

APPENDIX C:

# The Metric System

The Metric Conversion Act of 1975 (15 USC §§205a-k) and E.O. 12770 (3 CFR, 1991 comp.) encourage federal agencies to use the metric system in procurement, grants and other business-related activities. The general conditions of each NSF grant contain a provision encouraging principal investigators to submit progress reports, final reports, other reports and publications produced under grants that employ the metric system of measurements.

Approximate Conversion from <b>CUSTOMARY TO METRIC</b>			Approximate Conversion from <b>METRIC TO CUSTOMARY</b>		
<i>When you know</i>	<i>You can find</i>	<i>If you multiply by</i>	<i>When you know</i>	<i>You can find</i>	<i>If you multiply by</i>
<b>Length</b>			<b>Length</b>		
inches	millimeters	25	millimeters	inches	0.04
feet	centimeters	30	centimeters	inches	0.4
feet	meters	0.3	meters	feet	3.3
yards	meters	0.9	meters	yards	1.1
miles	kilometers	1.6	kilometers	miles	0.6
<b>Area</b>			<b>Area</b>		
square inches	square centimeters	6.5	square centimeters	square inches	0.16
square feet	square meters	0.09	square meters	square yards	1.2
square yards	square meters	0.8	square kilometers	square miles	0.4
square miles	square kilometers	2.6	hectares	acres	2.5
acres	hectares	0.4			
<b>Volume</b>			<b>Volume</b>		
cubic inches	cubic centimeters	16	cubic centimeters	cubic inches	0.06
cubic feet	cubic meters	0.03	cubic meters	cubic feet	35
cubic yards	cubic meters	0.8	cubic meters	cubic yards	1.3
<b>Mass</b>			<b>Mass</b>		
ounces (avoirdupois)	grams	28	grams	ounces (avoirdupois)	0.035
pounds	kilograms	0.45	kilograms	pounds	2.2
short tons	metric tons (megagrams)	0.9	metric tons (megagrams)	short tons	1.1
<b>Liquid Volume</b>			<b>Liquid Volume</b>		
ounces	milliliters	30	milliliters	ounces	0.034
pints	liters	0.47	liters	pints	2.1
quarts	liters	0.95	liters	quarts	1.06
gallons	liters	3.8	liters	gallons	0.26
<b>Temperature</b>			<b>Temperature</b>		
degrees Fahrenheit	degrees Celsius	5/9 (after subtracting 32)	degrees Celsius	degrees Fahrenheit	9/5 (then add 32)