

March 30, 2017

Mr. Carter Halfman
Office of Policy and Strategic Planning
Department of Commerce
H.C. Hoover Building, Rm. 5863
1401 Constitution Ave. NW.
Washington, DC. 20230

<http://www.regulations.gov> docket DOC-2017-0001

Re: The Impact of Federal Regulations on Domestic Pavement Sealcoat Manufacturing

Dear Mr. Halfman:

The Pavement Coatings Technology Council (PCTC) is pleased to respond to the Department of Commerce's request for information regarding the impact of federal regulations on domestic manufacturing.¹ PCTC is a 501(c)(6) trade association whose members include manufacturers of pavement sealcoats (2017 North American Industry Classification System (NAICS) Code 324121). PCTC also represents these manufacturers' suppliers and their customers, who are mainly contractors engaged in sealcoat application. As we explain below, these manufacturers, and their up- and down-stream value chain, have been and increasingly will be burdened by actions of the U.S. Geological Survey (USGS) that might best be described as "pre-regulatory" or "regulation by information." They have been stymied in their efforts to respond to these actions by the narrowness of existing procedures and by USGS's recalcitrance. The Department's inquiry presents a rare potential opportunity to finally hold USGS accountable for its activities.

The Sealcoat Industry

Sealants are used in pavement maintenance programs to extend the life of a valuable – and costly – asset. They come in two types: asphalt-based sealcoat and refined coal tar-based sealcoat. Where both are available, the coal tar-based product dominates the market because of its longevity, its predictability, and its superior performance in protecting underlying asphalt

¹ 82 Fed. Reg. 12786 (March 7, 2017).

pavement from oxidation, weathering, non-petroleum chemicals, and seepage of leaked or spilled petroleum products.

Coal tar is a by-product of the steel-making process. It has a long history of safe use. It is classified as “generally regarded as safe” by the FDA, and among other things is the active ingredient in many dandruff shampoos.² Refined coal tar-derived sealcoat (RTS) is formulated, distributed, and applied by thousands of local businesses across the United States, virtually all of which are small, family-owned enterprises. These businesses are often located in areas that have been hit hard by deindustrialization, and they often provide good-paying jobs that do not require a college degree. We need more, not less, of these kinds of skills-based jobs in the United States, and we need to make sure we put in place policies that allow them to flourish.

USGS’s Advocacy Research Program

The sealant industry is threatened, however, by the unaccountable actions of the USGS, an ostensibly non-regulatory bureau within the Department of Interior (DOI). About a dozen years ago, several USGS hydrologists located in the USGS Texas Water Science Center in Austin began a systematic program of advocacy research,³ an effort that continues to this day. This program has consisted of conducting and publishing research in a wide variety of fields unified only by its persistent focus on RTS. These publications have addressed the purported role of RTS in freshwater sediment contamination, indoor air quality, ambient air quality, and effects on aquatic species. The agency has compiled its claims into illustrated “fact sheets” and a one-stop web site.⁴ More recently, other USGS regional staff have begun to conduct similar research.⁵

Historically, the USGS played a relatively neutral informational role in our Federal system, “providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.”⁶ More recently, however, USGS has decided to produce “policy relevant” science.⁷ The agency’s actions regarding RTS are a prime example.

The Office of Management & Budget (OMB) has long recognized that “[i]nformation dissemination can have a significant economic impact even if it is not part of a rulemaking. For instance, the economic viability of a technology can be influenced by the government’s characterization of its attributes. Alternatively, the Federal government’s assessment of risk can directly or indirectly influence the response actions of state and local agencies or international

² See 21 C.F.R. § 358.710(a)(1).

³ “Advocacy research” is defined as *research that is carried out with the intention of providing evidence and arguments that can be used to support a particular cause or position*. See <https://www.merriam-webster.com/dictionary/advocacy%20research>.

⁴ <https://tx.usgs.gov/sealcoat.html>

⁵ See, e.g., Baldwin *et al.*, listed at <http://tx.usgs.gov/sealcoat.htm>.

