

Headquarters
United States Forces Korea
Unit #15237
APO AP 96205-5237

United States Forces Korea
Regulation 40-6

30 November 2007

Medical Services

YELLOW SAND ACTIVITY MONITORING SYSTEM

***This is the first edition of United States Forces Korea Regulation 40-6.**

For the Commander:

DAVID P. VALCOURT
Lieutenant General, USA
Chief of Staff

Official:



F.W. MORRIS
Chief of Publications and
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Summary. This regulation establishes policies, responsibilities and procedures governing the Yellow Sand Activity Monitoring System. It also implements activity restriction recommendations and protective procedures during high concentrations of Yellow Sand to mitigate the effects of this environmental threat, and protect the health and safety of United States Forces Korea (USFK) personnel and families.

Applicability. This regulation applies to the following:

- a. Active duty U.S. Armed Forces personnel who are assigned to USFK, or who are within the Republic of Korea (ROK) while on leave or temporary duty

and their family members who are subject to the Status of Forces Agreement (SOFA).

b. Reserve personnel who are performing annual or other training in the ROK.

c. National Guard personnel who are performing training in a Federal status in the ROK.

d. All U.S. citizen civilian employees of the Department of Defense (DOD), Non-Appropriated Fund Instrumentality (NAFI) supporting USFK, DOD Invited Contractors, Technical Representatives and their family members who are subject to the SOFA.

e. All ROK civilian employees.

Supplementation. Further supplements to this regulation by subordinate commands are prohibited unless prior approval is obtained from Headquarters (HQ) USFK, (FKSG), Unit #15237, APO AP 96205-5237, email: fksg@korea.army.mil.

Forms. USFK forms are available at www.usfk.mil.

Records Management. Records created as a result of processes prescribed by this regulation must be identified, maintained, and disposed of according to governing service regulations. Record titles and descriptions are available on the Army Records Management System website at: <https://www.arims.army.mil>.

Suggested Improvements. The proponent of this regulation is Office of the Command Surgeon, HQ USFK (FKSG). Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to HQ USFK (FKSG), Unit #15237, APO AP 96205-5237, email: fksg@korea.army.mil.

Distribution. Electronic Media Only (EMO).

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Glossary

1. PURPOSE. To prescribe policies, establish responsibilities and procedures governing the Yellow Sand Activity Monitoring System, implement protective procedures and activity restriction recommendations during high concentrations of Yellow Sand to safeguard USFK personnel and their families, and ensure unit readiness to mitigate the harmful effects of Yellow Sand.

2. REFERENCES. Required and related publications are listed in Appendix A.

3. EXPLANATION OF ABBREVIATIONS. Abbreviations used in this regulation are explained in the glossary.

4. RESPONSIBILITIES.

a. Service Component Commanders shall:

(1) Publish and enforce procedures and guidance that ensure all personnel assigned or attached to their command understand and comply with this Regulation and USFK Command Policy Letter# 36, Activities During Yellow Sand Alert.

(2) Ensure Major Subordinate Commands (MSCs) monitor particulate pollution forecast and Yellow Sand activity data and implement protective measures for outdoor activities to mitigate the dangers caused by unhealthy Yellow Sand levels.

(3) Ensure MSCs assimilate Yellow Sand activity into Risk Management, Health Promotion and Injury Prevention Plans in order to reduce the unhealthy effects of Yellow Sand and ensure unit readiness.

(4) Ensure unit personnel at all levels and their families are aware of the Yellow Sand Activity Monitoring System, the negative health consequences of Yellow Sand and measures to reduce exposure to Yellow Sand.

(5) Ensure unit personnel and their families adhere to the appropriate activity restrictions and protective procedures during high concentrations of Yellow Sand.

b. Commanding General, Eighth US Army (8th Army) shall:

(1) Ensure the 18th Medical Command (MEDCOM) conduct primary notifications of Yellow Sand warnings and alerts to the USFK Command Center Seoul (CC Seoul), for dissemination to all USFK Component Commanders, Area Commanders, the Installation Management Command (IMCOM)-Korea, Armed Forces Network (AFN)-Korea, Department of Defense Dependents School (DODDS)-Pacific, Directors of Youth Activity Services, and the Directors of Child Development Services when Yellow Sand concentrations reach unsafe levels.

(2) Ensure the 18th MEDCOM monitors the Korean Meteorological Administration's Asian Dust Warnings and Yellow Sand forecast notices from the 607th Weather Squadron; maintains a Yellow Sand Alert website to reflect current Yellow Sand Warnings, and establishes a secondary Yellow Sand warning and notification system that provides CC Seoul with a secondary source of Yellow Sand alerts.

