TBD DELETED

THIS EXEMPTED FROM P. [illegible] OBJECTIVE A.3 IN MIP

DESCRIPTION	JUSTIFICATION	CAPITAL $	MAN-HOURS	OTHER	IED C	REMARKS
SAFETY AND HOUSEKEEPING						
1. CONNECT MTL SAFETY VALVE	SAFETY	TBD	1/2	—	10/1	
2. CONTROL LEAK FROM LAST FINAL WASH TO DETECT AIR TANK OVERFLOW	SAFETY	TBD	1/2	—	7/1	IN PROGRESS. STEAM PRESSURE REQUIRED ON TANKER ARM SUPPLY
ABOVE FLOW SHEET — CONTAINS BIPHENYL + CATALYST						
CUSTOMER RELATIONS						
1. PERSISTENT MINOR FOOD QUALITY PROBLEM (STABILITY)	FAILING SPEC. ON OCCASIONAL SINCE OCTOBER	1242 NOT WORKING NONE	AS NECESSARY TO SOLVE PROBLEM	—	ASAP	PROCESS PAT 4286(1)
		CROSSCHECKING WITH AGNISTON SHOWED OK & NORMAL	MONSANTO STABILITY TEST FAILED	A.C.I. STABILITY OR ON FIRST PART LAST OR NEXT LOT FAILED, THEY PASSED.		CURRENT LOT IS FAILING MEDIUM STABILITY
2. LONG RANGE [illegible] PRODUCT PRICE TO COMPETITION FROM QUALITY STANDARD AND PRODUCT IMPROVEMENT	WEAK FOREIGN	NONE	2	2 PROCESS TECHNOLOGY		WILL HAVE TO LEARN THIS UNTIL FRACTIONATION STARTUP IS COMPLETE
		JAPANESE KAWASAKICHI SUPERIOR FOR STABILITY	ASPECT			
3. STUDY POSSIBLE QUALITY DEGRADING PROCESS CHANGES	AS SCRAPED QUALITY IMPROVEMENT	TANK CAR SAMPLES FROM STORAGE TANKS			7/1	
4. INSTALL CONTROL AND CLOCK [illegible]	IMPROVED QUALITY MEASUREMENT	$2500 / [illegible]			DATA 2/15	CONSTRUCTION COMPLETE 7/1
5. EVALUATE [illegible]	NEED TO QUALITY THIS	TBD- [illegible]	—	—	9/1	[illegible]

MONS 034997

1971 [illegible]

Aroclor [illegible]

[illegible]

Description	Justification	Capital/Expense	Manpower Hours Non-Monthly	Manpower Hours Other	EDC	Remarks
Customer Relations (cont)						
6. Install 70-30 blend tank	Increased blend capacity + pursently only mix tanks available. Ability to ship blends on shorter notice	$40,000/0	—	Mechanical design	12/31	Design in progress.
7. Advise customers on ecology problems	Pollution/Relations	None	As needed	As needed		Pyragrodge and Graham have been supplied with information
COGS						
1. Improve drum handling facility	Manpower reduction + safety more automated handling	0/7000	1	Design 1	10/1	Work in progress. Transfer of Anniston facility is one alternative
2. Hold brain storming [illegible] for new cogs reductions	Cost reductions. Aroclor related people to contribute ideas. No major cost improvement work last 2 months	TBD	1/2	—	4/1	Preliminary work seson

MONS 034998

1971 TECHNICAL [illegible]

AROCLORS / [illegible] / [illegible]

[illegible]

