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Date 3-2-49

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Series A

K25RC

Revision Of SF Material Coding System
(Short Title of Document)

M. B. Fortune
Author

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Date March 2, 1949

Subject Revision of SF Material Coding System.

Recent Changes in the handling and reporting of inventory and transfer data of all SF materials has necessitated a revision of the present system of coding these classified items. Attached are four tables of codes which are to be used in the preparation of data concerning all SF material inventories and transfers effective 0800 Friday March 4, 1949. The new code system will consist of codes made up of two parts; a prefix and a suffix. The prefix portion of the code will designate the assay range and the suffix will indicate the chemical state of the material.

Table I is a list of prefix codes to be used on all SF materials that have an assay which is known. Materials on which no assay is known will not require the prefix portion of the code, but will require a descriptive assay code (Table II) to identify the material until an actual laboratory assay is determined. A suffix portion of the code will be required for all SF materials irrespective of their type, condition, or physical state. Table III is to be used for pure materials (those of commercial or reagent purity) and Table IV is to be used for impure or contaminated materials. The criterion for the use of a particular code in Table IV is to be determined by the major component(s) present. Should anyone desire to transfer any material which is not included in Table III or IV, a new code for such material may be obtained by contacting the author at 8341.

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By Phillips Date 1-7-66

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M. B. Fortune

Approved: J. R. Largey
J. R. Largey

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Approved for issue by: J. R. Largey
Date of issue: March 2. 1949

Identification Number: KF-42

CARBIDE AND CARBON CHEMICALS CORPORATION
K-25 PLANT
Process Division
Uranium Control Department

REVISION OF SF MATERIAL CODING SYSTEM

M. B. Fortune

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M. B. Fortune
M. B. Fortune

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J. R. Largey

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TABLE I

PREFIX CODES FOR ALL SF MATERIALS

Prefix Code Number	U-235 Concentration in Weight Per Cent	Prefix Code Number	U-235 Concentration in Weight Per Cent
1	155500 to 182400	18	564400 to 569400
2	182400 to 173600	19	569400 to 655500
3	173600 to 164800	20	655500 to 750500
4	164800 to 156000	21	750500 to 746600
5	156000 to 147200	22	746600 to 850500
6	147200 to 234815×10^{-1}	23	850500 to 837700
616	Only Normal Harshaw Feed -- 0.7115	24	837700 to 932700
7	234815×10^{-1} to 129600	25	932700 to 928800
8	129600 to 192100	26	928800 to 1203800
9	192100 to 176300	27	1203800 to 1109900
10	176300 to 250500	28	1109900 to 1112900
11	250500 to 291100	29	1112900 to 1114900
12	291100 to 296100	30	1114900 to 1911100
13	296100 to 382200		
14	382200 to 387200	35	U-233
15	387200 to 473300	40	Thorium
16	473300 to 478300	70	Plutonium (Pu-239)
17	478300 to 564400		

TABLE II

DESCRIPTIVE CODES FOR MATERIAL
OF UNKNOWN ASSAY

Class	Range of U-235 Concentration in Weight Per Cent		
A	155500	to	234815 x 10^{-1}
B	234815 x 10^{-1}	to	176300
C	176300	to	296100
D	296100	to	655500
E	655500	to	932700
F	932700	to	1112900
G	1112900	to	1911100

TABLE III

SUFFIX CODES FOR PURE MATERIALS

Suffix Code Number	Chemical Formula	Chemical Compound Name
20	U	Uranium Metal
21	UO_2	Uranous Oxide
23	UO_3	Uranic Oxide
24	U_3O_8	Urano-uranic Oxide
31	UCl_4	Uranium Tetrachloride
32	UCl_3	Uranium Trichloride
33	UCl_5	Uranium Pentachloride
35	UF_6	Uranium Hexafluoride
43	$UO_2(NO_3)_2 \cdot 6H_2O$	Uranyl Nitrate
45	UF_5	Uranium Pentafluoride
65	UF_4	Uranium Tetrafluoride
66	$UO_2SO_4 \cdot 3H_2O$	Uranyl Sulphate
67	$UO_2(C_2H_3O_2)_2 \cdot 2H_2O$	Uranyl Acetate
68	$UO_2HPO_4 \cdot 4H_2O$	Uranyl Phosphate
69	$UO_2NH_4PO_4 \cdot 3H_2O$	Uranyl Ammonium Phosphate
70	$UO_2F_2 + H_2O$	Uranyl Fluoride Solution
71	UO_2F_2	Uranyl Fluoride
72	UO_4	Uranyl Peroxide
75	$(NH_3)_2U_2O_7$	Ammonium Di-Uranate