(3) Ensure the 18th MEDCOM Occupational Health/Industrial Hygiene Assessment Teams conduct air quality and industrial hygiene assessments as required, and provide recommendations to mitigate unhealthy air quality as appropriate.

(4) Ensure the 18th MEDCOM coordinates with the USFK Command Surgeon and USFK Public Affairs Office (PAO) to provide safety tips and other appropriate information on Yellow Sand awareness to command information networks during the Yellow Sand season, in order to increase USFK personnel awareness.

c. Commander, Seventh Air Force (7th AF) shall ensure the 607th Weather Squadron provides Yellow Sand forecast notices during the Yellow Sand season to CC Seoul, the Office of the Command Surgeon, the 18th MEDCOM Deputy Chief of Staff, Force Health Protection; and disseminate Yellow Sand forecast notices on the AFN Weather Channel and USFK Weather Information Website, in order to enhance predictability of impending Yellow Sand events and increase USFK personnel awareness.

d. Commander, IMCOM-Korea shall:

(1) Ensure all Area Commanders actively publicize safety tips and Yellow Sand alert warnings in their communities, on their respective command channels and other appropriate command information networks during the Yellow Sand season, in order to increase USFK personnel awareness.

(2) Assess policies, procedures, risks and benefits regarding the exchange from heating system to air conditioning in government furnished living quarters and office spaces, in anticipation of Yellow Sand events.

(3) Publish and enforce procedures and regulations for Yellow Sand activities and restrictions as required by USFK Command Policy Letter # 36, Activities During Yellow Sand Alert.

(4) Monitor particulate pollution forecast and Yellow Sand activity data and implement protective measures and restrictions for outdoor activities to mitigate the dangers caused by unhealthy Yellow Sand levels.

e. Area Commanders shall:

(1) Ensure all personnel are aware of the Yellow Sand Activity Monitoring System, protection measures and outdoor activity restrictions by disseminating Yellow Sand activity monitoring information to the unit level; posting data on appropriate bulletin boards, area news bulletins and websites, and by including information from this regulation in briefings for newly arriving personnel.

(2) Ensure the Directors of Child Development Services, and Directors of Youth Activity Services monitor particulate pollution forecasts and Yellow Sand data, and implement protective measures and restrictions for outdoor activities in accordance with this regulation.

(3) Develop and enforce procedures and regulations for Yellow Sand activities and restrictions as required by USFK Command Policy Letter # 36, Activities During Yellow Sand Alert.

(4) Monitor particulate pollution forecast and Yellow Sand activity data and implement protective measures for outdoor activities to mitigate the dangers caused by unhealthy Yellow Sand levels.

f. Commander, AFN-Korea shall utilize all available radio and television media to disseminate safety tips, and rapidly distribute Yellow Sand alert warnings and forecast notices.

g. USFK J3 shall:

(1) Provide Yellow Sand alert notices from CC Seoul, to all USFK Component Commanders, Area Commanders, IMCOM-Korea, AFN-Korea, DODDS-Pacific, Directors of Youth Activity Services, and the Directors of Child Development Services when Yellow Sand concentrations reach unsafe levels in order to ensure appropriate risk reduction measures are initiated in a timely manner.

(2) Ensure CC Seoul receives Yellow Sand forecast notices from the 607th Weather Squadron and disseminates the forecast notices to all USFK Component Commanders, Area Commanders, IMCOM-Korea, AFN-Korea, DODDS-Pacific, Directors of Youth Activity Services, and the Directors of Child Development Services in order to enhance predictability of impending Yellow Sand events and increase USFK personnel awareness.

(3) Incorporate the Yellow Sand Activity Monitoring System and Yellow Sand information into the mandatory theater requirements training program.

h. USFK Command Surgeon shall:

(1) Serve as proponent for the USFK Yellow Sand Activity Monitoring System, all Yellow Sand activity restriction recommendations, protective procedures and policy matters.

(2) Liaison with the Korean Meteorological Administration (KMA) on Yellow Sand monitoring and forecasting issues relevant to this regulation.

(3) Coordinate with USFK PAO and USFK Safety Office to provide safety tips and other appropriate information on Yellow Sand awareness to command information networks during the Yellow Sand season in order to increase USFK personnel awareness.

(4) Coordinate with the 607th Weather Squadron to receive Yellow Sand forecast notices and ensure this information is appropriately disseminated to command information networks during the Yellow Sand season in order to increase USFK personnel awareness.