DESCRIPTION	JUSTIFICATION	CAPITAL/SOURCE	MANPOWER PROCESS	MANPOWER OTHER	EDC	REMARKS
PROCESS CONTROL						
1. ISSUE APPROVED REVISED SMPLS	IMPROVE PROCESS CONTROL	BRAWLEY ON KEY VARIABLES NONE	1	—	3/1	TSD COMPLETED A DRAFT OF THE KEY VARIABLE SECTION. DRAFT OF WHOLE DOCUMENT ESSENTIALLY COMPLETE
2. REVISE MIP WORK PLAN	PLANNING TOOL	NONE	1/2	—	2/1	WORK PLAN COMPLETE AND APPROVED. BEING ISSUED.
3. PROVIDE [illegible]	IMPROVE PROCESS CONTROL ONLY CHLORINE AND BIPHENYL NEED NEW MEASUREMENTS. CHLORINE PEOPLE WORKING ON SAMPLING/ANALYZING PROCEDURES.	TBD	—	—	AS NEEDED	RACO MATERIALS BIPHENYL AND CHLORINE ARE ONLY PROBLEM AREAS.
4. DEVELOP AND IMPLEMENT METHOD FOR ANALYZING BOGANIES IN CHLORINE	IMPROVED PROCESS CONTROL	NONE	—	AR+D 1	3/1	METHOD DEVELOPED BY AR+D. SAMPLING PRESENTS PROBLEM. CHLORINE PEOPLE TO DEVELOP METHODS.
5. MODIFY TELEPHONE [illegible] TO STRESS SAFETY AND SEPARATING [illegible]	SAFETY/PROCESS CONTROL	0/[illegible]	—	E+I 1		BEING HELD DUE TO LOW PRIORITY

OPERATOR INVOLVED IN DETERMINING WHETHER IN CONTROL

MONS 034999

1971 TECHNICAL [illegible]

AROCLORS / [illegible]

[illegible]

DESCRIPTION	JUSTIFICATION	CAPITAL/EXPENSE	MANPOWER PROPOSED	OTHER	EDC	REMARKS
ECOLOGY BILL						
1. SUPPLY INFORMATION AND [illegible] TO [illegible] OUT THERMAL UNITS ONLY	REDUCE PCB LOSS TO ENVIRONMENT	246 2000/1000 273 0/7500 — DSC PROBLEM 222 0/[illegible]		DESIGN 2	9/1	DESIGN COMPLETE. CONSTRUCTION TO BE COMPLETE BY
2. CLOSE LOOP ON AROCLOR DRUMS ONLY	"	NONE	1	—	4/1	WAITING FOR ANALYTICAL RESULTS ON WASHING TESTS
3. COMPLETE PAVING, CURBING AND SETTLING BASIN	BIGGE "	40,000/0	—	DESIGN 3	9/1	DESIGN COMPLETE. CONSTRUCTION TO BE DONE IN CONJUNCTION WITH PRACTIVATOR
4. INSTALL AND DEMONSTRATE REWORK FACILITIES	SAVINGS FACILITIES TO REWORK SOME OF THE MATERIAL A CUSTOMER HAS USED. SOME CAN BE REWORKED TO SALABLE GOODS AT SAVINGS.	35000/3000	1/2	—	10/1	CONSTRUCTION IN [illegible]
5. INSTALL [illegible] BLANKETING ON [illegible] TANKS AND [illegible] CHLORINATOR [illegible] LINES	AIR POLLUTION REDUCTION [illegible] TANK ARE SPARGED WITH N_2 TO REDUCE [illegible]. TO TRY BLANKETING DUE TO FUMING RELATED TO [illegible] MATERIAL QUALITY PROBLEM ABOVE. CHLORINATOR [illegible] LINES VENT TO AIR AND COULD SPRAY AROCLOR [illegible] [illegible]	0/6000	1/2	DESIGN 1/2	4/1/71	NEW EDC FOR DESIGN 6/1 COMPLETION 9/1

MONS 035000

[illegible] TECHNICAL [illegible]

AROCLOR [illegible]

[illegible]