TABLE IV

CONTAMINATED WASTE SUFFIX CODES

DESCRIPTION	SUFFIX CODE NO.
2 - 4 Mesh uncoated alumina 2 - 4 Activated Carbon	80
2 - 4 Mesh uncoated alumina 6 - 8 Mesh activated carbon	81
2 - 4 Mesh cadmium coated alumina 6 - 8 Mesh activated carbon	82
4 - 8 Mesh activated alumina	83
6 - 8 Mesh activated carbon	84
2 - 4 Mesh cadmium coated alumina 4 - 8 Mesh activated alumina	85
2 - 4 Mesh uncoated alumina 4 - 8 Mesh activated alumina	86
2 - 4 Mesh uncoated alumina 2 - 4 Mesh activated carbon 4 - 8 Mesh activated carbon	87
Miscellaneous Carbon and/or Alumina	89
Acetone	A-1
Aluminum Nitrate	A-2
Ammonium Carbonate	A-3
Ammonium Dichromate	A-4
Ammonium Hydroxide	A-5
Sodium Fluoride	A-7
Conversion Ash	A-8
Benzene	B-1
Benzene and MFL	B-2
Alumina Leach Solution	B-3
Trichlorethylene	B-6

DESCRIPTION	SUFFIX CODE NO.
Carbon Tetrachloride (CCl_4)	C-2
Carbon Tetrachloride (CCl_4) and MFL	C-3
Alumina and oxides	C-6
Hydrochloric Acid (HCl)	D-1
Nitric Acid (HNO_3) --- Acid and Rinse Loop	D-2
Sulphuric Acid (H_2SO_4)	D-3
Hydrofluoric Acid (HF)	D-4
Hydrochloric Acid (HCl) and Trisodium Phosphate	D-7
Ethylene Glycol	E-1
Methanol	E-2
Miscellaneous Ferrocyanides	F-1
Miscellaneous Filter Cakes	F-2
MFL Filter Cake	F-3
C-2144 Filter Cake	F-4
Lime Flock Filtrate	F-5
Freon	F-6
Freon and MFL	F-7
Freon and T-MFL	F-8
Freon and C-2144	F-9
Grease	G-1
MFL and C-2144	G-2
T-MFL	G-3
Hydrocarbon Oil	H-1
Kerosene and Hydrocarbon Oil	H-2
MFL	J-1
C-2144 and Hydrocarbon Oil	J-2

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DESCRIPTION	SUFFIX CODE NO.
Trichlorethylene (CCl_4) and Hydrocarbon Oil	J-4
Trichlorethylene (CCl_4) and MFL	J-5
Trichlorethylene (CCl_4) and C-2144	J-6
Freon and Hydrocarbon Oil	J-7
Trichlorethylene (CCl_4), MFL, and Hydrocarbon Oil	J-9
Laboratory Wastes	L-1
Lime Flock Filter Cake	L-2
Sodium Fluoride and Hydrocarbon Oil	L-3
Iron Flock	L-5
Laboratory Wastes (K-1303 only)	L-6
Carbitol	L-7
Gunk	L-8
Soda Lime and Salt	L-9
Sodium Sulphate and Sodium Nitrate	M-1
Sodium Sulphate and Sodium Fluoride	M-2
Sodium Nitrate and Copper Nitrate	M-3
Nickel Carbonate and Sodium Chloride	M-4
Sodium Carbonate and Sodium Sulphate	M-5
Nickel Disc Solution	N-1
Nickel Carbonate and Nickel Chloride	N-2
Trichlorethylene and Sodium Carbonate	N-5
Tergitol	N-6
Tergitol and Trisodium Phosphate	N-7
Tergitol and Sodium Chloride	N-8
Trichlorethylene and Sodium Chloride	N-9
P. G. Corrosion Products	P-1

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DESCRIPTION	SUFFIX CODE NO.
Phill Solution	P-4
Potassium Dichromate	P-5
Potassium Hydroxide	P-6
Potassium Nitrate	P-8
Potassium Uranate	P-9
Acid Loop Rinse Water	R-1
Sodium Carbonate	S-1
Sodium Chloride (Salt)	S-2
Sodium Cyanide	S-3
Sodium Hydroxide	S-4
Sodium Nitrate	S-5
Sodium Uranate	S-6
Soda Lime	S-7
Sodium Sulphate	S-8
Sodium Fluoride	S-9
Trichlorethylene	T-1
Trisodium Phosphate	T-2
Tergitol and Sodium Carbonate	T-4
Uranium Chlorides	U-1
Sodium Carbonate and Aluminum Nitrate	U-2
Ammonium Diuranate	U-3
Vacuum Cleaner Material (Corrosion Product)	V-1
Carbon Ash	V-4
Iron Oxides	V-9
Water	W-1
Mixed Sodium Salts	W-3
Hydrochloric Acid, Tergitol, and Sodium Chloride	W-6

DESCRIPTION	SUFFIX CODE NO.
C-716	X-1
C-714 and C-816	X-2
C-714	X-3
C-816 Solution	X-4
C-2144 and C-714	X-5
C-2144	X-6
C-816 and C-616	X-7
Mud	X-9