Anniston
C. K. Eastman
W. H. Hunter
J. Koenig
C. Landwehr
A. E. Leisy
G. W. Miller
W. B. Papageorge
W. F. Taffee
H. L. Williams

General Offices
C. E. Anagnostopoulos
J. O. Bright
H. C. Carder
D. E. Cayard
D. Danna (3)
L. C. Fuhrmeister
H. O. Hehnar
D. B. Hosmer
R. E. Howard
R. M. Kountz
W. A. Kuhn
C. F. Luecke
H. L. Payton
W. R. Richard
N. L. Sample
A. J. Speziale
A. Stephens
J. Stratmeyer
H. S. Trail
J. H. Zwemer

South Second St.
O. DeGarmo
M. E. Gibbs
J. F. Quinn
J. R. Savage - JFQ

Other Locations
D. B. Edwards - DR
J. W. Graves - Luling
W. R. Kellogg - Nitro
G. F. Knollmeyer - Seattle
J. F. White - Everett
F. Weisenborn - CB
Wilson - WGK

This Copy For → C. E. Bowles

Monsanto

Anniston Plant

TECHNICAL SERVICES DEPARTMENT

MONTHLY REPORT

Summary

June, 1968

Cost Improvement Results For First 6 Months

	Estimated Actual	Target	% of Target
Month	$28,000	$43,000	66
YTD	$270,000	$206,500	130

Organic Division

First step taken in debottlenecking Solid Aroclor was a new chart which will enable operators to predict chlorinator batch end with more accuracy than at present. Potential is 2.8% capacity increase.

Delivery of the Santowax R rectifying column is expected in mid-July. Installation drawings are in progress.

Savings of $80,000 and New Earnings of $60,000 per year are possible by increasing Chlorine cell current from 48 KA. TSD met with R. L. Sandstedt (Engineering Manager - CED) concerning proposed increase.

HCl project (AFE 2899 - Staley Grade Acid) for HCl coke scrubber returned unapproved with request that alternates be evaluated. This assignment, plus thorough study of sources of organic contamination of acid is getting high priority. Plan for solving organics problem will be complete by 7/15.

EVOP program to optimize the PNP reaction time and temperature is underway in the field. Reduced reactor cycle demonstration targeted for 7/31/68.

Agricultural Division 0285853

Major work effort in June was concentrated on revision of the Parathion Improvement Plan. High N_2 sparge (Interim Process) was cut back to enable a reduction in hydraulic load to waste treatment. Phase III$_b$ (Increase Cl_2 levels)of the Interim

AN - 306

CONFIDENTIAL INFORMATION

"This document contains confidential information which is the property of Monsanto Company. Only those portions of the document relevant to a duly authorized individual's need to know may be excerpted for him. The report must not be sent outside the Company without written approval and the authorized recipient is accountable for its safe keeping, excerpting or otherwise disclosing of its contents and for its proper disposal. The document remains the property of Monsanto Company and shall be returned within two months to its author, except upon special authorization to hold for a longer period."

TOWOLDMON0044267

Agricultural Division - continued

Process continues. The parathion recovery system has not been demonstrated due to filter problems. Purolator (filter vendor) is involved and will make recommendations concerning filter problem. Construction underway on experimental sulfur removal facilities. Completion expected late July. The project for automatic blending of Methyl Parathin has been cancelled. Revised Lab savings of $4,900/yr. ($11,000 original estimate) would not justify the $16,000 NFC required.

Engineering Design and Services

Design

Transmitted design packages for the HCl Carbon Conveyor, the Safety Shower at the KOH Loading Dock, and the addition to the Service Building. Started Utilities Cost Improvement Study. Completed evaluations of plant steam usage, Niran Agitator Interlocks, and Communications for Plant Emergency Plan.

Plant Improvement

Transmitted review drawings and held Safety Review for Acetone Storage Tank Dikes. AFE for relocation of fence along Highway 202 was forwarded and approved. Design for protection of Plant 44 KVA Feeder was started.

Liaison

Steel erection continuing and piping installation underway on Aroclor Expansion. Office Shell and Warehouse skeleton completed.

Waste Heat Recovery

Revisions to Waste Heat Recovery Unit were completed and the unit started on 6/23/68. Major effort is directed to establishing Therminol loss rate.

Pollution Control

No odor or water pollution complaints in June. There was one air emission June 21, when Cl_2 fumes were released during emergency shut-down of the cell house. Malathion waste treatment studies are progressing satisfactorily. Twenty-four atmospheric samples were analyzed for SO_2. Final report on Choccolocco creek aquatic life was received from biological consultants.

