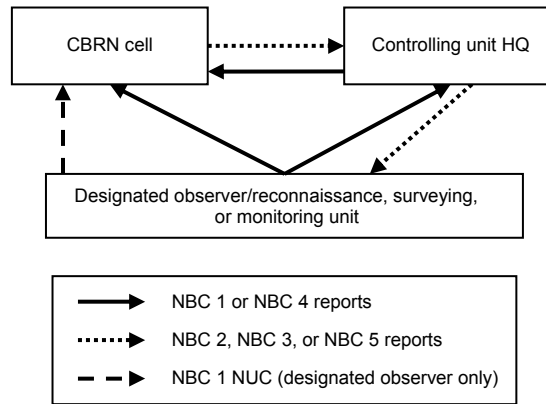


*GTA 03-06-008

CBRN Warning and Reporting System

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**Headquarters, Department of the Army
November 2007**

*This publication supersedes GTA 3-6-8, August 1996.

Sample NBC 1 Report (Observer's Report)				
Line	Nuclear	Chemical	Biological	ROTA (RN, RB, RC, and RU)
A	O /US/B26/001/N/55//	C /US/A237/001/C//	C /US/C135/001/B//	O /US/A137/001/RU//
B	M /32UXX064258/090DGG//	M /32UXX064258/090DGG//	M /32UXX064258/090DGG//	M /32UXX064258/090DGG//
C	NA	NA	NA	M /281545ZSEP2006//
D	M /201450ZSEP2006//	M /201450ZSEP2006//	M /201450ZSEP2006//	NA
F	O /32UBN058640/EE//	O /32UBN058640/EE//	M /32UBN058640/EE//	O /32UBN058640/EE//
G	M /SUS/AIR/1/BOM/1//	M /OBS/AIR/1/BML-///	M /OBS/AIR/1/BML-///	M /SUS/TPT/1-/JSML//
H	M /SURF//	NA	NA	NA
I	NA	M /AIR/NERV/P/MPDS//	M /UNK/BIO/UNK/MSDS//	M /SURF/2978/UNK/MSVY//
J	O /46//	NA	NA	NA
L	O /20DEG//	NA	NA	NA
M	O /TOP/30DEG/10KM//	NA	NA	NA
MR	NA	NA	NA	O /LEAK/CONT//
PC	O	NA	NA	NA
PD	O	NA	NA	NA
T	NA	M /FLAT/URBAN//	M /FLAT/URBAN//	M /FLAT/URBAN//
Y	O /270DEG/016KPH//	O /270DEG/016KPH//	O /270DEG/016KPH//	O /270DEG/016KPH//
Z	O /4/10C/7/5/1//	O /4/10C/7/5/1//	O /4/10C/7/5/1//	O /4/10C/7/5/1//
GENTEX	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)

M = Mandatory (must be provided)
O = Operationally determined (should be provided if known/command discretion)
C = Conditional

Sample NBC 2 Report (Evaluated Data)				
Line	Nuclear	Chemical	Biological	ROTA (RN, RB, RC, and RU)
A	M /US/B26/001/N/55//	M /US/A237/001/C//	M /US/C135/001/B//	M /US/A137/001/RU//
C	NA	NA	NA	M /281545ZSEP2006//
D	M /211335ZSEP2006//	M /211335ZSEP2006/ 211345ZSEP2006//	M /211335ZSEP2006/ 211345ZSEP2006//	NA
F	M /32UXX123567/EE//	M /32UXX123567/EE//	M /32UXX123567/EE//	M /32UXX123567/EE//
G	M /SUS/AIR/1/BOM/1	M /OBS/AIR/1/BML-/1	M /OBS/AIR/1/BML-/1	M /SUS/TPT/1/TNK/1//
H	M /SURF//	NA	NA	NA
I	NA	M /AIR/NERV/P/OTH//	M /AIR/BIO/UNK/MPDS//	M /SUR/1789/-MSVY//
MR	NA	NA	NA	M /LEAK/CONT//
N	M /16KT//	NA	NA	NA
T	NA	M /FLAT/URBAN//	M /FLAT/URBAN//	M /FLAT/URBAN//
Y	O /270DEG/013KPH//	O /270DEG/013KPH//	O /270DEG/013KPH//	O /270DEG/013KPH//
Z	O /4/10C/7/5/1//	O /4/10C/7/5/1//	O /4/10C/7/5/1//	O /4/10C/7/5/1//
GENTEXT	FREE TEXT (information that adds significant value to the report)	FREE TEXT (information that adds significant value to the report)	FREE TEXT (information that adds significant value to the report)	FREE TEXT (information that adds significant value to the report)
M = Mandatory (must be provided) O = Operationally determined (should be provided if known/command discretion) C = Conditional				

