

EC

**ABBREVIATIONS AND ACRONYMS, ABBREVIATIONS FOR  
MEASUREMENTS, USE OF SCIENTIFIC NOTATION,  
AND METRIC CONVERSION CHART**

**Abbreviations and Acronyms**

EC

AEA	Atomic Energy Act of 1954
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
DWPF	Defense Waste Processing Facility
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
FR	Federal Register
HLW	high-level waste
LLW	low-level waste
NEPA	National Environmental Policy Act
NRC	U.S. Nuclear Regulatory Commission
RCRA	Resource Conservation and Recovery Act
SCDHEC	South Carolina Department of Health and Environmental Control
SEIS	Supplemental Environmental Impact Statement
SRS	Savannah River Site

## Abbreviations for Measurements

cfm	cubic feet per minute
cfs	cubic feet per second = 448.8 gallons per minute = 0.02832 cubic meter per second
cm	centimeter
gpm	gallons per minute
kg	kilogram
L	liter = 0.2642 gallon
lb	pound = 0.4536 kilogram
mg	milligram
μCi	microcurie
μg	microgram
pCi	picocurie
°C	degrees Celsius = $5/9$ (degrees Fahrenheit – 32)
°F	degrees Fahrenheit = $32 + 9/5$ (degrees Celsius)

## Use of Scientific Notation

Very small and very large numbers are sometimes written using “scientific notation” or “E-notation” rather than as decimals or fractions. Both types of notation use exponents to indicate the power of 10 as a multiplier (i.e.,  $10^n$ , or the number 10 multiplied by itself “n” times;  $10^{-n}$ , or the reciprocal of the number 10 multiplied by itself “n” times).

For example:  $10^3 = 10 \times 10 \times 10 = 1,000$

$$10^{-3} = \frac{1}{10 \times 10 \times 10} = 0.001$$

In scientific notation, large numbers are written as a decimal between 1 and 10 multiplied by the appropriate power of 10:

4,900 is written  $4.9 \times 10^3 = 4.9 \times 10 \times 10 \times 10 = 4.9 \times 1,000 = 4,900$

0.049 is written  $4.9 \times 10^{-2}$

1,490,000 or 1.49 million is written  $1.49 \times 10^6$

A positive exponent indicates a number larger than or equal to one; a negative exponent indicates a number less than one.

In some cases, a slightly different notation (“E-notation”) is used, where “ $\times 10$ ” is replaced by “E” and the exponent is not superscripted. Using the above examples

$$4,900 = 4.9 \times 10^3 = 4.9E+03$$

$$0.049 = 4.9 \times 10^{-2} = 4.9E-02$$

$$1,490,000 = 1.49 \times 10^6 = 1.49E+06$$

**Metric Conversion Chart**

To convert into metric			To convert out of metric		
If you know	Multiply by	To get	If you know	Multiply by	To get
<b>Length</b>					
inches	2.54	centimeters	centimeters	0.3937	inches
feet	30.48	centimeters	centimeters	0.0328	feet
feet	0.3048	meters	meters	3.281	feet
yards	0.9144	meters	meters	1.0936	yards
miles	1.60934	kilometers	kilometers	0.6214	miles
<b>Area</b>					
sq. inches	6.4516	sq. centimeters	sq. centimeters	0.155	sq. inches
sq. feet	0.092903	sq. meters	sq. meters	10.7639	sq. feet
sq. yards	0.8361	sq. meters	sq. meters	1.196	sq. yards
acres	0.0040469	sq. kilometers	sq. kilometers	247.1	acres
sq. miles	2.58999	sq. kilometers	sq. kilometers	0.3861	sq. miles
<b>Volume</b>					
fluid ounces	29.574	milliliters	milliliters	0.0338	fluid ounces
gallons	3.7854	liters	liters	0.26417	gallons
cubic feet	0.028317	cubic meters	cubic meters	35.315	cubic feet
cubic yards	0.76455	cubic meters	cubic meters	1.308	cubic yards
<b>Weight</b>					
ounces	28.3495	grams	grams	0.03527	ounces
pounds	0.4536	kilograms	kilograms	2.2046	pounds
short tons	0.90718	metric tons	metric tons	1.1023	short tons
<b>Temperature</b>					
Fahrenheit	Subtract 32 then multiply by 5/9ths	Celsius	Celsius	Multiply by 9/5ths, then add 32	Fahrenheit

**Metric Prefixes**

Prefix	Symbol	Multiplication Factor
exa-	E	1 000 000 000 000 000 000 = 10 <sup>18</sup>
peta-	P	1 000 000 000 000 000 = 10 <sup>15</sup>
tera-	T	1 000 000 000 000 = 10 <sup>12</sup>
giga-	G	1 000 000 000 = 10 <sup>9</sup>
mega-	M	1 000 000 = 10 <sup>6</sup>
kilo-	k	1 000 = 10 <sup>3</sup>
centi-	c	0.01 = 10 <sup>-2</sup>
milli-	m	0.001 = 10 <sup>-3</sup>
micro-	μ	0.000 001 = 10 <sup>-6</sup>
nano-	n	0.000 000 001 = 10 <sup>-9</sup>
pico-	p	0.000 000 000 001 = 10 <sup>-12</sup>
femto-	f	0.000 000 000 000 001 = 10 <sup>-15</sup>
atto-	a	0.000 000 000 000 000 001 = 10 <sup>-18</sup>

**Change Bars**

Changes from the Draft EIS are indicated in this Final EIS by vertical change bars in the margins. The bars are marked TC for technical changes, EC for editorial changes or, if the change was made in response to a public comment, with an L for the designated comment number, as listed in Appendix D of the EIS.

TC