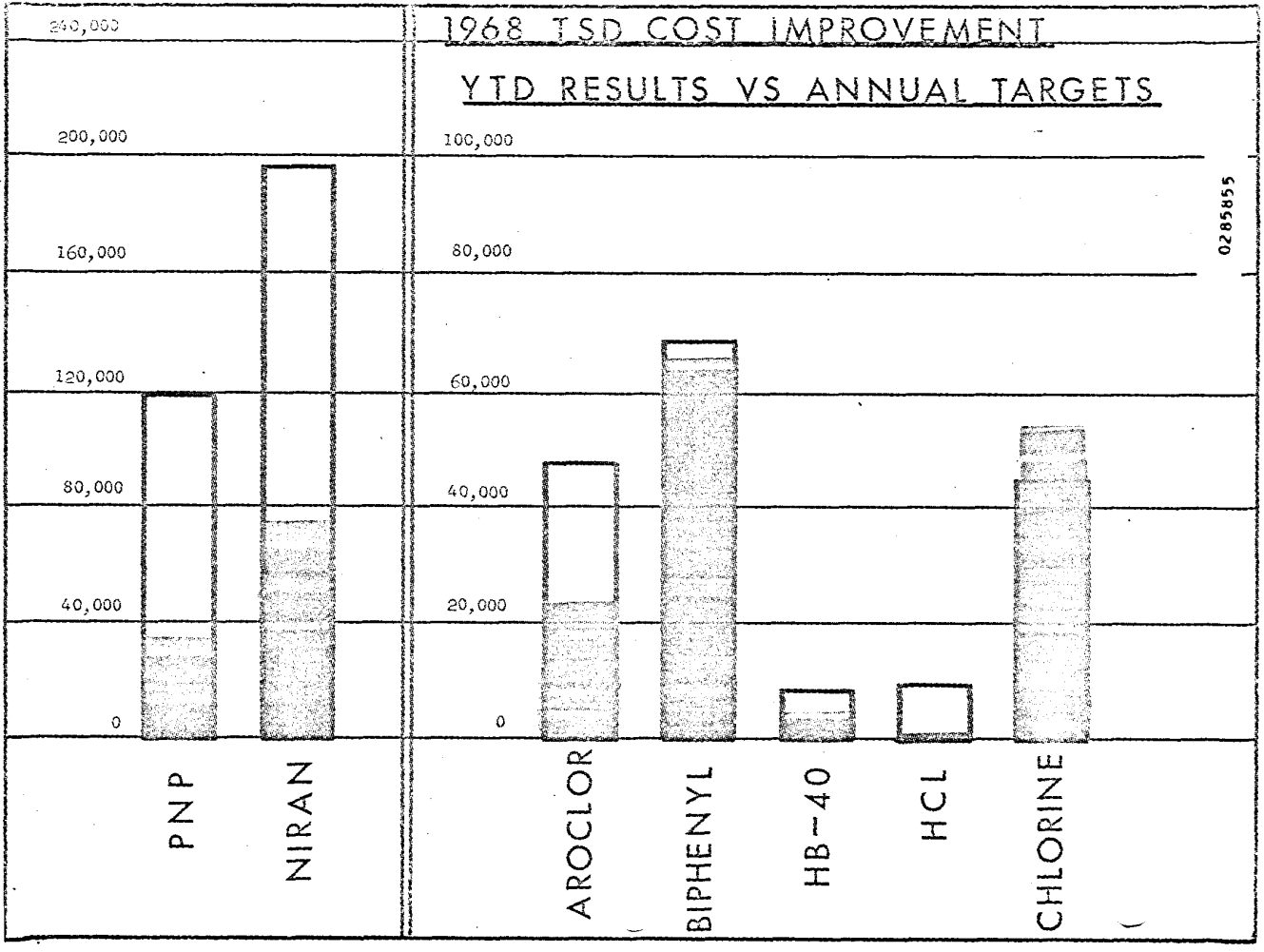
Quality Control

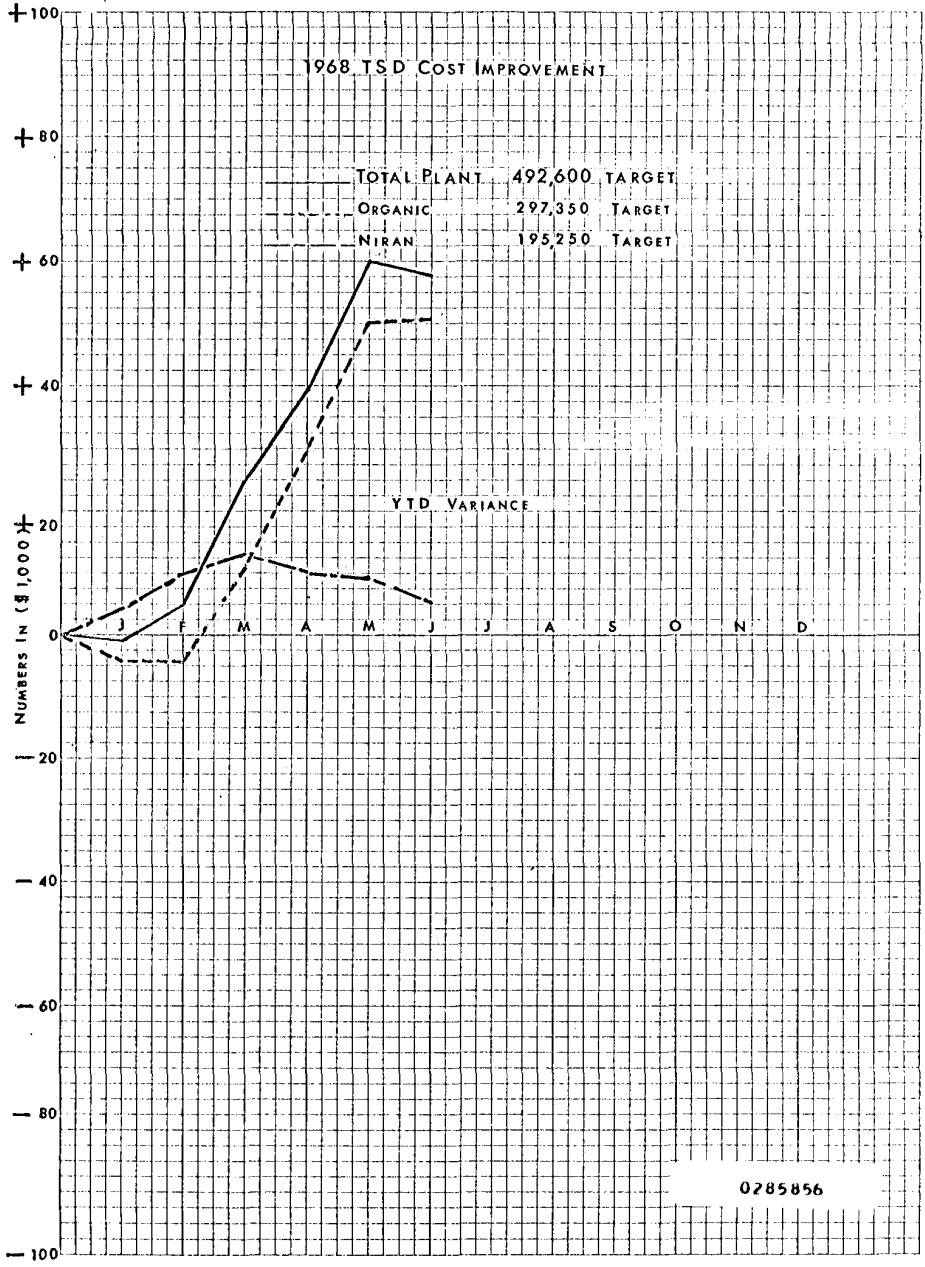
The RFT Index was 98.7, with 10 lots rejected out of 758; 9 out of 655 from the Organic Division. The June Quality Score was 98.6 , up 0.4 from May, YTD 97.1 vs. 93.0 target. A study was begun correlating Solid Aroclor performance with operating variables in the Aroclor process and upstream, E.D.C. July 12.

