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**ASSESSMENT OF ENVIRONMENTAL HEALTH WITHIN THE
DEPARTMENT OF DEFENSE: TOOLS FOR PROACTIVE EVALUATION**

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ABSTRACT: The Department of Defense is the primary trustee for many large tracts of land that contain many valued species and habitats. The DoD is committed to protecting these resources while maintaining mission requirements. This requires an integrative, proactive approach that assesses the potential for exposure and toxicity of relatively unique substances (e.g., explosives). New spatially-explicit tools are being developed that improve on estimating exposure for wildlife species. Research has been conducted improving on methods to test and determine toxicity to sentinel wildlife receptors in the laboratory for field extrapolation of effects. Integration of models and experimental data are being used to evaluate the fate, transport, and likelihood of effects for new propellants, explosives, and pyrotechnics to help scientists consider the potential for adverse environmental outcomes before new substances are used. Together, these tools aid in the assessment of adverse outcomes before, during, and following use to assist managers in making wise land use decisions. Specific examples of these tools will be discussed.

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