



**Lawrence Livermore National Laboratory  
7000 East Avenue, L-198, Livermore, California, 94550**

**SUBJECT:** Report on Foreign Travel to the Atomic Weapons Establishment

**DATE:** July 3, 2023

**TO:** Dr. Angela Chambers, Nuclear Criticality Safety Program Manager, National Nuclear Security Administration / NA-ESH-21

**FROM:** David P. Heinrichs

**MEETING TITLE:** JOWOG-30 Steering Group Meeting

**MEETING LOCATION:** Atomic Weapons Establishment, Aldermaston, United Kingdom

**MEETING DATES:** May 2-4, 2023

**ATTENDEES ON BEHALF OF NCSP:** Shauntay Coleman, David Heinrichs

**MEETING PURPOSE:** The purpose was a meeting of the JOWOG-30 Advisory Group to discuss:

- (a) Organizational changes (i.e., criticality safety is now subtask J30-07-04 under a new ES&H task)
- (b) Leadership changes (Deb Lewis is J30 NNSA Lead; Jim Coy is ES&H Lead)
- (c) Finalize and present revised criticality safety tasking statement and quad charts
- (d) A “deep dive” review by the J30 Advisory Group into criticality safety

**MEETING BENEFITS TO THE NCSP:** Atomic Weapons Establishment (AWE) is a partner organization of the DOE NCSP with collaborations specified in Appendix F of the NCSP Five Year Execution Plan.

**PURPOSE OF TRAVEL:** During the week, AWE and LLNL also met to discuss the following:

- (a) Recruitment/group health
- (b) University pipeline
- (c) Hands-on training course at NATM/NCERC
- (d) ICNC
- (e) Criticality safety summit meeting at Y-12
- (f) Best practices for decontaminating gloveboxes
- (g) Status IS820 CIDS license, availability, and schedule for installation
- (h) CIDS omission cases at AWE/B and PANTEX
- (i) Status of “portable” CIDS and future testing needs
- (j) Resumption of AWE/LLNL Five Year Measurement Campaign
- (k) Establishing reference dosimetry values at AFRRRI
- (l) Source term specifications for shielding calculations
- (m) Emergency response and accident exercises
- (n) Movement and accounting for hold-up within gloveboxes and ducting
- (o) Storage of fissile materials



- (p) Omission of water coolant in glovebox operations
- (q) AWE support to LLNL triennial independent internal assessment

**Persons Contacted at Atomic Weapons Establishment:**

Phil Angus, Graham Auld, Simon Garbett, Matt Harker, Nigel Kelsall, Mark Roydhouse, Jennifer Turnidge

**Agenda:** JOWOG 30 meeting agenda May 2-4, 2023 – criticality deep dive

<b>Tuesday May 2<sup>nd</sup></b>	
09:00 – 10:00	Arrive at main gate
10:00 – 10:30	Meet and greet / tea and coffee
10:30 – 11:30	Discussion and updates around the new CIDS 820 system and licensing
11:30 – 12:30	CIDS omission cases including the case made at AWE B
12:30 – 14:00	Lunch
14:00 – 15:00	Discussion and catch up regarding accident dosimetry
<b>Wednesday May 3<sup>rd</sup></b>	
09:00 – 10:00	Arrive at main gate / tea and coffee
10:00 – 11:00	Discussion regarding appropriate source terms and assumptions in shielding calculations
11:00 – 12:00	Emergency response approaches
12:00 – 14:00	lunch
14:00 – 15:30	Deep dive meeting (Hampshire suite)
<b>Thursday May 4<sup>th</sup></b>	
09:00 – 10:00	Arrive at main gate / tea and coffee
10:00 – 10:30	Discussion regards the NCS pipeline and approaches taken
10:30 – 11:00	Discussion covering the vera blocks
11:00 – 12:00	Update regarding progress with waterless facilities and movement control approaches
12:00 – 12:30	Triennial review and future plans
12:30 – 13:30	Lunch and close

**Distribution:**

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