

Potential Threat of CBRNE Terrorism in Japan

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Masaaki Iwaki

Adviser, Teikoku Sen-i Co.,Ltd

Major General (Ret.), former Commandant of the Ground
Self-Defense Force (JGSDF) Chemical School

●Threat of CBRNE terrorism(1) : UAV/ drone with C

Threat - Old but not too old : Matsumoto Sarin case
Chem-Images of Downwind hazard area



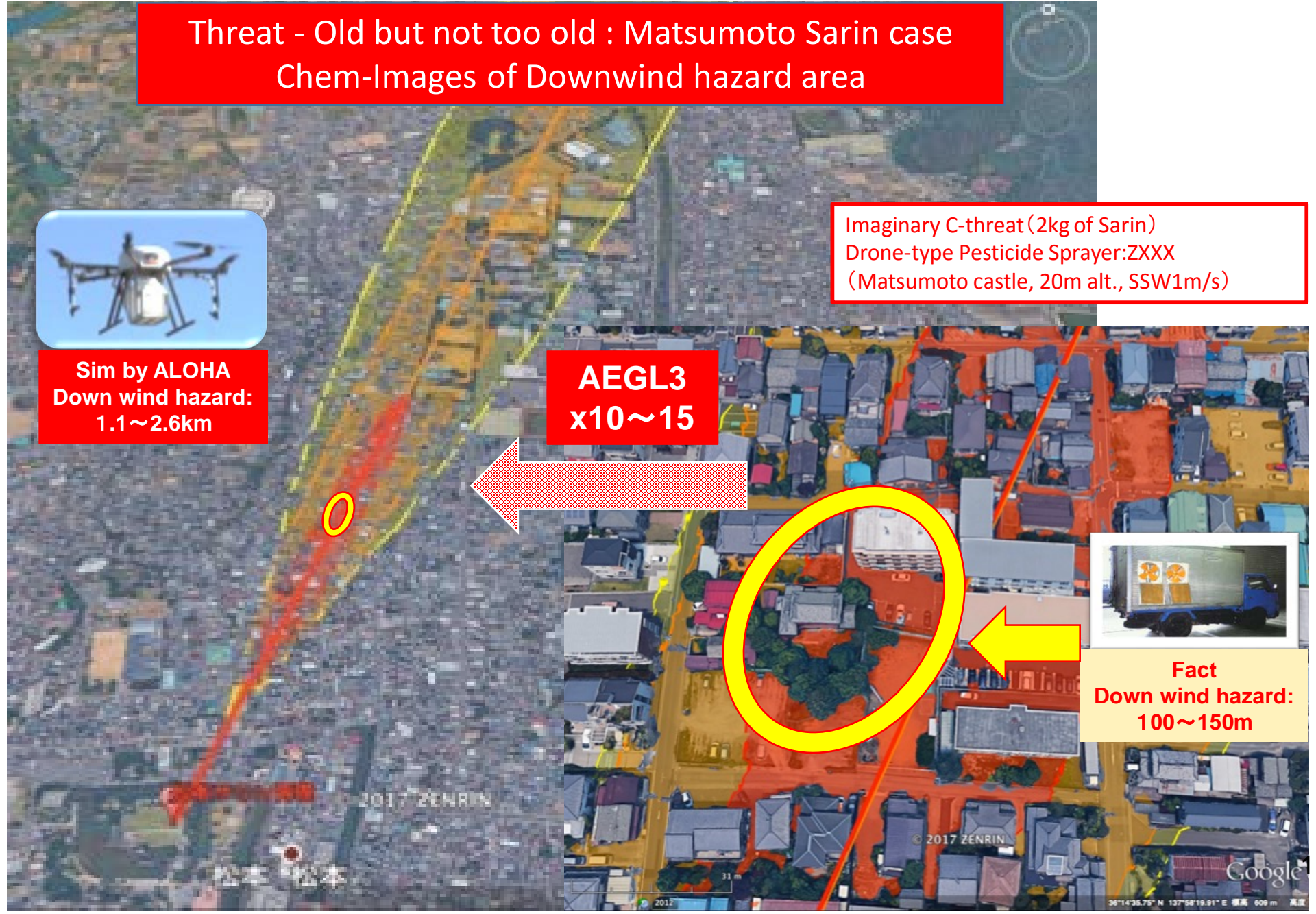
Sim by ALOHA
Down wind hazard:
1.1~2.6km

