

CHAMBER OF COMMERCE  
OF THE  
UNITED STATES OF AMERICA

WILLIAM L. KOVACS  
VICE PRESIDENT  
ENVIRONMENT, TECHNOLOGY &  
REGULATORY AFFAIRS

1615 H STREET, N.W.  
WASHINGTON, D.C. 20062  
(202) 463-5457

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Information Quality Guidelines Processing Staff  
Mail Code 2811R  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460  
By email to: [quality@epa.gov](mailto:quality@epa.gov)

RE: Request for Reconsideration of Request for Correction (RFC 04019)

Dear Sir or Madam:

The United States Chamber of Commerce (Chamber) files<sup>1</sup> with the Environmental Protection Agency (EPA) this Request for Reconsideration (Appeal) of the Chamber's Request for Correction (RFC)<sup>2</sup> of databases and models that contain incorrect information concerning various chemicals. Such information is used, for example, in establishing appropriate cleanup levels for contaminated waters and land and significantly impacts the protection of public health and the environment as well as remediation costs.

Although such a serious issue deserves serious attention by the EPA, this has not occurred, despite the fact that this failure ignores the mandate of the Data Quality Act (DQA) to maximize data quality.<sup>3</sup> EPA, in its Response<sup>4</sup> refuses to check the questioned data. That is just plain wrong. Passing on to those using the databases and models the responsibility for and consequences arising from the use of such erroneous data is an abdication of the government's responsibility to use and foster the use of good quality data in protecting human health and the environment. Moreover, notwithstanding that such data are invalid, EPA has for decades required that the regulated community use such data in

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<sup>1</sup> The request is submitted pursuant to: [1] Section 515, Treasury and General Government Appropriations Act for Fiscal Year 2001; Public Law 106-554; 44 U.S.C. §3516, note; [2] 67 *Federal Register* 8452-8460 (<http://www.whitehouse.gov/omb/fedreg/reproducible2.pdf>).

<sup>2</sup> U.S. Chamber of Commerce, *Request for Correction, RFC 04019*, May 26, 2004 at <http://www.epa.gov/quality/informationguidelines/documents/04019.pdf>.

<sup>3</sup> Section 515, Treasury and General Government Appropriations Act for Fiscal Year 2001; Public Law 106-554; 44 U.S.C. §3516, note.

<sup>4</sup> In its Response to the Chamber's RFC, EPA pulled one database off its website and added two explanatory sentences to another database concerning its use; in all other respects, EPA ignored or dismissed the Chamber's request and asserted that the databases and models that the Agency continues to disseminate or whose dissemination it sponsors or recommends are in conformance with the Information Quality Guidelines (IQG), without explaining why this is true. EPA, *Response to RFC 04019* at <http://www.epa.gov/quality/informationguidelines/documents/04019-response.pdf>.

addressing environmental contamination. While it is unfortunate that EPA's scientific work is sloppy, it is an abuse of public trust not to correct the flawed data when it is brought to the agency's attention.<sup>5</sup>

## INTRODUCTION

There is a strongly held, bipartisan view that sound science is absolutely crucial to rulemaking and policy decisions. Unfortunately, the databases and models that the Agency disseminates, or whose dissemination it sponsors or recommends,<sup>6</sup> contain errors that propagate from one information source to another.<sup>7</sup> There is therefore no question that peer review of such databases and models has failed.

This Appeal consists of:

1. this letter, which is transmitted to EPA as the electronic file named, CHAMBER LETTER;
2. Supplemental Commentary that addresses point by point in sequential order the issues raised in EPA's Response letter and the material named "Attachment" that EPA included with its Response letter to the Chamber's RFC. The Supplemental Commentary is transmitted to EPA as the electronic file named, SUPPLEMENTAL INFORMATION;
3. the full written report produced for the Chamber by Cambridge Environmental (<http://www.cambridgeenvironmental.com>), comprised of a Cambridge Environmental Memorandum report and zipped file attachments, that analyzes databases and models that EPA disseminates or whose dissemination it sponsors or recommends. The Cambridge Environmental Memorandum report (with zipped file attachments) to the Chamber is transmitted to EPA as the electronic files named CAMBRIDGE ENVIRONMENTAL REPORT, CAMBRIDGE ENVIRONMENTAL ZIP ATTACHMENT PART 1, and CAMBRIDGE ENVIRONMENTAL ZIP ATTACHMENT PART 2; and

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<sup>5</sup> As described in the Chamber's RFC (see Footnote 2), there is no question that such poor quality information deleteriously impacts business and industry. The RFC documents in quantitative terms how businesses and industries, many of whom are members of the Chamber and whose interest the Chamber is tasked to represent, are affected and impacted in a significant manner by the faulty information that EPA disseminates or whose dissemination it sponsors or recommends. Note that the OMB guidelines instruct that (67 FR 8452-8460): [Influential information means] *that the agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions* [emphasis added.]