DESCRIPTION	JUSTIFICATION	CAPITAL [illegible]	[illegible]	OTHER	EDC	REMARKS
ECOLOGY (CONT)						
6. DETERMINE DISPOSITION OF STILL BOILING MATERIAL	LOSS OF PYRENE USE ~~FOR~~ FOR THIS MATERIAL DUE TO PRODUCT CHANGES MAKES ALTERNATE NECESSARY	NONE	1/2	—	3/1	USING FOR [illegible] 1254 ELECTRICAL
7. STARTUP INCINERATOR AND PARTICULATOR	POLLUTION	1.25 M/250 M	12	2	8/1 INCINERATOR 10/1 PARTICULATOR	INCLUDES M.C. AND TBD STARTUP TIME
NEW PRODUCT EVALUATION						
1. TRICHLOROBENZENE IN 273 WOODY BAU HAS EVALUATED 233 AND NOW TAKING ANOTHER SINGLE	NEW EARNINGS SAVINGS INSURE RAW MATERIAL SUPPLY	TBD	1	—	5/1	IN PROGRESS
2. DECHLOROBIPHENYL	NEW EARNINGS	TBD	1/2	—	3/15	NEW PRODUCT [illegible] IN [illegible] [illegible] TO [illegible] PILOT PLANT
~~NEED [illegible] BY SUMMER TO SUPPLY A DUPONT PILOT PLANT DEVELOPING COSTS FOR FIRST [illegible] AND ALSO FOR PERMANENT~~		TBD	26	1 1/2		

POTENTIAL MARKET

MAKE IT FOR LESS THAN BUYING

HOOKER ONLY US SUPPLIER MADE ~~[illegible]~~ AS BYPRODUCT TO LINDANE MANUFACTURE UNDER FIRE FROM ECOLOGISTS.

MONS 035001

NITROPHILINE AREA
SUMMARY OF WORK FOR REVIEW
5/2/71

	DESCRIPTION	JUSTIFICATION	CAP./EXP.	MANPOWER NAN-MO. PROD.	MANPOWER NAN-MO. OTHER	EDC	REMARKS
SAFETY	SAFETY AUDIT FOR ONA AND INT. PNA.	SAFETY		1/2		6/1/71	
	UPGRADE NH_3 DOCK AT ANHY STORAGE	SAFETY	0 / 1000		1	8/1/71	
CAPACITY	UPGRADE INT. PNA TO CONTINUE PROD. ASLONG AS NECESSARY.	CONTINUE PROD TO RETAIN MARKET.	T B D	1 TO 10	0 TO 10	PART BY 6-1-71	MAY BE JUST SUPPORT OR WHOLE PROJECT
QUALITY	DETERMINE COLOR STABILITY OF REFINED ONA AND MEET LIMITS SET.	CUSTOMER RELATIONS	T B D	1	1	6-1-71	TEMPORARILY MEETING SPEC. BY SHIPPING ONLY FRESH MATERIAL.
	RESOLVE REFLUX CONTROL ON ONA COLUMN	MEET QUALITY AT HIGHER PROD. RATES	T B D	1	1	9-1-71	
PRO. CONT.	MIP FOR ONA		0 / 0	1/2		5-1-71	DRAFT BEING REVIEWED FOR APPROVALS.
	REVIEW PRODUCT GROUP OBJECTIVES EACH MO.		0 / 0	1/2		ALL YEAR	
ECOLOGY	DETERMINE REQUIREMENTS FOR COLOR AND ORGANICS AND PLAN TO MEET THEM.	COMPLY WITH POLLUTION LAWS.	$360M ONA ① 420M PNA	1	1 PT.	7/1/71	PLAN ONLY
	RECOVER AMMONIA NOW SCRUBBED.	DITTO	T B D ②	1/2	1 PT.	4/5/71	LIAISON FOR PROD. DESIGN BY PROJECT IMPLEMENTATION TEAM
							* DATE WILL NOT BE SLIM. [illegible] JUNE '71 IS DESIGN [illegible] 1-1-74 [illegible] OHIO RIVER
	CHANGE PNA THERMIGNOL UNIT	DITTO	7000	1/2	1/2	5/1/71	
	OBTAIN POLLUTION INVENTORY	PROVIDE BASIS FOR SPEC./TEST. TREATMENT [illegible]	0 / ?	?		12/1/71	
				6	5 1/2		

① [illegible] 6 AT [illegible]
② [illegible] 6 AT [illegible]

