

The University of Chicago
Metallurgical Laboratory

October 30, 1942

MIDWAY 0800
EXT. 1290

CLASSIFICATION CHANGED
TO: NOT CLASSIFIED
5-10-65 E. V. Pettit
Authority of: USAEC
MAY 10 1965 W. Adams

Memorandum to: C. M. Cooper
From: R. S. Apple

~~SECRET~~
COLLECTION *Wash. Re*
BOX No. *2-3 (1) NNB-77-85-1*
FOLDER *In Date Order*

Proposed Code

The following proposed code, developed in cooperation with Drs. Brown and Perlman, is being submitted with the suggestion that it become standard for all inter and intra group discussions pertaining to the work of this project. Our goal has been a code using a few, simple terms which lend themselves to normal conversation without arousing curiosity or suspicion in anyone likely to overhear them.

<u>Scientific Term</u>	<u>Code Word</u>	<u>Remarks</u>
1. Uranium	the metal	Preferable to tubealloy in that it is less conspicuous.
2. Radioactivity	sensitivity	This is in use at present with the du Pont design division. Its use here is fortunate in that it connotes an "explosive" connection. For our use locally, however, a more suitable code is required and is still being sought.
3. U ₃ O ₈	black powder	General descriptive term, more vague than "black metal oxide."
4. UO ₂	brown powder	Preferable to "reduced powder"
5. UO ₃	orange powder	Probably of little use
6. UF ₄	green powder	All fluorides are to be disguised in that they give definite clues to the chemistry involved.
7. Fluorine	the gas	Flurine, as uranium, is not to be mentioned by name because of the chemical clues it gives.

1099950

This document contains information of a confidential nature...
Unauthorized persons are prohibited from...
Transmission in any manner to...
Authorized personnel only.

SECRET

<u>Scientific Term</u>	<u>Code Word</u>	<u>Remarks</u>
8. HF Solution	the acid	Anhydrous HF will be referred to as "the anhydrous acid."
9. UF ₆	heavy gas	
10. U Cl ₅	red gas	
11. U Cl ₄	green crystal	The difference between UF ₄ and UCl ₄ is the obvious one of different crystal form.
12. U ₂ C ₃ } UC ₂ }	the carbide	No distinction made for general purposes
13. UO ₂ (NO ₃) ₂ ·6H ₂ O	the nitrate	The anhydrous salt would be referred to as "the anhydrous nitrate."
14. UO ₄ ·2H ₂ O	the peroxide	
15. Any fluoride not specifically designated	halide	All other halides to be designated as chloride, bromide, etc.
16. Carriers in general	extenders	
17. Rare Earths	group 3 materials	A better code is desired.
18. Element 94	Product	Already in use with the du Pont design division
19. Fission Products	By-Products	Already in use with the du Pont design division
20. Element 93	Pre-Product	
21. Specific fission product	By-product #1-etc.	The first fission product encountered is #35, hence call this #1 and number each successive element in the periodic table in consecutive order. In this way, the by-product number + 34 equals the atomic number of the element in question. This is somewhat complicated and not likely to be of great demand

This document contains information affecting the national defense of the United States within the meaning of the Espionage Act, U.S.C. 50; 31 and 32. The transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

1099951

~~SECRET~~

<u>Scientific Term</u>	<u>Code Word</u>	<u>Remarks</u>
22. Wet Fluoride process	Wet process B	Now in use by the du Pont design division
23. Peroxide process	Wet process C	" " " " " " "
24. Fluorine process	Dry Process	" " " " " " " Subject to modification as work progresses.

This document contains information affecting the national defense of the United States within the meaning of the Espionage Act, U.S.C. 50; 31 and its transmission or revelation of its contents in any manner to an unauthorized person is prohibited by law.