<sup>6</sup> *...if an Agency, as an institution, disseminates information prepared by an outside party in a manner that reasonably suggests that the agency agrees with the information, this appearance of having the information represent agency views makes agency dissemination of the information subject to these guidelines.* (67 FR 8452-8460).

<sup>7</sup> This occurs generally by incorporation by reference or by linking databases and models that EPA disseminates, or whose dissemination it sponsors or recommends, through government websites and through documents that the agency makes available to the public directly or through its designee distributors, such as the National Technical Information Service.

4. a report developed by the U.S. Geological Survey (USGS) concerning data quality problems. The USGS report concerning data quality problems is transmitted to EPA as the electronic file named, U.S. GEOLOGICAL SURVEY REPORT.

## **EPA's ALARMING RESPONSE**

In summary, EPA's Response to the Chamber's RFC is alarming in that it rejects a requested review of erroneous data, largely disclaims or ignores the fact that problems exist, and blatantly fails to address the public need for quality information, thereby placing the onus for examining and assuring data quality upon the users of such information and leaving them to employ such information at their own risk. This is an abdication of public trust. Specifically, EPA states:

1. Rather than acknowledging specific data errors noted by the Chamber, EPA has issued warnings, disclaimers, and denials of responsibility for such data and stated that it is not responsible for misuse of the models and databases that it disseminates or whose dissemination it sponsors or recommends.<sup>8</sup> Simply put, any problems with models or databases are users' problems, not EPA's.

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<sup>8</sup> This is done in any number of ways. For example, EPA denies responsibility for assuring the quality of data, databases, and models issued by third parties despite the fact that EPA recommends, disseminates, or sponsors the dissemination of such data, databases, and models. It justifies this by noting either that copyright is held by the third party, that the data, databases, or models are proprietary, or that the information was not developed by EPA. Often, however, such information has been developed in whole or part with federal government funds that were provided to the third party by EPA, as for example, has been the case (ongoing) concerning development of the EPI Suite (as confirmed in a March 29, 2005 email communication from Cathy Fehrenbacher of EPA to the Chamber). As another example, Water9 includes an extensive disclaimer in the initial pop-up window, which reads as follows: *This software and the accompanying files are provided as is and without warranties as to the performance or merchantability or any other warranties whether expressed or implied. The user assumes the entire risk of using the program.* The Chamber surmises that the user might be held responsible for any errors in the program if there was a regulatory compliance issue with using the results of the model as EPA has issued this warning and cautionary statement. This position would seem on its face to negate the spirit of the Data Quality Act. EPA also denies responsibility for correcting data on the basis of its argument that new databases and models have superseded previously distributed models. But doing this neglects the fact that errors can propagate, as clearly demonstrated in this Appeal, from one database and model to another. There is also an implicit waiver of responsibility in many models and databases that EPA disseminates or whose dissemination it sponsors or recommends, in that EPA fails to provide any cautionary statements that data are in error and it fails to provide reasonable discussions of data uncertainty; the Agency has in effect waived its responsibility to perform this task, despite the fact that it is a reasonable, and near universal expectation of scientists and engineers that information should be qualified in terms of the certainty (or uncertainty) with which it is known. Moreover, in making blanket statements that databases and models are in conformance with the IQG, without explaining why such a statement is valid, EPA has failed to recognize its responsibility to provide transparency in its reasoning concerning data quality. The Agency also denies responsibility to correct data errors by stating patently false facts, such as assertion of the robustness of peer reviews of contentious information. In ignoring concerns raised in the Chamber's RFC, EPA also waives and denies its responsibility to correct data errors. Another issue that Cambridge Environmental privately communicated to the Chamber is noteworthy (see <http://www.epa.gov/waterscience/itm/>). One entry at this site is *The Inland Testing Manual* (Full text) (Index of PDF documents, by chapter title) where "Full text" is a link, and "PDF" is a link. If a person clicks on the link for "(Full text)" they can find a disclaimer. If, instead one clicks on the link to the PDF documents, they DON'T find any disclaimer. Unfortunately, none of these disclaimers is any use if one finds the document by Googling for it and downloading it directly—in this case one will never know about any disclaimer. This observation argues that disclaimers should be present in the documents, not on web sites.

