

Environmental Remediation Services at Camp Navajo Installation, Arizona



SAG MEETING
July 14, 2005





MKM Engineers Overview

Camp Navajo

- MKM Engineers, Inc. was founded in 1991 and is headquartered in Stafford, TX.
- Has performed over \$100 million of environmental and decontamination and decommissioning services under federal government contracts.
- MKM is a small geo-environmental engineering firm specialized in providing the following services:
 - site investigation and remediation
 - hazardous, toxic, and radiological waste (HTRW) services
 - operation and maintenance (O&M) services
 - turnkey environmental construction and remediation
 - munitions and explosives of Concern (MEC) services
 - low-level radioactive waste (LLRW)
 - decontamination, deactivation, demolition, and decommissioning
 - transportation and disposal of hazardous wastes
 - geophysical services



Environmental Remediation Services at Camp Navajo Installation, Arizona

- ❑ Guaranteed Fixed Price Remediation (GFPR) – Performance Based Contract (PBC).
- ❑ Includes implementation of Response Complete (RC)/Remedy-In-Place (RIP) for sites with the OB/OD Area – **NAADs 01, 04, E76, 07, 08A, 09A and 10.**
- ❑ Also includes Long Term Management (LTM) activities of Sites **NAAD 40** (former sanitary landfill) and **NAAD 43** (former construction debris landfill #5); and the Ammunition Workshop Area sites **NAADs 11B, 14D and 14G**



THE MKM GFPR TEAM

❑ MKM ENGINEERS, INC.

- ❑ Srimi Neralla, Ph.D. – Program/Project Manager
- ❑ Stan Levenger, P.G. – Task Manager (LTM)
- ❑ Paul Hanneman – Task Manager (OB/OD Sites)
- ❑ Tom Hope – Environmental Scientist

❑ CH2M Hill.

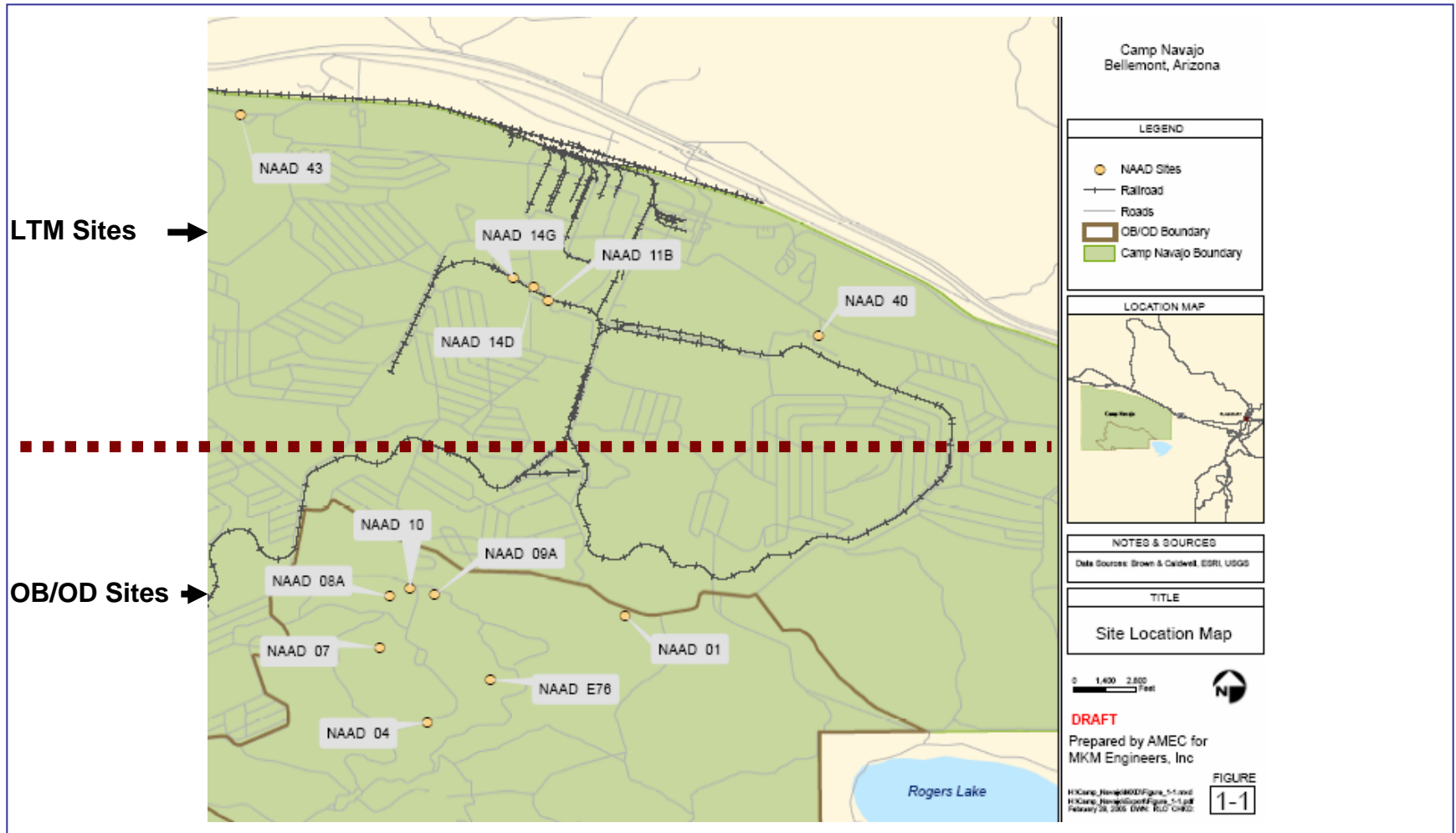
- ❑ Mike Heitmann – Task Manager (OB/OD Sites)
- ❑ Ken Greene, CHMM – Asst. Task Manager (OB/OD Sites)