J. C. Landwehr
Technical Services Superintendent

JCL:kd

TOWOLDMON0044268


1968 TSD COST IMPROVEMENT
YTD RESULTS VS ANNUAL TARGETS
240,000
200,000
160,000
120,000
80,000
40,000
0
100,000
80,000
60,000
40,000
20,000
0
PNP
NIRAN
AROCLOR
BIPHENYL
HB-40
HCL
CHLORINE
0285855



EUGENE DIETZGEN CO.
MADE IN U. S. A.
NO. 340-B DIETZGEN GRAPH PAPER
8 X 8 PER INCH

TOWOLDMON0044270

AROCLOR E. E. Bowles, C. R. McIlwain, D. A. Self, (V. R. Haupt)

Cost Improvement

	Month	YTD	
Target	$5300	$15,950	*estimated
Actual	$2900*	$29,860	

TSD Objective B-1(d) Revise Aroclor MIP by 12/1/68

Basic MIP reviewed with the TPM. Further revisions are being made to incorporate latest forecasted product demands. Expect to issue in mid-July, two weeks late.

TSD Job No. 455 Liquid Aroclor Chlorinator Study

Catalyst for the continuous chlorinators has been weighed into plastic bags to assure standard usage. WGK-PRD work indicates an improvement in 1242 stability (TCC) will result from using the standard amount of catalyst. Test started 20 Jun 68 and will continue until 300 bags of catalyst are used.

TSD Job No. 456 Fixed Bed Earth Treatment

Project 2748 to install a larger capacity feed pump on the Porocel column to enable two still operation was transmitted on 19 Jun 68.

TSD Objective C-2 Apply Statistical Control to Solid Aroclor Chlorination By 7/1/68

Determined relationship between Aroclor 5060 softening point and chlorination time. Chart of this relationship will enable operator to predict batch end easier and has the potential of increasing capacity by 2.8%. Chart will be tested in field for one month before final step of eliminating waiting time for final analysis before recharging next batch.

BIPHENYL - SANTOWAX W. G. Niemeyer, (V. R. Haupt)

Cost Improvement

	Month	YTD	
Target	$3800	$23,000	
Actual	$4630*	$67,200	*estimated

0285857

TOWOLDMON0044271

BIPHENYL - SANTOWAX - continued

TSD Objective B-7(a) Debottleneck Biphenyl Stills to 87.6 M Lbs./Yr. Biphenyl Rate By 2/69.

CED is making preliminary calculations on debottlenecking this area. Anniston TSD will supply current operating data. W. G. Niemeyer, E. F. Anthony and R. S. Yates met on this subject on July 2, 1968.

TSD Objective B-7(c) Provide Assistance (Liaison) To CED As Necessary On Project To Upgrade No. 1 Furnace, CEA-1892

Engineering flow diagrams and plot plans have been issued, and detailed piping information has been obtained in field. Safety review meeting on this project will be held on July 1, at General Offices.

TSD Objective B-1(a) Revise Biphenyl-Santowax Manufacturing Improvement Plan By 8/1/68

Rough drafts of synopsis, capacity and raw material sections have been completed. Work to continue on revisions of other sections.

Quality

TSD Job No. 731 Install 8-Tray Distillation Column On Santowax R Still

Tentative shipping date of column is 7/9/68. Installation drawings are in progress with extra manpower assigned to expedite the design phase.