2. EPA asserted in a few instances that a model or database has been superseded but is silent on whether data problems remain or have carried over (by propagation from one database or model to another) and still need to be addressed.
3. EPA asserts it has no responsibility to assure the correctness of databases and models that it disseminates but does not own or whose dissemination it sponsors but was developed by someone else. In these instances EPA asserts such flawed databases and models are someone else's problem, even in instances where EPA specifically recommends that such material be used, for example, by a regulated entity as part of an environmental cleanup. [Would this excuse work with the IRS, i.e., an individual can deny responsibility for payment of taxes and penalties because the tax preparer made the error or because IRS information or advice is in error?]
4. EPA specifically recommends the use of models and databases it disseminates or whose dissemination it sponsors even though it has issued warnings, disclaimers, and denials of responsibility for any misuse by others.
5. EPA did not address the consistency, or lack thereof, of data found in databases and models taken as a whole, which is a primary concern expressed in the Chamber's RFC. However, because EPA has issued warnings, disclaimers, and denials of responsibility concerning the models and databases that it disseminates or whose dissemination it sponsors, EPA contends that the quality of such information is transparently established, and therefore that the databases and models are individually in conformance with the IQG.
6. EPA states that as the databases and models it disseminates or whose dissemination it sponsors are peer reviewed, such information is of good quality, warnings, disclaimers, and denials of responsibility by the Agency notwithstanding.
7. EPA asserts that any variations in numerical values of physical or chemical data properties among the databases and models that it disseminates or whose dissemination it sponsors and about which the Chamber has concerns are due to the effect of site specific conditions.
8. EPA asserts that because Agency regulations and policy are ultimately established according to the professional judgment of EPA staff, the data, databases, and models in question are not the determining factor in the formulation of regulations, guidance, and policy decisions.

Taken as a whole, EPA's Response to the Chamber's RFC constitutes a litany of refusals that fail to achieve a satisfactory correction. As discussed in this Appeal, the faulty databases and models that EPA continues to disseminate, or whose dissemination it sponsors, or whose use it recommends lack all three characteristics of information quality (objectivity, utility, and integrity) required by the DQA.<sup>9</sup> Moreover, as this Appeal and the Chamber's RFC document, although the information of concern is influential, it lacks transparency<sup>10</sup> and reproducibility.<sup>11</sup>

## EPA's DATA QUALITY FAILURE IS MANIFESTLY EVIDENT

With regard to the OMB IQG<sup>12</sup>, the fact of dissemination (or sponsorship of dissemination), not ownership, is central to the issue of EPA's responsibility for correcting data,<sup>13</sup> regardless whether such databases and models were paid for in whole or in part with government funds and regardless whether such databases and models are public, private, proprietary, or copyrighted.<sup>14</sup>

Taken as a whole, the Chamber asserts that EPA is not authorized under the IQG or the DQA to disseminate, sponsor the dissemination of, recommend,<sup>15</sup> or endorse the use of databases and models that EPA can reasonably be expected to know are in error and are therefore not reproducible.<sup>16</sup> There is no construction of the IQG that allows EPA to

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<sup>9</sup> Footnote 3, *Ibid.*

<sup>10</sup> As to transparency, the OMB guidelines instruct (67 FR 8452-8460) ...*agencies must make their methods transparent by providing documentation, ensure quality by reviewing the **underlying** [emphasis added] methods used in developing the data...* As this Appeal documents, it is clear that EPA has failed to review the underlying methods used in developing the data; for had the Agency done this, it would be patently clear that the methodology failed to place emphasis on primary information sources, thereby leading to the occurrence and propagation of data errors. Moreover, as this Appeal documents, EPA leaves it to the user to search out critical **primary** information sources as such information is not provided.