**Sample NBC 3 Report
(Immediate Warning of Expected Contamination
or Hazard Area)**

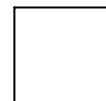
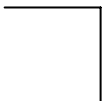
Line	Nuclear	Chemical	Biological	ROTA (RN, RB, RC, and RU)
A	M /US/B26/001/N/55//	M /US/A237/001/C//	M /US/C135/001/B//	M /US/A137/001/RU//
C	NA	NA	NA	M /281430ZSEP2006//
D	M /211335ZSEP2006//	M /211335ZSEP2006/ 211345ZSEP2006//	M /211335ZSEP2006/ 211345ZSEP2006//	NA
F	M /32UXX123567/EE//	M /32UXX123567/EE//	M /32UXX123567/EE//	M /32UXX123567/EE//
G	O /SUS/AIR/1/BOM/1//	O /OBS/AIR/1/BML/-//	O /OBS/AIR/1/BML/-//	O /SUS/TPT/1/TNK/1//
H	O /SURF//	NA	NA	NA
I	NA	M /AIR/NERV/P/UMPDS//	M /AIR/BIO/UNK/MSDS//	M /SUR/1789/-OTH//
N	O /16KT//	NA	NA	NA
O	O /261100ZSEP2006//	O /261100ZSEP2006//	O /261100ZSEP2006//	O /261100ZSEP2006//
PA	NA	M /1KM/3-10DAY/10KM/2- 6DAY//	M /1KM/3-10DAY/10KM/2-DAY//	M /1KM/-5KM/-//
PB	M /019KPH/33KPH/5KM/ 273DGG/312DGG//	NA	NA	NA
PC	O /32VXX456324/ 32VXX453621/ 32VXX453256/ 32VXX435123/ 32VXX342178/ 32VXX401876//	NA	NA	NA
PD	O /030DGT//	NA	NA	NA
PX	NA	M /201600ZOCT2006/ 32VXX456280/32VXX456119/ 32VXX576200/32VXX556217/ 32VXX456280//	M /201600ZOCT2006/ 32VXX456280/32VXX456119/ 32VXX576200/32VXX556217/ 32VXX456280//	M /201600ZOCT2006/ 32VXX456280/32VXX456119/ 32VXX576200/32VXX556217/ 32VXX456280//
XB	C /270DEG/015KPH//	C /270DEG/015KPH//	C /270DEG/015KPH//	C /270DEG/015KPH//
Y	O /4/10C/7/5/1//	O /4/10C/7/5/1//	O /4/10C/7/5/1//	O /4/10C/7/5/1//
Z	O /4/10C/7/5/1//	O /4/10C/7/5/1//	O /4/10C/7/5/1//	O /4/10C/7/5/1//
GENTEXT	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)	O *LINE PA=1000M/THE RADIUS OF THE HAZARD AREA

M = Mandatory (must be provided)
O = Operationally determined (should be provided if known/command discretion)
C = Conditional



GTA 03-06-008

November 2007



Sample NBC 4 Report (Recon, Monitoring, and Survey Results)