MONS 035002

1971 TECHNICAL EFFORT "DCB" DEPT 273.

DESCRIPTION	JUSTIFICATION	CAPITAL/ EXPENSE	MAN POWER PROCESS	MAN POWER OTHER	EDC	REMARKS
RAW MATERIAL USAGE DEVELOP ACCURATE MATERIAL BALANCE TO PIN POINT YIELD LOSSES & COSTS TO RECOVER	$20,000 @ 5.5 M Lbs/yr.	TBD	1 MM	2 MM ANALYTICAL		BALANCE ALSO REQ'D TO DEVELOP COST FOR POLLUTION CONTROL
ECOLOGY. DEVELOP ACCURATE ESTIMATE OF LBS. ORGANIC TO SEWER; NITROGEN TO SEWERS NITROGEN TO ATMOSPHERE	up $22,000/yr. OPERATING INCREMENTAL CAPITAL COSTS FOR DEPT 273 UNKNOWN "ORG." LOSS MAY RUN 200 M - 400 M FOR SECONDARY TREATMENT BASED ON FULL RATE ORG. LOSSES RANGE UP TO 100 Lbs/M. BASED ON DEPT. YIELDS.	TBD	1 MM	2 MM ANALYTICAL		THIS SHOULD BE A SIGNIFICANT INPUT TO DECISION ON CONTINUED OPERATION OF DEPT. 273. & NEEDS TO BE DETERMINED PRIOR TO FINAL DESIGN ON SECONDARY TREATMENT.
REDUCE COOLING WATER USAGE TO REDUCE BOTH ORGANIC YIELD LOSSES & REDUCE LOAD ON SECONDARY TREATMENT. - PRESENT H_2O FLOW TO SEWER IS 40 GPM.	TBD	TBD	1/2 MM	—		
CHANGE OUT AROCLOR UNIT TO THERMINOL	POLLUTION	$7,500	1/2	1/2	5/1/71	PCB CONTROL
DEVELOP ALTERNATE PLAN FOR HIGH BOILER DISPOSAL	POLLUTION	TBD	1/2	0	6/1/71	DUMPING IN LAND FILL MAYBE TERMINATED BY LAW
COBS EVALUATE TCB PRODUCTION IN DEPT. 273 FACILITIES	UP TO $100,000 BASED ON $5 M "DCB" PRODUCTION	TBD	1	0	4/1/71	CHARGED TO FLUIDS GROUP

EQUIP. IDENT. NO. ____ AREA NO. ____ SHEET ____ OF ____
CEA NO. ____
BY ____ DATE ____
PROJ/DEPT ____ DIVISION ____
PLANT ____

CENTRAL ENGINEERING DEPARTMENT

MONS 035003

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Status
Use ONP Tower for PNP 1. Evaluate 2. Proj. Complete	$43,000/yr	$15000	4	3/1/71 8/1/71	Eval. Complete Estimate To Be Done By 3/15, Project By 5/15. (Pickle)
Increase PNP Rate By 1.5% 1. Caustic Conc. to 21.5% 2. Dem. 175°C Reaction Temp.	$57000/yr	-0- unk.	3	9/1/71	21.5% Caustic Conc. Demonstrated (5.3% Rate Incr.); 175°C Temp Demonstrated, working to Define Equipment Modif. Req'd for Permanent Operation at 175°C
Demonstrate 600,000 #/hr Rate ONP @ 82% OST	$21000/yr	-0-	1	10/1/71	New Cams Cut, Waiting Installation of New Cam Motors.
Demonstrate Condensate Refining System On ONP	$16,000/yr	$2200 (EXP)	2	6/1/71	Project Approved, Awaiting Drafting Manpr.
Complete 1971 Safety Audits	—	—	1	9/1/71	ONP/PNP Complete TPP/NaPNP In Proc.
Reduce N. Acidifier Emission	—	unk.		7/1/71	No Work To Date
Line ONP Surge Tanks	—	unk		8/1/71	No Suitable Lining Yet Found. Heresite Failed In NaPNP Service
Relocate Cleaner Water	—	-0-	—	3/1/71	Complete
Meet Pollution Req. On [illegible]	—	unk.	2	7/1/71	Being Handled In Plantwide Study By Biosite
Revise MIP Work Plan	—	—	1	3/1/71	Complete
1. Drive In-Dept. [illegible]	—	—	1	4/1/71	No Work To Date
TPP					
Reduce Coal Losses [illegible]	—	unk	1-2	10/1/71	Jan-Apr: 84 Clay 1970 Avg: 130 Clay Reduction Attributed To New Operating Procedure For Vis. Treat.