TOWOLDMON0044272

CHLORINE D. W. Dudley, J. M. Jones, G. L. Moore, (D. C. Malm)

Cost Improvements

	Month	YTD
Target	$2,780	$28,125
Actual	$7,600	$54,425

TSD Objective B-6(a) Monitor Mercury Usage by Radioactive Inventories

Third inventory of Anniston's cells set for August 6. Will license laboratory analyst with State of Alabama for handling of radioactive materials. Analyst will work with D. B. Hines in taking inventory and will eventually take over spiking of cells. Progress report of results of past two inventories published in June.

TSD Objective B-6(b) Develop Program to Reduce Mercury Usage to 0.75 Lbs. Hg/Ton Cl_2 By 2/1/69

Delivery of materials for mercury wash tank not meeting schedules. Installation may be delayed until 9/1/68.

TSD Objective B-6(c) Assist In Demonstration Of Brine Dechlorination By 4/1/69

Complete installation of final revisions to brine dechlorination have been coordinated with maintenance. Work is set tentatively for week of July 1. If installation is completed on schedule, demonstration should follow by 7/15/68.

Safety

TSD Objective A-18 Design A Program And Timetable To Reduce Mercury Level In Cell House To 0.05 mg Hg/m^3 Of Air

Weighted mercury vapor level for June was 0.10 mg Hg/m^3 of air.

TSD Job No. 847 Increase Cell Current - (Savings - $80,000)

Savings of $80,000 and new earnings of $60,000 are possible by increasing cell current from 48 KA to 52 KA. R. L. Sandstedt (CED Engineering Manager) agreed that cell current may be increased, and helped plan a test program with monitor recommendations.

Plant electrical design is designing and estimating necessary controls for a test program. Preliminary design will be complete by 8/1.

TSD Job No. 802 Brine Treatment - (Savings - 3,500 B.T.)

Project 2854, $10,500 NFC and $3,500 savings, was submitted for approval 6/31/68. The project provides for increased carbonate treatment of brine to reduce the calcium concentration.

TOWOLDMON0044273

TSD Job No. 328 Titanium Brine Heat Exchanger - (Savings $2500)

Project 2935, $1200 NFC, was approved 6/21/68 to reduce the heating steam temperature to below 130°C. to reduce crevice corrosion of the titanium at localized hot spots on brine side.

TSD Job No. 783 KCl Overflow - (Savings $0)

Project 2650, $4,100 NFC approved, was cancelled 6/5/68 by the Inorganic Division.

TSD Job No. 806 Mercury Still (Savings $5,000 B.T.)

Mercury still installation at Anniston cannot be justified.

Progress report was submitted for typing in June detailing economics of a mercury still at Anniston.

TSD Job No. 807 Mercury Recovery From Waste Water - (Saving $6,200 B.T.)

Results of tests of Fe-Hg column for recovery of mercury being analyzed. Report summarizing economics will be published in July.

HCl K. J. Buturla, (D. C. Malm)

Cost Improvement

	Month	YTD
Target	$400	$1000
Actual	$380	$1200

TSD Objective B-10(a) Demonstrate Reduction of Unaccounted HCl Losses To 10% Of Total HCl Available

Design package for recycle line project transmitted to Planning and Scheduling On June 11.

TSD Objective B-10(c) Submit AFE For Staley Grade Acid By 5/15/68

HCl project AFE 2899 for HCl coke scrubber was returned with request to evaluate alternates. A new study is underway to define source and cause of organics in HCl by 7/15. Future action will be based on study results.

TSD Job No. 497 Muriatic Acid Storage

Project in Maintenance backlog. No action.

TSD Job No. 891 Re-route Venting System On HCl Collection Tank

Project transmitted to Planning and Scheduling on May 22, 1968; in planning backlog.

TOWOLDMON0044274

PNP O. J. Norris, K. J. Buturla, (D. C. Malm)

Cost Improvements

	Month	YTD
Target	$14,000	$62,000
Actual	0	35,100

TSD Objective B-9(a) Assist In Demonstration Of 20 M Lbs./Yr. Rate

Statistical analysis of reactor and acidifier cycle times has been completed. A report with the findings and a revised plan to increase rate has been submitted for typing. Production for June was well below target at 1.49 M lb./mo. due to mechanical outages. Major outages included failure of filter and rupture of the 200# steam supply header. Actual on-stream rate was 1.65 M lb./mo.

TSD Objective B-9(b) Increase Autoclave Reaction Temperature (9/1 Target)

Optimization of reactor temperature and time is underway in field. Reaction temperature will be increased to 174°C. by 7/15/68.

TSD Objective B-9(c) EVOP Study of Molar Ratios NaOH/PNCB 6/1/68

Revised schedule for EVOP study to begin remains 9/1/68.

NIRAN K. G. Hale, O. J. Norris, J. L. Gaines, (D. C. Malm)

Cost Improvement

	Month	YTD
Target	$15,485	$70,950
Actual	$12,200	$76,650

TSD Objective B-1 Revise Niran Long Range Cost Improvement Plan by 5/1

Rough draft of 1968 plan complete. Target date for In-Plant Review is 7/15.

TSD Objective B-5(a) Demonstrate Parathion Recovery by 5/1/68. ($70,000/Yr. Savings + 10-15% Reduction in C.O.D. Loading)

Start-up problems encountered with Purolator motorized metal-edge filters. Elements with larger spacing were installed, but the filters still blinded after short periods of operations. Samples of feed material were sent to Purolator lab for analysis. Recommendations expected by 7/8/68.