Imaginary C-threat (2kg of Sarin)
Drone-type Pesticide Sprayer:ZXXX
(Matsumoto castle, 20m alt., SSW1m/s)

AEGL3
x10~15



Fact
Down wind hazard:
100~150m



●Threat of CBRNE terrorism(2) : UAV/ drone with R

Image of a R-drone
(cf. : PM's official residence)

Date : 2015/9th April
R source: contaminated dart 100g (134Cs, 137Cs, 1.5 μ Sv/hr)
Drone : commercial drone- CJJ Phantom



●Threat of CBRNE terrorism(3) Stand-off attack by Small Weapon

Fukushima No.1 plant/Tepeco

Decommisioning at TEPCO/Fukushima

Tentative storage of spent fuel

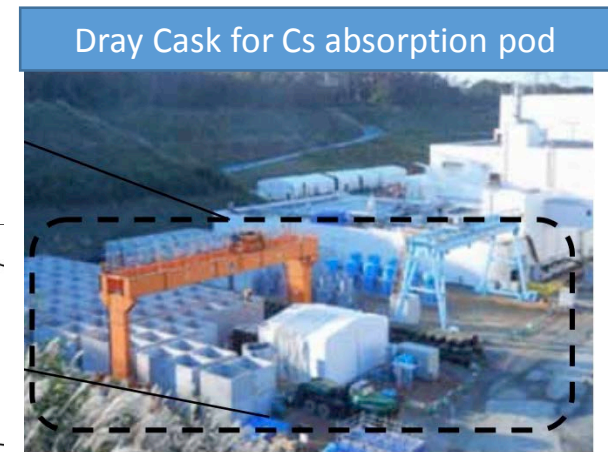
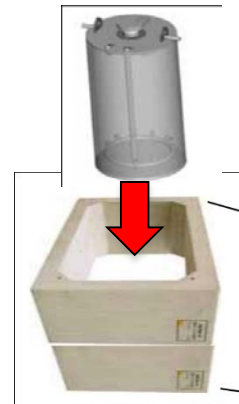
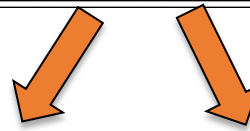


Tentative storage of Cs absorption pod



●Threat of CBRNE terrorism(3) Stand-off attack by Small Weapon

Weapon	Country	Weight	Range	Warhead Ø/Kg	Armor Penetration
Milan Anti-Tank Missile	France	32 kg	2000 m	133 mm/3.12 kg	>1000 mm
Panzerfaust 3 Anti-Tank Launcher	Germany	13 kg	300 m	110 mm/NA	>700 mm
RPG-7 Anti-Tank Launcher	Soviet Union	11 kg	300 m	85 mm/NA	330 mm
Carl Gustav M2 Recoilless Gun	Sweden	15 kg	700 m	84 mm/NA	>400 mm
LAW 80 Anti-tank Launcher	U.K.	9 kg	500 m	94 mm/NA	700 mm
TOW 2 Anti-tank Missile	USA	116 kg	3750 m	127 mm/28 kg	>700 mm
Javelin AAWS/M	USA	16 kg	2000 m	127 mm/NA	>400 mm



Wall Thickness : ~??cm (steel : ~??cm)

ca. $10^{14} \sim 10^{15}$ Bq/pod
stocks : ca. 500 casks (at April 2013)