MONS 035004

1971 TECHNICAL EXPO –
AROCLORS / PYRANOLS / [illegible]
DEPT [illegible]

DESCRIPTION	JUSTIFICATION	CAPITAL/EXPENSE	MANPOWER PROCESS MAN-	OTHER MONTHS	EDC	REMARKS
SAFETY AND HOUSEKEEPING						
1. CONDUCT 1971 SAFETY AUDIT	SAFETY	TBD	1/2	—	10/1	
2. CONTROL CATALYST MIX TANK TEMPERATURE	SAFETY	TBD	1/2	—	7/1	IN PROGRESS. STEAM PRESSURE REDUCTION ON TRACERS MAY SUFFICE
CUSTOMER RELATIONS						
1. RESOLVE AROCLOR 1260 QUALITY PROBLEM (STABILITY)	FAILING SPEC. ON OCCASIONS SINCE OCTOBER	NONE	AS NECESSARY TO SOLVE PROBLEM	—	ASAP	PROGRESS RPT. 4286(1) CURRENT LOT IS FAILING MONSANTO STABILITY
2. LONG RANGE POWER FACTOR SPEC CHANGE AND PRODUCT IMPROVEMENT	MEET FOREIGN COMPETITION FROM QUALITY STANDPOINT	NONE	2	2	12/31	WILL HAVE TO DELAY THIS UNTIL FRACTIONATOR STARTUP IS COMPLETE
3. STUDY POSSIBLE QUALITY DEGRADING DURING LOADING	AS SHIPPED QUALITY IMPROVEMENT	TBD	1	—	7/1	
4. INSTALL CONTROL LAB CLEAN ROOM	IMPROVED QUALITY MEASUREMENT	$2500/$2500	—	1	2/15	CONSTRUCTION COMPLETE 3/1
5. EVALUATE IMPROVING TCB/TTCB RAW MATERIAL QUALITY	QUALITY IMPROVEMENT	TBD	1	—	9/1	MOISTURE COULD BE A PROBLEM.

MONS 035005

1971 TECHNICAL [illegible]
AROCLORE/[illegible]
[illegible]

DESCRIPTION	JUSTIFICATION	CAPITAL/EXPENSE	MANPOWER PROJECT MAN-MONTHS	MANPOWER OTHER MAN-MONTHS	EDC	REMARKS
CUSTOMER RELATIONS (CONT)						
6. INSTALL 70-30 BLEND TANK	INCREASED BLEND CAPACITY	$40,000/0	—	2	12/31	DESIGN IN PROGRESS.
7. ADVISE CUSTOMERS ON ECOLOGY PROBLEMS	POLLUTION/RELATIONS	NONE	AS NEEDED	AS NEEDED		PAMGEORGE AND GRAHAM HAVE BEEN SUPPLIED WITH INFORMATION
COGS						
1. IMPROVE DRUM HANDLING FACILITY	MANPOWER REDUCTION + SAFETY	0/7000	1	1	10/1	WORK IN PROGRESS. TRANSFER OF ANNISTON FACILITY IS ONE ALTERNATIVE
2. HOLD BRAIN STORMING SESSION FOR NEW COGS REDUCTIONS	COST REDUCTIONS	TBD	1/2	—	4/1	PRELIMINARY WORK BEGUN