(5) Coordinate with 18th MEDCOM, Deputy Chief of Staff, Force Health Protection, to ensure an efficient primary and secondary source of Yellow Sand notices and alerts are provided to CC Seoul, for dissemination to all USFK Component Commanders, Area Commanders, IMCOM-Korea, AFN-Korea, DODDS-Pacific, Directors of Youth Activity Services, and the Directors of Child Development Services when Yellow Sand concentrations reach unsafe levels.

i. USFK PAO shall:

(1) Coordinate with USFK Command Surgeon and USFK Safety Office to provide safety tips and other appropriate information on Yellow Sand awareness to command information networks during the Yellow Sand season in order to increase USFK personnel awareness.

(2) Actively publicize safety tips and Yellow Sand alert warnings on appropriate command information networks and the USFK Website during the Yellow Sand season to increase USFK personnel awareness.

j. USFK Safety Office shall:

(1) Coordinate with USFK Command Surgeon to obtain safety tips and other appropriate information on Yellow Sand awareness.

(2) Integrate and actively publicize safety tips and information on the Yellow Sand Activity Monitoring System into the USFK Summer Safety Campaign and USFK Seasonal Safety Pamphlets.

k. Superintendent of DODDS-Pacific shall:

(1) Establish a system and procedures to monitor particulate pollution forecast and Yellow Sand data from CC Seoul and the 18th MEDCOM, Deputy Chief of Staff, Force Health Protection.

(2) Upon notification or the realization that Yellow Sand particulate pollution are at unhealthy levels, implement protective measures and restrictions for outdoor activities as required by USFK Command Policy Letter # 36, Activities During Yellow Sand Alert and this regulation.

(3) Identify high-risk individuals and implement activity restrictions in accordance with this regulation and USFK Command Policy Letter # 36, Activities During Yellow Sand Alert.

I. Directors of Youth Activity Services and the Director of Child Development Services shall:

(1) Monitor particulate pollution forecast and Yellow Sand data from CC Seoul and the 18th MEDCOM, Deputy Chief of Staff, Force Health Protection.

(2) Upon notification or the realization that Yellow Sand particulate pollution are at unhealthy levels, implement protective measures and restrictions for outdoor activities as required by USFK Command Policy Letter # 36, Activities During Yellow Sand Alert and this regulation.

(3) Identify high-risk individuals and implement activity restrictions in accordance with this regulation and USFK Command Policy Letter # 36, Activities During Yellow Sand Alert.

5. POLICY.

a. USFK leaders, personnel and their families will monitor particulate pollution forecast and Yellow Sand data, and take appropriate measures to protect themselves from the unhealthy seasonal phenomenon of Yellow Sand. Furthermore, all military, civilian leaders, and USFK personnel and their family members will be familiar with the Yellow Sand Information Card, and learn to recognize and respond to this environmental threat; and will employ risk management principles to mitigate the dangers caused by unhealthy Yellow Sand levels (see Appendix A and B, Yellow Sand Information Card).

(1) Real-time monitoring of Yellow Sand concentration data is available at the USFK website (<http://www.usfk.mil>) and on the 18th MEDCOM Yellow Sand website (<http://www.seoul.amedd.army.mil/sites/yellowsand/default.asp>).

(2) The KMA maintains an Asian Dust Warning System that provides real-time monitoring and notification procedures for Yellow Sand alert warnings to the 18th MEDCOM and the Watch Team at CC Seoul.

b. Upon notification or the realization that the Yellow Sand Particulate Matter (PM)/pollution are at unhealthy levels, commanders and leaders at all levels will implement appropriate measures as established in Appendix A and B of this Regulation, to mitigate the effects to personnel in their commands.

c. All USFK personnel and their families will implement recommended protective measures and restrictions for outdoor activities in accordance with the guidance listed in Appendix A and B of this Regulation, and upon the realization of the Yellow Sand warning levels of health concern. Recommended protective measures, actions and restrictions for outdoor activities include the following:

(1) **Yellow Sand Concentration Exceeding 99 micrograms/m³**. Identify high-risk personnel and implement activity restrictions when Yellow Sand concentration readings exceed 99 micrograms/m³.

(2) **Amber Yellow Sand Health Alert Code (100-199 micrograms/m³)**. Reduce prolonged and heavy exertion outdoor activities for high-risk personnel when Yellow Sand concentration readings exceed 100 micrograms/m³ or when an **Amber** Yellow Sand Health Alert Code is issued.

