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SUBJECT: MONTHLY STATUS AND PROGRESS REPORT

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U. S. ATOMIC ENERGY COMMISSION
HANFORD OPERATIONS OFFICE

MONTHLY STATUS AND PROGRESS REPORT

DECEMBER 1959

PART I

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MONTHLY STATUS AND PROGRESS REPORT

HANFORD OPERATIONS OFFICE

DECEMBER 1959

PART I

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HIGHLIGHT STATEMENT - DECEMBER 1959OPERATIONS

CANNED FUEL ELEMENT PRODUCTION TOTALLED 632 TONS, 97.7% OF FORECAST. THE TOTAL CONSISTED OF 54 TONS OF SOLID AND 497 TONS OF 1&E NORMAL-URANIUM AND 81 TONS OF 1&E 94-METAL. YIELDS WERE 89.8% FOR SOLID AND 85.8% FOR 1&E NORMAL-URANIUM AND 83.0% FOR 94-METAL PIECES.

IN-REACTOR PRODUCTION WAS 108.6% OF FORECAST. THE OVER-ALL AVERAGE TIME-OPERATED EFFICIENCY WAS 82.2% AS COMPARED WITH THE 82% FORECAST. NEW MAXIMUM POWER LEVEL RECORDS WERE ESTABLISHED AT C, D, F, H, KE, AND KW REACTORS. INDIVIDUAL REACTOR PRODUCTION RECORDS WERE ESTABLISHED AT D AND KW. DURING THE MONTH, THERE WERE 10 NORMAL-URANIUM FUEL ELEMENT FAILURES. THESE INCLUDED 9 1&E ELEMENTS AND ONE SOLID ELEMENT. THERE WERE ALSO TWO PRODUCTION TEST, RUN-TO- RUPTURE 1.47-METAL FAILURES AT B REACTOR.

TOTAL SEPARATIONS PLANT PLUTONIUM PRODUCTION WAS 124.5% OF FORECAST WITH 78.5% OF THE TOTAL PRODUCED BY PUREX AND 21.5% BY REDOX. A TOTAL OF 1,090 GRAMS OF NEPTUNIUM WAS RECOVERED FROM PUREX AND 70 GRAMS WAS RECOVERED FROM THE REDOX PLANT.

PRODUCTION OF NORMAL UO_3 TOTALLED 553 TONS, 110.6% OF FORECAST. ENRICHED UO_3 PRODUCTION TOTALLED 48.2 TONS, 102.6% OF FORECAST. ALL SHIPPING SCHEDULES WERE MET.

PLANT ACQUISITION AND CONSTRUCTION

NEW PRODUCTION REACTOR - DESIGN IS 33% COMPLETE AND CONSTRUCTION IS 0.3% COMPLETE VS. 0.3% SCHEDULED. DURING THE MONTH WORK WAS STARTED ON THE SUPPORTING TELEPHONE FACILITIES, THE RIVER PUMP HOUSE, AND T-C BUILDINGS AND FACILITIES. (SEE PART I, PAGE 11.)

CONFINEMENT - DESIGN IS 68% COMPLETE, AND CONSTRUCTION IS 20% COMPLETE VS. 20% SCHEDULED. (SEE PART I, PAGES 9 AND 10.)

PRTR - DESIGN IS COMPLETE AND CONSTRUCTION IS 63% COMPLETE VS. 73% ACTUAL. (SEE PART I, PAGE 10.)

PFPP - DESIGN IS 95% COMPLETE AND CONSTRUCTION IS 87% COMPLETE VS. 85% SCHEDULED. (SEE PART I, PAGE 9.)

COMMUNITY

PROPERTY DISPOSAL - A TOTAL OF 5,107 OF 5,360 SALE PROPERTIES HAVE BEEN SOLD AND AN ADDITIONAL 32 GOOD FAITH DEPOSITS PLACED. (SEE PART II, PAGE 4.)

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PLANT OPERATIONS

METAL PREPARATION

CANNING - NET PRODUCTION OF CANNED FUEL ELEMENTS TOTALLED 632 TONS, 97.7% OF FORECAST ^{1/}. THIS TOTAL CONSISTED OF:

NORMAL URANIUM			
SOLID	54 TONS	19.8% YIELD	
I&E	497 "	85.8% "	
94 METAL - I&E	81 "	83.0% "	

FIVE CANNING LINES WERE OPERATED ON EACH OF TWO SHIFTS ON A FIVE-DAY-PER-WEEK BASIS. CANNING LINE TIME-OPERATED EFFICIENCY WAS 91.1%.

AT MONTH END, THE TOTAL INVENTORY OF CANNED FUEL ELEMENTS WAS APPROXIMATELY 662 TONS AND VARIED BY TYPE FROM 0.7 MONTH'S SUPPLY TO 1.2 MONTHS' SUPPLY. THE INVENTORY OF BARE URANIUM CORES VARIED BY TYPE UPWARD FROM A ONE MONTH'S SUPPLY. APPROXIMATELY 3.5 MONTHS' SUPPLY OF CAPS AND CANS WAS ON HAND DURING DECEMBER.

AUTOCLOVE FAILURES - FOUR FUEL ELEMENTS FAILED DURING AUTOCLOVE TESTING IN DECEMBER. TWO WERE CAUSED BY DEFECTIVE WELDS AND TWO RESULTED FROM THIN CAPS.

SCRAP SHIPMENTS - TWO SCRAP SHIPMENTS WERE MADE TO FERNALD DURING DECEMBER. THESE INCLUDED APPROXIMATELY 48 TONS OF NORMAL-URANIUM METAL AND APPROXIMATELY 2.7 TONS OF 94 METAL.

REACTOR OPERATION

DURING DECEMBER, REACTOR PRODUCTION RATES IN TERMS OF INDEX ^{2/} WERE:

	<u>B</u>	<u>C</u>	<u>D</u>	<u>DR</u>	<u>F</u>	<u>H</u>	<u>KE</u>	<u>KW</u>	<u>TOTAL</u>
MAXIMUM POWER LEVEL DURING MONTH (INCLUDES ALL PRODUCTION)	81.2	100.0	85.5	85.5	86.8	88.5	185.0	185.5	898.0
AVERAGE LEVEL WHILE OPERATING (INCLUDES ALL PRODUCTION)	70.2	87.8	79.9	77.1	80.5	81.8	166.3	170.3	813.9
TIME-OPERATED EFFICIENCY	75.4	77.0	90.0	75.3	80.7	89.0	80.2	90.1	82.2

IN-REACTOR PRODUCTION FOR DECEMBER WAS 108.6% OF FORECAST ^{1/}. THIS GREATER-THAN-FORECAST PRODUCTION WAS POSSIBLE LARGELY BECAUSE OF THE HIGHER-THAN-EXPECTED AVERAGE POWER LEVELS. THE OVER-ALL AVERAGE TIME-OPERATED EFFICIENCY WAS 82.2% AS COMPARED WITH THE 82% FORECAST. THE OVER-ALL REACTOR PRODUCTION EFFICIENCY ^{3/} WAS 82.9%. NEW MAXIMUM POWER LEVEL RECORDS WERE ESTABLISHED AT C, D, F, H, KE, AND KW REACTORS. INDIVIDUAL REACTOR PRODUCTION RECORDS WERE ESTABLISHED AT D AND KW. AT THE END OF THE MONTH, EQUILIBRIUM POWER LEVELS WERE LIMITED BY FUEL-ELEMENT-FAILURE CONTROL CONSIDERATIONS AT ALL REACTORS EXCEPT C. AT C REACTOR, THE EQUILIBRIUM POWER LEVEL WAS LIMITED BY GRAPHITE TEMPERATURE.

