicants were interviewed and 57 were tested.

TRAINING

Schools were held for the operation of trackmobiles and forklifts. There were 6 trackmobile operators and 6 forklift operators licensed.

SAFETY

The Corporation has worked 19 days or approximately 73,549 man-hours without a disabling injury. The various division records are as follows:

<u>Division</u>	<u>Man-hours</u>	<u>Days</u>
New York Office	334,400	1,700
Research Division	794,000	3,180
Atlanta Division	20,000	19
Pensacola Plant	1,829,000	801
Corporation	73,549	19

AP00045528

SAFETY (Cont'd.)

The Atlanta Division experienced a lost time injury during the month.

Personnel of the Ammonia-Methanol plant in Pensacola completed six years without a lost time injury.

Medical Section

The Medical Section treated 15 injuries for Escambia and 42 for Carroll, performed 15 pre-employment and 17 annual physicals and gave a total of 12 immunization injections.

EMPLOYEE RELATIONS

Three 5-year service awards and two 10-year service awards were presented.

The first issue of the house organ, "The Sphere", was mailed in March and was well received by the employees.

LABOR RELATIONS

The Textile Workers Union of America has petitioned the National Labor Relations Board for an election in the American Cyanamid plant. After the petition was filed, the International Chemical Workers Union moved in two organizers for the purpose of intervening in the Cyanamid election. They are presently making house calls and handbilling the company. They have informed us that once the election at Cyanamid is completed, the Chemical Workers expect to work on Escambia's employees. We have held three meetings with all first-line supervisors for the purpose of acquainting them with their rights and the way in which they can be most effective in combating this coming organizational drive.

INSURANCE

During the month of March, we paid 85 claims under our Group Hospitalization program which amount to a total of \$ 12,850.54.

The London Market on Use and Occupancy Insurance for chemical plants has become almost nonexistent due to tremendous losses in 1965 resulting from hurricanes. We did manage to secure a quotation from the London market on our renewal which was due April 1st but the Underwriters could not guarantee us that they could place the entire coverage. We then tested the Domestic Market and obtained a firm quotation for 100% of our coverage from the Oil Insurance Association, however, we were required to accept a 5-day deductible. The London Market had quoted a flat \$ 100,000 deductible. We have accepted the O.I.A. proposal and will work out the details next month. Prior to this, we had no deductible. This coverage was worked out with the assistance of the EBS Insurance Department.

AP00045529

INSURANCE (Cont'd.)

We settled the following claims during the month of March:

Six claims amounting to \$ 1,391.81 under our Automobile Liability and Property Damage Insurance.

One claim amounting to \$ 211.63 under our Public Liability and Property Damage Insurance.

TAXES

We filed Ad Valorem Taxes for the Pensacola plant with the Santa Rosa County Tax Assessor on March 30, 1966, however, we were advised by the Tax Assessor that they were endeavoring to go on a 100% Evaluation during 1966. If this study is completed in time for the 1966 tax rolls, the rendition made by us to the Tax Assessor will be void and we will have to negotiate another tax evaluation.


E. M. Spurlock

EMS:kc

AP00045530

PRODUCTION MONTHLY REPORT

April, 1966

AP00045531

INTEROFFICE MEMORANDUM

To: H. F. Roderick
From: T. L. Carey
Re: April Production

Date: May 9, 1966
Copy: J. G. Gibert
L. W. Gopp
H. L. Harwell
Dr. W. M. Smith
Dr. T. H. Vaughn
J. F. Walrath

Dear Mr. Roderick:

Two of the production units had outstanding results for April. Both PVC and NP set new monthly production records. PVC produced 4,604 M pounds and NP, 6,710 tons. NP production costs were \$1.81 per ton lower than the previous best costs.

Nitric acid was as predicted - a \$15,000 negative variance due almost entirely to a carryover of costs from the maintenance shutdown in March. Volume is now up to standard.

Methanol was negative \$12,000 due to a broken tube in one of the reformers. This necessitated operating the plant at less than half rate for three days. Five thousand dollars was again accrued for future maintenance.

Ammonia had a reasonably good month with a positive variance of \$23,000. Again \$10,000 was accrued to help defray the costs of a major maintenance turnaround that is being planned for late June or early July.

The nitrates and solution plants were negative by \$3,700. The problems here were no urea production due to sales and not sufficient nitric acid and ammonia to run 83% and prills at a good rate.

The amines plants experienced considerable process difficulties which resulted in a production substantially below budget. Yields were good however, which partially offset the volume variance. The plants are now operating at a much better rate and with the additions being made, it is expected that by July these plants will be operating at above budgeted rates. April variance was a negative \$54,000.

The overall results from all of the production units was negative \$37,100.

AP00045532

May 9, 1966

May will be an unusual month from the agricultural chemicals portion of our production. This was brought about by a sales situation:

1. NP inventory is sufficient to provide for all projected sales.
2. A shortage of ammonium nitrate and solutions. (Sales needs all we can possibly make and sales prices are good at this time.)

Because of this situation, a study was made to compare May profitability of making NP vs. diverting the NP use of ammonia and nitric acid to production of ammonium nitrate and solutions.

The results were as follows:

1. NP, no production - variance	-\$55,000
2. Ammonium nitrate and solutions increase - variance	+ 26,000
3. Profit from additional sales of prills and solutions	+ 40,000
4. Value of granulating 3000 tons NP fines during this period vs. selling at \$3 off list	<u>+ 10,000</u>
Net in favor of diverting NP raw materials	+\$26,000

Due to this special situation that exists at the height of the fertilizer season, the decision was made to shut the NP plant down and convert the ammonia and nitric acid to AN, prills and U-34 solutions because of the better profitability.

This was a reluctant decision because NP would have produced a positive variance in May as has been predicted. For example, with the same production as April and using only the difference in price of phosphoric acid if purchased under our agreement with W. R. Grace, April's results would have been \$6,000 positive. (This acid is available from Grace in May.)

AP00045533

May 9, 1966

There is one other advantage and that is this shutdown will allow for the few days necessary to complete installation of the ammonium phosphate equipment. This project is on schedule and should be in operation on June 1.

Methacrylates

The operation of this plant featured a number of major changes that were being completed at the end of the month. The plant was shut down for eight days and this coupled with the changes contributed to the negative variance of \$161,000.

The changes:

1. Installation of liquid phase dehydration in place of the vapor phase. This will be much simpler equipment and operation and it is expected will improve yield and quality.
2. Repacking of the methanol stripper.
3. Installation of an additional tray in the HIBA column to improve quality of HIBA by removal of more of the low boilers and better operation of the past flash unit.
4. Installation and testing of the Western States continuous centrifuge.
5. Change to use of xylene in the MAA decanter.
6. Set up for plant scale test of 95% isobutylene to improve absorption and determine operation of reactors under these conditions as well as operation with no mother liquor return. Hopefully will point the way to increase HIBA production.

It is hoped that most of these items will have been evaluated by the end of May.

AP00045534

May 9, 1966

Bonus

The production incentive plan was announced to all operating and maintenance groups early in April. Meetings were held with each group individually to announce and explain the plan. It was well received and, I think, is beginning to show results. I am well pleased so far.

Superintendent Reports

You will note that this month the area superintendents have each estimated the variance for May in their units. This is the logical outgrowth of the cost awareness program started in February. This program coupled with the bonus plan will be most beneficial to improved results.


T. L. Carey

TLC/djs

AP00045535