(3) **Blue Yellow Sand Health Alert Code or Watch (200-399 micrograms/m³)**. High-risk personnel should not exercise or play outdoors and their outside physical activities should be limited to bare essentials; all other personnel should reduce prolonged and heavy exertion outdoor activities when Yellow Sand concentration readings exceed 200 micrograms/m³, or when a **Blue** Yellow Sand Health Alert Code or "**Watch**" is issued.

(4) **Orange Yellow Sand Health Alert Code or Advisory (400-799 micrograms/m³)**. Avoid all outdoor activities for high-risk personnel; cancel prolonged and heavy exertion outdoor activities (including Physical Training) for all others, when Yellow Sand concentration readings exceed 400 micrograms/m³, or when an **Orange** Yellow Sand Health Alert Code or "**Advisory**" is issued. Commanders will not conduct outside Physical Training (PT) when concentrations reach or exceed the 400 microgram/m³ level and will limit outdoor field training to only the most essential activities, and will minimize the exposure time of service members to unfiltered air.

(5) **Purple Yellow Sand Health Alert Code or Warning (800 micrograms/m³ or Greater)**. All USFK personnel and family members shall remain indoors, at reduced activity levels, unless mission dictates otherwise, when Yellow Sand concentration readings exceed 800 micrograms/m³, or when a **Purple** Yellow Sand Health Alert Code or "**Warning**" is issued. All outside training activities will be prohibited under these conditions. Training will be conducted indoors or delayed/cancelled until Yellow Sand concentration levels are reduced to safer levels.

APPENDIX A

REFERENCES

a. Required Publications.

(1) DOD Directive 1010.10, Health Promotion and Disease Prevention, 24 November 2003.

(2) DOD Directive 4715.1E, Environment, Safety and Occupational Health, 19 March 2005

(3) DOD Instruction 4715.15, Environmental Quality Systems, 11 December 2006.

(4) DOD Directive 6200.4, Force Health Protection, 9 October 2004.

(5) DOD Directive 6490.2, Comprehensive Health Surveillance, 21 October 2004.

(6) Army Regulation (AR) AR 200-1, Environmental Protection and Enhancement, 21 February 1997.

(7) US Forces Korea (USFK) Command Policy Letter# 36, Activities During Yellow Sand Alert, 12 February 2007.

b. Related Publications.

(1) DOD Directive 4715.1E, Environment, Safety, and Occupational Health, 19 March 2005.

(2) DOD Instruction 6055.1, DoD Safety and Occupational Health Program, 19 August 1998.

(3) DOD Instruction 6055.5, Industrial Hygiene and Occupational Health, 10 January 1989.

(4) DOD Manual 6055.5-M, Occupational Medical Surveillance Manual, 4 May 1998.

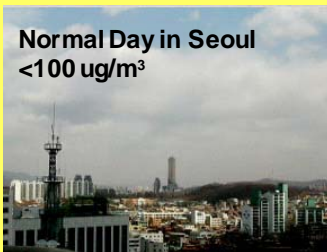
APPENDIX B

Yellow Sand/Asian Dust –(HwangSa)

What is it? Inhalable particles that originate from dry, desert regions of China and Mongolia.

What does it do? In sufficient concentration, fine particles can obscure visibility, irritate soft tissues in the eyes, nose, mouth, and throat, and cause or exacerbate respiratory and cardiovascular problems.

When does it happen? Yellow Sand events usually occur from February through June.



What can I do?

As of 28 June 2007

During the Yellow Sand/dust storm:

- Avoid outdoor activities, especially the elderly, young children, and persons with lung diseases (such as asthma), heart disease or diabetes; see other side of card for activity restriction recommendations
- Keep windows and doors closed
- Remove contact lenses and wear glasses
- Brush your teeth and wash your hands, face and eyes with warm water upon returning indoors
- Drink plenty of water to keep your tears flowing well
- Use air filters to keep air clear, and humidifier to increase indoor humidity level
- Wash fruits and vegetables exposed to Yellow Sand before consumption
- Wash hands carefully before handling food
- Don't burn candles and don't smoke indoors

After the Yellow Sand/dust storm has cleared:

- Air out room/house
- Wash objects exposed to dust before using them – do this carefully to keep from stirring up the dust

Check the current Yellow Sand concentration at <http://www.usfk.mil>, click on **Yellow Sand**, or <http://www.seoul.amedd.army.mil>, click on **Yellow Sand**. For more information, contact Deputy Chief of Staff Force Health Protection, 18TH MEDCOM at **736-3033/3025**, mobile **010-71 24-9512**.

