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WAR DEPARTMENT
UNITED STATES ENGINEER OFFICE
MANHATTAN DISTRICT
~~KNOX RIDGE, TENNESSEE~~
P. O. Box 1111
Knoxville, Tennessee

IN REPLY
REFER TO

EIDME-a
MD-600.18 (9)

24 January 1944

MEMORANDUM to Brig. Gen. L. R. Groves.

Inclosed are two memoranda prepared for your use on
22 January 1944, that contain information pertinent to Hanford
and the P-9 program.

CLASSIFIED FILE SECTION
U.S. ENGINEER OFFICE
MANHATTAN DISTRICT
DISPATCHED

JAN 25 1944

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K. D. Nichols

K. D. NICHOLS,
Colonel, Corps of Engineers,
District Engineer.

- 2 Incls.:
- Cy. 1 of 6A of Memo, KDN to LRG, 1-21-44 (Hanford)
- Cy. 1 of 8A of Memo (P-9).

CLASSIFICATION CANCELLED
DATE 3/27/61
For the Atomic Energy Commission
W. K. Knapp
Chief, Declassification Branch

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600.1 Hanford 8-6.2

X 88-9.1

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UNITED STATES ENGINEER OFFICE
MANHATTAN DISTRICT
~~XXXXXXXXXXXXXXXXXXXX~~
P. O. Box 1111
Knoxville, Tennessee

21 January 1944

MEMORANDUM to Brig. General L. R. Groves.

1. It is recommended that a decision be made at an early date concerning the desired construction schedule for Hanford. The attached chart shows the number of men required for completing the three operating units at various intervals. The interval shown is in months, the first figure representing the interval between the first and second units and the second figure representing the interval between the second and third units. The total manpower shown is according to the latest revised estimates. These revised estimates represent a considerable increase over previous manpower requirement estimates, and the discrepancy is explained by two factors: first, we did not meet the original labor requirements during the early stages of construction, thereby causing increased requirements to bring the schedule up to date, and, second, the revised figures are based on more nearly completed plans that were not available at the time the first manpower curves were estimated. The remainder of the sheet shows the delivery of final units from Hanford based on the completion date for the third unit. It is to be noted that two sizes of units are assumed. Each "x" represents one unit.

2. It is my recommendation that we attempt to complete all three units at two-month intervals. If this recommendation is not adopted, theoretically there is little difference between the 2-4 and the 2-6 schedule according to production chart, but to provide for contingencies I would again recommend the faster schedule, that is, the 2-4 in lieu of the 2-6. I believe the saving in overhead required for maintaining the du Pont construction organization would be comparable to the cost of providing for the extra housing required for the larger manpower requirement for the faster schedule.

CLASSIFICATION CANCELLED
DATE 2/27/61
For the Atomic Energy Commission
[Signature]

K. D. Nichols
K. D. NICHOLS,
Colonel, Corps of Engineers,
District Engineer.

Incl. 3 - Detassification of each Chart.

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Not officially released by du Pont.
(From Roger Williams' Notes,
19 Jan. 1944 Meeting)

<u>Intervals (Months)</u>	<u>Total Manpower</u>
2-2	48,000
3-3	42,000
4-4	38,000 (Present force 31,500)
2-4	44,000
2-6	40,000

12 Kg Units

<u>Months after File #1 Completed</u>	<u>Intervals</u>		
	<u>2-2</u>	<u>2-4</u>	<u>2-6</u>
13	x	x	x
14	x	x	x
15	xx	x	x
16	x	x	
17	x	x	x
18	x	x	xx
19	x	x	x
20	x	x	x
21	x	x	x
Total Units	10	9	9

18 Kg Units

<u>Months after File #1 Completed</u>	<u>Intervals</u>		
	<u>2-2</u>	<u>2-4</u>	<u>2-6</u>
13	x	x	x
14			
15	x	x	x
16	x		
17	x	x	x
18		x	x
19	x	x	
20	x		x
21	x	x	x
Total Units	7	6	6

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 OFFICE OF FILE
 Chief, Declassification Branch
 1/21/61
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P-9 PROGRAM

Recommendations as to Suspensions of Operations

In the event that it becomes desirable to suspend operations of any of the four P-9 plants, it is recommended that plants be shut down and placed in a "stand-by condition" in the following order:

1. Wabash River Ordnance Works
2. Alabama Ordnance Works
3. Morgantown Ordnance Works
4. Consolidated Mining & Smelting Co.