TOWOLDMON0044275

NIRAN - continued

TSD Objective B-5(c) Demonstrate Solvent Addition to Residue (Interim) Process By 6/1/68. ($59,000/Yr. Yield Savings)

Yield savings of $5550 were obtained during June production from phases 1 and 2 (N_2 sparging). Phase 3 (increase Cl_2 level) tests continue on one system. High N_2 sparging was stopped in late June in order to reduce H_2O to jet scrubbers and thus reduce hydraulic load to waste treatment plant.

TSD Objective B-5(d) Evaluate Sulfur Recovery from Residue by 7/1/68. ($40,000/Yr. Savings + A 31% Reduction In SO_2 To Air)

Installation of test facilities started in June. EDC - 7/19/68. Plant testing is targeted to begin 8/1.

PR&D work continued on final recovery process. Review of process work was held with fred Lippman and Bill Udell of Ag Research on 6/26-27.

TSD Objective B-5(e) Demonstrate Reliability Of Submerged Pump for R. I. Control of Chlorination

No action this month. Tests in field are expected to be resumed in September when problem with light source has been corrected.

TSD Objective B-5(f) Complete Design For Automatic Blending of Methyl Parathion By 4/1/68

Project has been cancelled based on revised estimate of potential laboratory savings. Original estimate of $14,800/Yr. savings has been reduced to $4,900/Yr. and will not justify the $16,000 NFC necessary. The job will be re-evaluated next year as part of the project to batch sequence the condensation reactors.

TSD Objective B-5(g) Evaluate Freon Recovery By 3/1/68

Job has been cancelled because savings of $2,000/Yr. will not justify further study at this time.

TSD Objective B-5(k) Evaluate Automatic Control of Chlorination (10/1/68 Target)

Target date for evaluation has been moved back to 8/69. Revised date reflects delay in refractometer test program which will not be complete until 6/69.

Safety

TSD Objective A-10 Eliminate High H_2S Pressure in Thio Acid Reaction by Demonstrating Temperature Controlled Alcohol Addition By 6/1/68.

No change in status. Waiting for Production to make one month trial of automatic alcohol feed.

TSD Objective A-14(a) Determine Need To Upgrade Interlocks and Alarms On Critical Vessels In Parathion Department by 6/1/68.

Survey completed and report published in June. Will submit AFE by 10/1/68 to modify present Interlock System to prevent restarting reactant feed with agitator off.

TOWOLDMON0044276

NIRAN - continued

TSD Objective B-5(c) Demonstrate Solvent Addition to Residue (Interim) Process By 6/1/68. ($59,000/Yr. Yield Savings)

Yield savings of $5550 were obtained during June production from phases 1 and 2 (N_2 sparging). Phase 3 (increase Cl_2 level) tests continue on one system. High N_2 sparging was stopped in late June in order to reduce H_2O to jet scrubbers and thus reduce hydraulic load to waste treatment plant.

TSD Objective B-5(d) Evaluate Sulfur Recovery from Residue by 7/1/68. ($40,000/Yr. Savings + A 31% Reduction In SO_2 To Air)

Installation of test facilities started in June. EDC - 7/19/68. Plant testing is targeted to begin 8/1.

PR&D work continued on final recovery process. Review of process work was held with fred Lippman and Bill Udell of Ag Research on 6/26-27.

TSD Objective B-5(e) Demonstrate Reliability Of Submerged Pump for R. I. Control of Chlorination

No action this month. Tests in field are expected to be resumed in September when problem with light source has been corrected.

TSD Objective B-5(f) Complete Design For Automatic Blending of Methyl Parathion By 4/1/68

Project has been cancelled based on revised estimate of potential laboratory savings. Original estimate of $14,800/Yr. savings has been reduced to $4,900/Yr. and will not justify the $16,000 NFC necessary. The job will be re-evaluated next year as part of the project to batch sequence the condensation reactors.

TSD Objective B-5(g) Evaluate Freon Recovery By 3/1/68

Job has been cancelled because savings of $2,000/Yr. will not justify further study at this time.

TSD Objective B-5(k) Evaluate Automatic Control of Chlorination (10/1/68 Target)

Target date for evaluation has been moved back to 8/69. Revised date reflects delay in refractometer test program which will not be complete until 6/69.

Safety

TSD Objective A-10 Eliminate High H_2S Pressure in Thio Acid Reaction by Demonstrating Temperature Controlled Alcohol Addition By 6/1/68.

No change in status. Waiting for Production to make one month trial of automatic alcohol feed.

TSD Objective A-14(a) Determine Need To Upgrade Interlocks and Alarms On Critical Vessels in Parathion Department by 6/1/68.

Survey completed and report published in June. Will submit AFE by 10/1/68 to modify present Interlock System to prevent restarting reactant feed with agitator off.

TOWOLDMON0044277

P_2S_5 K. G. Hale, (D. C. Main)

Cost Improvements

	Month	YTD
Target	0	0
Actual	0	0

Safety

TSD Objective A-15(a) Provide Design To Reduce Fumes in P_2S_5 Working Areas by 4/1/58 At Surge Tank Vent

Design revisions are underway. Final design by July 15. Will transmit.

