



ENVIRONMENTAL ASSESSMENT MARKETING WHITE PAPER

M2 Technologies, Inc., Kansas State University, CABEM Technologies

<http://uol.ksu.edu/>

MISSION

The Urban Operations Laboratory (UOL), through the Operations Environmental Laboratory (OEL), offers distinct environment, safety, and occupational health (ESOH) assessment capabilities which can be tailored to support key requirements and metrics for public and private sector partners.

PROPOSED INITIATIVE

- Goal: Leverage the successful technomilitary approach to assist technology developers and users in addressing ESOH requirements (DoDI 5000.2 and MIL-STD-882D), including energy and transportation aspects EO 14323), and advance toward sustainability.
- Utilize convenience of existing contract mechanisms with the United States Marine Corps Systems Command and Joint Non-Lethal Weapons Directorate; we are a GSA Schedule Contractor.
- Opportunities: Establish unique niche for capabilities, differentiated from in-house environmental groups and A&E firms.

ACTION PLAN

- Collaborate with clients in defining project goals/vision, establishing plans, and implementing solutions (LCEA framework, ESOH calculators, carbon/eco-footprints, etc.); while facilitating successful development and deployment of products and processes.
- Actively participate in team meetings and teleconferences to share knowledge and results.
- Investigate new and emerging regulations/standards to support public and private stakeholders.

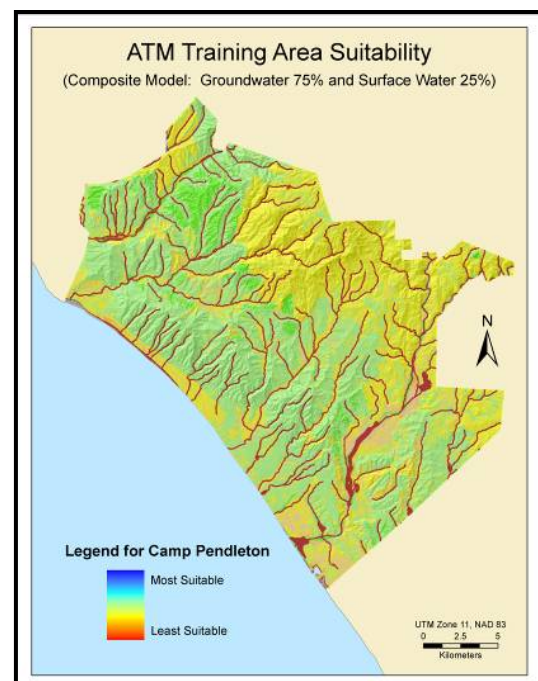
CAPABILITIES

- Multidisciplinary teams of subject matter experts with diverse collaborative perspectives.
- Applied work with laboratory and field-testing capacities.
- Practical and cost-effective applications of versatile software tool – EKAT, which contains a standardized format and semi-automated tool for PESHE development.
- Outreach and engagement via Consortium for Environmental Stewardship and Sustainability.
- Proven experience with technology continuum (R&D through remediation/redevelopment).

PESHE DEVELOPMENT

Using the Programmatic Environmental, Safety, and Occupational Health Evaluation (PESHE) tool and outline found in the Environmental Knowledge and Assessment Tool (EKAT) assists PESHE developers in systematically covering the generally important topics for a PESHE report.

The PESHE template is an editable Word document containing pre-written text applicable to most PESHE reports. To fully use the capability of EKAT to screen for hazardous chemicals and assist with environmental compliance, the PESHE report generator may be used, and will help by automating the proper placement of NEPA compliance, comprehensive ESOH, hazardous materials management, pollution prevention, and explosive safety information within the PESHE report.



HIGHLIGHTED TECHNOLOGIES and DELIVERABLES

Anti-Traction Material (ATM)

- Preliminary Life Cycle Environmental Assessment (LCEA) for ATM – September 2002
- NEPA Decision Memorandum for Mobility Denial System/ATM – July 2005
- Effectiveness Research and GIS Site Suitability Tool Development – July 2005
- Sampling Summary Report – November 2005
- LCEA for Mobility Denial System/Anti-Traction Material – February 2007
- Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE) – March 2008

Aromatic and Odorant Technologies

- Summary of Scientific Literature for Malodorants and Irritants – January 2002
- Toxicological Assessment and Recommendations for Further Study – May 2003
- Ecotoxicity and Environmental Effects of Malodorants – September 30, 2003
- Sorption and Biodegradation of Tertiary Butyl Mercaptan – March 2004
- Limited Life Cycle Environmental Assessment (LLCEA) – October 2005
- Updated LCEA – December 2007

Pulsed Energy Projectile (PEP)

- Preliminary LCEA for PEP – October 2002

Running Gear Entanglement System (RGES)

- Preliminary LCEA for RGES – February 2003



Testing and Training Range – Fort Leonard Wood, Missouri

- Baseline Environmental Evaluation and Record of Environmental Consideration – March 2003

Nonlethal Thermobaric Technology (NTT) and Related Flash-Bang Programs

- Preliminary LCEA for NTT – June 2003
- Potential Human Health and Environmental Impacts of Developmental Thermobaric Formulations – January 2005
- Work Plan Environmental Toxicology Testing, Evaluation, and Reporting – Nonlethal Thermobaric Formulations – June 2005
- Human Effects Review Board evaluation of Joint Nonlethal Warning Munition – February 2007
- Pyrotechnics Flash-Bang Thermobaric Systems White Paper – April 2007
- Improved Flash Bang Grenade Test Chamber Data Analysis – March 2008

Rigid Foam

- Environmental Testing Results for Phase I of Technology Development – February 2004

Nonlethal Airburst Munitions (NAM)

- Preliminary LCEA of Tungsten Ballast Technology for NAM – March 2004
- LCEA updates and revisions – October 2007

Vehicle Nonlethal Munitions (VENOM) and Laser Dazzler

- Preliminary Review of Data – August 2008

Mission Payload Module – Nonlethal Weapons System

- Development of LCEA & PESHE – Underway
- Initial Health Hazard Assessment Report – Underway

UOL ESOH capabilities and methodologies are consistent with joint service strategies and commitments to pollution prevention, environmental management systems, sustainable development, range management, and green procurement. With a history of successfully supporting government agencies through an independent and pragmatic approach, UOL is strongly positioned to continue, and enhance, collaboration with public and private organizations in securing much-needed ESOH, energy, and sustainability information.