DURING DECEMBER, THERE WERE 10 NORMAL-URANIUM FUEL ELEMENT FAILURES. THESE INCLUDED 9 I&E AND 1 SOLID ELEMENT. THERE WERE ALSO 2 PRODUCTION TEST, RUN-TO-RUPTURE, 1.47-METAL FAILURES AT B REACTOR. THIS BRINGS THE CUMULATIVE NUMBER OF NORMAL-URANIUM RUPTURE INCIDENTS TO 1,127, INVOLVING 1,147 PIECES (INCLUDING 71 I&E PIECES). THE CUMULATIVE NUMBER OF 94-METAL RUPTURE INCIDENTS REMAINS AT 65, INVOLVING 67 PIECES.

^{1/} "SECRET" DOCUMENT HAN-73696 JOHNSON/TRAVIS DATED OCTOBER 23, 1959, SUBJECT "HAPO PRODUCTION FORECAST."

^{2/} "SECRET" MEMORANDUM, BLOCH/TRAVIS, DATED JUNE 8, 1959, SUBJECT "REVISION OF INDEX NUMBERS," SYMBOL PRP:EEG.

^{3/} PRODUCTION EFFICIENCY = $\frac{\text{SUM OF 8 AVERAGE POWER LEVELS FOR THE MONTH}}{\text{SUM OF 8 AVERAGE POWER LEVELS WHILE OPERATING}}$

PLANT OPERATIONS (CONT'D)REACTOR OPERATION (CONT'D)

FOLLOWING IS A SUMMARY OF DECEMBER REACTOR OUTAGES:

DATE DOWN	DATE UP	OUTAGE HOURS	REMARKS
<u>B REACTOR:</u>			
11-27	12-1	91.3	PANELLIT TRIP DUE TO FAULTY RELAY. COMPLETED CHARGE-DISCHARGE.
12-1	12-1	1.6	PANELLIT TRIP.
12-1	12-1	0.3	PANELLIT TRIP CAUSED BY OSCILLATING GAUGE.
12-14	12-18	102.5	SCHEDULED CHARGE-DISCHARGE, LEAK TESTING, AND TUBE REPLACEMENT.
12-18	12-18	0.3	PANELLIT TRIP.
12-23	12-23	0.3	PANELLIT TRIP CAUSED BY PLUGGED CONE SCREEN.
12-23	12-24	37.4	PANELLIT TRIP CAUSED BY A STUCK I&E, 1.47-METAL, PRODUCTION TEST FUEL ELEMENT FAILURE IN TUBE 1770.
12-30	STILL DOWN		REMOVAL OF A STUCK I&E, 1.47-METAL, PRODUCTION TEST FUEL ELEMENT FAILURE FROM TUBE 1764.
<u>C REACTOR:</u>			
12-9	12-12	68.2	REMOVAL OF AN I&E NORMAL-URANIUM FUEL ELEMENT FAILURE FROM TUBE 2484 AND CHARGE-DISCHARGE.
12-13	12-13	5.0	POISON DISCHARGE.
12-14	12-16	33.0	INVESTIGATION OF UNCONFIRMED FUEL ELEMENT FAILURE SUSPECT. COMPLETED CHARGE-DISCHARGE.
12-18	12-18	0.3	PANELLIT TRIP.
12-27	12-30	58.1	REMOVAL OF A STUCK I&E NORMAL-URANIUM FUEL ELEMENT FAILURE FROM TUBE 2362. COMPLETED CHARGE-DISCHARGE AND TUBE REPLACEMENT.
12-30	12-30	0.7	PANELLIT TRIP CAUSED BY A FLUCTUATING GAUGE.
12-30	12-30	5.7	POISON DISCHARGE.
<u>D REACTOR:</u>			
11-29	12-2	66.2	COMPLETED TUBE REPLACEMENT, FOLLOWING A PANELLIT TRIP.
12-23	12-25	43.4	PANELLIT TRIP CAUSED BY A NORMAL-URANIUM FUEL ELEMENT FAILURE IN TUBE 2661. COMPLETED CHARGE-DISCHARGE.
<u>DR REACTOR:</u>			
12-7	12-11	98.0	WATER LEAK CAUSED BY I&E NORMAL-URANIUM FUEL ELEMENT FAILURE IN TUBE 3975, AND CHARGE-DISCHARGE.
12-17	12-19	50.1	PANELLIT TRIP. MAINTENANCE AND PRODUCTION TEST WORK WERE PERFORMED.
12-26	12-27	36.0	LEAK TESTING AND CHARGE-DISCHARGE.
<u>F REACTOR:</u>			
12-8	12-12	101.5	REMOVAL OF AN I&E NORMAL-URANIUM FUEL ELEMENT FAILURE FROM TUBE 3469. COMPLETED CHARGE-DISCHARGE AND MAINTENANCE WORK.
12-25	12-27	42.2	REMOVAL OF AN I&E NORMAL-URANIUM FUEL ELEMENT FAILURE FROM TUBE 3467 AND CHARGE-DISCHARGE.
<u>H REACTOR:</u>			
12-11	12-12	41.8	TRIP DUE TO A POWER SURGE ON NO. 3 LINE AT MIDWAY. COMPLETED MAINTENANCE WORK DURING PERIOD OF INSUFFICIENT REACTIVITY.
12-28	12-28	0.2	PANELLIT TRIP ON TUBE 3668.
12-28	12-30	39.7	MANUAL TRIP DUE TO INDICATIONS OF A WATER LEAK. REMOVAL OF A STUCK I&E NORMAL-URANIUM FUEL ELEMENT FAILURE FROM TUBE 3668. COMPLETED CHARGE-DISCHARGE AND TUBE REPLACEMENT.
12-30	12-30	0.6	PANELLIT TRIP CAUSED BY FLUCTUATING GAUGE.
<u>KE REACTOR:</u>			
12-7	12-10	65.4	SCHEDULED CHARGE-DISCHARGE.
12-10	12-10	1.1	RESISTANCE TEMPERATURE DETECTOR REPAIR.
12-10	12-10	3.0	POISON DISCHARGE.
12-23	12-24	36.3	REMOVAL OF A STUCK I&E NORMAL-URANIUM FUEL ELEMENT FAILURE FROM TUBE 3350 AND CHARGE-DISCHARGE.
12-27	12-29	41.6	REMOVAL OF A STUCK SOLID, NORMAL-URANIUM FUEL ELEMENT FAILURE FROM TUBE 5578 AND CHARGE-DISCHARGE.

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PLANT OPERATIONS (CONT'D)

REACTOR OPERATION (CONT'D)

DATE DOWN	DATE UP	OUTAGE HOURS	REMARKS
<u>KW REACTOR:</u>			
11-29	12-1	61.3	SCHEDULED CHARGE-DISCHARGE AND MAINTENANCE.
12-2	12-2	4.2	POISON DISCHARGE.
12-19	12-21	51.7	REMOVAL OF A STUCK I&E NORMAL-URANIUM FUEL ELEMENT FAILURE FROM TUBE 2649 AND CHARGE-DISCHARGE.
12-21	12-21	4.2	POISON DISCHARGE.