Wabash River and Alabama Ordnance Works are recommended as first and second in order of shut-down, because operating costs are higher at these plants than at Morgantown and they do not contain electrolytic equipment for processing the material to the final high concentrations such as is located at Morgantown.

Further, it is recommended that the three Ordnance Works P-9 plants be shut down and placed in a "stand-by condition" prior to the shutting down of the CM&S plant for contractual reasons and because experience has shown that a shorter period of time would be required to start up the Ordnance Works plants and place them on a producing basis.

<u>Operating Data</u>	<u>A.O.W.</u>	<u>M.O.W.</u>	<u>W.R.O.W.</u>	<u>C.M.& S.</u>
Design & Capacity of Plants, Lbs./Mo.	1600	800	2400	1200
Approx. Oper. Cost/Mo.*	\$145,000	\$64,000	\$205,000	\$27,000
" No. Oper. Employees	63	69	65	66

*(Recent estimate based on actual operation)

Contractual Data

Alabama, Morgantown and Wabash River Ordnance Works were constructed and are now operating under supplemental agreements to ordnance contracts covering the main plants at each of the plant locations. Operating contracts expired December 31, 1943, and were renewed until June 30, 1944.

* * * * *

The operating contract for the Consolidated Mining & Smelting Plant calls for operation of the plant continuously during a first period of operation until December 31, 1945, or until cessation of hostilities between the United States and the Axis powers, severally or collectively, whichever is sooner. During this time the United States has the right to the entire output of the plant, with CM&S getting only that part which the United States does not require.

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PROCESSES DIVISION, TENNESSEE

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Immediately following the first period of operation, the plant will be maintained by CM&S for two years in a stand-by condition, which period of time is known as the "stand-by" period. During the "stand-by" period, CM&S has a right to operate the plant and take full output of it, less incidental requirements by the United States.

Upon 90 days notice, during the "stand-by" period, the United States may require CM&S to put the plant back on an operating basis and operate it for a three-year period beginning at any time before expiration of 90 days immediately following the stand-by period. This period is known as the "second period of operation". During the "second period of operation", CM&S has a right to 50% of the plant output plus such part of the remainder as is not required by the United States.

In the event the United States becomes involved in hostilities, other than with a country of the British Empire, during the "stand-by" period or during the "second period of operation" the United States shall have priority to purchase the CM&S's portion of the plant output during the "second period of operation."

After termination of the "second period of operation"; or of the "stand-by period" (if the United States has not taken up its option for the "second period of operation") CM&S shall have right to remain in, and hold the plant for a twenty-one year lease period at an annual rent of one percent (1%) of the proceeds of the sale of product during such year.

During lease period CM&S shall have right to purchase the plant either at the then estimated cost of replacement less depreciation calculated at rate normally applied by the United States to war plants, from date of installation to date of commencement of lease period - or (at CM&S's election) to purchase plant for an amount equivalent to highest bonafide bid to United States for sale and removal of the plant.

Throughout lease period the United States shall have priority of purchase as follows:

- a. In event of war between United States and any country, other than a country of the British Empire, to entire output of plant at its maximum capacity.
- b. At all other times, to 50% of output currently available.

CM&S shall always be at liberty to terminate lease period by ninety days notice to United States.

If CM&S has not purchased plant under arrangements mentioned above, or if lease period has been terminated by notice by CM&S, or if lease has been terminated by effluxion of time, the United States shall dismantle the plant and remove it from the CM&S premises, within six months after termination of lease.

Estimated Requirements

Dr. Compton estimates that a minimum of 7 tons of P-9 will be required for pile being built for Hanford tests and that a minimum of 3 tons more will be required (10 tons minimum total) for tests on exponential slurry pile.

Other requirements of P-9 are subject to decisions yet to be made.

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NND 2/18-49
2-27-49
Chief, Classification Branch

