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To: T. H. Huffman

From: D. C. Skokna
Date: February 19, 1990

Subject: ABERDEEN MONTHLY PROGRESS REPORT
JANUARY, 1990

Interoffice
Communication

VISTA

Safety

There was one first aid and one recordable case reported during January. The recordable case involved a maintenance employee who suffered caustic burns to his feet. At month's end, the Aberdeen plant's employees have worked 3863 days (5,125,576 manhours) since the last lost time injury.

FY 1990 Key Statistical Information

	<u>January</u>	<u>Y.T.D.</u>
PVC Production, MM Lbs.	39.9	143.0
Reactor Stream Factor, %	90.0	83.0
Resin Quality, % Prime	96.6	96.7
VCM Efficiency, Lbs./Lb.	0.9936	0.9995
Flexible Compound Production, MM Lbs.	5.3	23.7
Flexible Compound Quality, % Prime	98.3	97.9
Rigid Compound Production, MM Lbs.	5.5	17.1
Rigid Compound Quality, % Prime	99.9	99.4
Plasticizer Production, MM Lbs.	1.4	5.6
Plasticizer Quality, % Prime	85.5	89.5
Energy Use, (EUI, %)	< 8.4>	<12.8>
Fixed Cost Variance, \$M	<10.8>	19.4
Variable Cost Efficiency Variance, \$M	218.0	268.0

Capacity Utilization Factors

Resin	105.6	95.4
Flexible Compound	69.0	76.1
Rigid Compound	93.2	99.4
Plasticizer	73.3	77.0

Waste Reduction Indices (%)

Offsite, Hazardous Wastes	157.7 ⁽¹⁾	141.5
Recycled, Hazardous Wastes	57.9 ⁽¹⁾	60.6
Offsite, Non-Hazardous Wastes	74.6 ⁽¹⁾	81.3
Vulnerable By-Products	100.5 ⁽¹⁾	95.7
Total Waste Water	113.8 ⁽¹⁾	115.7
Air and Water	82.6 ⁽¹⁾	83.3

(1) Three-month rolling average.

T. H. Huffman

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Operations

A clean wall agent was tested in reactor D745. Initial results are promising. Resin properties and quality were not significantly impacted.

Lucidol 288 catalyst was used to make a 5415 resin batch. This is a less expensive material than the catalyst currently used. No noticeable difference was noted between normal production and the trial batch. More extensive trials are scheduled for February.

Maintenance problems on Lines III and V, along with increased product demand, tightened flexible compound production schedules. A PLENEX polymer run was made on Line I.

Demand for rigid compound surged during the month. On January 6, a new one-day production record of 356.6M pounds was set. The previous record was 351.6M pounds set on 6/1/85.

Costs

Variable costs were favorable due primarily to good VCM usage and to product mix effects in the compound department.

Fixed costs were essentially at budget.

OMP

1. Production of off-grade resin for 1990 YTD is 0.0326 lbs./lb. versus the FY1989 average of 0.0441. Most of the improvement is the result of the Vinyl Operations Superintendent's Natural Team's changes in startup procedures.
2. The month's millscrap production in the flexible compound department was 0.0111 lbs./lb. versus last year's average of 0.01968. The improvement was a result of procedural changes that were implemented by the Millscrap Reduction Team (This is Bill Davis's natural team. Bill is a shift supervisor).
3. CAPCO, a 5385 resin customer, visited the plant to learn more about our rigid compounding and quality control methods.
4. Twitchell's R&D manager visited the plant to learn about 5415 production.

T. H. Huffman

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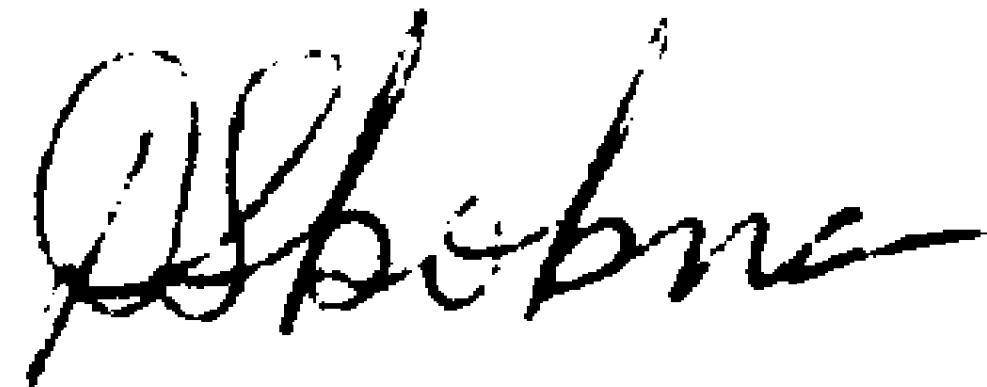
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5. Dayton Extruded Plastics (DEP) visited the plant to discuss dimensional stability problems they are having with our rigid compound. They agreed to participate in a D.O.E. involving the raw materials used in their dry blend.
6. All first and second level supervisors met with plant management to discuss barriers they experience to QMP. Also, information was exchanged about our plant's businesses.
7. Twenty-two employees were trained to be on the Facilitator Team. This group will work with the plant's natural teams.
8. On 1/26, a team evaluated the VCM Plant's quality systems.
9. Sixty-three percent of the plant's natural teams met during the month.

Projects

The alternate natural gas line was tested. We will begin using natural gas from ACG via the new line on 2/1/90. Savings are approximately \$1000 per day.



Doug Skokna
Plant Superintendent

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AberdeenRWS/DCS (File Copy), JDO, JEN, MRK, DAM,
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SAFETY - B. L. Trego, J. V. Uptain

	<u>January</u>	<u>Fiscal</u> <u>Y.T.D. 1990</u>	<u>Fiscal</u> <u>Y.T.D. 1989</u>
First Aid	1	6	6
OSHA Recordable	<u>1</u>	<u>3</u>	<u>2</u>
Total Injuries	2	9	8
Number of Restricted Workday Cases	1	2	1
Number of Lost Workday Cases	0	0	0

Injuries by Department

Vinyl Operations	0	0	0
Compound Operations	0	2	2
Maintenance	2	6	6
Laboratory	0	0	0
Receiving/Warehouse	0	0	0
Office	<u>0</u>	<u>1</u>	<u>0</u>
Totals	2	9	8

Injuries by Type

Cuts and Abrasions	1	2	1
Eye Injuries	0	1	0
Burns	1	2	2
Bruises	0	1	2
Strains/Sprains	0	0	2
Stings	0	1	0
Other	<u>0</u>	<u>2</u>	<u>1</u>
Totals	2	9	8

Non-Occupational Injuries

Lost Workday Cases	2	3	1
Days Lost	18	84	20

Safety Record

Last lost time injury - 7/5/79
Days since - 3863
Employee hours since - 5,125,576

On January 31, 1990, the employees of the Aberdeen plant completed 3863 days with no lost time injury.

"Hand Injury Prevention" was the principle topic for safety meetings during the month.

The new Safety Handbook was completed and is ready for distribution in February's safety meetings.

SAFETY - Continued

Routine dosimetry results for the month were:

<u>Chemical</u>	<u>< PEL</u>		<u>> PEL</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
VCM	75	100.00	0	0.0
Lead	15	88.2	2	11.8
Total Particulates	8	100.00	0	0.0

Monthly Injury Summary

<u>Injury Class</u>	<u>Department</u>	<u>Description</u>
RWC	Maintenance	Caustic burns to both feet.
FA	Maintenance	Cut - right fore finger.