⁶ <https://www.usgs.gov/about/about-us/who-we-are>

⁷ <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6210.2008.00957.x/full>

bodies.”⁸

OMB’s description accurately captures the consequences of USGS’s advocacy research campaign. EPA has adopted the USGS publications and included them in its own “Causal Analysis/Diagnosis Decision Information System,” or CADDIS, an initiative developed to help federal and state scientists and engineers conduct causal assessments in aquatic systems, and in its Stormwater Best Management Practices.⁹ More recently, EPA agreed in a settlement with environmental groups challenging its multisector industrial storm water general permit (MSGP) to propose a revised permit that would exclude facilities with RTS-sealed surfaces from coverage under the permit – a development that another environmental group trumpeted as “Historic Good News: the Era of EPA Restrictions on Coal Tar Sealers Begins!”¹⁰

USGS has worked with environmental groups directly in a campaign to persuade state and local legislatures that RTS is harming human health and the environment. One example is the five-stop lecture tour of USGS hydrologist Dr. Barbara Mahler in northern Illinois in October 2015. The Illinois Chapter of the Sierra Club (ICSC) organized town hall-style events with municipal government cooperation in five different jurisdictions¹¹ in Northern Illinois. The ICSC then contacted an Illinois State Representative from the area, and asked her to formally request that the USGS make Dr. Mahler available for the events. During the two-day tour, the ICSC acted as the host, transporting Dr. Mahler from venue to venue, introducing Dr. Mahler at several venues. In short, the USGS paid for their employee to be the featured speaker at lobbyist-sponsored¹² events.

Consequences of USGS’s Advocacy Research Program

As just noted, a direct consequence of USGS’s campaign is that EPA will propose a change to its MSGP that, if finalized, would have the effect of causing covered facilities to discontinue using RTS. USGS’s work has also played a key role in dozens of state, county and local actions to ban RTS – including in the District of Columbia. These bans are collected at an activist website that highlights the “20,000,000 served” by bans.¹³ At least one RTS manufacturing plant has had to close as a result of a state ban (Vance Brothers, in Minnesota). But RTS manufacturers throughout the country have suffered declines in their sales when jurisdictions into which they sell have banned RTS.

Sealcoat manufacturers have also lost business nationwide due to private “deselection” driven by the questionable science of the USGS. Because the scientists involved are employees

⁸ OMB, Final Information Quality Bulletin for Peer Review, 70 Fed. Reg. 2664, 2667 (Jan. 14, 2005).

⁹ More details on these actions is set out in an Information Quality Act request for correction filed with EPA by PCTC, available at <https://www.epa.gov/quality/re-request-correction-14003-under-epa-information-quality-guidelines>

¹⁰ <https://coaltarfreeamerica.blogspot.com/2016/08/historic-good-news-era-of-epa.html>

¹¹ October 14 at the Barrington Village Hall. October 15 at the McHenry County Government Center, the College of Lake County, Benedictine University, and the Wilmette Community Recreation Center.

¹² The Sierra Club was stripped of its 501(c)(3) status because of its lobbying activities. See https://en.wikipedia.org/wiki/Sierra_Club

¹³ <https://coaltarfreeamerica.blogspot.com/p/bans.html>.

of the USGS, members of the public believe that it is the opinion of the U.S. government that RTS is unsafe. Those who do not have the expertise to evaluate the science think they are being asked whether to believe the government or industry. The public in general, not just elected representatives, are being misled by USGS's advocacy science to believe that banning or avoiding RTS will solve a problem.

The facts, however, do not support USGS's position that a problem even exists. Sealcoat manufacturers have spent hundreds of thousands of dollars over the past decade on scientific consultants to evaluate and rebut USGS's claims. These consultants regularly publish articles in peer-reviewed journals describing their inability to replicate USGS's results and further criticizing USGS's science. Sealcoat manufacturers have also had to spend hundreds of thousands of dollars on lobbyists to respond to the dozens of legislative efforts launched every year to restrict RTS. Finally, and most regrettably, sealcoat manufacturers have had to spend hundreds of thousands of dollars on lawyers, primarily to obtain data that USGS should be making public as a matter of conventional scientific practice (and as a publicly-funded government agency).