Line	Nuclear	Chemical	Biological	ROTA (RN, RB, RC, and RU)
A	O /US/B26/001/N//	O /US/A237/001/C//	O /US/C135/001/B//	O /US/A137/001/RN//
I	NA	M /UNK/NERV//	M /AIR/BIO/-/MPDS//	M /SURF/2978/-/MSVY//
K	O /UNK//	NA	NA	NA
Q	M /32VXX481203/ GAMMA-//	M /32UXX233779/VAP/ OTH//	M /32VXX481203/ SOLID-//	M /32VXX481203/LIQ/-//
R	M /7CGY/DECR/DN//	O /20PPM//	O /20PPM//	O /7CGH/DECR/DF//
S	M /212245ZSEP2006//	M /212245ZSEP2006//	M /212245ZSEP2006//	M /212245ZSEP2006//
T	NA	M /FLAT/URBAN//	M /FLAT/URBAN//	M /URBAN/URBAN//
W	O /POS/POS/YES/HIGH//	O /POS/POS/NO/MED//	O /POS/POS/NO/ MED//	O /-/POS/NO/HIGH//
Y	O /285DEG/012KPH//	O /285DEG/012KPH//	O /285DEG/012KPH//	O /285DEG/012KPH//
Z	O /4/10/7/5/1//	O /4/10/7/5/1//	O /4/10/7/5/1//	O /4/10/7/5/1//
GENTEX	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)
M = Mandatory (must be provided) O = Operationally determined (should be provided if known/command discretion) C = Conditional				

**Sample NBC 5 Report
(Areas of Actual Contamination)**

Line	Nuclear	Chemical	Biological	ROTA (RN, RB, RC, and RU)
A	O /US/B26/001/N//	O /US/A237/001/C//	O /US/C135/001/B//	O /US/A137/001/RU//
C	NA	NA	NA	O /271130ZSEP2006//
D	O /260945ZSEP2006//	O /260945ZSEP2006//	O /260945ZSEP2006//	NA
I	NA	M /AIR/NERV/P/UMSVY//	M /AIR/BIO/-/UMPDS//	M /SURF/2978/-/OTH//
O	M /261100ZSEP2006//	M /261200ZSEP2006//	M /261230ZSEP2006//	M /271330ZSEP2006//
XA	M /5CGH/32UXX234765/ 32UXX235987/ 32UXX456231/ 32UXX342657/ 32UXX234765//	M /LCT50/32UXX234765/ 32UXX235987/ 32UXX456231/ 32UXX342657/ 32UXX234765//	M /LCT50/32UXX234765/ 32UXX235987/ 32UXX456231/ 32UXX342657/ 32UXX234765//	M /0.002CGH/32UXX234765/ 32UXX235987/ 32UXX456231/ 32UXX342657/ 32UXX234765//
XB	O /75/100CGH/ 32UXX621476/ 32UXX621477/ 32UXX622477/ 32UXX622476/ 32UXX621476//	O /32UXX621476/ 32UXX621477/ 32UXX622477/ 32UXX622476/ 32UXX621476//	O /32UXX621476/ 32UXX621477/ 32UXX622477/ 32UXX622476/ 32UXX621476//	O /32UXX621476/ 32UXX621477/ 32UXX622477/ 32UXX622476/ 32UXX621476//
Y	O /276DEG/016KPH//	O /276DEG/016KPH//	O /276DEG/016KPH//	O /276DEG/016KPH//
Z	O /4/10/7/5/1//	O /4/10/7/5/1//	O /4/10/7/5/1//	O /4/10/7/5/1//
GENTEX	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)	O FREE TEXT (information that adds significant value to the report)
M = Mandatory (must be provided) O = Operationally determined (should be provided if known/command discretion) C = Conditional				