QUALITY MANAGEMENT PROCESS - M. R. Kane

CAPCO (Cement Asbestos Products Company), which buys 5385 resin, visited the plant to learn about rigid compounding and Q.C. of rigid compound. CAPCO will begin manufacture of pipe at its Van Buren, AR facility during the first quarter of 1990. The additional production will increase Vista's position from 24MM pounds to 36-40MM pounds.

Twitchell's R&D Manager, Dwight Barry, visited the plant this month to learn about the production of 5415 resin. Twitchell produces coated yarns which are woven to make patterned fabrics. As a part of the visit, Dwight talked with the Technical Service Lab personnel and discussed their capabilities.

Dan Preston from Dayton Extruded Plastics visited to discuss problems which DEP has experienced. The nature of the problem is dimensional instability (swell or shrink of the extruded part). As a result of our discussion, we decided to do a DOE involving the raw materials to their dry blend product. The experiment was designed and sent to Dayton for review. The material for each experimental run will be blended at Dayton's plant where the DOE runs will be made.

Manager's OMP Meeting

All of the first and second line supervisors met with plant management to discuss barriers they experience to QMP and also to receive information about the plant business. Meetings were held each of two days with half the group attending each day. The feedback from the meetings was positive and all involved agreed the meetings should be held annually.

Q-Scorecard Submittal

The plant Q-Scorecard was submitted for approval on January 26. The scorecard included goals in the following areas: 1) Natural Teams; 2) Cost Control; 3) Safety; 4) Waste Minimization; 5) Quality; and 6) a Linkage Measure. Development of departmental support scorecards has begun.

Facilitator Training

A meeting was held on January 23 to train all those who agreed to be a part of the Facilitator Team. There are twenty-two trained facilitators who will work with the plant natural teams. The natural teams will be taught team techniques and work on a project in their department as their case study.

VCM Plant Quality Systems Evaluation

An evaluation of the VCM plant's quality systems was performed on January 26. People involved were Mike Kane (Aberdeen), Dave Hollis (LCCP), and Jim Hall (Houston - Purchasing). All involved agreed that the exchange was mutually beneficial.

COST VARIANCES - D. C. Skokna

Variable Costs

<u>Product</u>	<u>January, 1989 Variance, \$M</u>		
	<u>Efficiency</u>	<u>Price</u>	<u>Total</u>
PVC	\$136.0	\$1165.5	\$1301.5
Flexible Compound	53.2	176.6	229.8
Rigid Compound	14.4	271.9	286.3
Plasticizer	<u>14.4</u>	<u>10.6</u>	<u>25.0</u>
	\$218.0	\$1624.6	\$1842.6

PVC - VCM use was below budget.

Flexible Compound - The favorable variance was due to product mix effects and a lower than normal scrap rate. The reduced scrap (0.011 lbs./lb. versus 0.0145 lbs./lb. standard) is due to the successful efforts of the Millscrap Reduction Team.

Rigid Compound - A favorable product mix effect was partially offset by above budget raw material consumption.

Plasticizer - VRP yields were above budget to give the overall positive variance.

Price Variances

	<u>\$M</u>
- VCM	\$1209.2
- Resin to Rigid Compound	245.6
- Resin to Flexible Compound	143.8
- Alfol ^R 610	17.4
- 610P to Flexible Compound	16.4
- Natural Gas	< 38.0 >
- Other Variances	<u>30.2</u>
Total	\$1624.6

Fixed Cost Variances

	<u>\$M</u>
- Payroll and Benefits	<\$58.4>
- MM&C	< 34.7 >
- Miscellaneous	88.5
- TI&D	14.3
- Clearances	<u>8.1</u>
Total	<\$10.8>

Payroll and Benefits - Overtime in operations and maintenance was above budget due to operational needs and the holiday.

M. M. & C. - Material costs for the Compound Department repairs were above budget.

COST VARIANCES - Continued

Miscellaneous: Major variances in this category were:

Moving, Home Assistance - \$13.3M favorable.

Unclassified - \$18.4M favorable. Some charges related to the RFS trials were transferred to this project's capital AFE.

Packaging Supplies - \$21.3M favorable.

T.L.& D. - This category was \$14.3M unfavorable due to a \$16.1M unfavorable FICA variance. The FICA is based on cash payroll which includes five pay periods this month.

VINYL - J. D. Olson, K. W. Birck

Safety

The Vinyl Department did not have any first aid or OSHA recordable injuries during the month of January.

The monthly safety meeting topic for the month was hand safety. A video tape on hand safety and pinchpoints was viewed and discussed.

General

1. 5385 was produced this month in the New Module.
2. Reactor D745 was used to test a new reactor clean wall technology. The new technology appears to have the potential to replace reactor chem wash and rinsing. There has been no detectable adverse effect on any resin physical properties.
3. Lucidol 288 catalyst was used to produce a batch of 5415. There was no noticeable difference between this resin (including Mets IR testing) and other 5415 resin normally made with Witco 939 catalyst. L-288 is a less expensive raw material. More extensive testing will continue in February.
4. The resin raw materials in the 744 account were valued at \$345.4M.

	<u>January</u>	<u>YTD</u>
- Production, MM Lbs.	39.9	143.0
- Daily Rate, M Lbs./C.D.	1287.1	1162.6
- Capacity Utilization Factor, %	105.6	95.4
- Total Reactor Charges	928.0	3349.0
- Charges/C.D.	29.9	27.2
- Reactor Stream Factor, %	90.0	83.0
- Rotary Dryer Stream Factor (#4-#8), %	71.7	70.7
- Fluid Bed Dryer Stream Factor, %	96.8	86.3
- Resin Quality, % Prime	96.6	96.7

Reactor Downtime

	<u>Hours</u>
- Operational downtime (recovery scheduling conflicts, rinsing chem wash tanks, New Module rinse/charge water conflicts, no place to dump, waiting on Q.C. data before charging and filter changes).	278.5
- Maintenance downtime (hydroblast reactors and drill condensers D700 (1X) and D745 (2X), drill condensers D742, D743 and D744, repair agitator fluid coupling D742, repair agitator seal D300, repair Topaz unit, replace safety discs on D742 and D743, and miscellaneous instrument and valve repairs).	463.8

VINYL - Continued

<u>Dryer Downtime</u>	<u>% of Total Downtime</u>
- Reactor limited production.	75.3
- Operational downtime (centrifuge plugs, check for dust collector leaking, clean dryers, activator transfer problems, and flameouts).	12.4
- Maintenance downtime (centrifuge repairs, rotary and fluid bed repairs, shear pins, repair rotary valve, clean fluid bed scrubber, and repair Trunion bearings.	13.3

Key Maintenance Work - J. B. Autrey, J. B. Hegwood

Reactor 745 was shut down during the month for hydroblasting and condenser drilling. This was done as part of the clean wall test run. The condenser was drilled and brushed in order to remove as much buildup on the tubes as possible. The condenser was then swabbed with the clean wall agent.

Reactor 700 was shut down during the month for hydroblasting and condenser drilling. This was done as part of the contamination control program.

Reactors 743 and 744 were shut down for condenser drilling during the month because of cooling control problems.

