



OSAC Research Needs Assessment Form

Title of research need: Development of methods for monitoring levels of contamination of aids

Keywords: Training aid, contamination, canine

Submitting subcommittee(s): Dogs and Sensors

Date Approved: 08242016

(If SAC review identifies additional subcommittees, add them to the box above.)

Background information:

1. Description of research need:

Research is needed to determine when training aids are contaminated and how long it takes to dissipate the contamination odor from the pure odor training aid.

2. Key bibliographic references relating to this research need:

Ross J. Harper, José R. Almirall, Kenneth G. Furton, Identification of dominant odor chemicals emanating from explosives for use in developing optimal training aid combinations and mimics for canine detection, Volume 67, Issue 2, 15 August 2005, Pages 313–327

Kenneth G. Furton, Lawrence J. Myers, The scientific foundation and efficacy of the use of canines as chemical detectors for explosives, Volume 54, Issue 3, 10 May 2001, Pages 487–500

Erica Lotspeich, Kelley Kitts, John Goodpaster, Headspace concentrations of explosive vapors in containers designed for canine testing and training: theory, experiment, and canine trials, Volume 220, Issues 1–3, 10 July 2012, Pages 130–134

3a. In what ways would the research results improve current laboratory capabilities?

Research would result in improved quality of canine training aids for all disciplines.

3b. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

The research would improve understanding of the subcommittee to be used in drafting standards related to training and certification.

3c. In what ways would the research results improve services to the criminal justice system?

The standards will result in improved detector canine operational performance as a result of an expected increase in more effective and efficient canine training.

4. Status assessment (I, II, III, or IV):

I

	Major gap in current knowledge	Minor gap in current knowledge
No or limited current research is being conducted	I	III
Existing current research is being conducted	II	IV

This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.

Subcommittee

Approval date: 08242016

(Approval is by majority vote of subcommittee. Once approved, forward to SAC.)

SAC

1. Does the SAC agree with the research need? Yes No

2. Does the SAC agree with the status assessment? Yes No

If no, what is the status assessment of the SAC:

Approval date:

(Approval is by majority vote of SAC. Once approved, forward to NIST for posting.)