ENGINEERING DESIGN AND SERVICES

Mechanical/Electrical/Instrument Design and Drafting J. C. Price, J. A. Veazey, R. L. Brewer, J. K. Rennie, (W. F. Taffee)

Highlights

Drawings were issued for the Waste Heat Recovery Unit, Soda Ash Slurry Tank Drainage, Experimental Filter at Waste Treatment, Safety Showers at Niran, and Revision to Air Exchanger Ductwork at P&S. Final drawings were issued and Design Packages transmitted for Project 2468 - HCl Carbon Conveyor, Project 2771 - Showers at KOH Loading Dock, and Project 2898 - Addition to Service Building. Completed Design for High Level Alarms at the Aroclor Tank Farm. Completed evaluations of Plant Steam Usage, Methyl Parathion Blending, Agitator Interlocks at Niran, and Communications for Plant Emergency Plan. Started Utilities Cost Improvement Study. Consulting, Drafting and Liaison services were provided for twelve (12) small jobs, including two (2) accident investigations.

Objectives

There has been no change in status of objectives except as reported below:

TSD Objective A-5 Winterize Safety Showers

Project 2771 - Safety Showers at KOH Loading Dock - transmitted for installation. Drawings for Shower at Niran were completed and quotes requested. Expect to transmit package for Niran Showers in July.

TSD Objective A-7 Plant Emergency Plan

Norman Bach, Radio Communications Manager, reviewed the Emergency Communications Plan and helped develop the final specifications. The AFE to provide Emergency Plan Radio Equipment will be forwarded in July.

TOWOLDMON0044278

ENGINEERING DESIGN AND SERVICES - continued

TSD Objective A-8 Mechanical Guarding

Unable to meet with Plant Manager in June. Final Report to be delayed until July.

TSD Objective A-14(4) Upgrade Interlocks On Critical Vessels In Parathion Department

Evaluation completed and report issued in June.

TSD Objective B-5 Design of Automatic Blending For Methyl Parathion

Project was evaluated and has been cancelled.

TSD Job No. 824 Upgrade Loading Docks - C. E. McIlwain, (W. F. Taffee)

Projects for upgrading 17 plant loading/unloading facilities have been written and reviewed with Production and TSD personnel. Total cost is $40,000 NFC and $31,000 expense.

Progress Report will be issued in July. No further work is planned until projects are approved.

CED LIAISON V. T. Langdon, (W. F. Taffee)

CEA 1430 - Aroclor Expansion

Tank farm area steel erection continuing, piping installation well underway. Therminol heater location finalized as west of tracks. Layout and flow sheet of flaking, packing and drumming area agreed on. Start-up budget approved in early June.

CEA 1452 Warehouse

Warehouse skeleton and warehouse office shell completed. Structural steel for flakers to be erected first week in July. Potential housekeeping problems in flaker area resolved by adding a trench drain. Estimates forwarded covering recommendations of plant Safety Review.. Start-up budget will be prepared by L. L. Faulkner.

WASTE HEAT RECOVERY C. E. Woodward, (W. F. Taffee)

An inspection of water and Therminol equipment was conducted June 6 - (D. C. Deck - WGK-TSD) confirmed that tower steel was less severely attacked than comparative corrosion coupons.

Phase III start-up flow sheet and process targets were established June 7, in St. Louis, in a review meeting with J. R. Buss, H. J. Hileman, D. E. Steinmeyer, and C. E. Woodward. Mechanical modifications completed June 22 and the unit was started June 23. Target for completion of this project still August 1.

TOWOLDMON0044279

WASTE HEAT RECOVERY - continued

Therminol fog problem existed at start-up conditions. Additional runs are planned to attempt to identify conditions for minimum fogging.

POLLUTION CONTROL E. G. Wright, (J. C. Landwehr)

TSD Objective F-4 Develop A Plan For Reporting Spills and Other Non Routine Emissions In The Plant

The system was explained to all operating personnel at their respective safety meetings with the exception of the Aroclor and Biphenyl groups. The system will be explained to the groups at their July safety meeting.

TSD Objective F-6 Continue Annual Program of Biological Survey Of Choccolocco Creek

Final Report on May survey was received in June. The work established present biological status and recommend that a follow-up survey at a different season (Fall) be conducted to identify seasonal changes.

TSD Objective F-3 Establish A Monitoring System For Air Effluents From The Plant

Twenty-Four (24) atmospheric samples were collected and analyzed for SO_2 during June.

TSD Job No. 808 Install Solids Removal Equipment At Waste Treatment

Review drawings have been sent out..

TSD Job No. 816 Install Adequate Drainage at Soda Ash Slurry Tank

Project No. 2798 transmitted to Maintenance on June 24, 1968.

TSD Job No. 707 Install Trebler Sampler on Parshall Flume

Project has been completed. Unit now being used to gather data on solids in waste treatment plant effluent.

Special activities

1. Continuous samplers were installed on the HCl neutralization pit. These should provide more reliable data.

2. Data on untreated waste streams requested by Paul Hodges was transmitted in June.

3. The transition from Parathion to Malathion waste in the pilot treatment plant started in late June. No conclusions can be drawn at present.

TOWOLDMON0044280

PROCESS AND QUALITY CONTROL J. P. Chadwick, (W. B. Dunlap)

TSD Objective C(2) Apply Statistical Control To Solid Aroclor Chlorination

Correlation has been completed to relate Solid Aroclor yields with polyphenyl content of Santowax R, operating conditions of Santowax still, Biphenyl still and Biphenyl Tubular Converter. Comparison of analytical and operating data from periods of steady high and low yields have shown that polyphenyl content of Santowax did not change, and upstream operating controls were not a factor. The effect of operating variables in the chlorinator and still are now being studied.

TSD Objective C(7) Training In Use Of Computer

The Olivette-Underwood computer was received and put into immediate use in Solid Aroclor correlation studies. Programs were written for Laboratory GLC calculations, and for weekly payroll computation.