Reactors 741 and 742 were shut down during the month for safety disc replacements. This completes all safety disc replacements for the year.

Number seven dust collector was shut down for repairs to its screw conveyor and stub shaft during the month. The screw conveyor and stub shaft were replaced with a newly designed model.

Number eight dryer was shut down during the month for repairs to its inlet screw and Trunion. The inlet screw was pulled and repaired and the Trunion was replaced.

The fluid bed dryer was shut down for cleaning and Bird repairs during the month. The demister pads were pulled and cleaned because of an excessive calcium carbonate buildup. The Bird centrifuge was pulled and replaced with a spare because of an excessive vibration problem.

The main breakers were replaced on the east hot water charge pump and the old unit dump Sweco motors during the month.

All instrumentation for the low molecular weight project was calibrated during the month.

Numbers three and four VC Corken compressors were removed and rebuilt during the month.

There were six major valves changed out in the reactor area during the month.

COMPOUND - J. E. Nickerson, K. G. Akins

Safety

The Compound Department worked without injury in January. The topic of the monthly safety meeting was pinchpoint awareness. The topic of this safety meeting was recommended by the team investigating the November incident in which an operator severed the tip of his finger in a closing door.

General

Several maintenance problems caused some unusually high downtime in the Compound Department in January. The increase in downtime, coupled with increasing flexible compound demand, tightened production schedules. Line III was down eighty-two hours during the month awaiting parts to repair the FCM starter. Replacement of Welex seals was responsible for forty-five hours of downtime in the dry blend unit. Line V was idle for the entire month of January due to a combination of light orders and repairs to the twin screw gearbox. Line I was down for twenty-eight hours during production trials of Plenex polymer formulations.

On January 6, the dry blend unit produced 356,554 pounds to set a new one-day production record. The previous record was 351,560 set on June 1, 1985. The setting of this new record was particularly significant as it came at a time when demand for our rigid compounds surged and the production schedule was extremely tight.

<u>Compound Production</u>	<u>Operating Days</u>	<u>Production (M Lbs.)</u>		
		<u>Month</u>	<u>Avg./Day</u>	<u>Fiscal Y.T.D.</u>
Line I	28	2126	76	8232
Line III	27.5	3219	117	13151
Line V	0	0	0	2339
Total		5345		23722
% Prime		98.3		97.9
Capacity Utilization Factor		.690		.761

Downtime

Hours

Line I

- Product Changes	77
- Plenex Compound Testing	28
- Miscellaneous Maintenance	16
- Mill Maintenance	11
- Quality Problems and Control	4

Line III

- FCM Starter Repair	82
- Product Changes	58
- Quality Problems and Control	9
- Dicer Problems and Maintenance	8
- Miscellaneous Maintenance	6

COMPOUND - Continued

	<u>Operating Days</u>	<u>Production (M Lbs.)</u>		
		<u>Month</u>	<u>Avg./Day</u>	<u>Fiscal Y.T.D.</u>
Rigid Compound	28.5	5470	192	17097
% Prime		99.9		99.4
Capacity Utilization Factor		.932		.710

Downtime

Hours

- Welex Maintenance	53
- Product Changes	50
- Miscellaneous Maintenance	28
- Quality Problems and Control	19

	<u>Operating Days</u>	<u>Production (M Lbs.)</u>		
		<u>Month</u>	<u>Avg./Day</u>	<u>Fiscal Y.T.D.</u>
Plasticizer	29	1614	56	6400
% Prime		85.5		89.5
Capacity Utilization Factor		.733		.770

Key Maintenance Work - J. B. Autrey, J. B. Hegwood

The Line V twin screw extruder was shut down for repairs to its speed reducing and drive gearboxes during the month. The speed reducing gearbox was replaced with a new gearbox. The twin screw gearbox was rebuilt after it was found that a bearing failure had occurred.

The vacuum jets on plasticizer reactors R-1 and R-2 were removed for cleaning during the month because of an excessive calcium carbonate buildup.

The first quarterly PM program was completed on the dicers in the compound area this month. This should help reduce downtime and maintenance cost on dicers.

Numbers one and two Welex were shut down during the month for repairs. The gate was replaced on #1 Welex because of a leak. The shaft, sheave and seals were replaced on #2 Welex.

The temperature control loops were calibrated and the water flow meters cleaned on plasticizer reactors R-1, R-2, R-3 and R-4.

The starter on Line III FCM drive was replaced during the month.

UTILITIES - J. B. Autrey, J. B. Hegwood

The alternate natural gas line was tested during the month. We will start using natural gas from ACG Company on February 1, 1990, due to favorable pricing.

The automatic water valve was repaired and the continuous blowdown line was replaced on boiler #1 during the month.

The east propane pump was removed, rebuilt and reinstalled during the month.

The control valves on boilers #1 and #3 were removed and rebuilt during the month.

ENGINEERING - R. E. Polk, S. C. Hillman, C. J. McDonald

PROJECTS IN DEVELOPMENT - GENERAL

5305 Graininess Work

Decalcified water will be used instead of DI water for the calcium free water test run. Ion exchange with sodium will be used to remove the calcium. The test run is scheduled for March.

EVC Clean Wall Technology

The EVC clean wall test kicked off in January. The clean wall has reduced reactor fouling and cull production. It also eliminates the final reactor rinse to sewer.

A closed reactor temporary addition system is being constructed for longer term testing.

VCSM

Work on the assignments continues on schedule. Plant engineers are still writing process descriptions/procedures, operator interface guidelines, and creating graphics panels. The team reviewed and revised process control diagrams (PCD's).

TC Wastewater Compliance

Air stripping of rinse water in the blend tanks apparently will reduce VCM levels below TC compliance levels. The test run was cut short because it created high hard particles in the resin. A revised rinsing procedure will be tested.

Alternate Gas Supply

The new supply line is operating. February pricing with the new line will save approximately \$1000/day.

Baghouse Replacement

DCE is designing a new air baffling system. Improper baffling has led to premature bag failures.

Plasticizer COD Reduction

A screening design showed no potential to reduce plasticizer COD by adjusting the variables tested. Reaction time was the most significant variable and we already operate at the optimum value.

