Appendix A

Glossary of Acronyms and Terms

APPENDIX A
Acronyms and Glossary of Terms

Acronyms

200E	200 East Area of the Hanford Site
200W	200 West Area of the Hanford Site
300 Area	300 Area of the Hanford Site
AEC	U.S. Atomic Energy Commission
AOC	Abnormal operating conditions
ANU	Aged natural uranium, a standard nomenclature for natural uranium that has undergone no separations for 2 years
ARH	Atlantic Richfield Hanford Company
BMI	Battelle Memorial Institute, Columbus, Ohio
CCC	Carbide and Carbon Corp., Operated the Paducah, Ky and Oak Ridge Operations for the AEC
COEI	Composition of ending inventory
DOE	U.S. Department of Energy
DOE-RL	U.S. Department of Energy-Richland Operations Office
DOE-HQ	U. S. Department of Energy-Headquarters
DU	Depleted uranium (^{235}U component less than 0.711 wt %)
ERDA	Energy Research and Development Administration
ERDF	Environmental Restoration Disposal Facility
EU	Enriched Uranium (>0.7% ^{235}U <20%)
FFTF	Fast Flux Test Facility
FMPC	Feed Materials Processing Center, Fernald, Ohio
GDP	Gaseous diffusion plant – an enrichment process of the ^{235}U component

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GE	General Electric Company
HAN	Hanford document number prefix
HE or HEU	High enriched uranium (^{235}U content >20%)
HEPA	High efficiency particulate air (filter)
HVAC	Heating, ventilation, and air conditioning
HW	Hanford Works (entire-plant area including laboratory facility) (Also used as document number prefix)
I & E	A type of reactor fuel element
ISO	Document prefix number used by ISOCHEM at Hanford
LEU	Low enriched uranium (uranium with the ^{235}U content from 0.71 wt % to less than 20 wt %)
LMFBR	Liquid Metal Fast Breeder Reactor
Lot(s)	10 T-Hoppers or 60 drums of UO_3 powder
MED	Manhattan Engineer District
MOX	Mixed Pu-U oxide reactor fuel
MT	Metric ton (s)
MTU	Metric ton (s) uranium
NBL	New Brunswick Laboratory – operated as an independent laboratory for the AEC and successor agencies
NE	Office of Nuclear Energy, U.S. Department of Energy
NLO	National Lead Company of Ohio
NPH	Normal paraffin hydrocarbon

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NYOO	New York Operations Office, AEC
ORIGEN2	Oak Ridge Isotope Generation Program, Version II (A model predicting isotopes produced as a result of nuclear fission of uranium.)
OSD	Operational specification document
PHMC	Project Hanford Management Contractor
PFP	Plutonium Finishing Plant
PNL	Pacific Northwest Laboratories (to 1995)
PNNL	Pacific Northwest National Laboratory (after 1995)
PUREX	Plutonium Uranium Extraction (process or facility)
PWR	Pressured water reactor
R&E	Research and Engineering
REDOX	Reduction-Oxidation (process or facility)
Ref	Reference
Rev	Revision
RFETS	Rocky Flats Environmental Technology Site
RHO	Rockwell Hanford Operations
RL	Richland Operations Office
SK	Sketch
TBP	Tributyl phosphate
TIG	Tungsten inert gas (welding)
TK	Tank
TRU	Transuranic (having an atomic number greater than 92)

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U	Uranium-any form and all isotopes
UNH	Uranyl nitrate hexahydrate
WHC	Westinghouse Hanford Company

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94 Metal	Uranium enriched to 0.94 percent of uranium 235
125 Metal	Uranium enriched to 1.25 percent uranium 235
Aged Natural Uranium	Natural uranium which has not been subjected to any radiological separation processes for at least 2 years
Aliquot	A small part of the larger sample
B	Boron
Be	Beryllium
C	Carbon
CCl_4	Carbon tetrachloride
Cd	Cadmium
Ci	Curie, 3.73E10 disintegrations per second
Cr	Chromium
^{137}Cs	Cesium 137, the 137 isotope of Cesium
Cu	Copper
DF	Decontamination Factor
Derby	Uranium metal button
Detrex™	Trichloroethylene, a solvent degreaser
duPont	E. I. DuPont de Nemours and Company
E Metal	Uranium metal enriched in ^{235}U content above 0.711 wt%
Fe	Iron
Fractionation	Separating one component from another such as separating the Pu from U stream
g	Gram(s)

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Green Salt	Uranium Tetrafluoride, UF_4, radioactive, green crystals
H	Hydrogen
Hexone	Methyl isobutyl ketone
Homogenization	Mixing thoroughly without purposely changing particle size
Ingot	Uranium metal bar used as the source material for reactor fuel fabrication
K-25	K-25 site at Oak Ridge, Tennessee
Legacy	Materials or other assets remaining in inventory which have no identified current or future programmatic use and require dispositioning
Mg	Magnesium
μCi/lb	Micro-curies per pound
Mn	Manganese
MWD/t	Megawatt Days/thermal (fuel burnup)
N	Nitrogen
Natural uranium	As-mined uranium that has not been irradiated or isotopically separated
Normal uranium	Uranium with a ratio of ^{235}U to total U similar to natural U. (The ratio may be artificially regenerated)
Ni	Nickel
NOx	Nitrogenoxide; oxides of nitrogen
N-Reactor	New Production Reactor
^{237}Np	Neptunium - 237
One lot of uranium	Traditionally 10 T-Hoppers or 60 drums of UO_3 product

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Paducah	Paducah Gaseous Diffusion Plant, Operated by Carbide and Carbon Corp. for the AEC at Paducah, Kentucky
Pot Calciner	Heated, stirred vessel to convert UNH to UO_3 in UO_3-Plant
ppb	Parts per billion
ppm	Parts per million
Pu	Plutonium
Round robin	A process of exchanging samples between testing labs and comparing results to identify, understand, and rationalize/minimize differences
^{106}RuRh	Ruthenium-Rhodium-106 decay chain
^{103}Ru	Ruthenium isotope 103
^{90}Sr	Strontium isotope 90
Subsampling	Removing a portion of a larger sample to a separate container
^{99}Tc	Technetium - 99
T-Hoppers	Specially designed containers used to ship UO_3 on rail cars
U	Uranium-any form and all isotopes
U_3O_8	Uranous-uranic oxide
^{232}U, ^{233}U, ^{235}U, ^{236}U, ^{237}U, ^{238}U, ^{240}U	Isotopes of uranium. Unless specified otherwise in the text, "U" includes all isotopes of uranium
μCi/gm	Micro-curies per gram
UF_4	Uranium tetratfluoride
UF_6	Uranium hexafluoride
UO_2	Uranium dioxide

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UO_3	Uranium trioxide - the product shipped from Hanford
UPb	Uranium mono-lead
UPb_3	Uranium tri-lead
Virgin Uranium	Uranium which has never been irradiated
$^{95}ZrNb$	Zirconium Niobium 95 decay chain