0285866

TOWOLDMON0044281

COMMUNITY RELATIONS, PERSONNEL, RECRUITING, AND DEVELOPMENT

Community Relations

1. K. J. Buturla received citation for work with Junior Achievement group.

2. J. C. Price attended hearing of State Highway Dept. concerning improvements to Highway 202 which passes in front of Monsanto facilities.

Personnel

1. James K. Rennie, Contract Designer from Southern Technical Services, started 6/3.

2. J. M. Jones returned to school on 6/24 after co-op work quarter (Ga. Tech. Co-op).

3. G. L. Moore reported for quarter work session on 6/10 (Ga. Tech. Co-op).

4. Jim McGee reported for quarter work session on 6/10 (Auburn Co-op).

5. Ed Bowles, Auburn University graduate, joined the TSD Department and has reported to V. R. Haupt.

Recruiting - Objective - Recruit one experienced chemist and one experienced engineer by September 1968

Interviewed three candidates for PR&D senior chemist and one candidate for project-echanical engineer in recent months. All candidates lacked either experience or leadership qualities required for these jobs. Recruitment of experienced technical personnel has been a complete failure so far. Also, have an upcoming need for minimum of 2 manufacturing representatives for CED projects.

Four of our six summer employees are excellent future technical employees (the two are unavailable for Monsanto employment). Their assignments and relationships with supervisors is providing excellent opportunity for mutual assessment of opportunities and capabilities.

Development

1. W. F. Taffee, O. J. Norris, and V. R. Haupt attended Management Process Course taught by W. B. Papageorge at Holiday Inn 6/9 through 6/14.

2. Twenty-one technical and supervisory members of TSD process, design, and laboratory groups, plus four co-ops and four summer employees, attended Motivation Seminar by Dr. Scott Meyer 6/5.

Visitors

1. Dwight Deck, WGK Materials Engineering Group - 6/6 - to inspect the experimental Heat Recovery unit.

2. R. W. Peterson, Project Manager, CEA 1430 - Aroclor - and Boyd Hedleston, Project Manager, CEA 1452 - Warehouse - 6/12 through 6/14 - in connection with their projects.

TOWOLDMON0044282

Visitors (continued)

3. D. Schulz and R. Ferrario, CED - 5/24 and 5/25 - obtain field data for No. 1 Tubular Unit revision.

4. R. J. Gordon, CED Draftsman - 6/11 through 6/14 - in connection with drawing preparation for the Aroclor expansion.

5. W. A. Kuhn and R. M. Kountz - 6/17 and 6/18 - to discuss solid Aroclor and HB-40 expansions.

6. F. J. Holzapfel, Director of Process Design and Project Management, Central Engineering - 6/20 - to review past and present CED efforts.

7. C. F. Foster, CED Project Manager, CEA 1232 - 6/25 - to review the Utilities project recently completed.

8. Fred MacDonald, General Superintendent, MCL, Newport Plant - 6/28 - to review Biphenyl-Aroclor technology.

9. Norman G. Bach, Radio Communications Manager, M.I.S.D., St. Louis - 5/31 - to discuss radio communication plans.

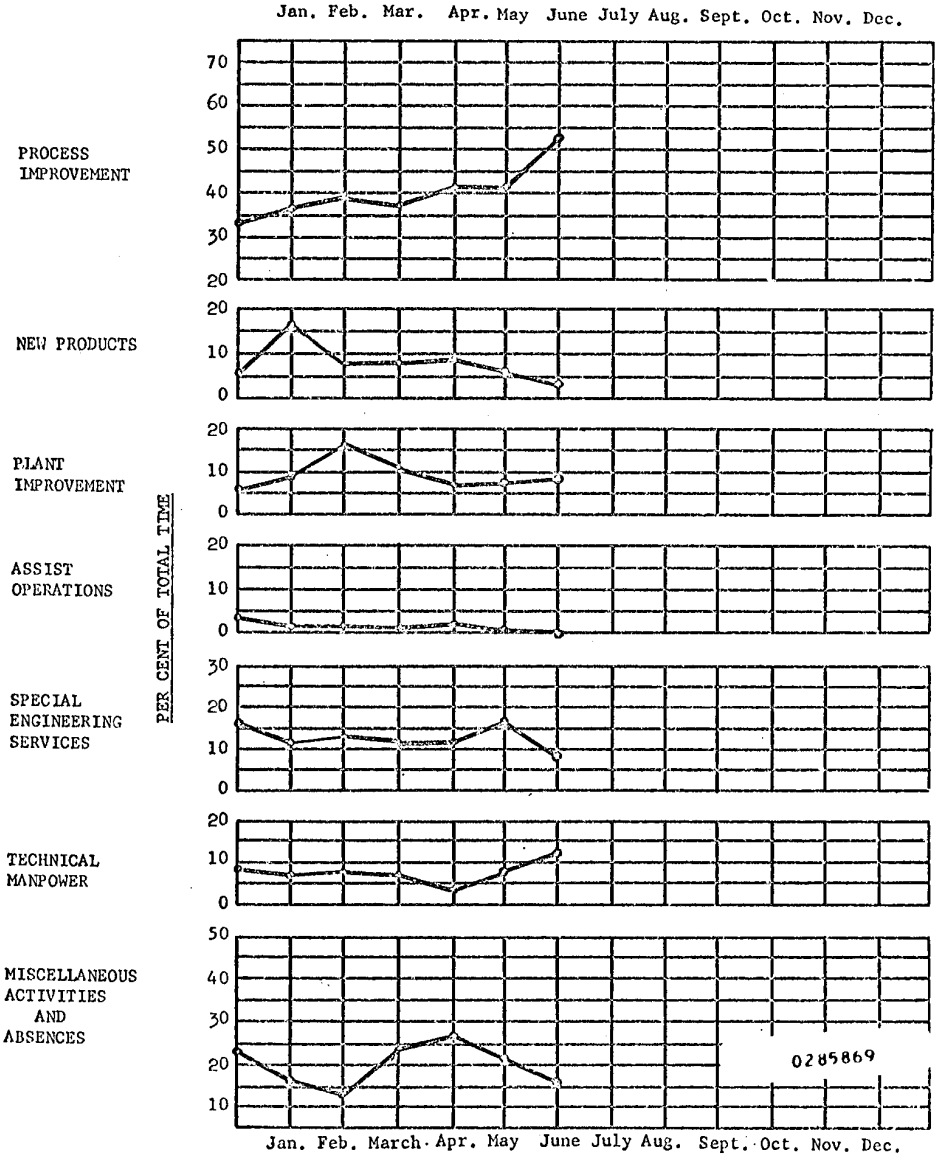
10. R. L. Sandstedt, Electrical Engineering Manager, CED - 6/10 - to discuss Chlorine Dept. electrical supply proposals.