ABERDEEN CHEMICAL PLANT
APPROVED CAPITAL PROJECTS

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AFE NUMBER	PROJECT DESCRIPTION	STATUS
AB58	ALTERNATE NATURAL GAS PIPELINE	THE SYSTEM HAS BEEN STARTED UP AND IS OPERATIONAL. PUNCHLIST ITEMS ARE IN PROGRESS. INSTALLATION IS IN PROGRESS AND PLANNED FOR COMPLETION IN APRIL. CONSTRUCTION IS 90% COMPLETE AND IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR MARCH. ENGINEERING IS IN PROGRESS. CONTROL ROOM PRE-WORK ITEMS ARE SCHEDULED FOR COMPLETION IN FEBRUARY. DESIGN IS IN PROGRESS WITH COMPLETION SCHEDULED FOR MARCH. CONSTRUCTION IS IN PROGRESS WITH COMPLETION PLANNED FOR FEBRUARY. INSTALLATION WILL BE COMPLETED IN APRIL. INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS. THE PROJECT IS COMPLETE AND WILL BE CLOSED TO FIELD CHARGES IN JANUARY. INSTALLATION IS IN PROGRESS WITH COMPLETION PLANNED FOR MAY. INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS. LONG LEAD ITEMS HAVE BEEN PLACED ON ORDER. PROJECT COMPLETION IS PLANNED FOR 7/1. LONG LEAD ITEMS HAVE BEEN PLACED ON ORDER. INSTALLATION IS PLANNED FOR COMPLETION IN JUNE. INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS. ENGINEERING IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR MAY. INSTALLATION IS IN PROGRESS WITH COMPLETION PLANNED FOR MARCH. INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS. PROJECT COMPLETION IS PLANNED FOR FEBRUARY. INSTALLATION IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR FEBRUARY. DESIGN IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR MARCH. INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS. PROJECT COMPLETION IS PLANNED FOR MARCH. INSTALLATION IS SCHEDULED TO BEGIN IN MARCH WITH COMPLETION IN MAY. INSTALLATION IS IN PROGRESS WITH COMPLETION PLANNED FOR MARCH. DESIGN IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR APRIL. DESIGN IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR JUNE. INSTALLATION IS COMPLETE FOR R-1. PROJECT COMPLETION IS PLANNED FOR APRIL. INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS. THE PROJECT WILL BE CLOSED TO FIELD CHARGES IN MARCH. INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS. THE COMPRESSOR IS SCHEDULED FOR DELIVERY IN FEBRUARY 1990. INSTALLATION IS 90% COMPLETE AND IN PROGRESS. COMPLETION IS PLANNED FOR FEBRUARY. MODIFICATIONS TO LINE 1 FOR TEST RUNS HAVE BEEN COMPLETED. ENGINEERING IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR MID-1991. ENGINEERING IS IN PROGRESS. ENGINEERING IS IN PROGRESS ON 13 PROJECTS. EQUIPMENT IS BEING QUOTED.
DB18	VINYL VALVE UPGRADE	
AS19	PLANT ELECTRICAL UPGRADE	
AB49	VINYL CONTROL SYSTEM MODERNIZATION	
AP09	INERTS REMOVAL MODIFICATIONS	
C919	NEW WATER WELL	
D619	PROPANE STORAGE AREA DELUGE SYSTEM	
D629	COMPOUND REBLEND TRANSFER SYSTEM	
D639	BOILER SAFETY REVISIONS	
D749	LEAD HANDLING AND EXPOSURE REDUCTION	
D789	INERT GAS PURGING OF PA TANKS	
DB49	COMPOUND LINE 3 SEMI-BULK LEAD HANDLING	
DB59	COMPOUND SILO BRIDGE BREAKING	
F579	COMPOUND BOXING HOPPER MAGNETS	
F669	COMPOUND LINE 5 HEATED PLASTICIZER	
F699	LOW MOLECULAR WEIGHT RESIN EXPANSION	
F739	DRYER NO.8 CONTAMINATION REDUCTION	
F779	DRYER NO.4 CONTAMINATION REDUCTION	
GS69	DRYBLEND DIV. VALVE AND CHUTE REPLACEMENT	
GS59	NEW DRYER BARRHOUSES	
GS79	COMPOUND SOWER REVISIONS	
GS89	WASTE OIL REDUCTION	
GS19	VEN SIGHT GLASS REPLACEMENT	
GS39	PLANT WATER RECYCLE	
H679	PLASTICIZER REACTOR AGITATORS	
H729	TORQUE RHEDMETER REPLACEMENT	
H769	PLANT DIVERTER VALVE REPLACEMENT	
H829	RECOVERY SYSTEM COMPRESSOR - SPARE	
H879	ROOF UPGRADE	
AS40	REDUCED FLAME & SMOKE COMPOUND PROJECT	
HS00	PLANT WATER SYSTEM	
HS10	WEST INCINERATOR REPLACEMENT	
HS20	MISCELLANEOUS CAPITAL PROJECTS < \$15M	
LS30	FURNITURE AND OFFICE EQUIPMENT	

ENVIRONMENTAL - F. G. Jeanson

Water

All wastewater discharge parameters were met for the month of January.

Air

A meeting was held with the State to review our new air permit with the engineers that would be working on it. They had several additional items they wanted in the air permit application. The application was revised per the comments of the State and a second meeting was held to discuss the revisions. The air permit is expected to be issued in February.

Waste

Make-up RCRA training was completed for all persons who missed during the month of December.

Waste shipments for the month included:

- One bulk load of floor sweep to Chemical Waste Management's (CWM) Lake Charles, Louisiana facility.
- One bulk load of lead bags to CWM's Emelle, Alabama facility.

The Governor of Alabama proposed to increase taxes on all imported waste disposed of at Emelle, Alabama by 550% to \$120/ton.

Superfund

We received a copy of NUS's report to EPA on the investigation of the four sites on our property. A meeting with EPA is scheduled in February to review the report and recommendations.

Miscellaneous

I attended Hazardous Materials Manager training during the month.

Total environmental costs for the 1989 calendar year were calculated to be \$2.4 million. The new dryer baghouses were \$1.5 million of this total.

The SPCC Plan Survey was completed during the month. Two work orders were written to repair dikes.

I attended Interaction Management and facilitator training during the month.

Jan-90

WASTE REDUCTION INDEX SHEET

	3 MONTH	ZWRI 90 YTD	1989FY
OVERALL EXCLUDING "TOTAL WASTE WATER"	89.55Z	88.98Z	103.51Z
NON-RECYCLED WASTE	79.49Z	85.68Z	94.96Z
RECYCLED/SOLID WASTE	96.60Z	91.29Z	109.51Z
I. Offsite, Hazardous Wastes	157.66Z	141.51Z	100.68Z
a. Land Ban Wastes	0.00Z	0.00Z	244.74Z
b. Hazardous Solids	113.04Z	87.04Z	111.19Z
c. Non-Hazardous Treated as Hazardous	173.95Z	160.88Z	95.77Z
II. Recycled Hazardous Wastes	57.92Z	60.57Z	103.51Z
III. Offsite, Non-Hazardous Waste	74.64Z	81.30Z	95.37Z
a. Recycled	141.40Z	109.02Z	98.39Z
b. Non-Recycled	67.08Z	78.16Z	95.03Z
IV. Vulnerable By-Products	100.54Z	95.65Z	111.36Z
V. Total Waste Water	113.76Z	115.67Z	95.01Z
VI. Air & Water	82.55Z	63.32Z	91.90Z
a. SARA - Air	85.75Z	85.95Z	88.05Z
b. SARA - Water	1228.63Z	1249.25Z	592.12Z
c. Non-SARA - Air	31.37Z	42.44Z	98.30Z
d. Non-SARA - Water	125.33Z	117.43Z	87.24Z

VAB.0001190219

Jan-90

WASTE RECTION INDEX SHEET

		POUNDS			
		1988FY	1989FY	90 YTD	3 Month
I.	Offsite, Hazardous Wastes	321409	329304	145636	124941
a.	Land Ban Wastes	2412	6006	0	0
	1. Phthalic Anhydride	2412	6006	0	0
b.	Hazardous Solids	79068	89465	22037	22037
	1. Stabilizer Spill	16989	22425	5097	5097
	2. Floor Sweep	62079	67040	16940	16940
c.	Non-Hazardous Treated as Hazardous	239930	233833	123599	102904
	1. Plast. Filter Cake	61670	56573	0	0
	2. Lead Bags	68640	67880	30100	16200
	3. API Sludge	29620	29380	66540	66540
	4. Pit #1 Solids	80000	80000	26959	20164
II.	Recycled Hazardous Wastes	653226	688080	126685	93288
a.	Recycled	653226	688080	126685	93288
	1. Separator Oil	651700	686210	125780	92600
	2. Safety Kleen Solvent	1526	1870	905	688
III.	Offsite, Non-Hazardous Waste	2429430	2357718	632415	447085
a.	Recycled	247201	247500	86295	86185
	1. Drums	49600	49600	10950	10950
	2. Pallets	145600	145600	45999	34405
	3. Aluminum Cans, Paper, and Box	0	300	496	396
	4. Scrap Metal	52000	52000	28850	40434
b.	Non-Recycled	2182229	2110218	546120	360900
	1. Landfill	2182229	2110218	546120	360900
IV.	Vulnerable By-Products	3597456	4076656	1101753	891821
a.	PVC	3597456	4076656	1101753	891821
	1. Culls	471409	330521	55210	33690
	2. Vacuum Vent Dust	329480	541016	165981	124275
	3. Sifter Overflow	801007	504106	59151	49939
	4. Pond Resin	1915560	2621013	794452	663753
	5. Pit #2 Resin	80000	80000	26959	20164
V.	Total Waste Water	4424987560	4278245861	1638930897	1241168141
a.	Effluent	4424987560	4278245861	1638930897	1241168141
	1. Pond 6	4424987560	4278245861	1638930897	1241168141
VI.	Air & Water	646617	604682	172508	131603
a.	SARA - Air	73316	65694	20177	15500
	1. VCM	73316	65694	20177	15500

VAB.0001190220

Jan-90

WASTE REACTION INDEX SHEET

		POUNDS			
		1988FY	1989FY	90 FY	3 Month
b.	SARA - Water	33	333	221	168
1.	VCM	22	21	8	6
2.	Di-n-octyl Phthalate	33	312	213	161
c.	Non-SARA - Air	268204	268290	33705	20434
1.	Particulates	263300	263300	33354	20164
2.	Sulfur Dioxide	904	990	351	270
d.	Non-SARA - Water	309040	274344	116204	93301
1.	BOD	43489	46750	27376	22917
2.	TSS	68392	53140	19876	16137
3.	COD	193881	173276	68406	56230
4.	NH3	1378	1199	237	217

ENERGY CONSERVATION - D. A. Moore

January, 1990

Fiscal Y.T.D.

I. Energy Conservation Data⁽¹⁾

A. Unadjusted EUI	(8.0%)	(12.0%)
B. Adjusted EUI	(8.4%)	(12.8%)
C. BTU/Lb. Product	2661.0	2764.0
D. Total Energy Consumption MMM BTU	138.1	524.3

II. Plant Energy Conservation Program

A. Maintenance

There were sixty-four energy related items completed in December. Fifty-two of these items were steam leak repairs. The remaining twelve were steam trap repairs.

III. Boiler Operation

<u>Boiler</u>	<u>Combustion Efficiency %</u>	
	<u>Jan., 90</u>	<u>Fiscal Y.T.D.</u>
No. 1	83.4%	83.5%
No. 2	83.2%	83.4%
No. 3	82.9%	83.1%

HUMAN RESOURCE REPORT

JANUARY, 1990

Personnel - J. E. Beall

Employment

None

Promotions/Transfers

Paul J. Kober - Transferred to Lake Charles Chemical
Plant as Plant Superintendent.

Gary Sanders - Employee bid from Compound Utility to Lab Trainee.

James M. Gray - Returned from Maintenance Helper to former
position, Lab Lead Technician.

Tommy Staten - Employee bid from Lab Technician "A" to Maintenance
Helper.

RETIREMENTS

None

TERMINATIONS/RESIGNATIONS

None

TO/FROM LEAVE OF ABSENCE

None

ABERDEEN, MISSISSIPPI

January, 1990
MONTHLY PERSONNEL REPORT

Salaried Employees 76*
Hourly Employees 172
Total Employees 248

Minority Employees #, %
Salaried 6 8%
Hourly 66 38%
Total 72 29%

Employees (Hourly)

New Employees 0
Terminations 0

Hourly Min. Hired 0
% Min. Hired 0
Hourly Min. Term. 0
% Min. Term. 0

DEPARTMENTS	PAR	#EMPLOYEES	MIN. EMP.	MIN.	NEW HIRES	YTD	TERM.	YTD	TURNOVER	YTD
Warehouse	<u>16</u>	<u>15</u>	<u>8</u>	<u>53</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Gen. Plant	<u>13</u>	<u>16</u>	<u>5</u>	<u>31</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Maintenance	<u>41</u>	<u>41</u>	<u>10</u>	<u>24</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Laboratory	<u>24</u>	<u>24</u>	<u>5</u>	<u>22</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Compound	<u>40</u>	<u>38</u>	<u>26</u>	<u>67</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Vinyl	<u>33</u>	<u>33</u>	<u>10</u>	<u>30</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Plasticizer	<u>5</u>	<u>5</u>	<u>2</u>	<u>40</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Number of Applicants:

Month 0 Year To Date 0

APPLICANT BREAKDOWN:

Minority 0 % Minority 0
Female 0 % Female 0

Hires (Hourly):

Month 0 Year To Date 0

Terminations (Hourly):

Month 0 Year To Date 0

Overall Turnover 0

Projected Annual Turnover 0

* Includes 1 Co-op Student.

ABERDEEN CHEMICAL PLANT
DEPARTMENTAL HOURS ANALYSIS REPORT
DISTRIBUTION LIST RWS, JFC, JVV, DEPARTMENT HEADS, FILE
1/ 1/90 THRU 2/ 4/90

DEPT	STR TIME HRS WRKD	OVERTIME HOURS		OVERTIME AS A % OF STR TIME	ABSENCE HRS LOST	ABSENCE AS A % OF STRAIGHT TIME			YEAR-TO- DATE	VACATION HOURS
		OVERTIME HOURS NONCONTROL	OVERTIME HOURS CONTROL			SICKNESS	PAID	OTHER NONPAID		
YARD	1632.00	48.00	51.00	6.07	12.00	0.00	0.00	0.74	1.77	24.00
UTILITY	720.00	24.00	122.75	20.38	84.00	11.67	0.00	0.00	2.91	36.00
MAINTENANCE	6511.00	16.00	1219.25	18.97	155.75	1.23	0.61	0.55	5.29	384.00
QC LAB	3715.75	36.00	59.50	2.57	24.25	0.00	0.32	0.33	2.88	48.00
JANITORS	376.00	0.00	5.25	1.40	0.00	0.00	0.00	0.00	0.29	8.00
WAREHOUSE	1328.00	0.00	102.25	7.70	116.00	8.73	0.00	0.00	3.85	32.00
STORES	366.00	0.00	32.50	8.88	2.00	0.00	0.00	0.55	2.03	24.00
DEVELOPMENT LAB	1117.75	13.75	110.00	11.07	0.00	0.00	0.00	0.00	0.72	48.00
DRY BLEND	1140.00	0.00	57.50	5.04	0.00	0.00	0.00	0.00	0.77	72.00
COMPOUND	7011.00	0.00	427.75	6.10	361.00	4.28	0.34	0.53	3.93	420.00
VINYL	7441.75	200.00	516.25	9.62	222.25	0.81	0.54	1.64	1.46	228.00
PLASTICIZER	841.50	0.00	64.75	7.69	72.75	5.70	0.00	2.94	4.05	84.00
GENERAL HELPERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL PLANT	32200.75	337.75	2768.75	9.65	1050.00	2.14	0.36	0.76	3.26	1408.00

TOTAL PLANT HOURS FOR JURY DUTY..... 0.00
TOTAL PLANT HOURS FOR NATIONAL GUARD/RESERVE DUTY..... 12.00
TOTAL PLANT HOURS FOR DEATH IN FAMILY..... 104.00

ADMINISTRATIVE SERVICES - J. E. Little

Safety

There were no safety instances this month. The department viewed the Hand Safety Training video.

