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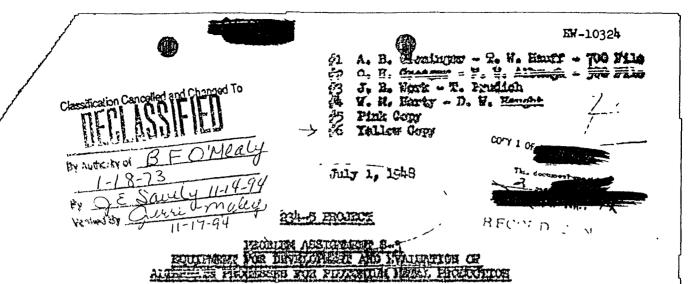


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OBJECTIVE

It is inturied an the objective of this Problem Assignment to assemble equipment to determine the physical and objected characteristics of the compounds numberatured in the current 234-5 process for button production such that these characteristics of compounds produced in alternate processes. With this equipment the feasibility of substituting an alternate process for the current process can be determined. Also, the equipment will be used to determine the most suitable physical and chemical conditions for the operation of the current and alternate processes.

DASIS AND PRESENT STATUS

The 234-5 Process functions as a process for the production of plutonius estal. The process consists of three places, purification, dry-chemistry and reduction. In the purification place the plutonium is received as a mixture of the various valence state nitrates which is reduced to plutonium III nitrate with hydricide sold. A plutonium III contate is producted. The precipitate is apparated from the supermatant and is then transferred to the fay-chemistry place. In the dry-chemistry place. In the dry-chemistry place. In the dry-chemistry place. The introduced is resolute with calcium in the reduction to the total lucride is resolute with calcium in the reduction places to form the plutonium metal. The detailed procedure for the process is contained in Specification letter 234-2, Access for Button Production, from J. B. Work to D. D. Streid, dated October 6, 1947, document Hi-1705.

Although the above process has functional adequately at i.e. Alumna for the projection of plutenium metal its use at Banford presents the experiments for several because the executive time will allow assume because steps to be eliminated from the continuity of the Isolation-Parification Process; a 2.24950ification of the Vaste Disposal and Recovery Processes; and the simple-fication of equipment design and fabrication. As indicated in the Cojective, OO ARMATER intention of the Development Group to provide Sacilities for experimenta-Asim Displayers as to development intention as to enable them potential maintentions on the successfully instituted into the process.

PACTION

Binso Hanford does not have boods and facilities for experimentation on a scale such that information useful for process and dissipline can be developed, the necessary facilities will be provided by modifying the available books in room







38, 41, and 48 of the Isolatica Building. The modification, operation of the open "A" type book to a dry-hox type book will provide an entirement in which the potential books have not ray be controlled. Equippent neckshar to the particular and control of the intensed experiments will be developed, present and installed in the heads. The description of the perfect will be developed, present and installed in the heads. The description of the perfect the perfect the information responsely to extrining the perpend Objective.

PACILITIES RECURSED

The facilities and equipment have been santiaged above and partic to the requirements reconsony for experimentation in all sight gree posts.

ESTIMATED COMPLETION DATE

Work on this Problem Assignment will start immediately and should require four minoration to complete, dependent upon reserving requisitioned supplies and equipment and on the priority obtained for the februarities of contain places of equipment in the 2008 Area shops.

D. W. Haught

APPROVED:

J. Work 7/7/48

J. E. Work Date

DAIL/ED

DECLASSIFED