<sup>11</sup> As to reproducibility, the OMB guidelines instruct (67 FR 8452-8460) *The reproducibility standard applicable to influential scientific, financial, or statistical information is intended to ensure that information disseminated by agencies is sufficiently transparent in terms of data and methods of analysis that it would be feasible for a replication to be conducted. And With respect to analytic results, 'capable of being substantially reproduced' means that **independent analysis** [emphasis added] of the original or supporting data using identical methods would generate similar analytic results, subject to an acceptable degree of imprecision or error.* This Appeal documents the lack of transparency of data sources and that the data, when referenced back to primary sources, do not, on independent analysis (such as undertaken in the Cambridge Environmental report) reproduce the data that EPA disseminates or whose dissemination it sponsors or recommends. Moreover, as this Appeal and the Chamber's RFC demonstrate, the degree of imprecision or error is clearly unacceptable.

<sup>12</sup> 67 *Federal Register* 8452-8460 (<http://www.whitehouse.gov/omb/fedreg/reproducible2.pdf>).

<sup>13</sup> *It is crucial that information Federal agencies **disseminate** [emphasis added] meet these guidelines.* (67 FR 8452-8460).

<sup>14</sup> Note that the OMB guidelines (67 FR 8452-8460) state that: *If an agency, as an institution, disseminates information prepared by an outside party in a manner that reasonably suggests that the agency clearly agrees with the information, this appearance of having the information represent agency views makes agency dissemination of the information subject to these guidelines.* As this Appeal documents, EPA clearly and specifically recommends the use of data prepared by outside parties.

<sup>15</sup> Recommend: as in advise, counsel, or suggest a particular decision or course of action.

<sup>16</sup> As previously noted, the OMB guidelines (67 FR 8452-8460) state that: *With respect to analytic results, 'capable of being substantially reproduced' means that independent analysis of the original or supporting data using identical methods would generate similar analytic results, subject to an acceptable degree of imprecision or error.* As this Appeal documents, reference to publicly available literature readily accessible to EPA and its contractors (as well as third parties whose data the Agency recommends for use) clearly demonstrates that reported data that EPA disseminates or whose dissemination it sponsors or recommends is neither reproducible nor acceptable. The failure of the agency and its contractors (as well as third parties whose data the Agency recommends for use) to produce reasonable data arises in large measure due to an inappropriate reliance

absolve itself of the responsibility to assure the quality of databases and models that it disseminates or whose dissemination it sponsors or recommends by issuing waivers, cautions, disclaimers, denials of responsibility, poor peer review, and passing on to users of such databases and models any liability for misuse of the information. Such actions are not authorized under the IQG, especially in instances in which the Agency can reasonably be expected to know such information is in error.

Moreover, the Chamber is deeply troubled that EPA makes clearly incorrect supportive statements concerning the quality of the data in databases and models that it disseminates or whose dissemination it sponsors or recommends, for example:

1. the patently false EPA suggestion that the data variability such as that about which the Chamber has concerns is mainly due to site specific conditions—the analysis performed by Cambridge Environmental clearly indicates that the data variability is mainly due to real errors and not mainly to site specific conditions;<sup>17</sup>
2. the indication that data quality is qualified by multiple tiers of peer review—the Cambridge Environmental analysis clearly demonstrates that the peer reviews that EPA posits as evidence of data quality have failed to uncover obvious, egregious data errors; as such, data quality is not maximized.<sup>18</sup> In fact, as documented in both the Cambridge Environmental and USGS reports,<sup>19</sup> such an undertaking can be readily carried out, i.e., the federal government has the necessary expertise to uncover data errors, and as such, it would be unreasonable for EPA to assert that this cannot be done. In failing to do this, the Agency has failed to maximize data quality;

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upon secondary and tertiary data reference sources rather than on primary sources of information. It is a basic tenet of scientific analysis that wherever and whenever possible, primary information resources should be relied upon when establishing the soundness of scientific information. This Appeal clearly demonstrates that relevant primary information resources are readily accessible and that it is therefore a reasonable expectation that EPA and its contractors (as well as third parties whose data the Agency recommends for use) can access this information; it also demonstrates that EPA's disclosure of underlying information that supports or refutes the quality of data is anything but transparent.

<sup>17</sup> In particular, refer to the part of the Cambridge Environmental report entitled "Appendix: Quantitative Analysis of Variability and Uncertainty" for an analysis that confirms the fallacy of EPA's suggestion. While site specific conditions can influence data values, in no way can such influences fully account for the variations that are noted in this Appeal and in the Chamber's RFC.

