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Wilmington, Delaware

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June 16, 1955

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1. M. H. Wahl ADD 1/23/89
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2. C. J. Barick AED 2/4/89
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MINUTES OF TECHNICAL DIVISION STEERING COMMITTEE MEETING
JUNE 14, 1955 - SAVANNAH RIVER LABORATORY

Committee Members Present

D. F. Babcock J. W. Morris
L. C. Evans C. W. J. Wende
J. W. Croach J. C. Woodhouse
Gerhard Dessauer Hood Worthington

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APPROVALS

The following Studies were approved for the programs outlined in the appendixes:

Study No.	Title	Date	Months	From	To
8510	Purex Design Testing	Inactive			
8511	Separations Process and Equipment Demonstration	45	6/1/55	8/31/55	
8512	Separations Process Chemistry	58	6/1/55	8/31/55	
8513	Separations Engineering Development	45	6/1/55	8/31/55	
8517	Separations Process Hazards	3	6/1/55	8/31/55	
8521	Hydriside Development	2	6/1/55	8/31/55	
8522	Analytical Chemistry Development	29	6/1/55	8/31/55	
8523	Waste Handling	3	6/1/55	8/31/55	
8527	Recycle Development	6	6/1/55	8/31/55	

MASTER

INFORMATION AND AGREEMENTS REACHED

1. Safety

The Laboratory's minor injury frequency for May was 0.30, a decrease from 0.38 for April.

The Radiation Control Section is giving talks at the safety meetings on the radiation containment philosophy.

The Safety Review Committee is in the midst of its second inspection of the Laboratory. In contrast to the previous inspection, only minor items are being found for correction.

The frequency of off-plant injuries is much higher than work injuries. Information is being given on means of avoiding the common off-plant injuries.

2. The number of security violations (safes unlocked, papers left out, etc.) in the Laboratory was reduced from 8 in April to 4 in May. This improvement is probably due in part to revised procedures which establish improved control.

3. A number of improvements are needed in the current B-line operation. The Laboratory's initial action on this work will be to see what pertinent information is available or is being developed elsewhere, then to decide what further action is required.

4. The Laboratory will give top priority to the problems associated with dissolving long elements.

5. As soon as possible the Laboratory will pass along to the Process Section design data on the various pieces of equipment needed to increase the capacity of the Purex plants.

6. Summer students working in the Laboratory will be given the opportunity to observe the advantages of working with du Pont as well as to show their capabilities.

7. The Laboratory is aiming at having natural uranium plate assemblies and enriched tube with large thorium slug assemblies ready for plant irradiation tests by the middle of August.

8. Consideration will be given to irradiating full length, natural uranium tubes clad with zirconium. This action would permit an early look at the dimensional stability of tubes.

9. Tentatively, the next Steering Committee Meeting will be at the Laboratory on July 12.

10. Attached for information are:

Appendix A - Financial Status

Appendix B - Separations Development Program

Appendix C - Analytical Development Program

Appendix D - Technical Division Study Status

TECHNICAL DIVISION

L. C. Evans
L. C. Evans

LCE:EV
Attach.

APPENDIX A

FINANCIAL STATUS

The Technical Division expenditures for the month of May totaled \$7,750,000, approximately the same as for April. Our total expenditures for FY-1955 to date are \$150,000, or 2%, below the Financial Plan. We can expect to finish FY-1955 with approximately the same status.

Our Budget and Financial Plan for FY-1956 totals \$9,400,000. This is a reduction of \$400,000 from our initial estimate and results from a decrease of \$500,000 because we do not now expect to build a recycle development facility, and an increase of \$100,000 to cover instrument development by subcontractors.

APPENDIX B

SEPARATIONS DEVELOPMENT PROGRAM
JUNE 1 TO AUGUST 31, 1955

<u>Study Code</u>	<u>Name</u>	<u>Estimated Man Months</u>
8510	Purex Design Testing	
8511	Separations Process and Equipment Demonstration	45
8512	Separations Process Chemistry	58
8513	Separations Engineering Development	45
8517	Separations Process Hazards	3
8521	Hydride Development	2
8523	Waste Handling	3
8527	Recycle Development	<u>6</u>
	Total	162

PROGRAM

<u>PUREX</u>	<u>Estimated Man Months</u>
I. Solvent Extraction	
II. Solvent Chemistry	
III. Head-End and Metal Oxide Finishing	
IV. Product Finishing	
V. Equipment	
MS	
Pumps	
Evaporators	
Dissolver	
Solvent Recovery	
In-Line and Close Coupled Analyzers	
Jets	
Sampler	
VI. Technical Manual and Standards	
	145

APPENDIX B (Cont.)

