

**NDIA Systems Engineering Division  
Environment, Safety, and Occupational Health  
(ESOH) Committee**

**Report to the 16 August 2017  
Division Meeting**

# Status Update



2017 Tasks	Status	Accomplishments (deliverables, etc.) - Updates in Bold
1. Assess application of MIL-STD-882E, NAS411 & NAS411-1, and Logistics Product Data (LPD) for environmental liabilities audit reporting for weapon systems	In Progress	<ul style="list-style-type: none"> <li>Entered into discussions with DoD Comptrollers Office and Auditors on Way Forward for Environmental Liabilities based on Disposal Sites Work Breakdown Structure analysis of potential HAZMAT costs to develop cost factors for different types of systems</li> </ul>
2. Evaluate inclusion of ESOH risks and requirements in MBSE/Digital Engineering	In Progress	<ul style="list-style-type: none"> <li><b>Holding discussions with Pratt &amp; Whitney regarding MBSE efforts to manage HAZMAT in repair and maintenance of parts. Pratt and Whitney to give presentation at the November 2017 DoD ESOH IPT meeting</b></li> </ul>
3. Update NAS411 and NAS411-1 to align language & AD-DSL, and continue with HAZMAT Risk Management Guidance	In Progress	<ul style="list-style-type: none"> <li><b>Attended DoD-AIA NAS411 meeting on August 2</b></li> <li><b>HAZMAT Risk Management (RM) Guidance</b></li> <li><b>NAS411-1 decision-making process</b></li> <li><b>2018 priorities (e.g., Updates to NAS411 &amp; NAS411-1, HAZMAT RM Guidance, statement of work/specification language)</b></li> <li><b>Continuing development of the HAZMAT RM Guidance; initial draft targeted for November 2017</b></li> <li><b>Participating in bi-monthly AIA NAS411 WG meetings</b></li> </ul>
4. ESOH Committee Meeting	In Progress	<ul style="list-style-type: none"> <li><b>ESOH Committee meeting at 1430-1600 on August 16</b></li> </ul>
5. NDIA SE Conference ESOH Track	In Progress	<ul style="list-style-type: none"> <li><b>ESOH track has 22 abstracts including panel session on TSCA and 1 Tutorial on Software System Safety</b></li> </ul>

# ESOH Track Proposed – SE Conference



- Day 1

Abstract	Author	Paper Title	Topic
19912	James Thompson	DASD (SE) Risk, Issue, and Opportunity (RIO) Management and Independent Technical Risk Assessments (ITRAs)	Keynote 1
19697	David Asiello	Weaving Acquisition ESOH into Systems Engineering and the Emerging Digital Engineering Tapestry	Keynote 2
19908	Asiello/Thompson/ Service Principals	DoD Acquisition ESOH IPT Q&A Panel	Keynote Question & Answer
19770	TSCA Panel (Dr. Underwood (OASD(EI&E), Amy Borman (Army), Jim Rudroff (Navy), Shane Esola (DCMA), Joseph Constantino (or Forbes) (AF)	Assessing the impacts of Amended Toxic Substances Control Act to the DoD Mission and the Defense Industrial Base	TSCA Panel

# ESOH Track Proposed – SE Conference



- **Day 1 (Cont.)**

Abstract	Author	Paper Title	Topic
19708	Michael Demmick	Unmanned System (UxS) Safety Engineering Precepts - an OSD Guide - update of the 2007 OSD UxS Safety Guide	Lessons Learned
19754	Joseph Jones	Divergent Oscillating Refueling Probe on the HH-60G Pavehawk	Lessons Learned
19822	Derek Johnston	Human Factors Perspectives on DoD Aircraft Oxygen System Challenges	Lessons Learned
19772	Michael Vinarik	A Pragmatic Approach to System Modeling for Hazard Identification and Risk Management	Digital Engineering
19701	Stuart Whitford	Leveraging Cybersecurity Tools for Software Safety: Focusing (Some) Static Analysis on Safety-Critical Software	Digital Engineering
19717	Bill Thacker	Using Digital Engineering to address ESOH Considerations across the Program Life Cycle	Digital Engineering
19773	Leo Kilfoy - MSC Software	Model Based Systems Engineering (MBSE) Considerations for ESOH	Digital Engineering