MONS 035006

1971 TECHNICAL EFFORT
AROCLORE/PYRANOLS/PYRANOLS
DEPT [illegible]

DESCRIPTION	JUSTIFICATION	CAPITAL/EXPENSE	MANPOWER PROCESS	MANPOWER OTHER	EDC	REMARKS
PROCESS CONTROL						
1. ISSUE APPROVED REVISED SMP'S	IMPROVE PROCESS CONTROL	NONE	1	—	3/1	TSD COMPLETED A DRAFT OF THE KEY VARIABLE SECTION. DRAFT OF WHOLE DOCUMENT ESSENTIALLY COMPLETE
2. REVISE MIP WORK PLAN	PLANNING TOOL	NONE	1/2	—	2/1	WORK PLAN COMPLETE AND APPROVED. BEING ISSUED.
3. PROVIDE MEASURING DEVICES FOR KEY VARIABLES AS NEEDED	IMPROVE PROCESS CONTROL	TBD	—	—	AS NEEDED	RAW MATERIALS BIPHENYL AND CALORINE ARE ONLY PROBLEM AREAS.
4. DEVELOP AND IMPLEMENT METHOD FOR ANALYZING ORGANICS IN CALORINE	IMPROVED PROCESS CONTROL	NONE	—	1	3/1	METHOD DEVELOPED BY AR&D. SAMPLING PRESENTS PROBLEM. CALORINE PEOPLE TO DEVELOP METHODS.
5. MODIFY TEL-ALARM PANELS TO SEPARATE SAFETY AND OPERATING ALARMS	SAFETY/PROCESS CONTROL	0/$2000	—	1		BEING HELD DUE TO LOW PRIORITY

MONS 035007

1971 TECHNICAL EFFORT

AROCLOR / POLYCHLORINATED BIPHENYLS

DESCRIPTION	JUSTIFICATION	CAPITAL/EXPENSE	MANPOWER REQUIRED	OTHER	EDC	REMARKS
ECOLOGY						
1. SUPPLY INFORMATION AND ASSISTANCE TO CHANGE OUT TRICHLORO UNITS	REDUCE PCB LOSS TO ENVIRONMENT	246 2000/1000 273 0/7500 222 0/8800	1	2	9/1	DESIGN COMPLETE. CONSTRUCTION TO BE COMPLETE BY
2. CLOSE LOOP ON AROCLOR DRUMS	"	NONE	1	—	4/1	WAITING FOR ANALYTICAL RESULTS ON WASHING TESTS
3. COMPLETE PAVING, CURBING AND SETTLING BASIN	"	40,000/0	—	3	9/1	DESIGN COMPLETE. CONSTRUCTION TO BE DONE IN CONJUNCTION WITH FRACTIONATOR
4. INSTALL AND DEMONSTRATE REWORK FACILITIES	"	35000/3000	1/2	—	10/1	CONSTRUCTION IN PROGRESS.
5. INSTALL NITROGEN BLANKETING ON MIX TANKS AND MODIFY CHLORINATOR RELIEF LINES	AIR POLLUTION REDUCTION	0/6000	1/2	1/2	4/1/71	NEW EDC FOR DESIGN 6/1 COMPLETION 9/1

MONS 035008

1971 TECHNICAL EFFORT
AROCLORS / PYRANOLS / PYDRANOLS
DEPT 246 / 254

DESCRIPTION	JUSTIFICATION	CAPITAL/EXPENSE	MANPOWER PROCESS	MANPOWER OTHER	EDC	REMARKS
ECOLOGY (CONT)						
6. DETERMINE DISPOSITION OF STILL BOILDOWN MATERIAL	LOSS OF PYDRANOL USAGE OF THIS MATERIAL DUE TO PRODUCT CHANGES MAKES ALTERNATE NECESSARY	NONE	1/2	—	3/1	USING FOR AROCLOR 1254 ELECTRICAL
7. STARTUP INCINERATOR AND FRACTIONATOR	POLLUTION	1.25 M/250 M	12	2	8/1 INCINERATOR 10/1 FRACTIONATOR	INCLUDES LAB AND TSD. STARTUP TIME
NEW PRODUCT EVALUATIONS						
1. TRICHLOROBENZENE	NEW EARNINGS SAVINGS INSURE RAW MATERIAL SUPPLY	TBD	1	—	5/1	IN PROGRESS
2 DECACHLORO-BIPHENYL	NEW EARNINGS	TBD	1/2	—	3/15	NEW PRODUCT FOR OLD 238 IN PROGRESS PRELIMINARY EVALUATION TO SUPPLY PILOT PLANT
MONS 035009		TOTAL	26	14 1/2		