❑ AMEC

- ❑ Kim Harriz, P.G. – Risk Assessment, DM/DV and Program Support
- ❑ Scott Veenstra, P.G. – Program Support



Site Location Map





Open Burn / Open Detonation Area (OB/OD) - Overview

- ❑ The OB/OD Area consist of approximately 2,500 acres situated in the southern portion of Camp Navajo. The 500 acres within the central part of this area was the main focus of the OB/OD activities. The surrounding 2,000 acres is buffer.
 - ❑ NAAD 01- Old Explosives Ordnance Disposal Demolition Area
 - ❑ NAAD 04- CK/CG Demilitarization Area
 - ❑ NAAD 07- Closed TNT Retention Ponds
 - ❑ NAAD 08A-Former Open Burn Area (Ponds)
 - ❑ NAAD 09A- Closed Open Burn Area
 - ❑ NAAD 10– Pad #3
 - ❑ NAAD E76– Suspected Mustard Gas Burial Site



Open Burn / Open Detonation Area (OB/OD) Activities

- ❑ In June, the MKM Team along with NGB participated in a Technical Project Planning (TPP) meeting with Arizona Department of Environmental Quality (ADEQ) to present the data gaps and the proposed approach for the environmental activities at these sites.
- ❑ The MKM Team is currently involved in drafting Work Plans that will provide specific details of planned sampling and analysis, data use, and path forward to achieve site closure.
- ❑ Look Ahead:
Upon approval of the work plans, field teams will be mobilized to implement the work plan.



Long Term Management - Overview

- ❑ Several sites at the Camp Navajo Installation have undergone remediation and have been recommended for Long Term Management (LTM).
- ❑ Several buildings have been demolished and some soil was excavated and disposed as part of the removal actions at the Ammunition Workshop Area **NAADs 11B, 14D and 14G**. These will require LTM.
- ❑ Two Landfill sites **NAAD 40** (former sanitary landfill) and **NAAD 43** (former construction debris landfill #5) are designated for NFA by ADEQ (FPU# 05-055 and FPU# 05-056 dated 8/31/04) and require LTM also.



Long Term Management (LTM) Activities

- ❑ In June, the MKM Team along with NGB participated in a Technical Project Planning (TPP) meeting with Arizona Department of Environmental Quality (ADEQ) to present the existing information and the proposed approach for the management activities at these sites.
- ❑ An Interim Work Plan has been submitted for ADEQ review to perform rehabilitation work at the landfill sites and the monitoring wells that are going to be included in the LTM program.
- ❑ The MKM Team is also currently involved in drafting Work Plans that will provide specific details of planned sampling and analysis, data use, and ramp-down strategies for these sites as part of the LTM program.