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Report "H"

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DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF, CHEMICAL CORPS
Chemical Corps Technical Committee
Army Chemical Center, Maryland

TSE/5190/blac
13 May 1949

CMLWH

SUBJECT: Chemical Corps Project Program for 1950

TO: Chairman, Chemical Corps Technical Committee

CCTC
ITEM 1990

1. References:

- a. CCTC Item 1882, 14 May 1949
- b. RDB 169/1, Classification System for the Master Plan, 23 Dec 1948
- c. RDB 169/3, Master Plan of Research and Development, 24 Feb 1949
- d. Plan for Evaluation of Chemical Corps 1950 Research and Development Program, April 1949
- e. SR 705-5-1, 17 Mar 1949
- f. SR 705-5-20, 17 Mar 1949
- g. Memorandum (s), QMLWR-P-3, R&E Div, OCCmLC, 12 May 49, "Chemical Corps Research and Development Project Program for FY 1950", to Secy, CCTC, w/2 Incls.

2. Discussion:

a. Reference a. identifies the CCTC action which approved the Chemical Corps Project Program for FY 1949 which, as originally approved, consisted of 208 projects classified no higher than Secret. Subsequent to the approval action by reference a., new projects were added and others terminated in accordance with changing needs and requirements as reflected in action coordinated through this Committee. As the result of continuous revision the 1949 program as presently constituted consists of 235 projects exclusive of those accorded special security classification.

b. In order to provide a timely and periodic review of Chemical Corps activity as stipulated by paragraph 12. of SR 705-5-1 (ref. e.) and reappraise project priorities as required by SR 705-5-20 (ref. f.), R&E Div, OCCmLC has prepared the draft of the 1950 project program attached herewith as Inclosure 2. In order that this draft may be evaluated with respect to the current 1949 program and so that record and approval action for both old and new projects may be facilitated, the 1949-50 Project Program Summary has been prepared and is attached herewith as Inclosure 1. This summary lists all projects now approved with appropriate disposition action on each together with all new projects proposed for establishment at this time.

c. In connection with the review of the program for the next fiscal year, it is believed that a brief explanation of the basis of program evaluation is pertinent to full consideration of the action proposed in this report. In this respect the RDB directives, references b. and c. were considered of major importance in providing guidance incorporating

EXCLUDED FROM GENERAL
DECLASSIFICATION SCHEDULE

DOMINATED AT 12 MONTH INTERVALS;
NOT AUTOMATICALLY DECLASSIFIED
DOD DIR 5200.107

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RESEARCH AND DEVELOPMENT PROJECT CARD (NEW PROJECTS)		2. SEC. Secret	3. PROJ. NO. 4-04-15-05
1. PROJECT TITLE Gas Bomb for G Series Filling		4.	
6. BASIC FIELD OR SUBJECT Ammunition		7. SUB FIELD OR SUBJECT SUB GROUP Chemical Munitions	
8. COGNIZANT AGENCY Chemical Corps, Res & Eng Div		12. CONTRACTOR AND/OR LABORATORY Munitions Division, Air Force Munitions Branch	
9. DIRECTING AGENCY Technical Command		CONTRACT/W. O. NO.	
10. REQUESTING AGENCY Chemical Corps		13. RELATED PROJECTS	
11. PARTICIPATION AND/OR COORDINATION U. S. Air Force		4-04-15-07 4-08-03-05 4-17-04-01 4-04-15-12 4-08-05-02	
		14. DATE APPROVED 22 July 1947, CCTC Item 1760	
		15. PRIORITY 1-C 16.	
19. Supersedes Project Card dated 25 May 1948.		17. EST. COMPL. DATES	
		RES.	
		DEV. June 1950	
		TEST June 1951	
		OP EVAL 1952	
		Fy 18. FISCAL EST'S.	
		49 75M	
		50 90M	
		51 60M	
20. REQUIREMENT AND/OR JUSTIFICATION (b)(2) HIGH			
21. BRIEF OF PROJECT AND OBJECTIVE (b)(2) HIGH			
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22. JRDB SN.		FC.	IC & P.
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UNCLASSIFIED Funds: Priority: 1-C

4-04-15-05 GAS BOMB FOR G SERIES FILLING

a. Results Prior to 1949:

(b)(3):10 USC 130

b. 1949 Results:

(b)(3):10 USC 130

c. 1950 Plan:

(b)(3):10 USC 130

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RESEARCH AND DEVELOPMENT PROJECT CARD (NEW PROJECTS)		2. SEC. Secret	3. PROJ. NO. 4-08-03-05
1. PROJECT TITLE Agents of the G-Series		4. REPORT DATE 31 Mar 49	
6. BASIC FIELD OR SUBJECT Chemical Warfare		7. SUB FIELD OR SUBJECT SUB GROUP Agents	
8. COGNIZANT AGENCY Chemical Corps, Res & Eng Div.	12. CONTRACTOR AND/OR LABORATORY University of Michigan		CONTRACT/W. O. NO. W-18-108-CM-817
9. DIRECTING AGENCY Technical Command	13. RELATED PROJECTS 4-04-15-05, 4-92-03-02 4-08-03-02, 4-93-14-01 4-08-03-01		17. EST. COMPL. DATES RES. Cont. REV. TEST OP EVAL
10. REQUESTING AGENCY Chemical Corps	14. DATE APPROVED 5 July 45, CWTC Item 1445		FY 18. FISCAL EST'S. 49 150 M 50 140 M 51 140 M
11. PARTICIPATION AND/OR COORDINATION None	15. PRIORITY SECRET 16.		
19. Supersedes Project Card 25 May 1948			
20. REQUIREMENT AND/OR JUSTIFICATION (b)(2) HIGH			
21. BRIEF OF PROJECT AND OBJECTIVE <p>The search for the most effective agents in this series will be conducted as follows: Analogs and compounds similar in structure will be synthesized for toxicity evaluation by the Medical Division. On those agents warranting further study, research will be continued and laboratory process development studies made in order to develop methods of synthesis which are practical and suitable for pilot-plant use.</p> <p>Methods for the detection and estimation of these agents, previously a part of this project, will be reported under project 4-08-03-02 in future.</p> <p>Their physical constants, corrosive effect on metals, and stability in storage and in the presence of moisture will be investigated as aids in selecting the best agent for standardization. Work on physical constants will be reported under project 4-08-03-01 and results obtained on corrosion will be submitted under project 4-93-14-01.</p>			
22. JRDB SN.	PC.	IC & P.	X. I. C.