<sup>18</sup> In particular, refer especially to the part of the Cambridge Environmental report entitled "Task 1: EPA references to outside databases" for an analysis that confirms the fallacy of EPA's suggestion. This Appeal establishes that the peer review process has failed to assure good data quality by failing to document and place principal reliance upon primary sources of information.

<sup>19</sup>The USGS report, James Pontolillo and Robert P. Eganhouse, The Search for Reliable Aqueous Solubility ( $S_w$ ) and Octanol-Water Partition Coefficient ( $K_{ow}$ ) Data for Hydrophobic Organic Compounds: DDT and DDE as a Case Study, Water-Resources Investigations Report 01-4201, is also available electronically at <http://water.usgs.gov/pubs/wri/wri014201/> and has been downloaded more than 8000 times, a strong indicator of the importance of this subject to the public. As USGS notes (<http://toxics.usgs.gov/highlights/kow.html>) *Whatever the outcome of the debate, the USGS report and [the DQA] have sparked a growing movement to create higher quality measurements of the properties, such as water solubility ( $S_w$ ) and octanol-water partition coefficient ( $K_{ow}$ ), that many environmental studies and policy decisions are based on.* [NB: This official statement disseminated by an Agency of the United States government clearly states that policy decisions are based on data.]

3. The contents of this Appeal further establish that EPA, rather than correcting data, has a documented history of issuing warnings, disclaimers, and denials of responsibility concerning the databases and models that it disseminates, thereby foisting onto users the responsibility for assuring information quality and liability for faulty analyses that arise out of a failure to do this;
4. This Appeal establishes that EPA continues to recommend<sup>20</sup> that users employ the models and databases it disseminates or whose dissemination it sponsors, notwithstanding EPA's warnings, disclaimers, and denials of responsibility;
5. This Appeal also indicates that although some models and databases have been superseded, there is no reason to believe that errors have been corrected, as the peer review process is obviously flawed and the errors propagate;<sup>21</sup> and
6. This Appeal also establishes that there is a bipartisan view that the quality of data, databases, and models must be sound and that sound data, databases, and models must underpin the development of sound regulations and policy decisions. There is a critical nexus between sound science information and regulatory policy and decisions; resort to the use of "professional judgment" (a poorly defined concept if ever there was one)<sup>22</sup> in establishing the basis or justification for regulation and policy is no excuse for failing to maximize the quality of data as the DQA mandates—professional judgment does not take place in a vacuum.<sup>23</sup>

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<sup>20</sup> The Zipped files that are part of the Cambridge Environmental report provide additional documentation.

<sup>21</sup> The USGS report, which is a part of this Appeal, also documents that errors often propagate and flow over into new models and databases; Footnote 19, *Ibid*.

<sup>22</sup> It is remarkable that, while the Agency in its "professional judgment" finds that its databases and models are in conformance with the IQG [Refer to the text of EPA's Response letter], a simple, straightforward inspection by Cambridge Environmental has easily been able to uncover serious flaws in the peer review of the databases—the propagation of data errors from one information source to another as described in this Appeal—and serious deficiencies in EPA's assessment that the errors of concern to the Chamber are due to site specific variations. In regard to peer review, the Chamber notes further, that not only are some peer reviews flawed, in some instances, EPA never even conducted a peer review of some of the databases that it disseminates or whose dissemination it sponsors or recommends. For example, EPA reports [EPA response to Chamber FOIA HQ-RIN-00847-05, March 31, 2005] having no record of any peer review of CHEMFATE. It is also interesting to note that one key report [S.W. Karickhoff and J.M. Long, *Summary of Measured, Calculated, and Recommended Log Kow Values*, Environmental Research Laboratory, Athens, Georgia. Prepared for Elizabeth Southerland, Chief, Risk Assessment and Management Branch, Standards and Applied Science Division, EPA Office of Water, Washington, D.C. April 10, 1995] that EPA claims as a basis for validation of its SPARC model, is to this day treated as an internal EPA report not available for public distribution even though it was developed in 1995 [As confirmed by email communication to Chamber, April 5, 2005 from J.M. Long, Chief, EPA Processes & Modeling Branch]. Thus, the public has no way of knowing or evaluating the extent of peer review of this material. If anything, these example shortcomings point directly to the fallacy of "professional judgment" as a means to form regulatory and policy decisions. Simply put, professional judgment is no excuse for poor data. In fact, the entire notion of how one goes about forming a professional judgment is called into question given these lapses in analysis and unnecessarily strict controls on basic information such as is found in the Karickhoff and Long report, which is widely referenced by EPA and other parties to justify decisions relevant to protection of public health and the environment.

