200 area weekly report

11 Feb 1954

Du Pont de Nemours (E.I.) and Co., Wilmington, DE (United States). Explosives Dept.

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- mtm 3/11
- #2. J. P. Hood
 - #3. V. R. Thayer - R. J. Christl
 - #4. L. C. Peery - SRP
 - #5. L. S. Danser - SRP
 - #6. M. H. Wahl - SRL
 - #7. W FILE

MEMORANDUM

TO: J. B. TINKER (#1) ✓
FROM: J. P. HOOD *for*

Deleted Version
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SR/H--822
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This document consists of 2 pages

No. 1 of 7 copies, Series A

200 AREA WEEKLY REPORT

SOLVENT EXTRACTION PLANTS

221-H Building - Gang Valve Corridors Rearrangement Study

Engineering has replied to AED's letter containing comments on the revised gang valve rack mock-up and indicated compliance with most of the requested changes. The exceptions taken appear valid.

Eight preliminary drawings relative to certain phases of this work have been submitted by Engineering for approval. The drawings approved with comment are:

W-161454 - GV corridors - Fire Water Deluge Valve Piping - Plans and Sections

W-161480, -1, -2 - GV Corridors - Key Plan Piping Arrangement - Sheets 1, 2 and 3

D-113372 - GV Corridors - Separator Strainer - Details

W-161293, -4, -5 - GV Corridors - Equipment Arrangement - Sheets 1, 2 and 3

217-F Building - Storage Magazine

The customer storage facilities provided in Building 217-F appear inadequate for the additional requirements of U-235 solution containers. Information is being developed on the design of containers and provisions to insure critical safety. When this information is complete, recommendations will be made regarding increased storage space.

LM Fuel Program - Recovery of U-235

Location of the dissolving and ion exchange facilities for TNX was agreed upon with Technical and Design. The dissolving facilities are to be located where the TNX temporary heater building now stands.

Remote loading of packaged slugs into a 9" vertical pipe is to be tried. The test will be run in 717 Building using the mock-up area crane.

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2/11/54

TRITIUM PROCESSING FACILITIES232-F BuildingProcess Line

We have been advised by the Engineering Department that the assembled components of the Process Line were shipped to SRP from Rochester on February 10, 1954.

232-H BuildingProcess Line

A flow sheet study of methods of increasing thruput of the authorized "F and H" process line has been made by AED and Engineering personnel. This work was reviewed with Design Division representatives to acquaint them with present thinking prior to a formal request from AED to start work to determine the feasibility of obtaining additional capacity by following this approach.

Arrangement drawings of the Process Line components for "H" Line were submitted to the AED by Engineering. These have been reviewed and approved for compliance with Flow Sheet requirements.

Thermal Diffusion Column

Preliminary drawings of a ~~Thermal Diffusion Column~~ Thermal Diffusion Column have been reviewed by the AED. Approval was given to permit development of final designs and to start fabrication of the unit. Procurement of auxiliary equipment essential to column operation has been started.

233 Building - "D" LineCrusher Guider

Designs of a prototype crusher grinder applicable to "D" Line work were submitted by the Engineering Department for comment. The crusher grinder is of the "jaw crusher" type. It is the opinion of the AED that preliminary improvised tests of grinding a ~~material~~ should be made prior to fabrication of the prototype to ascertain the applicability of the jaw type crusher for grinding this type of material.

CONSTRUCTION

See attached report.

ITEMS FOR MANAGEMENT REVIEW

None.

JPH/blt

Attachment with Copies 1 and 2.

[REDACTED]

CC: J. K. Lower
S. D. Smiley
J. J. Urban
P. R. Moore
L. C. Peery
J. B. Tinker
J. P. Hood (2)
PRD Central File
200 File

February 5, 1954

TO: J. D. ELLETT

FROM: L. S. DANSER - J. H. HERSHEY

WEEKLY REPORT - 200 AREAS
PROCESS BUILDINGS

200-F AREA

211 Building

Check out and run in of equipment in 211 is 85% complete. At the request of Construction, Operations is preparing a list of items in the waste handling and general purpose evaporator tankage facilities, which still require completion. Approximately 70% of the items on the chemical storage punch list, submitted three weeks ago, has been completed.