FUEL ELEMENT FAILURES - FOLLOWING IS A SUMMARY OF DECEMBER FUEL ELEMENT FAILURES:

TABULATION OF RUPTURED URANIUM SLUGS							
TUBE NO.	DATE RUPTURED	TUBE POWER ^{1/}	CONCENTRATION (MWD/T)	ASSIGNED MWD	LOSS DAYS	METAL	TYPE FAILURE
(NORMAL)							
3975-DR	12-7	1026	744	1370	0.89	I&E	SIDE OTHER.
3469-F	12-8	1109	531	1316	0.92	I&E	SIDE OTHER.
2484-C	12-9	1224	427	1272	0.72	I&E	SIDE HOT SPOT.
2549-KW	12-19	1461	595	5735	1.68	I&E	HOT SPOT.
3350-KE	12-23	1344	413	1619	0.49	I&E	UNDETERMINED.
2661-D	12-23	1036	815	2284	1.43	I&E	UNDETERMINED.
3467-F	12-25	1187	380	777	0.48	I&E	UNDETERMINED.
2362-C	12-27	1176	570	3531	2.01	I&E	HOT SPOT.
5578-KE	12-27	976	525	2847	0.86	SOLID	UNDETERMINED.
3668-H	12-28	1028	660	1383	0.85	I&E	SIDE OTHER.
(1.47 METAL)							
1770-B	12-23	1075	286	2342	1.67	PT I&E	HOT SPOT.
1764-B	12-30	1025	238	1914	1.36	PT I&E	SIDE OTHER.

TUBE REPLACEMENT - THERE WERE 62 TUBES INSTALLED DURING THE MONTH OF DECEMBER: 24 AT F, 20 AT B, 7 AT C, 5 AT DR, 3 AT KE, 2 AT H, AND 1 AT KW REACTOR.

TWO OF THE TUBES INSTALLED AT C WERE RIBLESS ZIRCONIUM TUBES, WHICH WERE INSTALLED TO PILOT INSTALLATION PROBLEMS, HYDRAULIC CHARACTERISTICS, AND CONVERSION RATIOS PRIOR TO THE 100-TUBE INSTALLATION. DURING THE MONTH, 6 PROCESS TUBE LEAKS WERE CORRECTED: 2 AT B, 2 AT DR, 1 AT F, AND 1 AT H REACTOR.

SHIELD PROTECTION - FRINGE POISONING FOR F REACTOR SHIELD PROTECTION WAS CHARGED DURING THE MONTH. SIX TOP COLUMNS AND FIVE FAR-SIDE COLUMNS WERE CHARGED WITH LITHIUM. TO COMPENSATE FOR THE REACTIVITY LOST BY CHARGING THE LITHIUM, APPROXIMATELY THREE TIMES AS MANY COLUMNS WERE CHARGED WITH 94 METAL.

SELF-SUPPORTED FUEL ELEMENTS - A "PILOT TEST OF SELF-SUPPORTED FUEL ELEMENTS IN RIBLESS ZIRCONIUM PROCESS TUBES" WAS BEGUN AT C REACTOR. THE TWO RIBLESS ZIRCONIUM TUBES INSTALLED DURING THE MONTH WERE CHARGED WITH SELF-SUPPORTED I&E FUEL ELEMENTS. TEMPERATURE DATA INDICATED ESSENTIALLY NO UNBALANCE AROUND THE FUEL ANNULUS, BUT INITIAL DATA INDICATE THAT A SLIGHT REDUCTION IN FUEL O.D. WILL BE DESIRABLE.

THE FIRST COLUMN OF SELF-SUPPORTED FUEL ELEMENTS HAVING THE SUPPORTS ATTACHED BY THE ULTRASONIC WELDING PROCESS WAS CHARGED INTO B REACTOR. NO PROBLEMS WERE ENCOUNTERED.

GRAPHITE OVERBORING - A FIRST ATTEMPT AT OVERBORING A GRAPHITE CHANNEL WAS MADE AT DR REACTOR. ALL EQUIPMENT UTILIZED IN THE TEST, EXCEPT FOR THE CUTTER ITSELF, OPERATED PROPERLY. THE CUTTER OVERHEATED AND FAILED DURING OPERATION. A NEW CUTTER DESIGN IS BEING DEVELOPED.

SEPARATIONS

TOTAL SEPARATIONS PLANT PLUTONIUM PRODUCTION WAS 124.5% OF FORECAST ^{2/}, WITH 78.5% OF THE TOTAL PRODUCED BY PUREX AND 21.5% BY REDOX.

^{1/} AT TIME OF RUPTURE.

^{2/} "SECRET" DOCUMENT HAN-73696, JOHNSON/TRAVIS, DATED OCTOBER 23, 1959, SUBJECT "HAPO PRODUCTION FORECAST."

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PLANT OPERATIONS (CONT'D)SEPARATIONS (CONT'D)

PUREX - THE PLANT PROCESSED 444 TONS OF URANIUM DURING THE MONTH. THE NEPTUNIUM RECOVERY BEGUN IN NOVEMBER WAS COMPLETED EARLY IN THE MONTH. A TOTAL OF 1,090 GRAMS OF NEPTUNIUM WAS RECOVERED FROM AN ESTIMATED BEGINNING INVENTORY OF 1,380 GRAMS. NEPTUNIUM BEARING SOLVENT WAS REPROCESSED DURING SUBSEQUENT PLANT OPERATION.

PLUTONIUM PROCESSING WAS RESUMED DECEMBER 6 AND CONTINUED UNTIL DECEMBER 9 WHEN OPERATIONS WERE SUSPENDED FOR JUMPER REPLACEMENT. THE FINAL PLUTONIUM AND URANIUM CYCLES WERE FLUSHED DURING THE OUTAGE IN AN EFFORT TO IMPROVE DECONTAMINATION OF THE FINAL PRODUCT. OPERATIONS WERE RESUMED DECEMBER 13 AND WERE CONTINUOUS THROUGHOUT THE REMAINDER OF THE MONTH.

TWO SEVERE PROCESS UPSETS OCCURRED DURING THE REMAINDER OF THE MONTH. ON DECEMBER 16, INCREASED PROCESSING RATES CAUSED THE 1C COLUMN TO FLOOD, AND APPROXIMATELY 3,000 GALLONS OF ORGANIC MATERIAL CONTAINING HIGH GAMMA ACTIVITY WAS RELEASED TO THE FINAL URANIUM CYCLE EQUIPMENT. THE FINAL URANIUM CYCLE WAS SHUT DOWN FOR 16 HOURS TO TRANSFER THIS ORGANIC MATERIAL TO A STORAGE TANK.

THE SECOND PROCESS UPSET OCCURRED ON DECEMBER 24 WHEN THE PROCESSING OF REWORK MATERIAL CAUSED AN INCREASE IN GAMMA ACTIVITY THROUGHOUT THE PLANT.

THE PLUTONIUM ANION EXCHANGE EQUIPMENT WAS SHUT DOWN FOR APPROXIMATELY 24 HOURS ON DECEMBER 22 FOR REPAIR OF A VALVE FAILURE CAUSED BY RESIN PLUGGING OF THE FEED LINE.