<sup>23</sup>NB: Moreover, the USGS has clearly indicated that policy decisions are based on data; Footnote 19, *Ibid*.

## EPA's RESPONSIBILITIES UNDER THE DQA

The DQA<sup>24</sup> mandates that OMB issue government-wide guidelines that establish standards for maximizing [emphasis added] the quality of all information disseminated by federal agencies. It explicitly mandates and instructs that:<sup>25</sup>

*The guidelines under subsection (a) shall—(1) apply to the sharing by Federal agencies of, and access to, information disseminated by Federal agencies: and (2) require that each Federal agency to which the guidelines apply—(A) issue guidelines ensuring, and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency...*

EPA's statement<sup>26</sup> that:

*Consistent with the IQGs, the quality of information in any individual rulemaking or Agency action should be scaled and appropriate to that use,*

is particularly disturbing—it contradicts the DQA. Clearly, the intent of this law is for federal agencies to ensure and maximize the quality of the information they disseminate. Quality, as OMB explains *is an encompassing term comprising utility, objectivity, and integrity.*<sup>27</sup> The information, such as that about which the Chamber has concerns is of poor quality, because as this Appeal documents, it lacks objectivity, utility, and integrity.

- **Objectivity:** The information is not objective. The OMB guidelines instruct *The agency needs to identify the sources of the disseminated information (to the extent possible, consistent with confidentiality protections) and, in a scientific, financial, or statistical context, the supporting data and models, so that the public can assess for itself whether there may be some reason to question the objectivity of the sources. Where appropriate, data should have full, accurate, transparent documentation, and error sources affecting data quality should be identified and disclosed to users.*<sup>28</sup> This Appeal indicates that this instruction of OMB has not been followed. Rather than appropriately identify sources, EPA instead has issued warnings, disclaimers, and denials of responsibility for any errors, and has instructed the public that it, and not the Agency, is responsible for assuring quality results. The Agency is almost completely derelict in informing users of the nature or extent of data errors in the databases and models that are of concern. Moreover, as this Appeal indicates, the information fails to meet the objectivity standard because the underlying methods are not transparent<sup>29</sup> or reproducible.<sup>30</sup>

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<sup>24</sup> Section 515, Treasury and General Government Appropriations Act for Fiscal Year 2001; Public Law 106-554; 44 U.S.C. §3516, note.

<sup>25</sup> Footnote 3, *Ibid.*

<sup>26</sup> EPA, *Response to RFC 04019* at <http://www.epa.gov/quality/informationguidelines/documents/04019-response.pdf>.

<sup>27</sup> 67 *Federal Register* 8452-8460 (<http://www.whitehouse.gov/omb/fedreg/reproducible2.pdf>).

<sup>28</sup> *Ibid.*

<sup>29</sup> *Ibid.*

<sup>30</sup> *Ibid.*



- **Utility:** The information clearly lacks utility. OMB explains utility as *the usefulness of the information to the intended user*.<sup>31</sup> Simply put, the quality of the data is so poor that a user cannot determine, for example, an appropriate cleanup standard or level of protection for a water body, because the outcomes realized from use of this poor data create enormous uncertainties, whose validity cannot be established and which impart enormous financial impacts owing to such ill-defined outcomes. Moreover, if the onus of confirming data quality is foisted on the user of the information, its usefulness is defeated.
- **Integrity:** The information also lacks integrity. As OMB explains *Integrity refers to the security of information—protection of the information from unauthorized access or revision, to ensure that the information is not compromised through corruption or falsification*.<sup>32</sup> As this Appeal clearly documents, there are data errors and these errors propagate from one database to another. Therefore EPA has failed to protect the data from corruption.

There is therefore no question that EPA has failed to ensure and maximize quality of the information that it disseminates or whose dissemination it sponsors or recommends. The DQA provides no discretion in this instruction. Additionally, scaling data quality appropriate to use will not assure that data quality is maximized—EPA is not omniscient on the matter of what is appropriate use, and no matter what EPA does, it cannot control the public's view of what is proper use once data is disseminated. It is therefore incumbent on EPA to maximize the quality of information as required by the DQA.

