

Peer Review Plan

Date: 12/12/2014

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

Title: Exposure to runoff from coal-tar-sealed pavement induces genotoxicity and impairment of DNA repair capacity in the RTL-W1 fish liver cell line.

Subject and Purpose: The purpose of this report is to describe a series of tests that investigate two aspects of DNA damage. The tests were conducted with runoff from pavement with two different types of sealcoat, to which cells from the RTL-W1 fish-liver cell line were exposed. The results of these tests indicated that runoff from coal-tar-sealcoated pavement collected during the 36 days following sealcoat application, with co-exposure to ultraviolet-a radiation, caused DNA damage. The results also indicated that exposure to the runoff impaired DNA repair capacity. 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): December 2014 – 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.