221 Building

Vessel installation is complete in the warm canyon except for the dehumidifier, and jumper installation has been started on section 18. Thirteen vessels have been set in the hot canyon. The fire, floor flushing and rack flushing sprays were satisfactorily tested in sections 5 through 18 of the hot canyon. The hot canyon crane was satisfactorily run in and the warm canyon crane hoists were load tested. Miscellaneous cleaning and paint retouching is continuing in both canyons.

Hand wheels have been installed on manually operated gang valves and installation is essentially complete. Insulation of gang valve piping is 90% complete.

Testing and cleaning of piping in the cold feed preparation area are nearly complete. Filters have been installed in cleaned process lines and screens have been installed ahead of automatic valves. Check out of second level canyon instruments has been started. The floor on the hot canyon side of the cold piping gallery in sections 17 and 18 is being Amercoated.

[REDACTED]

9/32

Amercoating of floors is complete in sections 5 through 9, and is in progress in sections 10 through 15 of the cold feed gallery. Pumps and agitators in the cold feed gallery are being checked out. Approximately 50% of the sample boxes has been reworked to meet Operations requirements for a decontamination surface. Fourth level control rooms are being repainted and panel instruments are being checked out in connection with calibration of third level instruments.

221 "A" Line

The hydrate evaporator cells have been Amercoated. Stainless steel hoods and duct work for the rinse and decontamination sinks have been completed. A number of pumps have been taken out for cleaning. The oxide dissolver temperature, level and specific gravity indicators have been placed on the operating platform hand-rail.

221 "B" Line

Installation of the No. 2 furnace in process room No. 2 is 50% complete. Insulation of the gang valve steam supply lines is now complete. The recirculating cooling water system is 90% complete. All the metering pumps, the mechanical cabinet exhaust fans and two additional samplers have been checked out and one of the mechanical cabinet exhaust fans has been satisfactorily run in.

232 Building

Installation of hoods, cabinets, and associated equipment continues in the laboratory wing. Major parts of the decanning machine have been positioned and the stainless steel lining for the south furnace is complete. The process control room and the process room are being partitioned off prior to installation of equipment. Several pieces of equipment have been checked out in the mechanical equipment room and are scheduled for run in next week.

235 Building

The heating and ventilating control air compressor is now completely installed. Installation of the inert gas system dryer is 90% complete. The spare process room is being cleaned and finished in preparation for use as a storage room.

292 Building and Associated Facilities

Loading of the top layer of type "E" gravel is 75% complete in the sand filter.

717 Building

The second H Area centrifuge block has been poured and the forms are being erected to pour the 3rd one for extra machinery. Mock up of F Area rack piping is continuing with no set pattern. About 75% has been completed.

200 H AREA

211 Building

The general purpose evaporator and two hold tanks have been positioned. The railroad has been completed to the loading platform.

221 Building

Work continues on machined beams and support ledges in both canyons. Fifty percent of the imbedded pipe details for section 5 warm canyon has been hydrostatically tested. The first jigs for section 5 have arrived and are being tried in the canyon. Eighty-five percent of the ion chamber tubes are in place in both canyons. The stainless steel plating to line the swimming pool walls is all in place. Both walls of the cold feed gallery have been painted to a height of seven feet. Bases are being installed for the third level vessels. One wall in each gang valve corridor has been Amercoated.

232 Building

Excavation for this building continues and footings are being poured.

292 Building and Associated Facilities

Waterproofing of the outside of the north wall of the sand filter is complete and back filling is 90% complete. Concrete finishing is in progress on the inside of the sand filter. The tent used in F Area for receiving and storing types "F" and "G" sand has been moved to H Area.

241 Waste Tank Farm

The pneumatic test on the cooling coils of tank No. 3 was satisfactorily completed. Work continues on waterproofing and the brick wall around the tanks. The 805 line has been fabricated to within 50 feet of the diversion box. The catch tank has been placed in its encasement.

MJC/p