# ESOH Track Proposed – SE Conference



- **Day 2**

<b>Abstract</b>	<b>Author</b>	<b>Paper Title</b>	<b>Topic</b>
19769	Jeff Walker	ESOH Risk Management and Applying MIL-STD-882E Principles to Programs that Deviate from Standard Acquisition Models	Rapid Acquisition
19767	George Evans	Rapid Equipping – Immediate Need to Equip and Protect Soldiers	Rapid Acquisition
19627	Nathan Brown - Kiona Technologies HQ	Workplace Injury Prevention through Behavioral Safety Observation Systems	MISC
19714	Patricia Underwood	DoD's REACH Strategy and its Impact to Acquisition and Sustainment	HAZMAT
19732	Lori Hales	Hazardous Materials Risk Management Using MIL-STD-882E	HAZMAT
19750	Dr. Michael Quinn (USPHC)	A Phased Approach for Assessing the Potential for Environment and Occupational Health Risks of Novel Materials of Military Concern	HAZMAT

# ESOH Track Proposed – SE Conference



- **Day 2 (Cont.)**

Abstract	Author	Paper Title	Topic
19836	Karen Gill	Leveraging the International Aerospace Environmental Group (IAEG) Defense Acquisition Materials Declaration Process	HAZMAT
19705	Patricia Huheey	Environmental Liabilities for DoD Weapons Systems	Life Cycle Analysis
19810	Ms. Sheila Neumann (U of Texas)	Environmental Life Cycle Assessment of Commercial Transportation Activities	Life Cycle Analysis
19699	Kelly Scanlon	Life Cycle Assessment: A Tool for Protecting DoD Assets	Life Cycle Analysis
19766	Sherman Forbes	ESOH Management in Agile and Rapid Acquisitions Using Digital Engineering	Rapid Acquisition

# Next ESOH Committee Meeting



- **Date:** August 16, 2017
- **Time:** 2:30 – 4:00 pm
- **Location:** Booz Allen Hamilton, Crystal Square 2, 1550 Crystal Drive, Arlington-Crystal City, Conference Room 5008 (POC is Karen Gill/Lucy Rodriguez)
- **Call-in Number:** 877-885-1087; Access Code 5576719407#
- **DCO Link:**
  - <https://conference.apps.mil/webconf/SEACQESOHMTG16AUG2017>
- **Meeting Agenda:**
  - ESOH Committee Report to Systems Engineering Division
  - 2017 NDIA SE Conference – Proposed ESOH Track
  - Update on TSCA/REACH/ODS Restrictions in Europe

# ESOH Committee - 2017 Task Plan



## 2017 Tasks:

1. Assess application of MIL-STD-882E, NAS411 & NAS411-1, and Logistics Product Data (LPD) for environmental liabilities audit reporting for weapon systems for reporting
2. Evaluate inclusion of ESOH risks and requirements in MBSE/Digital Engineering
3. Update NAS411 and NAS411-1 to align language & AD-DSL, and continue with HAZMAT Risk Mgmt Guidance
4. ESOH Committee Meetings
5. NDIA SE Conference ESOH Track

## Deliverables / Products:

1. White Paper
2. White Paper
3. NAS411-1 posted to ASSIST; Revised Draft HAZMAT Risk Management Guidance Document
4. Quarterly ESOH Committee Meetings
5. ESOH Track at the NDIA Annual SE Conference

## Schedule / Resources:

1. ECD September 2017 / OASD(EI&E)/ESOH, DoD ACQ ESOH IPT, NAVAIR, AIA, and other committee members
2. ECD September 2017 / DoD Acquisition ESOH IPT, AIA, NDIA SE Modeling & Simulation Committee, Industry, and other committee members
3. ECD September 2017 / ASSIST /SAF-AQ, DLA; ECD May 2017 – Revised Draft HAZMAT Guidance Document / NAS 411 WG, DoD ACQ ESOH IPT
4. Bi-monthly meetings with the NDIA SED meetings / DoD and Industry Participants
5. ECD October 2017 / Government and Industry Participants

## Issues / Concerns:

1. Funding, timing, and availability of staff
2. Funding, timing, and availability of staff
3. Consensus between DoD and AIA on objectives, scope, and depth of content in the approach for the Draft HAZMAT Risk Management Guidance Document; feasibility and consensus of adopting aspects of the NAVSEA HAZMAT Avoidance Process (e.g., assignment of severity categories)
4. Availability of participants and value added meetings
5. Recruiting presenters