ALL OF THE URANIUM PRODUCED DURING THE MONTH REQUIRED REWORK OR SILICA-GEL TREATMENT. FIFTY-FIVE PERCENT OF THE PLUTONIUM EXCEEDED SPECIFICATIONS AND REQUIRED REWORK OR BLENDING.

WASTE LOSSES TOTALLED 0.49% OF THE PLUTONIUM THROUGHOUT AND 0.21% OF THE URANIUM THROUGHPUT. HIGH WASTE LOSSES RESULTED FROM THE DISCARD OF DECONTAMINATION FLUSHES OF THE SOLVENT EXTRACTION EQUIPMENT, ABNORMALLY HIGH CENTRIFUGE CLEAN-OUT LOSSES AND PROCESS ADJUSTMENTS TO IMPROVE DECONTAMINATION.

IODINE EMISSIONS AVERAGED 0.75 CURIES PER DAY.

REDOX - THE PLANT PROCESSED 125 TONS OF NORMAL URANIUM AND 9.8 TONS OF 94 METAL.

OPERATIONS WERE SUSPENDED NOVEMBER 30 FOR THE FIRST NEPTUNIUM RECOVERY OUTAGE ATTEMPTED AT THE REDOX PLANT. A TOTAL OF 70 GRAMS OF NEPTUNIUM WAS SEPARATED. THE PLANT RESUMED OPERATION DECEMBER 7 ON NORMAL-URANIUM FEED MATERIAL TO ASSIST PUREX IN MEETING QUARTERLY PRODUCTION FORECASTS.

OPERATIONS WERE CONDUCTED ON A FIVE-DAY-PER-WEEK BASIS; HOWEVER, SOME WEEKEND WORK WAS NECESSARY TO REWORK WASTE SOLUTIONS CONTAINING TETRAVALENT PLUTONIUM POLYMER WHICH FORMED IN THE FEED STREAM.

TWO BRIEF UNSCHEDULED OUTAGES WERE NECESSARY DURING THE MONTH FOR PROCESS ADJUSTMENTS TO LOWER PLUTONIUM WASTE LOSSES.

SOME DIFFICULTY WAS EXPERIENCED WITH THE GAMMA ACTIVITY OF BOTH PRODUCT STREAMS. THE PLUTONIUM PRODUCT WAS MAINTAINED WITHIN SPECIFICATIONS BY CONTINUED OZONATION. A PORTION OF THE URANIUM OUTPUT REQUIRED BLENDING.

WASTE LOSSES AVERAGED 0.52% OF THE PLUTONIUM THROUGHPUT AND 0.12% OF THE URANIUM THROUGHPUT. HIGH WASTE LOSSES WHICH WERE EXPERIENCED AT THE BEGINNING OF THE MONTH RESULTED FROM THE TETRAVALENT PLUTONIUM POLYMER WHICH HAD FORMED IN THE DISSOLVER SOLUTION.

IODINE EMISSIONS AVERAGED 0.41 CURIES PER DAY.

UO₃ - PLANT PRODUCTION OF NORMAL UO₃ TOTALLED 553 TONS, 110.6% OF FORECAST. ENRICHED UO₃ PRODUCTION TOTALLED 48.2 TONS, 102.6% OF FORECAST. ALL SHIPPING SCHEDULES WERE MET.

FOR EACH TON OF URANIUM PROCESSED, 938 POUNDS OF NITRIC ACID WAS RECOVERED AT AN AVERAGE CONCENTRATION OF 45%. THE LOW RECOVERY IS BELIEVED DUE TO AN INVENTORY ERROR IN NOVEMBER WHICH RESULTED IN AN EXCESSIVE RECOVERY FIGURE FOR THAT MONTH.

TWO SUCCESSFUL AUTOMATED SHUTDOWNS WERE MADE ON K CALCINER DURING THE MONTH.

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PLANT OPERATIONS (CONT'D)

RESEARCH AND DEVELOPMENT

NEPTUNIUM PROCESSING - APPROXIMATELY 1,090 GRAMS OF NEPTUNIUM WAS SEPARATED AT PUREX DURING THE RUN BEGUN IN NOVEMBER AND COMPLETED DECEMBER 3. DURING THE FIRST WEEK OF DECEMBER THE FIRST NEPTUNIUM SEPARATION RUN AT REDOX WAS MADE. APPROXIMATELY 70 GRAMS OF NEPTUNIUM WAS SEPARATED DURING THIS RUN. IN ADDITION TO THE ABOVE, 420 GRAMS OF NEPTUNIUM AS NITRATE WAS RECEIVED FROM PADUCAH AND 335 GRAMS WAS RECEIVED FROM SAVANNAH RIVER AS OXIDE.

EIGHT FABRICATED PALM ELEMENTS WERE SHIPPED TO SAVANNAH RIVER ON DECEMBER 14 AS PART OF CAMPAIGN VIII. A NINTH ELEMENT COLLIDED WITH THE GUIDE BLOCK DURING EXTRUSION AND WAS SEVERELY GOUGED, REQUIRING REPROCESSING. DURING THE LAST WEEK OF DECEMBER THE HYDRAULIC SYSTEM FOR THE EXTRUSION PRESS FAILED. AT MONTH END, REPAIRS WERE IN PROCESS AND WERE EXPECTED TO BE COMPLETED SHORTLY.

SOME OF THE ELEMENTS IN EARLIER CAMPAIGNS WERE FABRICATED USING 100 MESH Al_2O_3 IN THE $Al-Al_2O_3$ NOSE AND TAIL SECTIONS. THIS GAVE A ROUGH APPEARING EXPOSED END, WHICH CAUSED SOME CONCERN TO SAVANNAH RIVER FROM A POROSITY STANDPOINT. THE FIRST EIGHT ELEMENTS OF CAMPAIGN VIII WERE FABRICATED FROM THE SAME 100-MESH Al_2O_3 ; BUT BOTH ENDS OF THE ELEMENTS WERE COVERED BY WELDING ALUMINUM DISCS TO THE ENDS. ALL OTHER ELEMENTS OF THIS CAMPAIGN ARE BEING MADE WITH -325 MESH Al_2O_3 . THESE ELEMENTS ARE SATISFACTORY.

DURING THE FIRST NEPTUNIUM SEPARATION RUN AT REDOX, 70 GRAMS WERE RECOVERED FOR FURTHER PROCESSING. THIS WAS 37% OF THE TOTAL NEPTUNIUM ESTIMATED TO HAVE BEEN IN THE COLUMNS AT THAT TIME. THESE RESULTS ARE ENCOURAGING. THE PROCEDURE CONSISTED OF THE FOLLOWING STEPS:

1. ALL THE SALT SOLUTIONS CONTAINING NEPTUNIUM WERE COLLECTED AND REPROCESSED THROUGH THE FIRST EXTRACTION CYCLE USING A SPECIAL FLOWSHEET TO REDUCE THE VOLUME AND FISSION PRODUCT CONTAMINATION.
2. THE SOLUTION WAS MADE ACID DEFICIENT AND PROCESSED THROUGH THE SECOND CYCLE WHERE URANIUM AND PLUTONIUM WERE EXTRACTED BY THE SOLVENT. THE NEPTUNIUM REMAINED IN THE AQUEOUS SOLUTION WHICH WAS SENT TO THE SECOND STAGE FEED TANK.
3. THE AQUEOUS SOLUTION WAS THEN REPROCESSED THROUGH THE SECOND CYCLE ON AN ACID FLOWSHEET AND THE NEPTUNIUM WAS EXTRACTED BY THE SOLVENT, SEPARATING IT FROM THE BULK OF THE FISSION PRODUCTS.
4. NEXT, THE NEPTUNIUM SOLUTION WAS SENT TO THE 1B (PARTITIONING COLUMN) WHERE THE NEPTUNIUM WAS STRIPPED INTO THE ACID DEFICIENT AQUEOUS SALT SOLUTION.
5. THE FINAL STEP CONSISTED OF SENDING THE NEPTUNIUM SOLUTION THROUGH THE PU CYCLE USING THE NORMAL PLUTONIUM FLOWSHEET.