11. Paul B. Hodges, Manager Environmental Engineering - 6/10 and 6/11 - and M. E. Batz, CED - 6/20 and 6/21 - discuss waste treatment pilot plant and start-up of Malathion waste tests.

12. A. E. Lippman and W. R. Udell, Ag Research - 6/26 and 6/27 - review of Sulfur Recovery and Purification Process development.

TOWOLDMON0044283

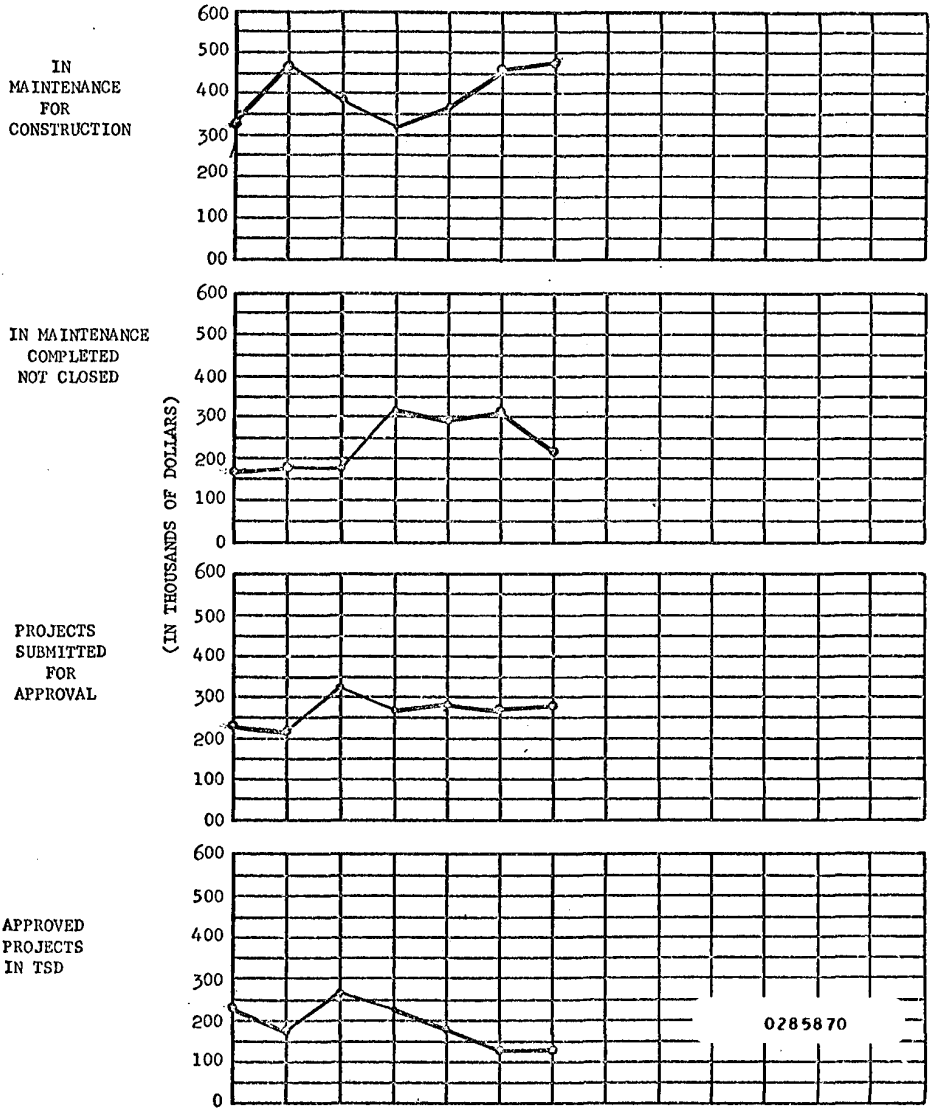
DISTRIBUTION OF TIME BY TECHNICAL SERVICE



0285869

TOWOLDMON0044284

TSD PROJECT SUMMARY



TOWOLDMON0044285