Sample NBC 6 Report (Detailed Information of CBRN/ROTA Attack/Incident)				
Line	Nuclear	Chemical	Biological	ROTA (RN, RB, RC, and RU)
A	O /US/B26/001/N//	O /US/A237/001/C//	O /US/C135/001/B//	O /US/A137/001/RU//
C	NA	NA	NA	O /271130ZSEP2006//
D	O /260945ZSEP2006//	O /260945ZSEP2006//	O /260945ZSEP2006//	NA
F	O /32UXX234789/EE//	O /32UXX234789/EE//	O /32UXX234789/EE//	O /32UXX234789/EE//
I	NA	O /AIR/NERV/P/UMPDS//	O /AIR/BIO/-MSDS//	O /SURF/2978/-MSVY//
Q	O /32UXX233779/ GAMMA/-//	O /32UXX233779/ /UMPDS//	O /32VXX481203/ SOLID/-//	O /32VXX481203/LIQ/-//
S	O /261750ZSEP2006//	O /261750ZSEP2006//	O /261750ZSEP2006//	O /261750ZSEP2006//
GENTEX	M /CBRN INFO/WEAPON YIELD ESTIMATED FOR EVALUATION OF COLLATERAL DAMAGE//	M /CBRN INFO/SICA LAB REPORT HAS ID THE AGENT AS VX//	M /CBRN INFO/PRESUMPTIVE ID OF AGENT AS (CODE #) FROM ORGANIC EQUIPMENT/(HHA)//	M /CBRN INFO/HISTORICAL ID OF THIS FACILITY AS A YELLOW CAKE REFINERY/NAI # 127//

M = Mandatory (must be provided)
O = Operationally determined (should be provided if known/command discretion)
C = Conditional

Notes:

- This report summarizes information concerning all forms of CBRN attacks and is prepared by the reporting unit or service equivalent if requested by higher HQ.
- This report is written in narrative form, with as much detail as possible (GENTEX is mandatory). It is used as an intelligence tool to help determine trends and future enemy actions.
- Line Q is repeatable up to 20 times in order to describe multiple detection, monitoring, or survey points.

Useful Formulas:

$\text{Earliest Arrival Time} = \frac{\text{Distance}}{\text{Wind Speed} \times 1.5}$	Note: Measure the distance from the front of the attack area. The resulting arrival time is in hours; if necessary, multiply it by 60 to determine minutes.
$\text{Departure Time} = \frac{\text{Distance}}{\text{Wind Speed}} \times 60$	Note: Measure the distance from the back of the attack area. The resulting departure time is in minutes.
$(^{\circ}\text{Celsius} \times 1.8) + 32 = ^{\circ}\text{Fahrenheit}$	
$(^{\circ}\text{Fahrenheit} - 32) \div 1.8 = ^{\circ}\text{Celsius}$	

Meaning of Line Items in NBC Reports				
Line	Nuclear	Chemical and Biological	ROTA (RN, RB, RC, and RU)	Remarks
A	Strike serial number	Strike serial number	Strike serial number	Assigned by CBRN cell
B	Location of observer and direction of attack or event	Location of observer and direction of attack or event	Location of observer and direction of attack or event	Use coordinates or place
C	NA	NA	DTG of report or observation and end of event	DTG of report or observation in Zulu time, month, and year DTG event ended in Zulu time, month, and year
D	DTGs of attack or detonation and attack end	DTGs of attack or detonation and attack end	NA	Nuc: Use Zulu time Chem/Bio: State time zone used
F	Location of attack or event (EE or AA)	Location of attack or event (EE or AA)	Location of attack or event (EE or AA)	Grid coordinates or place (actual or estimated) (EE or AA)
G	Means of delivery (See legend)	Means of delivery and quantity information (See legend)	Means of delivery and quantity information (See legend)	State suspected (SUS) or observed (OBS) and size of spill (See legend)
H	Type of nuclear burst	NA	NA	Air Surface Subsurface Unknown
I	NA	Release information on biological/chemical attacks or ROTA events Type of agent/type of burst: <ul style="list-style-type: none"> • Persistent (P) • Nonpersistent (NP) • Thickened (T) • Unknown (UNK) 	Release information on biological/chemical attacks or ROTA events UN/NA identification number (4-digit number taken from the Emergency Response Guidebook)	Chem/Bio: Air, ground, or spray All: Type of detection (point, standoff, survey) (See legend)
J	Flash-to-bang time	NA	NA	Use seconds
K	Crater description	NA	NA	Presence or absence of crater, state measurement in meters
L	Angular cloud width at H+5 minutes	NA	NA	State degrees or mils
M	Stabilized cloud size at H+10 minutes	NA	NA	Nuc: State angle as cloud top or bottom in degrees or mils. State height as cloud top or bottom in meters or feet
MR	NA	NA	Description and status of ROTA event (See legend)	None
N	Estimated yield	NA	NA	Use kilotons