THE OVER-ALL ARITHMETICAL FISSION PRODUCT DECONTAMINATION FACTOR WAS 1×10^7 RESULTING IN 1×10^4 MICROCURIES GROSS GAMMA PER GRAM NEPTUNIUM IN THE PRODUCT.

GETR GRAPHITE IRRADIATIONS - THE H-2 EXPERIMENT IN THE E-7 POSITION OF THE GETR WAS DISCHARGED DECEMBER 5 AFTER A CALCULATED EXPOSURE OF 1.2×10^{21} NVT. THE EXPERIMENTAL ASSEMBLY WAS FOUND TO BE BADLY DETERIORATED WITH SOME GRAPHITE SHATTERED. HOWEVER, MANY OF THE SAMPLES APPEAR TO BE IN SATISFACTORY CONDITION FOR MEASUREMENT. THE MECHANISM RESPONSIBLE FOR DETERIORATION OF THE CAPSULE IS THOUGHT TO BE OVERHEATING, WHICH IN TURN RESULTED FROM UNDERESTIMATING THE GAMMA HEATING EFFECT. LABORATORY STUDIES OF POSSIBLE MECHANISMS, INVOLVING SUCH FACTORS AS CHEMICAL OR METALLURGICAL REACTIONS AND THERMAL SHOCK ARE UNDER WAY WHICH WILL AID IN A MORE COMPLETE DETERMINATION OF THE CAUSES. THE GRAPHITE LUMPS IN THE CAPSULE ARE BEING ANALYZED TO DETERMINE IF A METAL-GRAPHITE REACTION OCCURRED.

FISSION PRODUCT RECOVERY - A FISSION PRODUCT RECOVERY TEST RUN WAS COMPLETED AT PUREX DURING THE NEPTUNIUM PROCESSING PERIOD EARLY IN DECEMBER. THIS WAS THE MOST PROMISING RUN TO DATE. GREATER THAN 90% OF THE CERIUM WAS REMOVED DURING THE SULFATE PRECIPITATION STEP. THE IRON CONTENT OF THE SULFATE PRODUCT INDICATED AN IRON SEPARATION FACTOR OF GREATER THAN 60. HOWEVER, THE SECOND PRECIPITATION TEST (PEROXY ACETATE) WAS INVALIDATED BY AN OPERATING ERROR WHICH PRODUCED A PH OF 1.6 INSTEAD OF THE PRESCRIBED 4 TO 5. THE RUN TO THAT POINT HAD INDICATED MUCH MORE SUCCESSFUL CONTROL OF PH THAN HERETOFORE OBTAINED.

PLANT ACQUISITION AND CONSTRUCTIONPROJECT AND DESIGN STUDIES

CA-747, PLUTONIUM FABRICATION PILOT PLANT - DESIGN HAS BEEN COMPLETED. THE FACILITY IS UNDER PARTIAL OCCUPANCY BY THE USER WITH THE REMAINING INSTALLATION OF EQUIPMENT BEING HANDLED BY A CPFF CONTRACTOR.

CGI-791, REACTOR CONFINEMENT - THE GENERAL ELECTRIC COMPANY HAS COMPLETED AND TRANSMITTED TO AEC-HDD A STUDY ON SEALING EXISTING BUILDINGS. THE STUDY INDICATES THAT MAINTAINING A SLIGHT NEGATIVE BUILDING PRESSURE IS THE MOST PRACTICAL METHOD OF CONTROLLING RELEASE RESULTING FROM INCIDENTS. AS SOON AS SUPPORTING DOCUMENTS ARE RECEIVED THE STUDY WILL BE TRANSMITTED TO THE WASHINGTON OFFICE.

THE A. D. LITTLE COMPANY HAS STARTED TESTING ACTIVATED CHARCOAL AS FILTER MEDIA FOR HALOGEN REMOVAL. THE TEST UNITS ARE TWO INCHES THICK AND GIVE A PRESSURE DROP OF 0.2" WATER. TO DATE, RESULTS INDICATE THAT THIS MEDIUM IS SIGNIFICANTLY BETTER THAN THE SILVER-COATED COPPER UNITS PREVIOUSLY TESTED.

CG-775, WATER PLANT EXPANSION 100-KW AND KW - A REVISED DESIGN IMPELLER IS TO BE SHIPPED ABOUT MID-JANUARY TO REPLACE THE IMPELLER THAT SHOWED EXCESSIVE CAVITATION IN THE PROTOTYPE HIGH-LIFT PUMP.

A NEW PROPOSAL (CGI-883) IS BEING PREPARED REQUESTING FUNDS FOR MODIFYING A PROCESS PUMP IN 100-KW AND FOR PROVIDING TOTAL DESIGN OF THE PROJECT.

CGI-802, PROCESS SAFETY MONITORING SYSTEM - HIGH-SPEED SCANNING TYPE FOR TEMPERATURE MONITORING - FIRST PHASE DESIGN AND FABRICATION OF A 116-POINT SYSTEM HAS BEEN AWARDED TO EPSCO, INC., THROUGH THEIR SUBSIDIARY MONITOR SYSTEMS, INC. SYSTEM DESIGN IS COMPLETE, AND WORK IS PROCEEDING ON VARIOUS SUBASSEMBLIES TO PREPARE THEM FOR TESTING.

CAH-822, PRESSURIZED GAS-COOLED LOOP FACILITY - THIS FACILITY IS TO BE INSTALLED IN THE PLUTONIUM RECYCLE TEST REACTOR. DESIGN AND FABRICATION OF THE OUT-OF-PILE (PHASE I) PORTION IS BEING CONTINUED BY THE STRUTHERS-WELLS CORPORATION. THE GENERAL ELECTRIC COMPANY IS 44% COMPLETE WITH DESIGN ON THE IN-PILE PORTION (PHASE II).

CGC-830, PLANT MODIFICATION FOR REPROCESSING NONPRODUCTION REACTOR FUELS - FOLLOWING THE WASHINGTON HEADQUARTERS REQUEST, DESIGN HAS BEEN STOPPED PENDING A STUDY BY PRIVATE INDUSTRY ON THE POSSIBILITY OF COMMERCIAL PROCESSING THESE FUELS. THE PROJECT IS BEING RE-EVALUATED ON THIS BASIS.

CAH-870, FACILITIES FOR RECOVERY OF RADIOACTIVE CERIUM - 325 BUILDING - THE ARCHITECT-ENGINEER HAS COMPLETED PRELIMINARY DESIGN AND IS 51% COMPLETE, ON SCHEDULE, FOR DETAILED DESIGN.