Cost Savings

Savings due to competitive bidding were \$13,731 for January, and \$62,839 for FY1990.

Savings due to prompt payment discounts were \$1755 for January, and \$8,876 for FY1990.

Warehouse - Finished Goods Inventory

Slow moving inventories are still a major concern. Fred Williams and Linda Michels are reviewing the various compounds.

Flexible - Line I	451,478
Line III	221,089
Line V	135,176
Rigid	<u>71,720</u>
TOTAL SLOW MOVING	879,463

Included above are 98M pounds of slow moving, off-grade compounds.

Training

- 1/23/89 - Pat Wells and Tommy Cummings attended facilitator training.
- 1/29 - 2/02 - Pat Wells attended The Management Process (TMP) in Houston.
 - Judy Frossard, Paradox software - PMS conversion to PC application.
 - Leo Ezell is cross-training in the raw material warehouse.
 - Janice Minga is cross-training for Stores Supervisor coverage.

Meetings

- 1/11 - 1/15 - QMP Managers Meetings - Mike Swierc, Tommy Cummings and Pat Wells attended.
- 1/16 - 1/25 - VMS updates (Maintenance and Administrative Services).

ADMINISTRATIVE SERVICES - Continued

Meetings - continued

- 1/17 - John Stokes visited Aberdeen for a compound overview.
- 1/18 - Dan Miller and Randy Polk - AFE cost tracking.
- 1/22 - 1/24 - Jack Little reviewed VMS implementation and startup problems at the Lake Charles Chemical Plant.
- 1/25 - OASIS Team - overview and plant operations.

**ABERDEEN CHEMICAL PLANT
SHIPPING ANALYSIS
JANUARY 1990**

-SHIPMENTS BY PRODUCTS-	MONTH			YTD		
	PUBLIC	IPT/ITC	EXCHANGE	PUBLIC	IPT/ITC	EXCHANGE
RESIN-BULK	22,155,410	9,104,400	348,750	72,897,220	38,816,570	348,750
RESIN-PACKAGED	366,050	216,000	0	1,307,704	946,750	0
FLEXIBLE COMPOUND-BULK	1,567,050	559,700	0	5,781,780	3,476,150	0
FLEXIBLE COMPOUND-PACKAGED	2,992,120	234,905	0	11,568,305	501,928	0
RIGID COMPOUND-BULK	4,413,690	696,000	0	14,524,190	1,896,000	0
RIGID COMPOUND-PACKAGED	196,262	4,200	0	828,434	17,000	0
PLASTICIZER	87,960	352,000	0	437,960	1,223,000	364,000
TOTAL	31,778,542	11,167,205	348,750	107,345,593	46,959,398	712,750

-SHIPMENTS BY MODE-

BULK:	RAILCAR	CUSTOMER PICKUP	COMMON CARRIER	TOTAL
JANUARY				
RESIN	159	49	50	258
FLEXIBLE COMPOUND	11	0	4	15
RIGID COMPOUND	26	1	22	49
PLASTICIZER	2	0	2	4
TOTAL JANUARY	198	50	78	326

YTD				
RESIN	553	113	239	905
FLEXIBLE COMPOUND	47	3	16	66
RIGID COMPOUND	82	10	54	146
PLASTICIZER	9	0	10	19
TOTAL YTD	691	126	319	1,136

PACKAGED:	CUSTOMER PICKUP	COMMON CARRIER	TOPC	CONTAINER	AIR/UPS	TOTAL
JANUARY						
RESIN	3	12	0	0	10	25
FLEXIBLE COMPOUND	19	83	1	0	3	106
RIGID COMPOUND	2	8	0	0	0	10
PLASTICIZER	0	1	0	0	0	1
TOTAL JANUARY	24	104	1	0	13	142

YTD						
RESIN	18	51	0	0	24	93
FLEXIBLE COMPOUND	79	281	2	0	8	370
RIGID COMPOUND	6	27	0	1	1	35
PLASTICIZER	0	1	0	0	1	2
TOTAL YTD	103	360	2	1	34	500

LABORATORY - J. R. Williams

A. Safety - There were no safety incidents in the Laboratory for January. The monthly safety meeting topic was "Hand Safety" with Richard Williams in charge of the meetings.

B. Customer Contacts - None.

C. Customer O.C. Problems Reports

1/30 - American Mirrex - When samples were tested from this railcar, there were "brass slivers" found in all compartments. This was traced back to the failure of a piece of manufacturing equipment during the extreme cold weather.

D. Requests for Corrective Action - None.

E. Product Waivers

<u>Customer</u>	<u>Product</u>	<u>Reason</u>	<u>No.</u>
Grain Systems	80273G WHT 110	Low Fusion Torque	1 H/T
Eagle	80273G WHT 110	Long Fusion	3 R/C

F. RVCM Summary

RVCM of In-Process Samples

The following is a summary of residual VCM results on in-process samples. None of the reactor daily averages exceeded 400 ppm RVCM during the month of January, 1990.

	<u>Reactor</u>	<u>Drier</u>	
	<u>Slurries</u>	<u>5265</u>	<u>5305</u>
Number of Samples	924	67	44
Average RVCM, ppm	133	0.795	0.747

RVCM of Shipment Samples

The following is a summary of the residual VCM analysis of shipment samples for the month of January, 1990.

<u>Product</u>	<u>Number of Samples</u>	<u>Average RVCM, ppm</u>
5265	40	0.565
5305	102	0.414
5385	57	0.578
5395	0	0
5415	63	0.062
5465	0	0
Dry Blend	80	0.155
Debox	16	0.670
Pond	6	6.579

LABORATORY - Continued

G. Resin Process Capabilities (based on dryer "regulars")

	<u>5265</u>	<u>5305</u>	<u>5385</u>	<u>5415</u>
Bulk Density	1.44	2.13	1.58	1.30
Inherent Viscosity	0.64	1.27	0.67	1.05
(vs. 0.715 - 0.744)	----	0.60	----	
L Color	4.60	2.40	4.00	4.56
A Color	3.17	3.50	----	
B Color	2.83	2.50	2.50	3.33
% on Pan	2.27	3.08	2.13	6.17
(vs. 2%, max.)	----	----	----	1.17
% thru 140 Mesh	0.62	1.23	1.44	4.73
Drytime	----	----	1.00	1.17
Mets I.R.	----	----	----	2.55
(vs. 95% of control)	----	----	----	1.57
Hard Particles, (% > 10)	----	----	13.9	2.4
Average particle size, microns	138	148	160	173

H. Flexible Compound Quality Summary

	<u>Adjustments</u>		<u>Rejections</u>	
	<u>M Lbs.</u>	<u>(%)</u>	<u>M Lbs.</u>	<u>(%)</u>
Hardness	31.0	(0.58)	7.5	(0.14)
Hard Particles	----	----	25.5	(0.48)
Heat Stability	10.0	(0.19)	----	----
Contamination	----	----	6.0	(0.11)
Dicing	----	----	4.2	(0.08)
Cross Contamination	----	----	<u>1.3</u>	<u>(0.02)</u>
Totals	41.0	(0.77)	44.5	(0.84)

I. Rigid Compound Quality Summary

	<u>Rejections</u>	
	<u>M Lbs.</u>	<u>(%)</u>
Torque Rheometry	<u>3.6</u>	<u>(0.06)</u>
Total	3.6	(0.06)

J. Miscellaneous

1. Minor problems with the load cell on the Syntech tensile tester were resolved through Dave Cox working with their technical people.
2. Several extra COD samples were run in support of the plasticizer test run.
3. Support was provided to Engineering in testing numerous samples for RVCM during two separate test runs.