JRDB FORM 1A, 1 APR 1947

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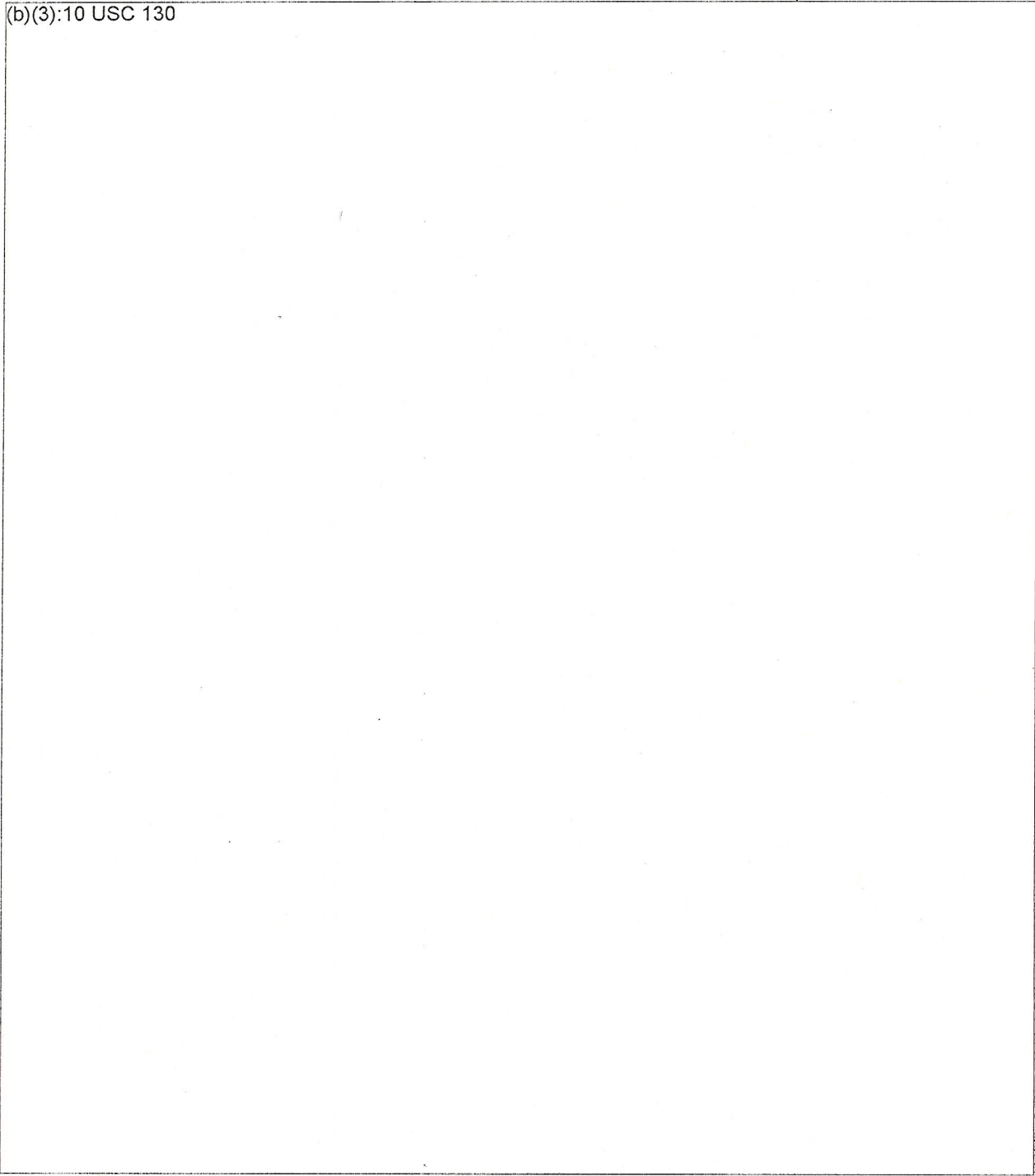
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Funds : 140 M
Priority: 1-C