Need for Relief

While the Administrative Procedure Act provides means for affected manufacturers to engage in the regulatory process, current law provides few means for affected entities to respond when an agency engages in research, information dissemination, and public advocacy actions calculated to drive regulatory actions by others. What few tools the sealcoat industry has have been particularly ineffective with the USGS, which has ignored its obligation under applicable OMB bulletins. (The attachment to these comments details how USGS has flouted OMB's Peer Review Bulletin in particular.) The agency has consistently circled its wagons and stonewalled the industry's efforts to have an honest, fairly-overseen scientific dialogue about the merits of USGS's claims. On its members' behalf, PCTC has:

- engaged subject area experts to review USGS work and made those reviews public;¹⁴
- commissioned scientists to conduct studies in attempts to reproduce the USGS work and publish the results;¹⁵
- submitted Freedom of Information Act (FOIA) requests;
- filed a FOIA lawsuit¹⁶ (that six years after the original FOIA requests were made remains unresolved) when responsive information (i.e. the data underlying USGS's conclusions) was improperly and inexplicably withheld – and remains withheld;¹⁷
- filed correction requests under the Information Quality Act (IQA);¹⁸
- appealed the USGS's wholly inadequate IQA decisions;¹⁹ and, most recently

¹⁴ Summaries of these reviews are available at <http://www.pavementcouncil.org/post-publication-peer-reviews-now-on-pubpeer-com/>

¹⁵ The list of science publications resulting from PCTC funding is available at <http://www.pavementcouncil.org/wp-content/uploads/2016/12/Science-Publications.pdf>

¹⁶ PCTC v. USGS, pending in the USDC DC # 1:14-cv-01200-KBJ

¹⁷ Without the withheld data, PCTC cannot attempt to fully reproduce USGS's hypotheses and conclusions which violates every recognized scientific principle.

¹⁸ https://www2.usgs.gov/info_qual/request_response_archive.html

¹⁹ *Ibid*

- filed a complaint with the Department of Interior's Inspector General.
- None of these actions has produced any significant change in USGS's behavior.

In summary, PCTC has made sure that USGS management is aware of the demonstrable flaws, manipulations, and other scientific deficiencies of their advocacy research, but our concerns have been either ignored or been shown the back of USGS's hand. The USGS has used its web site and its communications arms to promote the advocacy research, in full knowledge of the questions that have been raised, but without any acknowledgement that there even is a question.

PCTC believes that the USGS, as an agency of the U.S. government, has the responsibility not to use its perceived authority, or allow that authority to be used, to make false representations about a product that has been used safely for over 50 years, and to recognize that the science promulgated in its name does not comport either with the findings of scientists with expertise that the USGS does not have or with good scientific practice. PCTC believes that the USGS has the responsibility to correct the public record and to explain to those state and local governments that have already banned or are thinking about banning RTS that there is no sound scientific basis for those bans. Finally, PCTC believes that USGS must comply with FOIA and produce the information withheld from PCTC which, consistent with every recognized scientific practice, would allow PCTC to attempt fully to replicate and reproduce the conclusions reached by USGS in its studies.

PCTC requests the Department to investigate this matter, and to work with USGS or DOI to evaluate, independently and externally and with stakeholder involvement, the entire body of RTS-related research that the USGS has generated over the past decade-plus.

Thank you for your consideration and attention to this matter. Please contact me at alehuray@pavementcouncil.org or at (703) 299-8470 for additional information.

Very truly yours

Anne P. LeHuray, Ph.D.
Executive Director

Attachment: How USGS Publications on Refined Tar-Based Sealcoat Have Not Followed OMB's Peer Review Bulletin

March 30, 2016

The Impact of Federal Regulations on Domestic Pavement Sealcoat Manufacturing

Attachment:

How USGS Publications on Refined Tar-Based Sealcoat Have Not Followed OMB's Peer Review Bulletin

Since 2004, a handful of U.S. Geological Survey staff, with occasional collaborators inside and outside USGS, have attempted to show that tar-based pavement coatings as the “dominant” source of polynuclear aromatic hydrocarbons (PAHs) in stream and lake sediments, homes and elsewhere, and to dramatize the supposed health and environmental effects of PAHs. They have issued a series of articles, a half-dozen derivative fact sheets, and numerous presentations – all collected at a USGS website that once purported to describe “all things sealcoat” – and have testified before state legislatures and local governments.¹ These publications have not been – but need to be – peer-reviewed in compliance with OMB's Peer Review Bulletin.²

Since 2005, the Peer Review Bulletin has required all federal agencies to “conduct a peer review on all influential scientific information that the agency intends to disseminate.”³ “Influential” information is that which “the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions.”⁴ Reviewers are to be selected based on having the expertise, experience and skills necessary to perform the review.⁵ They “generally are not employed by the agency or the office producing the document” being reviewed and cannot have participated in its development.⁶ Reviewers must prepare a report, and the agency must disclose the report on its website, along with the names and affiliations of the reviewers.⁷ Finally, the Bulletin requires agencies to prepare peer review plans for documents that it intends to peer review, and to publish those as part of an online peer review agenda.⁸

Two USGS geologists – Barbara Mahler and Peter Van Metre – have individually or jointly authored or coauthored almost twenty articles published between 2005 and 2015 on coal tar-based pavement coatings. Many of these were published in peer-reviewed journals, but the Peer Review Bulletin makes clear that “prior peer review and publication is not itself sufficient grounds for determining that no further review is necessary.”⁹ Ten other articles have been published in *Environmental Science &*

¹ See <http://tx.usgs.gov/sealcoat/pubs.html>.

² OMB, Final Information Quality Act Bulletin for Peer Review, [70 Fed. Reg. 2664](#) (Jan. 14, 2005).

³ *Id.* at 2675.

⁴ *Id.*

⁵ *Id.* at 2669, 2675.

⁶ *Id.* at 2669, 2675.

⁷ *Id.* at 2675. Particular reviewers do not need to be associated with particular statements, but they cannot remain anonymous. *Id.*

⁸ *Id.* at 2676-77.

⁹ *Id.* at 2671. The Bulletin notes that “the intensity of peer review is highly variable across journals,” and may not address important questions. *Id.*

Technology, a journal that officially takes a more informal approach,¹⁰ although in the case of these articles it appears to have followed a conventional journal peer review process. None of the articles, nor any of the other USGS publications generated by Drs. Mahler and Van Metre, have been subjected to peer review conducted or commissioned by USGS in accordance with the Peer Review Bulletin. More recently, other USGS regional staff have begun to conduct similar research.¹¹

Several states, counties and cities have banned refined tar-based sealcoat as a direct result of the two USGS geologists' publications and testimony, and sealcoat plants have shut down as a result. Their publications are thus clearly "influential" and should have been peer reviewed under the Bulletin. Indeed, the USGS website that summarizes and integrates all the USGS ("PAHs and Coal-Tar-Based Pavement Sealcoat"¹²) fairly qualifies as a "scientific assessment" under the Bulletin – i.e., "an evaluation of a body of scientific or technical knowledge, which typically synthesizes multiple factual inputs, data, models, [and] assumptions . . ."¹³ When such an assessment is "highly influential," as the USGS website arguably is,¹⁴ it is subject to a higher standard under the Bulletin. Among other things:

- Reviewers must be independent of the agency producing the assessment;
- Reviewers must be provided with sufficient information about studies and models that they can understand the data and analytic procedures used to support the assessment's key findings;
- The draft assessment should, where feasible and appropriate, be made available for public comment and the comments provided to the reviewers; and
- The agency should respond to the peer reviewers' report.

What USGS actually did, instead, to peer review these publications can be gleaned from responses to a Freedom of Information Act (FOIA) request filed by the Pavement Coatings Technology Council (PCTC). In most cases, Dr. Mahler would email one or more co-workers to ask if they would perform a "colleague review" of a manuscript. Sometimes a recipient would suggest an external reviewer. The emails made available via the FOIA response do not indicate any discussion of potential reviewers' qualifications to adequately assess the science presented in the draft document. Indeed,

¹⁰ "Manuscripts are initially reviewed by the editor and, if appropriate, by other scientists who assess the significance, originality, and validity of the work, as well as its appropriateness for publication." "About the Journal," available at <http://pubs.acs.org/page/esthag/about.html>.

¹¹ See, e.g., Baldwin *et al.*, listed at <http://tx.usgs.gov/sealcoat.htm>.

¹² Available at <http://tx.usgs.gov/sealcoat.html>.

¹³ 70 Fed. Reg. 2675.

¹⁴ "Highly influential" assessments include those that are "novel, controversial, or precedent-setting." *Id.* The USGS sealcoat website and associated publications have attracted four requests for correction under the Information Quality Act and an ethics inquiry from the American Chemical Society. Drs. Mahler and Van Metre have used those materials as the basis for their testimony in prominent disputes in state and local legislatures about whether to ban coal tar-based sealcoat. The foregoing should meet any dictionary definition of "controversial."

in the case of papers about pavement sealcoat, most “colleague reviewers” were hydrologists in the USGS Water Division, with no identifiable background, much less expertise, in the relevant fields of inquiry. In at least one case, the reviewer was a colleague who appears to have assisted in the fieldwork underlying the article. The FOIA responses contain no evidence that any colleague reviewers were provided with, or asked to see, supporting information such as study designs or model input data or calculations. The colleague reviewers provided comments directly to the author(s).

After about eight years of this practice, it would appear that Drs. Mahler and Van Metre realized (or were told) that their work was influential scientific information. Beginning in 2012 – seven years after the Peer Review Bulletin was issued, and while one of their articles was undergoing journal review – the authors began preparing peer review plans for most of their articles, and those plans now appear on the USGS peer review agenda.¹⁵ Emails in the FOIA response indicate, however, that nothing actually changed in the way these works have been peer reviewed. Rather, Drs. Mahler and Van Metre have filled out a form containing summary information about their internal colleague reviewers¹⁶ and the external journal peer reviews. The authors still select the colleague reviewers, evidently looking across USGS to find scientists who can most convincingly be said to have either the education or experience to understand the study’s methodologies or the fields of inquiry. After the peer reviews are completed, Drs. Mahler and Van Metre post a “completed peer review summary” that summarizes the peer reviewers’ comments and describes how the authors responded to the comments.

These efforts fail to meet the Peer Review Bulletin’s requirements in several respects, even post-2012:

- Four articles listed on the USGS sealcoat website that were submitted to journals after the effective date of the Peer Review Bulletin have never been included on the USGS peer review agenda, and so none of the information about them that is required to be made publicly available has been.¹⁷
- For the four articles that are listed on the USGS peer review website, the website should disclose the names of the peer reviewers. It does not. The Survey’s response to the FOIA request does reveal the names of reviewers chosen by Drs. Mahler and Van Metre, but USGS has never disclosed (and appears not to know) the identity of reviewers chosen by journals.
- The USGS peer review website should also present the verbatim comments of the various reviewers of the listed articles. It does not. Instead, it presents only the authors’ summaries of those comments.
- It is also questionable how independent the author-chosen reviewers – all but one USGS employees – were. At least one of them appears to have participated in the development of an article, a clear violation of the Bulletin.

¹⁵ The agenda, available at http://www.usgs.gov/peer_review, contains plans for four of the six most recent articles listed on the USGS sealcoat website.

¹⁶ In one case (Mahler et al. 2015), the reviewer was an academic outside of USGS.

¹⁷ Van Metre et al. 2009, Yang et al. 2010, Van Metre et al. 2010, and Selbig et al. 2013.

Finally, it appears that USGS has rethought this issue, quite possibly to avoid having to comply with the Peer Review Bulletin, and is now taking the position that recent USGS sealcoat research is not influential because it “used previously published methods that were not novel or precedent-setting and its findings were consistent with those reported by other USGS and non-USGS researchers.”¹⁸ In other words, paradoxically, the more USGS publishes on this topic, the less “influential” they believe that work becomes.

The Peer Review Bulletin does not require public participation in peer reviews, but it does point out that “there are situations in which public participation in peer review is an important aspect of obtaining a high-quality product through a credible process.”¹⁹ Certainly this is one of those situations. USGS has never sought to involve the public in reviewing any of its sealcoat work product, and has resisted all requests from the affected industry, or scientists working on its behalf, for data that would help answer the serious questions they raised.

The problems described above cast doubts on the impartiality and neutrality of USGS and undermine its long-standing and well-deserved reputation as a “science organization.” USGS (or its parent the Department of the Interior) should be required to commission a truly independent third party to conduct a peer review of USGS’s sealcoat assessment (and the publications underlying it) that meets the requirements of the Peer Review Bulletin.

¹⁸ Email from Carolyn Reid, USGS, to Anne LeHuray, PCTC (Jan. 10, 2017).

¹⁹ 70 Fed. Reg. 2670.