CGC-872, PALMOLIVE FABRICATION AND REPROCESSING FACILITIES - 200 EAST AREA - ADVICE HAS BEEN RECEIVED THAT NO FURTHER ACTION IS REQUIRED ON THIS PROJECT. AS A COMPLETION ITEM, A STUDY IS BEING MADE TO DETERMINE THE BEST FORM FOR SHIPPING PALM.

AEC-167, PLUTONIUM RECYCLE TEST REACTOR - A REVISED CONSTRUCTION SCHEDULE IS BEING PREPARED TO INCLUDE SCOPE CHANGES THAT HAVE OCCURRED DURING PROGRESS OF THE PROJECT. THE SCHEDULE WILL SHOW THE SAME COMPLETION DATE AS THE PREVIOUS SCHEDULE.

AEC-175, NEW CENTRAL INDUSTRIAL FIRE STATION - DETAILED DESIGN HAS BEEN COMPLETED. THE BID PACKAGE IS TO BE ISSUED EARLY IN JANUARY FOR A BID OPENING ON JANUARY 26.

GROUP 1
EXCLUDED FROM AUTOMATIC
DECLASSIFICATION
DECLASSIFIED

PLANT CONSTRUCTION

MAJOR CONSTRUCTION - THE STATUS OF MAJOR CONSTRUCTION IS INDICATED BELOW:

PROJECT	PROJECT PROPOSAL NUMBER	MAJOR PROJECTS				DESIGN % ACTUAL COMPL.	PRESENT WORKING ESTIMATE (THOUSANDS)
		ACTUAL STARTING DATE	SCHED. COMPL. DATE	CONSTRUCTION			
				COMPLETION			
				% SCHED.	% ACTUAL		
PRTR	AEC-167	3-6-58	8-30-60	73	63	100	\$12,750
RMC BUTTON LINE, 234-5	CG-734	2-18-58	7-15-60	82 <u>1/</u>	82 <u>1/</u>	100	1,845
PU. FAB PILOT PLANT	CA-747	3-6-58	11-1-60	85	87	95	4,230
HIGH LEVEL RADIOCHEM. FACILITY	CA-749	8-14-58	1-1-60	100	100	100	960
MET. DEV. FAC., 306 BLDG. ADDITION	CA-744	3-20-59	9-1-60	38	30	100	2,685
REACTOR CONFINEMENT	CGI-791	3-31-59	3-15-61	20	20	68 <u>1/</u>	4,200 <u>2/</u>
306 BLDG. PILOT PLANT MODIF.	CGF-810	1-29-59	4-1-60	82	73	100	755
CRITICAL MASS LAB.	CG-731	6-4-59	6-30-60	52	56	100	1,000
ADD'L PU. FAB. FAC., 234-5 BLDG.	CGC-811	8-24-59	7-1-61	3	3	77	3,500
NEW PROD. REACTOR	CAI-816	5-1-59	10-1-62	0.3	0.3	33	145,000
NEW FUEL CLAD. FAC.	CAF-847	7-27-59	12-31-60	59	56	11 <u>3/</u>	1,000 <u>4/</u>

^{1/} BASED ON REVISED SCOPE OF WORK.^{2/} PORTION OF \$6,000,000 CONFINEMENT PROGRAM.^{3/} DESIGN IS BASED ON \$3,600,000 PROJECT.^{4/} PORTION OF \$3,600,000 PROJECT.CGI-791, REACTOR CONFINEMENT PROGRAM, CONTRACT AT(45-1)-687 -

PHASE I, FOG SPRAY SYSTEMS, J. A. JONES CONSTRUCTION COMPANY. ACCEPTANCE TESTS HAVE BEEN RUN ON THE FOG SPRAY SYSTEMS IN ALL AREAS, AND ONLY MINOR EXCEPTIONS REMAIN TO BE COMPLETED.

PHASE II-A, J. A. JONES CONSTRUCTION COMPANY. FILTERED WATER LINES HAVE BEEN REROUTED IN 100-F, 100-DR, 100-D, AND 100-B AREAS.

IN 100-KE AREA THE 105 BUILDING UNDERGROUND POWER CABLES FROM 105-KE AND 115-KE BUILDINGS HAVE BEEN COMPLETED.

IN 100-KW THE CONCRETE FLOOR, CENTER WALL, OUTSIDE WALLS, AND ROOF SLAB FOR THE AIR DUCTS HAVE BEEN PLACED. REROUTING OF THE UNDERGROUND POWER CABLES FROM 105-KW AND 115-KW HAVE BEEN COMPLETED.

PHASE II-B, CONTRACT AT(45-1)-1483, FILTER BUILDING, R. B. MILES CONSTRUCTION COMPANY. EXCAVATION WAS COMPLETED AND THE FIRST FOUNDATION CONCRETE PLACED IN 100-F AREA. THE EXCAVATION FOR THE FILTER BUILDING IN THE 100-H AREA WAS STARTED ON DECEMBER 14, AND IN THE 100-C AREA ON DECEMBER 28, 1959.

CONTRACT AT(45-1)-1446, PROJECT CG-731, CRITICAL MASS LABORATORY, H. S. WRIGHT CONSTRUCTION CO. THE PIPE FITTERS, WHO WALKED OFF THE JOB ON DECEMBER 9, 1959, IN A DISPUTE WITH THE SHEETMETAL WORKERS, HAVE NOT RETURNED TO WORK. THERE HAVE BEEN NO SIGNIFICANT DELAYS TO DATE; HOWEVER, THE WALKOUT COULD BECOME A DELAYING FACTOR IN THE NEAR FUTURE. (SEE LABOR RELATIONS, PART II)

CONTRACT AT(45-1)-1477, PROJECT AEC-167, PRTR, CUSTODIS CONSTRUCTION COMPANY.

PHASE II - THE CONCRETE CHIMNEY REACHED ITS MAXIMUM HEIGHT OF 161 FEET ON DECEMBER 22, 1959.

CONTRACT AT(45-1)-1410, PROJECT AEC-167, PRTR, SHAW & ESTES.

PHASE III - INSTALLATION OF THE PRIMARY COOLANT RECIRCULATION PIPING WAS STARTED DURING THE WEEK ENDING DECEMBER 30, 1959.

THE WELDS ON THE INNER BIOLOGICAL SHIELD ARE BEING CHECKED ON A TWO-SHIFT BASIS BY THE HELIUM SNIFFER METHOD.

THE CALANDRIA IS COMPLETE, AND WILL BE DELIVERED TO THE PRTR SITE WHEN REQUIRED BY SHAW & ESTES.

NINETY-FIVE ZIRCONIUM TUBES FOR PRTR HAVE BEEN RECEIVED FROM THE TUBE REDUCING CORPORATION.

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PLANT CONSTRUCTION (CONT'D)

CONTRACT AT(45-1)-1442, PROJECT CGH-790, MATERIAL RECEIVING AND STORAGE FACILITY ADDITION, BUILDING NO. 327, 300 AREA, JENSEN-RASMUSSEN & COMPANY. THE SIDING AND ROOF DECKING FOR THE 327 BUILDING ADDITION ARRIVED ON DECEMBER 18, 1959.

