



100,077

This document No. 1

3 pages
Series A



SECRET

ARMY SERVICE FORCES
UNITED STATES ENGINEER OFFICE
MANHATTAN DISTRICT
P. O. BOX 42
STATION F
NEW YORK, N. Y.

KHTG if 100,077
BOX # 603 209

IN REPLY REFER TO

EIDMM-5a

NO 319.1 Manual

72153H

25 July 1946.

BEST COPY AVAILABLE

Subject: Visit to Units No. 3 and No. 4, Monsanto Chemical Company, Dayton, Ohio, on 22 and 23 July 1946.

MEMORANDUM to Colonel W. D. Fleming, U. S. Engineer Office, Manhattan District, Oak Ridge, Tennessee.

DECLASSIFICATION AUTHORIZED

MALCOLM THEISEN, ANALYST

Name (ADD) - Organization

11-28-94

Date

DECLASSIFICATION RECOMMENDED

George Polking 090

Name (ADC) - Organization

11/23/94

Date

1. As a result of informal discussion with Dr. Malcolm Haring, Mr. J. Burbage, Mr. J. Spicka and others, as well as a general survey of both units, this officer was greatly impressed by the sense of responsibility of the administrative group and the group leaders in regard to health problems as well as the large amount of effort being put forth to solve these problems and the distinct advances made in the past two months despite the pressure of continuous production and research demands. While carrying on production and research, the same facilities are being used to construct and test new designs and operating methods which are to be incorporated in a new plant to be built within approximately two years. Delays in construction of new equipment are due at present to difficulties in securing sufficient construction personnel, e.g. carpenters, glassblowers, and difficulties in securing construction materials, e.g. plywood. Partly as a result of considerable recent turnover, there is a shortage of trained personnel experienced in the problems of postum production. This type of personnel is required not only for production purposes but also for designing and engineering. Despite these difficulties, a portion of the "production line" (super-scrub steps), for "fresh" material, has been redesigned and is now carried out enclosed in "semi-dry boxes" with multiple glove parts. This method has apparently been quite successful in decreasing contamination and indicates the general line that new designs will probably take. At present, a similar set-up for the "Marlite" operations (scrub steps) is being designed as well as a duplicate of the first "enclosure" to take care of "recycled" material. In addition, one of the research groups at Unit No. 3, is well along on construction of a similar arrangement to determine whether the method is feasible for research types of operation. It is anticipated that later designs will be successful in decreasing the number of glove parts as a result of the development of apparatus to carry out transfers, filtration, volatilization, etc., by remote control.

~~RESTRICTED DATA~~
This document contains Restricted Data
as defined in Executive Order 12958
by Act of October 2, 1955
Subject: Operations.

Oak Ridge Operations
REPOSITORY *Records Holding Center*
COLLECTION *KHTG # 209*
BOX No. *HRE: 27 Doc # 100,077*
FOLDER *2714-H Bldg*

SECRET

1155578

~~SECRET~~

Subject: Visit to Units No. 3 and No. 4, Monsanto Chemical Company,
Dayton, Ohio, on 22 and 23 July 1946. 25 July 1946.

Standardization of apparatus for common research procedures is also being studied at Unit No. 3.

2. The "tolerance" urinary level of excretion in use at present is 24 disintegrations per minute per 50 ml. The amount of material which can be produced without having some operating personnel above this level will depend on the rate at which handling procedures can be isolated or enclosed. At present and for some time in the future, it will not be possible to produce 500 units a month without having certain individuals go above this tolerance level. If such a high level of production is required, "rotation" or duplication of personnel will be necessary. Duplication of experienced personnel is made difficult by the fact that permanent positions cannot be promised to all since eventually such duplication should not be necessary. In general, desirable personnel are not satisfied with temporary positions. In the recent past and perhaps in the future, it may be necessary to allow a small number of individuals, with urine counts above 24 but less than 50 disintegrations per minute per 50 ml., to work for short periods of time in "hot" areas. Permission for this must come from the Plant Director as a result of special directive. It was suggested that a detailed record be kept in such cases, of the length of time worked, the urine level at that time, the reason for giving special permission, and the special precautions taken. Such a record may be of considerable legal importance in the future. Responsibility for keeping "above tolerance" individuals out of "hot" areas, rests with Mr. Burbage at Unit No. 4 and with the individual group leaders at Unit No. 3.

3. Other recent constructive steps have been taken. An analytic laboratory and counting room have been built in a warehouse about three miles from Unit No. 3 and the urine analysis and counting group will transfer there in a few days. The Group Leaders at Unit No. 3 meet weekly to discuss Health procedures and problems and take an active rôle in investigating specific problems. The group set up to investigate the methods and significance of biologic assays is functioning actively. All of the alpha ionization chambers for urine counting have been redesigned and rebuilt to facilitate decontamination.

4. The waste disposal problem was discussed with Dr. Haring, Mr. Burbage and the Health Group. It was agreed that all solutions containing significant amounts of active material from the health point of view should be processed at Unit No. 4 (hydrolyzed, precipitated and the contaminated sludge sent to Oak Ridge), and that no such solutions should be put into the drainage system at Unit No. 3. At Unit No. 4, all material disposed of into the sewer should be sampled and, when necessary

~~SECRET~~

~~SECRET~~

Subject: Visit to Units No. 3 and No. 4, Monsanto Chemical Company,
Dayton, Ohio, on 22 and 23 July 1946. 25 July 1946.

diluted before disposal. This includes water used to scrub circulating air. The Health Group will set up a routine monitoring program for the mud at the sewer outlets and for water sampling of the river.

5. The Progress Report of the Health Group will be modified to include detailed information on urinary levels of all personnel. Special comment as to cause and prevention will be made in cases of high counts. More complete discussion of high air contamination results and wipe counts, causes and prevention, will also be included. It should be noted that these results are of significance only insofar as correlation with high urine counts is good and that no "tolerance" levels for these survey procedures have been adopted.

B. S. Wolf

B. S. WOLF,
Captain, Medical Corps.

cc: Dr. Malcolm Haring
Capt. W. R. Clarkson.

~~SECRET~~

1153976