(Name and Location)	REF. NO.	DATE
Mr. W. E. Heinz		REF. NO.
A. W. Martin	AWM-584-72	2-3-72

PLAINTIFF'S EXHIBIT CEL-590

Equipment Engineering Section
Report for January, 1972

Sample Preparation Unit, RFA 345-559 (LWH, DLD)

Engineering will be complete on the vent systems, spare tankage, and other auxiliaries by February 18, completing the project as now specified. Additions are expected when the first process is identified. Construction is over 80% complete. Priority was dropped to accelerate revision of the VAMP and OXO Data Units and construction of BuAcA Lab Unit and the VPO Data Unit. Final completion date of this unit is currently indefinite - probably in March.

Multi-Tube Catalyst Unit, RFA 345-558 (LWH, SEG)

The Multi-Tube Catalyst Unit project was inactive in January. Engineering for the revised unit is complete and construction should resume about mid February. Construction is about 35% complete on the basis of the revised design.

Catalytic VPO Oxidation Data Unit, RFA 345-567 (LWH, GJV)

Project remains on schedule for a February 18 Engineering completion and as construction completion prior to March 31. The unit retains a first priority status and will probably be complete on or ahead of schedule.

Laboratory BuAcA Unit, (LWH, CAT)

Engineering is complete, construction is in progress for completion within two weeks of the hardware and instrumentation. The Laboratory glassware and commissioning will follow. This unit also has a first priority status and should be complete in two or three weeks.

VAMP Data Unit Turnaround, (LWH, GJV)

The turnaround involving a new feed instrumentation system is under construction, on a second priority basis and should be complete by February 18.

OXO Data Unit Turnaround, (LWH, GJV)

Fabrication of the new reactor continues on a second priority level. The reactor should be complete and installed by March 1.

Minor Projects and Support for Routine Maintenance (LWH, CAT, SEG)

Turnarounds completed in January include a new effluent transfer line for EtAcA, numerous revisions for the pre-pilot VPO Lab Unit, and modification of the flamability test unit (VA Data Unit) for study of the Butane VPO system.

Environmental Maintenance Projects

Vent Incinerator, RFA 345-563 (LWH, WSR, GJV)

Incinerator is on hand and contractor has been scheduled for concrete work. Safety and instrumentation system are designed. Construction to date is < 5% and expediting will start during the week of February 7-11. A more definite schedule will be developed this month.

Aerated Lagoon, RFA 345-566 (LWH, WSR, DLD)

Earth work design has been completed and will go out for bids to be coordinated by WSR. The piping system and auxiliaries to be re-evaluated and re-estimated in late February. A definite schedule and cost projection will be developed in February.

Rainfall Separation (LWH) - to be redefined by the environmental committee and rescheduled during February.

Chemical Waste Pretreatment and Cleaning Facility, RFA 345-568 (LWH, DLD)

RFA submitted for this facility. A 60 day schedule will be prepared.

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OSHA Studies and Engineering, (LWH, DLD, SEG)

This program is to become active in February at a level of about 5% for our Engineering effort.

Design Support for Plant Facilities

Building 149 - Additional Ventilation (LWH, RJB)

Fans in place but cannot become operative until motor mount is designed, fabricated, and installed on the exhaust fan.

Building 132 Expansion, (LWH, RJB)

Assistance for Mr. Roussel in February is to be 50 to 80% of RJB assignment.

Microfilm and Underground Piping Documentation - These programs have been deferred for 60-90 days.

Data Processing Activities (AJK, EJB)

Routine maintenance for the Data Logger and interface to the AcA Reaction Pilot Plant will be phased-out this month. Connections to the new computer from the butane VPO Data Unit interface equipment have been tenatively specified and installation of the network will start about March 1.

Target dates have been established for stepwise development of the new computer system applied to the VPO Data Unit. The schedule assumes little, if any, debugging of computer software which is contrary to plant on-line computer experience as studied by Dr. Klekers in January.

Dr. Klekers and Mr. Barrow will attend DEC computer schools during parts of February, March, and April. Mr. Osborne will attend the DEC school later in the year preparatory to incorporation of stream analyzers in the computer system.

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Stream Analyzer Activities (JEO, RLN, BGG, LJB)

The stream analyzer maintenance and calibration work in January included 17 chromatographs and two optical instruments.

Development projects completed in January included the VAMP Polymerization residual monomer chromatograph, the VAMP Product p H Meter, and the trace oxygen analyzer for the OXO Unit which subsequently failed mechanically. A Bendix paramognetic oxygen analyzer was developed for use at 100°C but changes in the VPO Data Unit process design have apparently eliminated need for the 100°C application. The Chromatograph on the VPVA Data Unit now used for flamability limits testing was modified to monitor the butane VPO feed composition studies.

Projects active or awaiting development manpower include in order of priority:

1. Heavy-ends chromatograph analyzer for the BuAcA Laboratory Unit.

2. Three analyzers for the butane VPO Data Unit.

3. Three paramagnetic oxygen analyzers for the VPO Data Unit. These items above include design and testing of the sample systems and subsequent documentation.

4. Viscosity instrument for VAMP should be received in February and will be evaluated and installed.

5. The new high speed Honeywell Chromatograph will be developed as time permits as it promises higher frequency results than now available.

Initial operation of the computer on the butane VPO Data Unit will include manual input of analyzer results as recorded on trend records. Mr. Osborne will develop a program later this year to incorporate analyzer results directly into the computer memory.

AWM:js

A W Martin

cc: Dr. R. A. Daniel - New York
Directors
Managers
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