CONTRACT AT(45-1)-687, PROJECT CGF-810, 306 BUILDING PILOT PLANT MODIFICATION, J. A. JONES. THE LAST CARLOAD OF PARTS FOR THE 2750-TON PRESS, PURCHASED FROM THE LOWEY HYDROPRESS CORPORATION, ARRIVED DECEMBER 18, 1959.

CONTRACT AT(45-1)-1479, PROJECT CGC-850, PUREX WASTE CRIB NO. 216-A, AND RELATED WORK, 200-EAST, FRANK H. LOHSE. BENEFICIAL USE OF CRIB NO. 216-A WAS OBTAINED DECEMBER 12, 1959.

CONTRACT AT(45-1)-1455, PROJECT CAI-816, NEW PRODUCTION REACTOR, KAISER ENGINEERS.

SUBCONTRACTS:

SC-2 - HEAD MECHANICAL, INC., COMPLETED WORK ON THE T-C WATER LINE DECEMBER 21, 1959.

SC-4 - THE 13.8 KV TRANSMISSION LINE AND DISTRIBUTION LINES FOR TEMPORARY POWER FOR THE NPR AREA WAS ENERGIZED BY TULLAR POWER CONSTRUCTION COMPANY ON DECEMBER 1, 1959.

SC-8 - PROJECT CAE-852 - THE SITE WORK ON SUPPORTING TELEPHONE FACILITIES FOR NPR WAS BEGUN DECEMBER 7, 1959, BY TULLAR POWER CONSTRUCTION COMPANY.

SC-10 - WORK ON THE RIVER WATER PUMP HOUSE WAS STARTED DECEMBER 16, 1959, BY JENSEN-RASMUSSEN & COMPANY AND B-E-C-K CORPORATION.

SC-11 - GEORGE A GRANT STARTED WORK ON THE T-C BUILDINGS AND FACILITIES DECEMBER 14, 1959.

BIDS HAVE BEEN EITHER INVITED OR RECEIVED FOR LUMP-SUM CONSTRUCTION ON 1734 STORAGE FACILITIES, MODIFICATIONS TO THE WHITE BLUFFS TUBE SHOP, AND ARCHITECTURAL MODIFICATIONS TO THE 2101 BUILDING.

THE FIRST ZIRCONIUM TUBE FABRICATED UNDER THE CONTRACT WITH THE HARVEY ALUMINUM COMPANY WAS DELIVERED TO HANFORD ON DECEMBER 16, 1959.

CONTRACT AT(45-1)-1473, PROJECT CGC-813, PLUTONIUM RECOVERY FACILITIES, BUILDING NO. 232-Z, 200-W, GEORGE A GRANT, INC. ASBESTOS CEMENT PIPE FITTINGS, WHICH HAD BEEN DELAYING PROGRESS ON THIS CONTRACT, WERE RECEIVED DECEMBER 29, 1959.

CONTRACT AT(45-1)-1466, PROJECT CAH-837, ADDITION TO 141-FS BUILDING, 100-F AREA, RAY ASHCRAFT. BENEFICIAL USE OF THE BUILDING BY THE USING DEPARTMENT WAS ASSUMED ON DECEMBER 18, 1959.

PROCUREMENT

THE ATOMIC ENERGY COMMISSION APPROVED 36 AWARDS MADE BY GENERAL ELECTRIC COMPANY IN THE TOTAL AMOUNT OF \$3,102,511.22. AND FIVE AWARDS MADE BY KAISER IN THE TOTAL AMOUNT OF \$5,231,566.

THE ATOMIC ENERGY COMMISSION PLACED 266 PURCHASE ORDERS FOR THE TOTAL AMOUNT OF \$320,784.14.

AMONG THE LARGER ORDERS WERE:

1. GENERAL ELECTRIC COMPANY PLACED AN ORDER WITH THE COMMERCIAL STEEL FABRICATORS FOR THE PURCHASE OF FILTER FRAME ASSEMBLIES IN THE AMOUNT OF \$91,918. THESE ASSEMBLIES WILL BE USED ON PROJECT CGI-791.
2. KAISER ENGINEERS PLACED AN ORDER FOR: THE MAIN HEAT EXCHANGERS IN THE AMOUNT OF \$4,600,000; A WATER SCREEN WITH THE LINK BELT COMPANY IN THE AMOUNT OF \$151,287; AND SIX CIRCULATING WATER PUMPS (4 ELECTRIC AND TWO DIESEL DRIVEN) FROM BYRON JACKSON PUMPS, INC., IN THE AMOUNT OF \$403,900.

PROPERTY

BUILDING 1101 AT CAMP HANFORD WAS TRANSFERRED FROM THE WALLA WALLA DISTRICT, CORPS OF ENGINEERS, TO THE ATOMIC ENERGY COMMISSION ON DECEMBER 10, 1959. THE BUILDING WILL BE USED BY KAISER ENGINEERS AS A JOB SITE OFFICE BUILDING.

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CONTRACTS

THREE CONTRACTS WERE AWARDED DURING THE MONTH OF DECEMBER BY AEC:

1. FRANK H. LOHSE WAS AWARDED CONTRACT AT(45-1)-1490, CHEMICAL PROCESS FACILITIES AND RELATED WORK, BUILDING NO. 306, 300 AREA, FOR \$149,950.
2. W. G. CLARK CONSTRUCTION COMPANY WAS AWARDED CONTRACT AT(45-1)-1491 FOR ADDITIONS AND ALTERATIONS TO BUILDING NO. 234-5 FOR INSPECTION FACILITY, 200-WEST AREA, FOR \$406,000.
3. RANDOLPH PLUMBING & HEATING COMPANY WAS AWARDED CONTRACT AT(45-1)-1493 FOR WATER LINE REPLACEMENT, WHITE BLUFFS, IN THE AMOUNT OF \$39,439.

KAISER ENGINEERS AWARDED ONE SUBCONTRACT (SC 111):

GEORGE A. GRANT, INC., FOR A AND ADMINISTRATION BUILDING, WAREHOUSE, AND OTHER T&C FACILITIES, IN THE AMOUNT OF \$224,400.

NPR INFORMATION CENTER

FINAL WORK IS BEING COMPLETED ON EXPANDING THE NPR INFORMATION CENTER IN THE RICHMAN ADMINISTRATION BUILDING OF HANFORD WORKS.

AIR MAIL

DECLASSIFIED

TO: Director, Division of Production
USAEC, Washington, D. C.

FROM: J. E. Travis, Manager, Hanford Operations
Office, USAEC, Richland, Washington

SUBJECT: MONTHLY STATUS AND PROGRESS REPORT

SYMBOL: B:RHL

JAN 11 1960

Enclosed herewith is Part II ("Official Use Only" portion)
of subject report for the month of .
The "Secret" portion, Part I, is forwarded as a separate
report.