	<u>Estimated Man Months</u>
<u>88</u>	10
I. Separations Process	
II. Recycle	
<u>25</u>	2
<u>MENT</u>	5
I. Thermal Column	
II. D-Line	
III. E-Line	
Total	<u>162</u>

APPENDIX C

ANALYTICAL CHEMISTRY DEVELOPMENT PROGRAM
JUNE 1 TO AUGUST 31, 1955

	<u>Estimated Man Months</u>
<u>STUDY CODE 8522 - Analytical Chemistry Development</u>	29
I. Short-Term 200-Area Studies	
Direct Laboratory Assistance	
Close-Coupled Analysis	
II. Long-Term 200-Area Studies	
Increased Capacity	
In-Line Analysis	
Solvent Degradation	
Pu Chemistry	
X-Ray Analysis	
Thermogravimetric Analysis	
III. Methods Improvement	
Ion Exchange	
Coulometry	
Other	
Isotopic Analysis	
Mass Spectrometer	
Fission Counter	
Special Counting Instruments	
Alpha Energy Analyzer	
Counting Standards	
IV. 100-Area Studies	
In-Line Moderator Analysis	
V. 300-Area Studies	
88 Analysis	
Methods Evaluation	

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APPENDIX D

TECHNICAL DIVISION STUDY STATUS (Cont.)

DPW-55-15-6

Study No.	Title	Man Mo.	From	To	Man Mo. used to 5/31	Total Man Mo. used FY-1955	Program	Budget
8514	Instrument Development - 200 Area	29	4/1/55	6/30/55	20.20	44.35	85% CPD 5% CPD 10% CPD	2804 2910 2924
8515	Instrument Development - 100 Area	20	4/1/55	6/30/55	9.95	29.00	80% RPD 20% RPD	2803 2923
8517	Separations Process Hazards	3	6/1/55	8/31/55	0	11.80	CPD	2804
8518	Theoretical Physics	40	5/1/55	7/31/55	9.90	110.40	75% RPD 5% RPD 20% RPD	2803 2910 2923
8519	Experimental Pile Physics	68	5/1/55	7/31/55	20.50	234.85	50% RPD 10% RPD 40% RPD	2803 2910 2923
8520	100 Area Mechanical Development	40.5	5/1/55	7/31/55	12.20	129.40	65% RPD 35% RPD	2803 2923
8521	Hydriside Development	2	6/1/55	8/31/55	0	22.95	CPD	2910
8522	Analytical Chemistry Development	29	6/1/55	8/31/55	0	95.45	10% RPD 70% CPD 20% MD	2803 2804 2922
8523	Waste Handling	3	6/1/55	8/31/55	0	2.85	CPD	2804
8524	New LM Elements	30	4/1/55	6/30/55	20.35	134.55	MD	2961
8525	Fluid Pressure Facility						(For construction only) MD	2802
8526	Recycle Facility						(For construction only) CPD	2604
8527	Recycle Development	6	6/1/55	8/31/55	0	8.85	CPD	2604
8528	Heat Treating Facility						(For construction only) MD	2802

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APPENDIX D

TECHNICAL DIVISION STUDY STATUS

DPW-55-15-6

Study No.	Title	Man Mo.	From	To	Man Mo. used to 5/31	Total Man Mo. used FY-1955	Program	Budget
8501	Non-destructive Testing	10	4/1/55	6/30/55	7.60	72.75	60% MD 40% MD	2802 2961
8502	300 Area Process Development - Present Components	3	4/1/55	6/30/55	.20	9.35	MD	2802
8503	New Fuel Element Fabrication	12	4/1/55	6/30/55	8.55	35.55	MD	2802
8504	Protective Coatings for New Fuel Elements	35	4/1/55	6/30/55	23.05	88.45	70% MD 30% MD	2802 2922
8505	Corrosion	12	4/1/55	6/30/55	6.90	41.40	60% MD 25% MD 15% MD	2802 2922 2961
8506	100 Area Process Development-General	15	5/1/55	7/31/55	3.45	50.55	RPD	2803
8507	Heat Transfer and Water Quality					0	RPD	2803
8508	Instrument Development - 300 Area	23	4/1/55	6/30/55	13.30	33.05	50% MD 50% MD	2802 2961
8509	Design and Evaluation of Fuel Elements	58.5	5/1/55	7/31/55	16.80	161.90	60% RPD 40% RPD	2803 2923
8510	Purex Design Testing			Inactive			CPD	2804
8511	Separations Process and Equipment Demonstration	45	6/1/55	8/31/55	0	119.90	95% CPD 5% CPD	2804 2910
8512	Separations Process Chemistry	58	6/1/55	8/31/55	0	166.90	95% CPD 5% CPD	2804 2924
8513	Separations Engineering Development	45	6/1/55	8/31/55	0	123.95	90% CPD 5% CPD 5% CPD	2804 2910 2924

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DATE

FILMED

10/20/94

END