LABORATORY - Continued

J. Miscellaneous - continued

4. Dave Cox participated in the Dayton Extruded Plastics DOE project.
5. A hard particle problem was experienced when using Aluchem AC-712K in 34862 GRY 546 for AT&T. This material was unable to be reprocessed into acceptable product. This is the second incident of this nature from using Aluchem AC-712K.

SAMPLE SHIPMENTS

JANUARY 1990

RESIN

<u>Ship Date</u>	<u>Product</u>	<u>Amount</u>	<u>Customer</u>
1/11/90	5385	200 lbs.	PANIMEX (CHILE) LTDA.
1/11/90	Pond Resin	250 lbs.	IFER DOMINICANA C. A.
1/19/90	5385	5 lbs.	Dow Chemical
1/23/90	5385	200 lbs.	El Paso PVC
1/23/90	5415	100 lbs.	Essex
1/23/90	Pond Resin	5 lbs.	SIMAQUIMICA
1/26/90	5265	50 lbs.	Sheller-Globe
	5305	50 lbs.	
1/26/90	5415	50 lbs.	Dayton Extruded Plastics
1/26/90	5385	4400 lbs.	CENTURY ESLON LTD.
1/30/90	Debox	2 lbs.	Sedco Pipe
1/31/90	Pond Resin	5 lbs.	HAROLD VELAZQUEZ
1/31/90	Pond Resin	5 lbs.	INYECCIONES INDUSTRIALES
1/31/90	5385	100 lbs.	C. ITOH
1/31/90	Pond Resin	50 lbs.	Conex of Georgia

COMPOUND

<u>Ship Date</u>	<u>Product</u>	<u>Amount</u>	<u>Customer</u>
1/05/90	18031 WAT CL	500 lbs.	Universal Plastics
	18961 NAT	500 lbs.	
1/15/90	16851 CB 50	100 lbs.	Vista Chemical - Austin
1/19/90	240-128B GRY 568	500 lbs.	P. W. Pipe
	240-170B GRY 568	500 lbs.	
1/22/90	2153 NAT	1500 lbs.	Encore Wire Corp.
1/23/90	18961 NAT	100 lbs.	Precision Trim
1/23/90	9-746 CMPD.	1 lb.	SIMAQUIMICA
1/23/90	9-746 CMPD.	1 lb.	FABRICA SANDALIAS BLUE STAR

COMPOUND (Cont.)

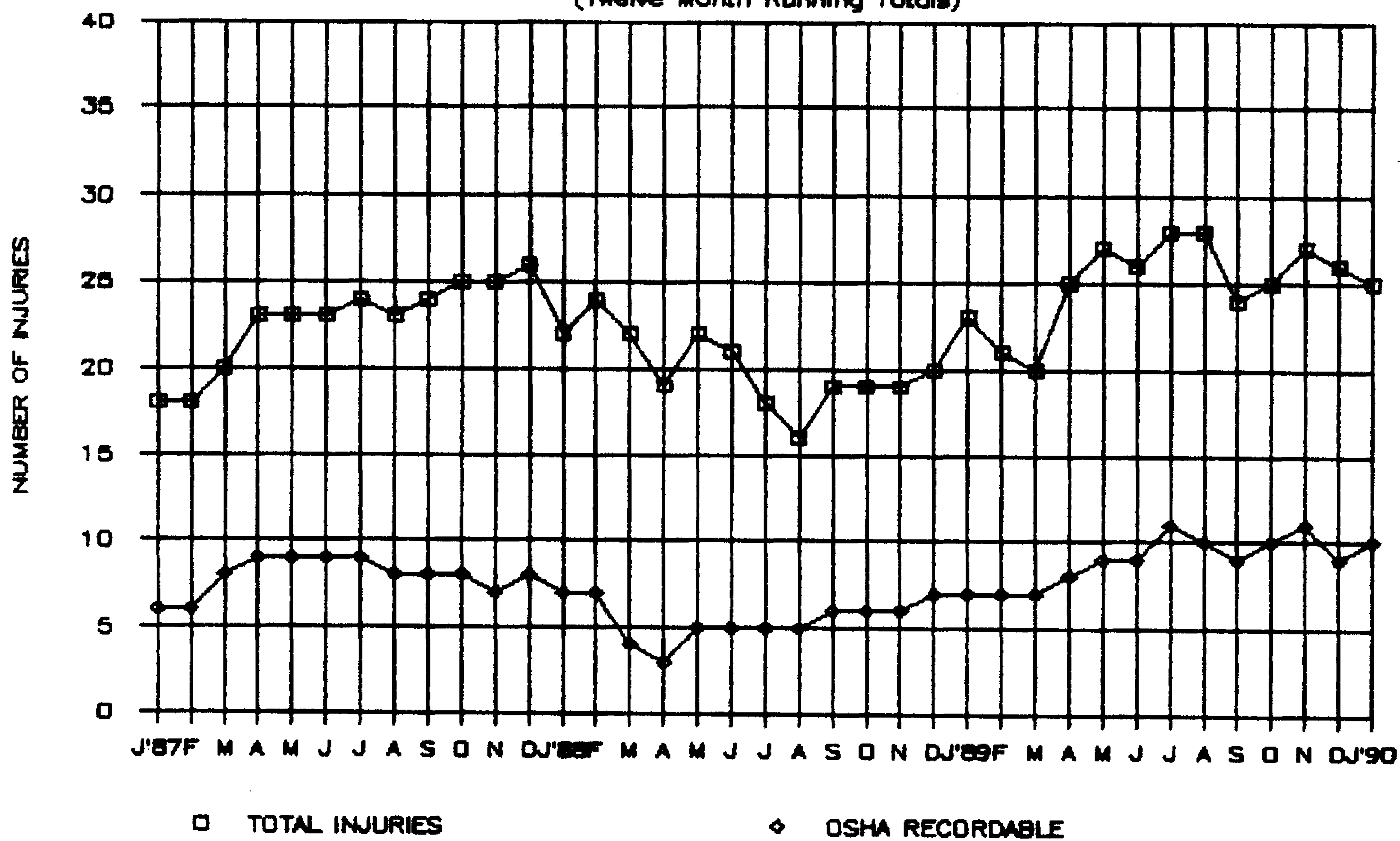
<u>Ship Date</u>	<u>Product</u>	<u>Amount</u>	<u>Customer</u>
1/24/90	384 FR NAT 419-33D NAT	250 lbs. 250 lbs.	West Penn Wire Corp.
1/25/90	34643 NAT 35851 NAT 35852 NAT	100 lbs. 100 lbs. 100 lbs.	ALCAVE
1/26/90	15041 CB 50	1500 lbs.	Precision Trim
1/26/90	38601 NAT 2153 NAT	1500 lbs. 1500 lbs.	Encore Wire Corp.
1/29/90	9-712 9-746 9-803 9-856	2 lbs. 2 lbs. 2 lbs. 2 lbs.	Pushpa Int'l. Corp.