Meaning of Line Items in NBC Reports (Continued)

Line	Nuclear	Chemical and Biological	ROTA (RN, RB, RC, and RU)	Remarks
O	Reference DTG for estimated contour line	Reference DTG for estimated contour line	Reference DTG for estimated contour line	None
PA	NA	Predicted radius for hazard area and attack area in km Duration of hazard in attack and hazard areas in days, hours, and minutes	Predicted radius for hazard area and attack area in km Duration of hazard in attack and hazard areas in days, hours, and minutes	None
PB	Detailed fallout hazard prediction parameters (wind speed, Zone I, cloud radius, left and right radial lines)	NA	NA	Effective wind speed (3 digits and unit of measurement) Downwind distance of Zone I (3 digits and unit of measurement) Cloud radius (2 digits and unit of measurement) Left and right radial lines (3 digits and unit of measurement)
PC	Radar-determined external contour of radioactive cloud	NA	NA	Geographic positions
PD	Radar-determined downwind direction of radioactive cloud	NA	NA	Downwind direction of radioactive cloud and unit of measurement
PX	NA	Hazard area location for weather period Field 2 may be repeated up to 20 times in order to describe the hazard area outline	Hazard area location for weather period Field 2 may be repeated up to 20 times in order to describe the hazard area outline	DTG of start of weather period Field 2: Hazard area coordinates
Q	Location of reading/sample/detection and type of sample/detection Repeatable up to 20 times in order to describe multiple detectors and monitoring or survey points (See legend)	Location of reading/sample/detection and type of sample/detection Repeatable up to 20 times in order to describe multiple detectors and monitoring or survey points (See legend)	Location of reading/sample/detection and type of sample/detection Repeatable up to 20 times in order to describe multiple detectors and monitoring or survey points (See legend)	Location coordinates Type of sample (see legend) Type of detection (see legend) Height of measurement above ground level and unit of measurement

Meaning of Line Items in NBC Reports (Continued)