APPENDIX C

Yellow Sand Activity Restriction Recommendations As of 28 June 2007

Dust Concentration Microgram(ug)/m ³	Level of Health Concern	Health Alert Color Code	Personnel at High Risk*	All Others
0-99	Good	Green		
100-199	Moderate	Amber	Consider reducing prolonged and heavy exertion ⁺	
200-399	Unhealthy	Blue "WATCH"	Do not exercise or play outdoors; Limit outdoor physical activity to bare essentials	Reduce prolonged and heavy exertion ⁺
400-799	Very Unhealthy	Orange "ADVISORY"	Avoid all outdoor activities	Do not conduct outdoor physical training; Cancel prolonged and heavy exertion outdoor activities ⁺
800 or greater	Hazardous	Purple "WARNING"	Remain indoors and keep activity levels low	
FOR THE LATEST YELLOW SAND LEVELS, go to http://www.usfk.mil , click on Yellow Sand , or http://www.seoul.amedd.army.mil , click on Yellow Sand , or call DSN 736-3033/3025, mobile 01 0-7 124-9512				

***Personnel at High Risk:**

- Children-5th grade & younger
- Persons with heart disease
- Persons with diabetes
- Elderly-65 and older
- Persons with lung disease such as asthma

+ Heavy exertion

- Field training exercises
- Outdoor recess or organized sports activities
- Road Marching (any distance)
- Outdoor Running (P.T. or recreational)
- Mowing lawns

Commanders, Supervisors, and School Leaders should:

- Identify individuals at high risk and implement appropriate protective measures
- Commanders should include Yellow Sand conditions in training risk assessments

Glossary

Section I Acronyms

AFN	Armed Forces Network
AR	Army Regulation
CC Seoul	Command Center Seoul
FKSG	Office of the Command Surgeon
DOD	Department of Defense
DODDS	Department of Defense Dependents School
HQ	Headquarters
IMCOM	Installation Management Command
KMA	Korean Meteorological Administration
MEDCOM	Medical Command
MSC	Major Subordinate Command
NAFI	Non-Appropriated Fund Instrumentality
PAO	Public Affairs Office
PM	Particulate Matter
PT	Physical Training
ROK	Republic of Korea
SOFA	Status Of Forces Agreement
U.S.	United States
USFK	United States Forces, Korea

Section II Terms

Microgram. A metric unit of measure and one of the most commonly used smallest units of weight/mass. One microgram is one-millionth of a gram, 1/1,000,000.

Micrograms/m3. Microgram per cubic meter (ug/m3) (of air or water).

Particulate Pollution. Also known as "Particulate Matter (PM)" includes a wide range of pollutants -- road dust, diesel soot, fly ash, wood smoke, and sulfate aerosols that are suspended as particles in the air. These particles are a mixture of visible and microscopic solid particles and minute liquid droplets known as aerosols. Particulate is commonly measured in microns, a metric unit of measure.

Status of Forces Agreement (SOFA). The international agreement between the U.S. of America and the Republic of Korea envisaged by Article IV of the U.S.-ROK Mutual Defense Treaty. The SOFA was signed on 9 July 1966 and became effective on 9 February 1967. The term "U.S.-ROK SOFA includes the original Agreement, and its Agreed Minutes and Understandings, as amended. Numerous implementing agreements may be found in the Official Minutes of the SOFA Joint Committee established by Article XXVIII, SOFA. ("SOFA is the abbreviated term for the "Agreement Under Article IV of the Mutual Defense Treaty Between the U.S. of America and the Republic of Korea Regarding Facilities and Areas and the Status of U.S. Armed Forces in the Republic of Korea.")

SOFA status personnel. The categories of those persons, defined in Articles I and XV of the SOFA, provided status and protection under the SOFA. For purposes of this regulation, it includes those members of the United States armed forces, civilian persons of United States nationality who are in the employ of, serving with, or accompanying the United States armed forces in the Republic of Korea, and their dependents; and properly designated invited contractors and their approved employees and dependents whose presence in Korea (and by default whose travel to Korea) is solely attributed to the performance of contracts with or for the U.S. armed forces in Korea, and qualify for status and protection under the SOFA.

Yellow Sand. A seasonal meteorological phenomenon also known as Yellow Dust or Asian Dust, which affects much of East Asia periodically during the springtime months. This occurrence starts with a dust storm of inhalable particles that originate in the deserts of Mongolia and Northern China, which moves and appears as a distinct yellow cloud across the Korean peninsula.