Enclosure:
Monthly Status and Progress Report, Part II

DISTRIBUTION:

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- 1 Copy - Process Engineering & Manufacturing Division
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- 1 Copy - Classified Files (Reading File)
- 1 Copy - Budget Division

AIR MAIL

OFFICIAL USE ONLY

U. S. ATOMIC ENERGY COMMISSION
HANFORD OPERATIONS OFFICE

MONTHLY STATUS AND PROGRESS REPORT

DECEMBER 1959

PART II

100-100000-100000

[REDACTED]

MONTHLY STATUS AND PROGRESS REPORT

HANFORD OPERATIONS OFFICE

DECEMBER 1959

PART II

C O N T E N T S

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<u>LABOR RELATIONS</u>	4
<u>PERSONNEL (ON-SITE)</u>	4

[REDACTED]

COMMUNITY OPERATIONS

GOVERNMENT HOUSING:

THE FOLLOWING ARE HOUSING STATISTICS FOR DECEMBER 1959:

	<u>DECEMBER 1</u>	<u>DECEMBER 31</u>
A. TOTAL HOUSES AVAILABLE FOR OCCUPANCY	46	24
1. TOTAL HOUSES OCCUPIED	18	15
2. TOTAL HOUSES UNOCCUPIED	28	9
(A TOTAL OF 3,786 SINGLE HOUSES AND 1,007 DUPLEXES SOLD - 5,800 UNITS.)		
B. TOTAL APARTMENTS AVAILABLE FOR OCCUPANCY	134	134
1. TOTAL APARTMENTS OCCUPIED	133	133
2. TOTAL APARTMENTS UNOCCUPIED	1	
C. THREE DORMITORIES ARE NOW IN OPERATION BY A COMMERCIAL OPERATOR.		

PRIVATE HOUSING UNITS (WHERRY ACT):

	<u>COLUMBIA HEIGHTS</u>		<u>SPOKANE HOUSING</u>		<u>TOTAL UNITS</u>
	<u>HOUSES</u>	<u>APTS.</u>	<u>HOUSES</u>	<u>APTS.</u>	
TOTAL UNITS	280	220	400	100	1,000
RENTED	149	120	396	97	752
VACANT	131	100	4 ✓	13	248

THE REHABILITATION OF THE COLUMBIA HEIGHTS APARTMENTS IS NOW UNDER WAY. THE PLAT FOR THE 280 HOUSES WAS APPROVED BY THE CITY PLANNING COMMISSION AND WAS SUBMITTED TO THE COUNTY FOR RECORDING. THE COUNTY HAS REFUSED TO ACCEPT THE PLAT FOR RECORDING BECAUSE OF A STATUTORY REQUIREMENT THAT ALL BACK TAXES MUST BE PAID. THE FHA CONTENDS THAT THE HOUSING HAS BEEN LISTED AS PERSONALTY AND THE NATIONAL HOUSING ACT DOES NOT PERMIT PAYMENTS IN LIEU OF TAXES ON PERSONALTY.

DISPOSAL:

ON DECEMBER 11, 1959, THE HHFA ADVERTISED FOR SALE 106 VACANT RESIDENTIAL, COMMERCIAL AND INDUSTRIAL PROPERTIES.

ON DECEMBER 18, 1959, HHFA ADVERTISED 11 UPTOWN COMMERCIAL PROPERTIES AND ONE LIGHT INDUSTRIAL PROPERTY FOR SALE.

A LIST OF TEN COMMERCIAL AND TWO NONCOMMERCIAL PRIORITY APPLICANTS WAS POSTED ON DECEMBER 24. THE APPEAL PERIOD CLOSES JANUARY 4, 1960.

THE HHFA OFFICE WAS MOVED FROM BUILDING W-16 TO THE GE HOUSING OFFICE (BUILDING 1116) ON DECEMBER 21.

THE REPORT OF SALES FOR THE MONTH, ENDING DECEMBER 31, 1959, IS AS FOLLOWS:

	<u>TOTAL INVENTORY</u>	<u>SALES CLOSED</u>		<u>UNSOLD</u>	<u>GOOD FAITH DEPOSITS</u>
		<u>PAST MONTH</u>	<u>TOTAL</u>		
<u>PRIORITY PROPERTIES</u>					
SINGLE HOUSES	3,788	0	3,786	2	1
DUPLEX HOUSES	1,018	11	1,007	11	8
COMMERCIALS	127	9	42	35	10
CHURCHES	6	0	6	0	0
NON-PROFIT	7	1	3	4	0
RESIDENTIAL LOTS	97	0	97	0	0
DORMITORY SITES	1	0	0	1	0
WHERRY SITES	1	0	0	1	0
<u>BID PROPERTIES</u>					
APARTMENTS	17	0	0	17	0
RESIDENTIAL LOTS	108	5	57	51	2
RESIDENTIAL TRACTS	87	4	54	33	10
COMMERCIALS	24	0	5	19	0
INDUSTRIALS	40	7	18	22	1
FLOOD PLAINS	39	16	32	7	0
TOTAL	<u>5,360</u>	<u>53</u>	<u>5,107</u>	<u>253</u>	<u>32</u>

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[REDACTED]

COMMUNITY OPERATIONS (Cont'd)

HOSPITAL

KADLEC METHODIST HOSPITAL SUBMITTED THEIR REQUEST FOR FUNDS FOR CALENDAR YEAR 1960 IN THE AMOUNT OF \$53,720.95. THIS AMOUNT COMPARES FAVORABLY WITH THE BUDGETED ESTIMATE OF \$52,000. AFTER THIS PAYMENT IS MADE THERE REMAINS A CONTRACT BALANCE OF \$66,774.64 AVAILABLE FOR CALENDAR YEAR 1961 ASSISTANCE PAYMENTS.

MUNICIPAL

A CHECK IN THE AMOUNT OF \$80,000 WAS SENT AS AN ASSISTANCE PAYMENT TO THE CITY OF RICHLAND FOR THE MONTH OF DECEMBER.

REAL ESTATE

THE YAKIMA OFFICE OF THE DEPARTMENT OF JUSTICE WROTE ITS WASHINGTON OFFICE RECOMMENDING AN APPEAL OF JUDGE LINDBERG'S ACCEPTANCE OF THE COMMISSIONERS' AWARDS ON THE WAHLUKE SLOPE. THERE STILL ARE PENDING 161 TRACTS, WITH 28,193 ACRES, TO BE SETTLED ON WAHLUKE SLOPE.

LABOR RELATIONS

BECAUSE OF A JURISDICTIONAL DISPUTE WITH THE SHEETMETAL WORKERS, FOUR PIPEFITTERS EMPLOYED BY UNIVERSITY PLUMBING AND HEATING, MECHANICAL SUBCONTRACTOR TO HOWARD S. WRIGHT CO., FIXED-PRICE CONTRACTOR ON THE CRITICAL MASS LABORATORY FACILITIES PROJECT HAVE REFUSED TO REPORT FOR WORK SINCE DECEMBER 9, 1959. THE DISPUTE INVOLVES THE INSTALLATION OF SCHEDULED PIPING FOR VENTING PURPOSES.

THE INTERNATIONAL OFFICES OF THE PLUMBERS UNION AND THE NATIONAL JOINT BOARD FOR SETTLEMENT OF JURISDICTIONAL DISPUTES HAVE ISSUED DIRECTIVES TO THE WORKERS TO RESUME WORK. TO DATE, HOWEVER, THE MEN HAVE ELECTED NOT TO HONOR THESE REQUESTS.

PERSONNEL (ON-SITE)

	<u>DECEMBER 1</u>	<u>DECEMBER 31</u>
ATOMIC ENERGY COMMISSION	279	279
GENERAL ELECTRIC COMPANY	7,839	7,803
TOTAL CONSTRUCTION PERSONNEL	<u>852</u>	<u>849</u>
TOTAL PROJECT PERSONNEL	<u>8,970</u>	<u>8,931</u>

END

**DATE
FILMED
9/01/92**