Line	Nuclear	Chemical and Biological	ROTA (RN, RB, RC, and RU)	Remarks
R	<p>Level of contamination, dose rate trend, and decay rate trend</p> <p>Dose rate trend/decay rates:</p> <ul style="list-style-type: none"> • BACK = Background • DECR = Decreasing • INCR = Increasing • INIT = Initial • SAME = Same • PEAK = Peak <p>Relative decay rates:</p> <ul style="list-style-type: none"> • DN = Decay normal • DF = Decay faster than normal • DS = Decay slower than normal 	<p>Level of contamination, dose rate trend, and decay rate trend, if known:</p> <ul style="list-style-type: none"> • LDXX lethal dose xx = LD1 to LD99 • IDXX incapacitating dose xx = ID1 to ID99 • ICTXX incapacitating dosage xx = ICt1 to ICt99 • LCTXX lethal dosage xx = LCt1 to LCt99 • MCTXX eye-affecting dosage xx (miosis) = MCT1 to MCT99 	<p>Level of contamination, dose rate trend, and decay rate trend, if known:</p> <ul style="list-style-type: none"> • LDXX lethal dose xx = LD1 to LD99 • IDXX incapacitating dose xx = ID1 to ID99 • ICTXX incapacitating dosage xx = ICt1 to ICt99 • LCTXX lethal dosage xx = LCt1 to LCt99 • MCTXX eye-affecting dosage xx (miosis) = MCT1 to MCT99 	<p>Repeatable up to 20 times in order to describe multiple detectors and monitoring or survey points</p>
S	<p>DTG of reading or initial detection of contamination</p>	<p>DTG of reading or initial detection of contamination</p>	<p>DTG of reading or initial detection of contamination</p>	<p>Repeatable up to 20 times in order to describe multiple detectors and monitoring or survey points</p>
T	<p>Terrain/topography and vegetation description</p> <p>Repeatable up to 20 times in order to describe multiple detectors and monitoring or survey points</p>	<p>Terrain/topography and vegetation description</p> <p>Repeatable up to 20 times in order to describe multiple detectors and monitoring or survey points</p>	<p>Terrain/topography and vegetation description</p> <p>Repeatable up to 20 times in order to describe multiple detectors and monitoring or survey points</p>	<p>Terrain/topography:</p> <ul style="list-style-type: none"> • FLAT = Flat • URBAN = Urban • HILL = Hill • SEA = Sea • VALLEY = Valley • UNK = Unknown <p>Vegetation:</p> <ul style="list-style-type: none"> • BARE = Bare • SCRUB = Scrubby vegetation • WOODS = Wooded terrain • URBAN = Urban • UNK = Unknown

Meaning of Line Items in NBC Reports (Continued)

Line	Nuclear	Chemical and Biological	ROTA (RN, RB, RC, and RU)	Remarks
W	Sensor information	Sensor information	Sensor information	Generic alarm results: <ul style="list-style-type: none"> • POS = Positive • NEG = Negative Confirmatory test: <ul style="list-style-type: none"> • Y = Conducted • N = Not conducted Confidence level of results: <ul style="list-style-type: none"> • LOW = Confidence • MED = Confidence • HIGH = Confidence
XA	Actual contour information and unit of measurement, dose rate/dosage CGH = Centigray per hour	Actual contour information and unit of measurement, dose BIO-CFU = Colony-forming units, if known	Actual contour information and lethal or incapacitating dose/dosage percentage: <ul style="list-style-type: none"> • LDXX lethal dose xx = LD1 to LD99 • IDXX incapacitating dose xx = ID1 to ID99 • ICTXX incapacitating dosage xx = ICT1 to ICT99 • LCTXX lethal dosage xx = LCT1 to LCT99 • MCTXX eye-affecting dosage xx (miosis) = MCT1 to MCT99 	Actual contour information Use MGRS (Military Grid Reference System), latitude/longitude, or UTM (Universal Transverse Mercator)
XB	Predicted contour information	Predicted contour information	Predicted contour information	Predicted contour information
Y	Downwind direction and speed	Downwind direction and speed	Downwind direction and speed	4 digits for direction and unit of measure 3 digits for wind speed and unit of measure
Z	Actual weather conditions	Actual weather conditions	Actual weather conditions	1 digit for air stability 2 digits for temperature (C) 1 digit for humidity 1 digit for significant weather phenomena 1 digit for cloud cover
GENTEXT	Free text Use this line for additional information needed for NBC reports (mandatory for NBC 6)	Free text Use this line for additional information needed for NBC reports (mandatory for NBC 6)	Free text Use this line for additional information needed for NBC reports (mandatory for NBC 6)	None