DRYBLEND

<u>Ship Date</u>	<u>Product</u>	<u>Amount</u>	<u>Customer</u>
1/10/90	426-90 WHT 110	250 lbs.	IFER DOMINICANA C. A.

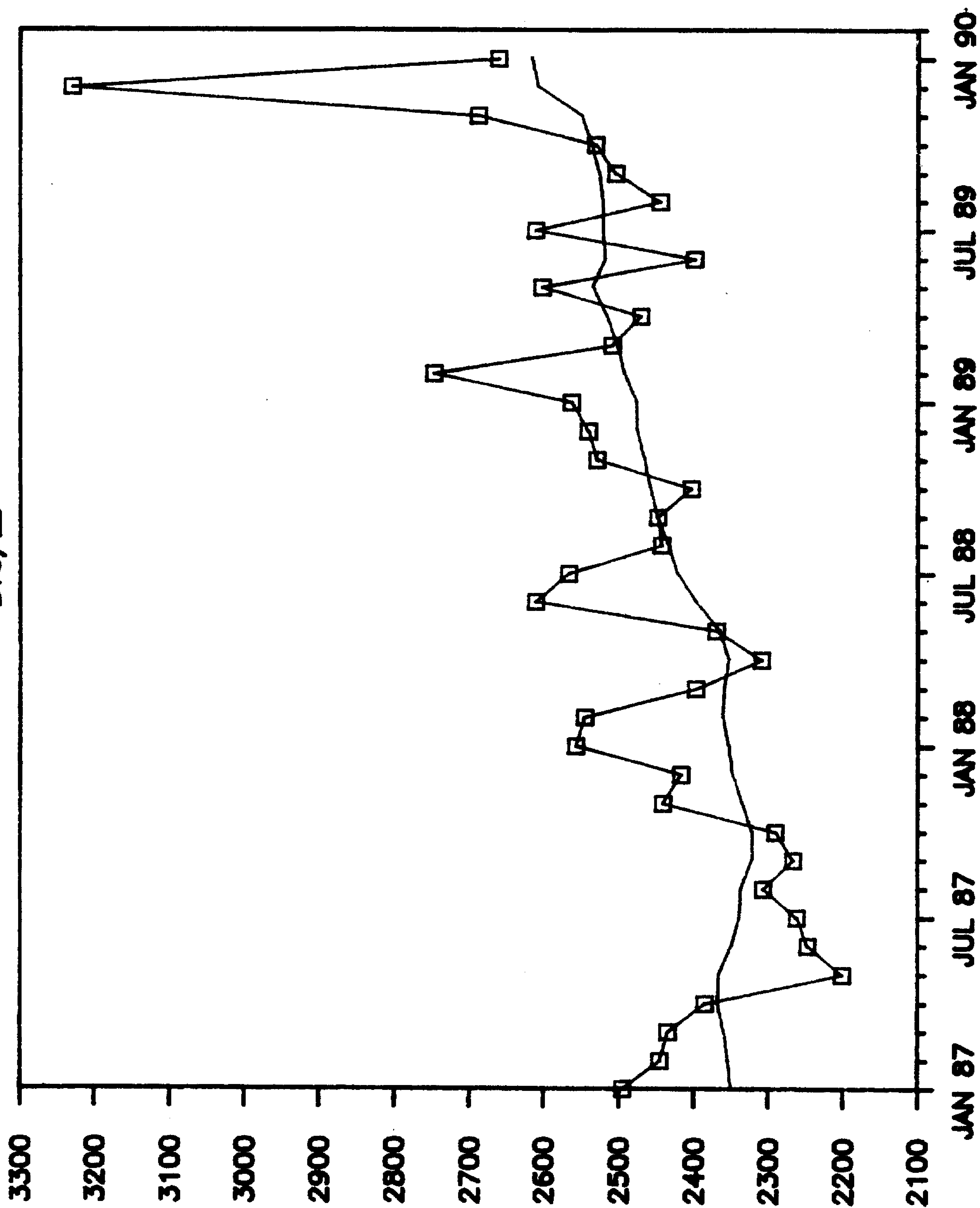
ABERDEEN CHEMICAL PLANT INJURIES

(Twelve Month Running Totals)



ABERDEEN ENERGY CONSUMPTION

BTU/LB



□ MONTHLY — 12 MONTH AVERAGE

ABERDEEN CHEMICAL PLANT
DEPARTMENTAL ANALYSIS REPORT
DISTRIBUTION LIST RWS, JFC, JVI, DEPARTMENT HEADS, FILE
10/ 2/89 THRU 2/ 4/90

DEPT	STR TIME HRS WKD	OVERTIME HOURS		OVERTIME AS A % OF STR TIME	ABSENCE HRS LOST	ABSENCE AS A % OF STRAIGHT TIME				YEAR-TO- DATE	VACATION HOURS
		OVERTIME NONCONTROL	OVERTIME HOURS CONTROL			SICKNESS	PAID	OTHER NONPAID	TOTAL		
YARD	5489.75	252.00	594.50	15.42	91.75	0.00	0.66	1.02	1.67	1.77	576.00
UTILITY	2726.50	144.00	470.00	22.52	84.00	3.08	0.00	0.00	3.08	2.91	248.00
MAINTENANCE	21731.25	307.75	3818.00	18.99	1138.75	4.23	0.29	0.71	5.24	5.29	2184.00
QC LAB	12115.00	324.00	562.25	7.32	320.25	1.39	0.10	1.16	2.64	2.88	688.00
JANITORS	1603.00	0.00	74.00	4.62	5.00	0.00	0.00	0.31	0.31	0.29	200.00
WAREHOUSE	4313.25	0.00	271.50	6.29	176.75	3.06	0.56	0.48	4.10	3.85	472.00
STORES	1260.75	0.00	39.50	3.13	27.25	0.00	0.00	2.16	2.16	2.03	108.00
DEVELOPMENT LAB	3602.50	66.25	328.50	10.96	27.25	0.67	0.00	0.09	0.76	0.72	528.00
DRY BLEND	4049.75	36.00	269.00	7.53	33.00	0.00	0.00	0.81	0.81	0.77	304.00
COMPOUND	25882.25	240.00	1815.25	7.94	994.00	2.97	0.28	0.60	3.84	3.93	1300.00
VINYL	26278.00	1152.00	2855.50	15.25	405.50	0.55	0.15	0.84	1.54	1.46	1620.00
PLASTICIZER	3271.50	60.00	108.25	5.14	102.75	1.47	0.00	1.67	3.14	4.05	236.00
GENERAL HELPERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL PLANT	112324	2582.00	11206.25	12.28	3406.25	2.04	0.22	0.77	3.03	3.08	8464.00

TOTAL PLANT HOURS FOR JURY DUTY..... 20.00
TOTAL PLANT HOURS FOR NATIONAL GUARD/RESERVE DUTY..... 12.00
TOTAL PLANT HOURS FOR DEATH IN FAMILY..... 216.00