

EMERGENCY PREPAREDNESS FREQUENTLY ASKED QUESTION (EPFAQ)

EPFAQ Number: 2015-009

DATE INITIATED 10-Sept-15

STATUS:

ORIGINATOR KEN EVANS

EMAIL

DRAFT PROPOSED

ORGANIZATION Illinois Emergency Management Ag **PHONE #**

RELEVANT GUIDANCE: NEI 99-01 R6

APPLICABLE SECTION(S) EALS AG1 AND AS1

QUESTION OR COMMENT

The implementation guidance provided in NEI 99-01, Revision 6, for EALs AG1 and AS1 is vague in reference to the selection of the source term. The developer notes provided on pages 42 and 46 (for AS1 and AG1, respectively) do not specify an actual source term. The only guidance provided is the fourth bullet, which states, "Acceptable sources of this information include, but are not limited to, the RETS/ODCM, and values used in the site's emergency dose assessment methodology." While developers are cautioned to ensure that the method used results in a logical escalation in the ECL, they are not provided guidance for the selection of an appropriate source term. As a result, some licensees have used an ODCM source term that contains only noble gases. This is not considered to be a realistic source term for a General Emergency or Site Area Emergency Classification, in that at this accident level severity, the source term would be expected to include non-noble components. For example, the EALs for AS1 and AG1 include dose set points of 500 and 5000 mrem thyroid CDE, respectively. Because it is recognized that the iodine fraction of the source term could be limiting in these EALs, the thyroid CDE PAG was also included in AS1 and AG1. Excluding non-noble components in calculations of effluent set points for these two EALs results in values that are extremely large and non-conservative. Based on the above, is it acceptable to use a noble gas only source term for the threshold calculation of effluent monitor readings for EALs AG1 and AS1?

PROPOSED SOLUTION

Add guidance for the selection of an appropriate source term in set point calculation, such as the gap or clad source term as referenced in NUREG-1465.

NRC RESPONSE:
