EPA’s failed science and cover up

These documents detail the internal communication in EPA’s Region 10 and National Science Advisor’s office that demonstrate that EPA:

- failed to have a critical science study peer reviewed per federal policy for “influential” science information
- Changed the classification from “influential” to “other” to cover the failed review
- Crafted a dishonest response to questions from the National Science Advisor about the peer review and changes from draft to final report
- Dismissed concerns expressed by staff about the failure to comply with classification and peer review policy
- Continue to defend the peer review as compliant with policies despite indisputable evidence of the misclassification and failure to adequately review

Documents included were not provided to the farm organizations until April and July, 2020 despite a FOIA request submitted in December, 2018 and repeated direct requests for the relevant documents made to EPA Region 10’s Edward Kowalski and Administrator Chris Hladick

July 2020
For detailed information: www.savefamilyfarming.org
November 2, 2012
Ginna Grepo-Grove (GGG), Quality Assurance Manager, recently appointed to manage the EPA's Science Inventory database. Listings must include category of “influential science information’ (ISI), highly influential science information (HISI) and “other.”

Grepo-Grove notes the Yakima study is “influential” and lists its impact on hundreds of residents using the drinking water and health impacts.

EPA national and regional leaders claim the study was classified as “other” as of March 22, 2012. If that were true Grepo-Grove would have no reason to request peer review comments as no peer review is required of products classified as “other.”
November 5, 2012, 8:37 am
Michael Cox (Office of Environmental Assessment) responds suggesting that the peer review they did was not needed but did it anyway. Since Cox was the one who prepared the initial peer review plan (next page) that designated the study as “influential” and called for 4 to 10 independent (that is non-EPA) experts, it is most interesting for him to suggest at this point that no peer review was necessary.

This indicates that around this time EPA decided to change the categorization from influential to other. The fact that it was in the database as “influential” prior to this is established by the Grepo-Grove email and request for completion of the Peer Review checklist. If it was “other” no such checklist would have been required.

It appears that Cox wants a phone conversation about this rather than through email.
Unknown date, presumably prior to September 27, 2012 as that is the identified completion date of the study.

Although Michael Cox is identified as the preparer of this plan, he is also the one who provides the detailed explanation in later emails that justifies why no peer review was required.

If it was classified as “other” by March 2012 as claimed, why would this indicate that peer review would start April 2012?

Second page of Cox’s peer review plan. Elimination of public from process is not in line with OMB guidance and was one reason why Grepo-Grove expressed concern about the requested change from “influential” to “other.”
Gina Grepo-Grove sends an email to a broad list in Region 10 re the need to submit information for the Science Inventory.

She notes the importance of identifying “influential” and “highly influential” and the importance of accurate peer review records. She includes references for determining proper categorization.

She also notes that the Unit Manager for the product must concur with the classification. The published 2013 report states the Region 10 Office of Environmental Assessment was the Unit Manager and emails show Joyce Kelly was the Director at the time of the study and report publication.
December 13, 2012
Grepo-Grove reports that the changes to the Science Inventory database have been made. It required some re-programming of the database to allow requested changes. She asks if Fleming and Cox want “other information removed or corrected”.

From: Gina Grepo-Grove
To: Sheila Fleming; Michael Cox
Cc: 
Date: 12/13/2012 03:50 PM MST

Subject: Yakima Nitrates in Science Inventory

Hello,

Everything has been corrected according to your request. Needed to work with the database developer in RTP as some of the requested changes were not really allowed by the system. Please visit the site and you will see the corrections made. If you want other information removed or corrected please inform me and we’ll see what we can do.

I apologize for the mistakes. These tasks - peer review coordinator and science inventory coordinator have just been added to mine last November and I am still on the learning curve.

Ginna Grepo-Grove
R10 Quality Assurance Manager
(206) 553-1632 - Office Phone Number
(206) 553-8210 - Fax Number
December 14, 2012

Cox and Fleming checking over the changes Grepo-Grove made to the Science Inventory.

Jennifer MacDonald, attorney for EPA, is copied on these references to changes from influential to other category.
March 13, 2013

Staff are preparing to publish the “Responsiveness Summary” to address the 40+ comments received as part of the public comment. These included numerous agricultural science experts from other agencies, academia and industry. Without exception all noted very serious flaws in the science and a number commented on the failure of EPA to follow peer review policies.

EPA Region 10 attorney Jennifer MacDonald provides justification for the peer review as meeting the requirement for “influential” science information. She cherry picks “salient excerpts” from the peer review handbook published by the Office of Management & Budget.

It is her understanding that the study is classified as “influential” and thus provides justification for the peer review under that classification. However, in an April, 2019 meeting with farm representatives she concurred with Edward Kowalski’s statement that the study was always classified as “other” and not as “influential.”
March 14, 2013

EPA justifies the peer review with this explanation. As they did with every other serious objection to the study process and conclusions, they brush off the criticism determining that despite the serious problems it “does not negate or diminish the conclusions…”

Glenn Paulson is the national science advisor for the EPA at headquarters.

In this document the study was classified as influential and EPA staff did not dispute that in their response.

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**From:** Fleming, Sheila  
**Sent:** Thursday, March 14, 2013 6:52 AM  
**To:** Grepo-Grove, Gina  
**Cc:** Kelly, Joyce  
**Subject:** FW: peer review

Hi Ginnie,

I forwarded Jennifer’s email to Joyce, along with the peer review comment and EPA’s response. Please let me or Joyce know if you have any concerns. Joyce would like to send this to Glenn P this morning.

Thanks, Sheila

**Peer Review**

**Comment #49:** Several commenters contended that the peer review conducted for the EPA 2012 Report was inadequate because: 1) EPA did not follow its own peer review guidance; 2) that the EPA 2012 Report was classified as “influential” by Office of Management and Budget (OMB) and required more extensive review; 3) EPA’s selection of peer reviewers was not transparent and all four peer reviewers were from federal agencies; 4) with the exception of one reviewer the comments received were brief and not adequately rigorous; and 5) one peer reviewer stated that the nitrate in many of the wells is most likely from a mix of sources which would be challenging to tease apart, probably requiring a much more extensive sampling campaign and more knowledge of well depth and screen lengths.

**EPA’s response:** Agency guidance provides several options for the peer review of documents classified as “influential” under the OMB work product criteria. Consistent with Agency Peer Review Guidance, EPA utilized an external peer review approach, which included scientists from USGS and the U.S. Department of Agriculture. In addition, scientists from EPA’s Office and Research and Development and EPA Region 10 conducted internal peer review. EPA considered the peer reviewers’ comments on the EPA 2012 Report and revised the report in response to the comments. The independent peer review process helped EPA solidify its conclusions and clarify the limitations and uncertainties of the study.

Brief comments do not necessarily imply a lack of rigor; brief comments could have resulted from a rigorous review in which the reviewer found the EPA 2012 Report’s conclusions to be well supported by data. As noted in previous responses above, EPA’s conclusions do not preclude the possibility of multiple sources of nitrate. This possibility does not negate or diminish the conclusions that were stated in the EPA 2012 Report.
March 14, 2013

Grepo-Grove expresses continuing concern about the peer review failing to meet the criteria for “influential” science. She is concerned that public participation was not a part of the peer review process as required by policy and that the study was classified as “other” as Sheila Fleming (with Joyce Kelly and Mike Cox’s support) directed her to do. Consequently, as “other” does not require peer review there was no information in the science inventory about the peer review, even though in the Responsiveness document EPA staff is defending it as adequate for “influential” science.

Despite her understandable reservations, Grepo-Grove bows to the authority of attorney Jennifer MacDonald: “If Jennifer said it’s OK then it is OK.”
March 14, 2013

In preparing to publish the “Responsiveness Summary” document that brushes aside the very serious criticism of the report from the science community, including the peer review, Joyce Kelly sends a copy of the draft comments about the peer review to the national science advisor Glenn Paulson.
March 15, 2013

Glenn Paulson was named the science advisor for the EPA by Director Lisa Jackson in 2012. He was previously with the Natural Resources Defense Council. In an email to Joyce Kelly he expresses direct reservations about the “some sort of review” and the “perhaps quite a lot” of changes between the draft that was reviewed and the final report. He notes that these significant issues were not disclosed as they should have been.
March 18, 2013

Michael Cox responds to the comments from national science advisor Glenn Paulson regarding the “some sort of review” and the “perhaps quite a lot” of changes between the reviewed draft and the unreviewed final report.

Cox is exceedingly dishonest in his characterization of the review. Two EPA scientists reviewed the draft, a USGS and USDA reviewer also reviewed the draft. However the USDA reviewer retracted his review after seeing the vast differences in data and conclusions in the final report. Only one external reviewer reviewed the draft—none reviewed the much altered final report.

The changes in the final report were written not by the science team but by the enforcement team who concluded that current dairy operations were to blame for the nitrate levels in groundwater despite significant contrary evidence in the report. The reviewed draft report concluded that no definitive sources could be identified.
Nine months later

December 6, 2013

After raising questions in March about the nitrate study's peer review and major changes from reviewed draft to unreviewed final report, Paulson reminds all EPA leaders of the requirements to submit accurate and up-to-date information to the EPA Science Inventory.
Nine months later

December 12, 2013

Following the reminder from Paulson, Joyce Kelly contacts Grepo-Grove about any submissions to the Science Inventory.

Grepo-Grove responds the only study in the inventory from Region 10 is the nitrate study. Even though she has been directed to list it or change it from “influential” to “other,” her discomfort with that is apparent. She says Mike Cox thinks it is not and says that Kelly gave instructions to follow what Mike recommended.
Before reviewing the justification Michael Cox provided for why the nitrate study was not “influential” and the peer review adequate, here are relevant sections from the OMB Peer Review Bulletin published in 2004:

“Influential’ science has a clear and substantial impact on important public policies or private sector decisions.”

“Intensity of peer review commensurate with the significance of the information being disseminated the likely implications for policy decisions.”

The OMB Peer Review Handbook

The term “influential scientific information” means the scientific information the dissemination of which the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions. In OMB’s government-wide information quality guidelines, the term “influential information” is used in the context of “influential scientific, financial, or statistical information.” However, this Bulletin only covers “influential scientific information.”

Section II: Peer Review of Influential Scientific Information

Section II requires each agency to subject "influential" scientific information to peer review prior to dissemination. For dissemination of influential scientific information, Section II provides agencies broad discretion in determining what type of peer review is appropriate and what procedures should be employed to select appropriate reviewers.

The National Academy of Public Administration suggests that the intensity of peer review should be commensurate with the significance of the information being disseminated and the likely implications for policy decisions. Furthermore, agencies need to consider tradeoffs between depth of peer review and timeliness. More rigorous peer review is necessary for information that is based on novel methods or presents complex challenges for interpretation. Furthermore, the need for rigorous peer review is greater when the information contains precedent-setting methods or models, presents conclusions that are likely to change prevailing practices, or is likely to affect policy decisions that have a significant impact.
OMB Bulletin defines independence of reviewers as "generally not employed by the agency" and even questions independence of experts employed by other federal and state agencies.

Only one reviewer was outside the agency, with the USGS another federal agency. The other reviewer withdrew his review after discovering the great differences between the draft he reviewed and the published final report.

**Independence.** In its narrowest sense, independence in a reviewer means that the reviewer was not involved in producing the draft document to be reviewed. However, for peer review of some documents, a broader view of independence is often necessary to assure credibility of the process. Reviewers are generally not employed by the agency or office producing the document. As the National Academy of Sciences has stated, “external experts often can be more open, frank, and challenging to the status quo than internal reviewers, who may feel constrained by organizational concerns.” The Carnegie Commission on Science, Technology, and Government notes that “external science advisory boards serve a critically important function in providing regulatory agencies with expert advice on a range of issues.” However, the choice of reviewers requires a case-by-case analysis. In some instances, reviewers employed by other federal and state agencies may be sufficiently independent.
OMB Bulletin allows for agency judgment on public comments. EPA peer review plans allowed for no public comment, but after the agency received significant complaints about the lack of public review, comments were allowed.

Without exception, all science experts who reviewed it as part of this process noted the serious flaws in science methodology used and the lack of substantiation of the conclusions.
December 12, 2013

Shortly after receiving the email from Grepo-Grove that the nitrate study is in the Science Inventory as “other” and not “influential” Joyce Kelly asks her assistant Michael Cox to justify the determination that the study was not “influential.”
The defense

December 18, 2013

Following Grepo-Grove's continuing questions about the classification and Joyce Kelly's request to justify the “other” classification, this is Michael Cox's detailed explanation as to why the classification can be justified as “other” rather than “influential.” The items he uses do not appear in the OMB Bulletin, but an honest response to them would have resulted in the proper classification as influential.

1. Significant precedent—This study did establish a very significant precedent in that it blamed current dairy operations for nitrate in groundwater and used that finding to justify enforcement actions that have decimated dairy farmers in the region.
2. Impact on economy—Impact on dairy community to date likely in excess of $100 million and counting but OMB Bulletin does specify an amount unlike that for “highly influential science.”
3. Significant controversial issues—highly controversial, particularly the conclusion of the report that current dairy operations were to blame. Cox ignores this final and false determination referring instead to the draft report's conclusion that no definitive source could be identified.
4. Significant emerging issue—historic contribution of nitrate in the area which Cox uses to justify this is contradicted by the report conclusions, thereby making it a very significant emerging issue.
5. Agency investment—does this admission not justify “influential”? 
6. Innovative approach—EPA’s innovative approach included using a teaspoon to sample soil to one inch on fields where manure was freshly applied and using this to determine nitrogen levels in fields. Many such examples of science methodology that fell outside of acceptable science as made clear by numerous science experts.
Five years later

After the change in administration in 2017 and the appointment of a new Region 10 Administrator, Chris Hladick, farmers raised the issue of the false report and lack of peer review.

Mr. Hladick supported his staff’s false account of the classification and the peer review in this June 19, 2019 letter to Save Family Farming.
September 19, 2019

Following the disappointing response from the Region 10 Administrator, the national dairy community appealed to new EPA Director Andrew Wheeler.

Susan Bodine, head of enforcement and compliance, continued to support the position of EPA staff that the study and peer review was in compliance with EPA policy, even continuing to use the USDA scientist as a reviewer despite his removal by request.

As Regional Administrator Hladick noted in his letter to you on June 19, 2019, the agency followed its peer review policy when the Report was developed. The EPA conducted both internal and external peer reviews and accepted public comment on the draft Report. Consistent with the policy articulated in the 2006 Memorandum on Peer Review and Peer Involvement at EPA, the Report’s external peer review included scientists from the United States Geological Survey (USGS) and the U.S. Department of Agriculture; scientists from EPA’s Office of Research and Development and EPA Region 10 conducted the internal peer review. The EPA considered the peer reviewers’ comments on the EPA 2012 Report and revised the report in response to the comments.

In 2013, the EPA issued an administrative order on consent under Safe Drinking Water Act Section 1431 to protect public health in Yakima Valley. In this case, the EPA’s Section 1431 action was supported by a Valley Institute for Research and Education’s (VIRE) 2002 study; USGS ground water sampling that was conducted in 1992 and 2004; Washington State Department of Ecology sampling conducted as part of the Agricultural Chemical Pilot Study conducted in 1988; and the Washington State
What can we conclude?

1. The OMB Bulletin’s definition of “influential” required that classification for the Yakima nitrate study and also required peer review adequate to the impact of the study on policy decisions and private sector actions.

2. EPA initially submitted the study to the Science Inventory as “influential.”

3. In December 2012 changes were submitted to the Science Inventory, likely changing it to “other” per directions from Sheila Fleming and Michael Cox.

4. Gina Grepo-Grove, responsible for managing the Science Inventory for Region 10, continued to express serious reservations about the classification and the lack of adequate peer review. She believed the study did not qualify for “other” but appeared to reluctantly comply with directions after EPA attorney Jennifer MacDonald said it “was OK.”

5. Despite the reclassification, MacDonald continued to refer to the study as “influential” and defended the peer review as adequate. No peer review was required of studies classified as “other.”

6. The National Science Advisor raised concerns about the lack of peer review and the fact that reviewers only saw the draft report and not on the final report even though that had been substantially changed.

7. Following these concerns, Michael Cox crafted a detailed justification for the “other” classification and lack of peer review but did not use the 2004 OMB Bulletin as a basis for his explanation. He also mischaracterized the changes from draft to final report.

8. Despite the changes in classification, the failure to meet peer review requirements, and the demonstrated false statements made by EPA staff, the Trump administration’s EPA leaders including Region 10 Administrator Chris Hladick and EPA’s Assistant Administrator for Enforcement and Compliance Susan Bodine continued to support the study and the peer review.