

# Peer Review Plan

**Date:** August 29, 2014

**Source Center:** U.S. Geological Survey (USGS)  
Texas Water Science Center  
1505 Ferguson Lane  
Austin, TX 78754

**Title:** Acute toxicity of runoff from sealcoated pavement to *Ceriodaphnia dubia* and *Pimephales promelas*.

**Subject and Purpose:** The purpose of this report is to describe a series of toxicity tests conducted with runoff from pavement with two different types of sealcoat. The test organisms are *C. dubia* (a cladoceran) and *P. promelas* (fathead minnows). These tests found that runoff from coal-tar-sealcoated pavement collected during the 36 days following sealcoat application caused 100% mortality among the test organisms. Mortality of the test organisms exposed to 10% coal-tar-based sealcoat runoff or to 100% asphalt-based-sealcoat runoff occurred only with subsequent exposure to ultraviolet radiation, but continued for the entire sample-collection period (111 days for coal-tar-sealed pavement and 36 days for asphalt-sealed pavement). Mortality following exposure to 100% runoff from unsealed asphalt was  $\leq 10\%$  in all treatments. The report will be submitted to the journal *Environmental Science and Technology (ES&T)* for publication.

**Impact of Dissemination:** This information product is considered by the USGS to be Influential Scientific Information.

**Timing of Review (Including Deferrals):** July 2014 to February 2015. Deferrals are not anticipated at this time.

**Manner of Review, Selection of Reviewers, and Nomination Process:** Review will be by individual e-mail/letters/memoranda/documents or as returned to the authors as an e-mail from *ES&T*. The USGS will select a reviewer pursuant to requirements in Survey Manual chapter 502.3—Fundamental Science Practices: Peer Review (<http://www.usgs.gov/usgs-manual/500/502-3.html>). Editorial staff at *ES&T* will select reviewers for the journal.

**Expected Number of Reviewers:** Four peer reviewers (one reviewer selected by USGS and three anonymous reviewers chosen by *ES&T*) are anticipated.

**Requisite Expertise:** Toxicology.

**Opportunity for Public Comment:** No, the opportunity for public comment is not formally incorporated into the USGS or *ES&T* peer review process.

**Agency Contact:** [peer\\_review\\_agenda@usgs.gov](mailto:peer_review_agenda@usgs.gov).