Legend		
Type of NBC Report NUC = Nuclear Report BIO = Biological Report CHEM = Chemical Report ROTA = ROTA Report UNK = Unknown WARN = ROTA Warning	Type of Incident N = Nuclear B = Biological C = Chemical RN = ROTA Nuclear RB = ROTA Biological RC = ROTA Chemical RU = ROTA Unknown	Location Qualifier AA = Actual Area EE = Estimated Area
ROTA Event Description CLOUD = Visible Cloud FIRE = Burning Fire POOL = Large quantity of still liquid LEAK = Continuous flow from damaged pipe or container SPILL = Small quantity of still liquid LIQUID = Liquid	ROTA Event Status PUFF = Single Release of a Cloud CONT = Continuous SPRAY = Spraying	Size of Spill or Release SML = Small (<200 L or KG) LRG = Large (≥200 L or KG to ≤1,500 L or KG) XLG = Extra Large (>1,500 L or KG) UNK = Unknown Amount
Type of Sample LIQ = Liquid VAP = Vapor SOIL = Soil Sample SOLID = Solid Sample VEG = Vegetation Sample WATER = Water Sample	Type of Detection OTH = Other, use GENTEXT MPDS = Manned Point Detection System UMPDS = Unmanned Point Detection System MSDS = Manned Standoff Detection System UMSDS = Unmanned Standoff Detection System MSVY = Manned Survey UMSVY = Unmanned Survey	Agent Container Type BML = Bomblet BOM = Bomb BTL = Pressurized Gas Bottle BUK = Bunker CON = Generic Storage Container DRM = Nominal 200-L Storage Drum GEN = Generator (Aerosol) MSL = Missile RCT = Reactor RKT = Rocket SHL = Shell SPR = Spray (Tank) STK = Stockpile TNK = Storage Tank TOR = Torpedo MNE = Mine (NBC-filled only) WST = Waste UNK = Unknown
Unit of Measurement (Speed) MPS = Meters per Second KPH = Kilometers per Hour KTS = Knots MPH = Miles per Hour	Means of Delivery AIR = Aircraft BOM = Bomb CAN = Cannon MLR = Multiple-Launched Rocket System MSL = Missile MOR = Mortar PLT = Plant RLD = Railroad Car SHP = Ship TPT = Transport UNK = Unknown	Type of Nuclear Burst or Agent Release Height AIR = Air SURF = Surface (Release on Ground Impact) SUBS = Subsurface (Only Used on NUC Reports) UNK = Unknown
Unit of Measurement (Direction) DGM = Degrees/Magnetic North DGT = Degrees/True North DGG = Degrees/Grid North MLM = Mils/Magnetic North MLT = Mils/True North MLG = Mils/Grid North		

Effective Downwind Message Format		
Line	Format	Meaning
Z	DDttt--	DTG when winds were measured
A	dddsss--	≤2 KT
B	dddsss--	>2 KT to ≤5 KT
C	dddsss--	>5 KT to ≤30 KT
D	dddsss--	>30 KT to ≤100 KT
E	dddsss--	>100 KT to ≤300 KT
F	dddsss--	>300 KT to ≤1,000 KT
G	dddsss--	>1,000 KT to ≤3,000 KT

Notes:

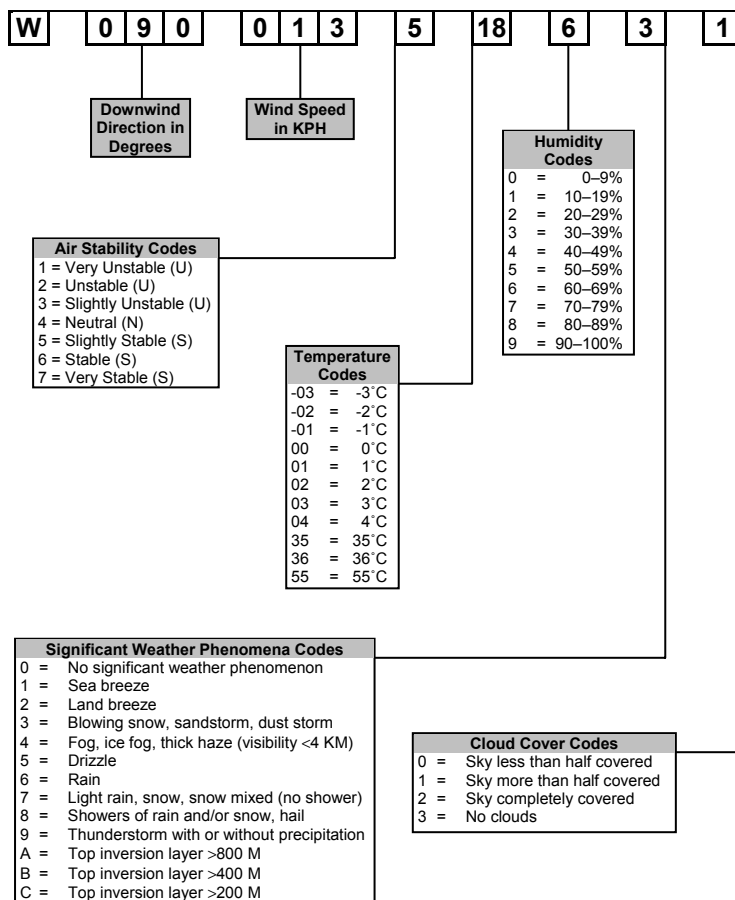
- Line Z is the date and time winds were measured; DD represents the day, and ttt represents the hour in Zulu time (GMT).
- Lines A–G provide data for the prescribed yield groups.
- The letters *ddd* represent the effective downwind direction from GN.
- The letters *sss* represent the effective wind speed to the nearest KPH.
- The three hyphens represent the expanded angle in degrees.

Chemical Downwind Message	
230500ZSEPP2006	230600ZSEPP2006
V Corps	
WM	/135/009/1/04/7/14/2//
XM	/125/010/2/08/6/0/0//
YM	/170/012/3/09/8/7/1//

Notes:

- CDM is valid for only 6 hours.
- Areas affected may be AREA-M, map sheet number, or an area such as V Corps.
- Each CDM is subdivided into three 2-hour periods.
- WM, first 2 hours; XM, next 2 hours, and YM, last 2 hours.

How to Read Weather Information in a Chemical Downwind Message



Transmission/Protection Factors¹			
Environmental Shielding		Transmission Factor (TF)	Protection Factor (PF)
Armored Vehicles			
M1 Tank		0.0400	25.00
M60 Tank		0.0400	25.00
M2 Infantry Fighting Vehicle		0.2000	5.00
M3 Cavalry Fighting Vehicle		0.2000	5.00
M113 Armored Personnel Carrier		0.3000	3.33
M93 NBC Reconnaissance Vehicle		0.2000	5.00
M109 Self-Propelled Howitzer		0.2000	5.00
M548 Cargo Vehicle		0.7000	1.43
M88 Recovery Vehicle		0.0900	11.11
M577 Command Post Carrier		0.3000	3.33
Trucks			
HMMWV		0.5000	2.00
¼-ton		0.8000	1.25
¾-ton		0.5000	2.00
2½-ton		0.5000	2.00
4-ton to 7-ton		0.5000	2.00
Structures			
Multistory buildings	Top floor	0.0100	100.00
	Lower floors	0.1000	10.00
Frame houses	Basement	0.6000	1.67
	Upper floors	0.1000	10.00
Urban areas (in the open)		0.7000 ²	1.43 ²
Woods		0.8000 ²	1.25 ²
Underground shelters (minimum 3-foot earth cover)		0.0002	5,000.00
Foxholes		0.1000	10.00
¹ The terms <i>protection factor</i> and <i>correlation factor</i> are interchangeable. ² Applies to aerial survey dose rates only. Formulas used to determine correlation/protection factors:			
$OD = \frac{ID}{TF}$ $ID = TF \times OD$ $CF = \frac{OD}{ID}$ $ID = \frac{OD}{CF}$ $OD = ID \times TF$			
where— <i>ID</i> = inside dose <i>OD</i> = outside dose <i>TF</i> = transmission factor <i>PF</i> = protection factor <i>CF</i> = correlation factor			