4-08-03 AGENTS OF THE G-SERIES

(b)(3):10 USC 130



RESEARCH AD

- 1. PROJECT
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RESEARCH AND DEVELOPMENT PROJECT CARD (NEW PROJECTS)		2. SEC. Secret	3. PROJ. NO. 4-92-03-02
1. PROJECT TITLE GB Plant. Process Development		4.	
6. BASIC FIELD OR SUBJECT Processing Methods, Manufacturing Techniques & Equipment		7. SUB FIELD OR SUBJECT SUB GROUP Chemicals	
8. COGNIZANT AGENCY Chemical Corps	12. CONTRACTOR AND/OR LABORATORY Technical Command	CONTRACT/W. O. NO.	
9. DIRECTING AGENCY Chemical Corps (Res & Eng Div)	Monsanto Chemical Company	4-18-108-CM-732	
10. REQUESTING AGENCY Chemical Corps	13. RELATED PROJECTS	17. EST. COMPL. DATES	
11. PARTICIPATION AND/OR COORDINATION None	14. DATE APPROVED 4-04-15-05 4-08-03-05	RES.	
	15. PRIORITY 1-C	DEV. Jan. 1950	
	16 Apr 46 - CNTC Item 1611	TEST	
		OP EVAL	
		Fy 18. FISCAL EST'S.	
		49	40M
		50	75M
		51	50M
19.			
20. REQUIREMENT AND/OR JUSTIFICATION (b)(2) HIGH			
21. BRIEF OF PROJECT AND OBJECTIVE <p>The object of this project is to develop a manufacturing technique together with the necessary equipment and operating directives for designing a plant capable of producing GB in the quantities necessary for use in military operations.</p>			
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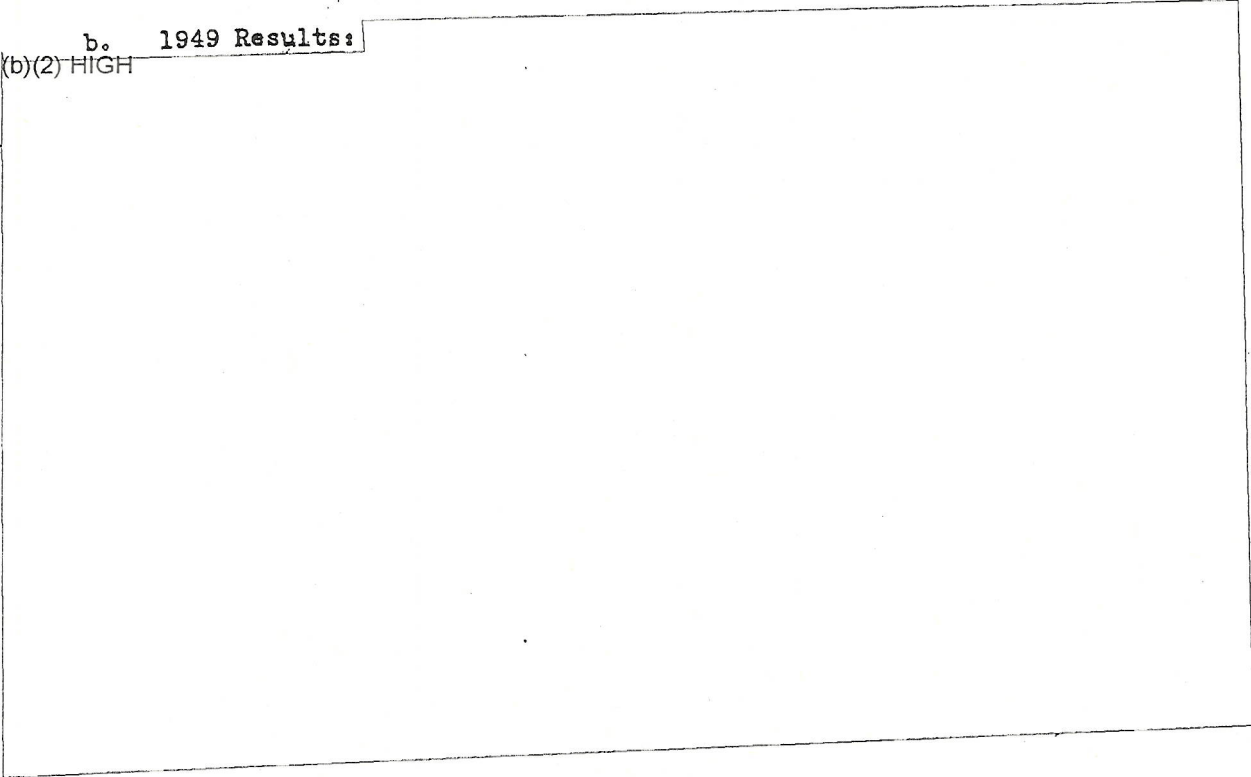
Funds: 75M
Priority: 1-C

4-92-03-02

GB PLANT, PROCESS DEVELOPMENT

a. Results Prior to 1949: Based on a process developed in the laboratory, a pilot plant was built and operated step-wise to produce about 400 lb. of GB. During the operation of the pilot plant, minor difficulties, chiefly pertaining to equipment corrosion, were encountered.

b. 1949 Results:
(b)(2) HIGH



c. 1950 Plans:

(1) Continue the operation of the Pilot plant and convert the available supply of intermediates to GB. Obtain all necessary data for the preparation of complete plant designs for Steps IV and V.

(2) Based on the work and recommendations of the contractor, and results obtained at Army Chemical Center, determine the advisability of conducting pilot plant development of the aluminum chloride process to replace the first three steps of the 5-step process.

d. Changes in Data for JRDB Form 1A: None.

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