If the construction of the OMB IQG is so flawed that, under the umbrella of the IQG, EPA can absolve itself of the responsibility to assure the quality of databases and models that it disseminates<sup>33</sup> by passing on to users of such databases and models any liability for misuse of the information, which the Agency does through issuance of waivers, cautions, disclaimers, and denials of responsibility,<sup>34</sup> then the OMB IQG itself has also failed to satisfy the Congressionally mandated quality standard of the DQA. However, that observation notwithstanding, the clear intent of Congress as stated in the DQA is that all federal government agencies must maximize data quality—notwithstanding any flaw(s) in the construction of the OMB IQG. The Chamber further asserts that the issuance of waivers, cautions, disclaimers, and denials of Agency responsibility as well as reliance on poor peer reviews of data certainly fails to maximize the quality of the information.

This Appeal establishes that EPA has a poor understanding of the quality, or lack thereof, of databases and models that it disseminates or whose dissemination it sponsors or

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<sup>31</sup> *Ibid.*

<sup>32</sup> *Ibid.*

<sup>33</sup> Or whose dissemination it sponsors or recommends.

<sup>34</sup> Footnote 8, *Ibid.*

recommends. This Appeal further establishes that EPA has failed to undertake a thorough review of data quality even though such an assessment is straightforward to carry out. EPA's blanket, non-transparent assertion in its Response to the Chamber's RFC that the data in databases and models it disseminates to the public are in conformance with the IQG without the Agency transparently explaining why such an assertion is true is disturbing. To the contrary, this Appeal establishes the Agency's failure to maximize data quality—it clearly documents EPA's failure to assure that the data in databases and models it disseminates or whose dissemination it sponsors or recommends are in conformance with the IQG.

Therefore, if databases and models that EPA intends to disseminate, sponsor, or recommend are in error, conformance with the DQA and OMB IQG must first be assured by ensuring that the disseminated databases and models are reliable, and not by issuing warnings or disclaimers, or by passing off responsibility for meeting this obligation to users of the data.

## **A BIPARTISAN VIEW OF THE NEED FOR QUALITY IS EVIDENT**

The need for sound science in formulating regulations and policy, inclusive of sound data, databases, and models, is the bipartisan position of our national leaders:

*EPA's regulations define the technical, operational, and legal details of many of the Nation's environmental programs. The credibility of our decisions depends on the science and analysis underlying these regulations. Their quality determines how well environmental programs actually work and the extent to which they achieve health and environmental goals (p.1); It is absolutely essential that EPA leaders have the best possible scientific and economic information to consider when making decisions (p.4)—***EPA Task Force Report on Improving Regulations, June 15, 2001.**

*We know that lack of information is always more expensive in the long run. A successful market economy fundamentally depends on the availability of accurate information—***John Gibbons, Assistant to the President for Science and Technology**, Remarks made at the University of Maryland at College Park, September 19, 1995.

*Regulatory decisions should be based on the best science and data that are available—***Vice President Al Gore**, Memorandum to D. Glickman and C. Browner, The White House, April 8, 1998.

*The Agency has demonstrated a strong commitment to sound science as the basis for our decisions—***EPA Administrator Carol Browner**, Testimony before the Committee on Science, House of Representatives, Oct 4, 2000.

*EPA relies on many sources of information to assist in decision making ... Our goal is to use the best science available*—**EPA Assistant Administrator Paul Gilman**, Office of Research and Development, letter to Congressman Richard A. Baker, June 19, 2003.

*EPA is committed to providing public access to high quality [emphasis added] information*—**EPA Assistant Administrator and Chief Information Officer Kimberly Nelson**, Office of Environmental Information, letter to Congressman Joe Barton, February 9, 2005.

*Throughout EPA's history, our greatest successes have occurred when policies, regulations, and decisions are based on the results of sound and relevant scientific research ... [T]he credibility of our decisions depends on the science underlying them. The quality of the science behind those decisions largely determines how well environmental programs actually work—whether they achieve our health and environmental goals.* —**EPA Administrator Christine Todd Whitman**, Remarks to EPA Science Forum, May 1, 2002.

## REQUEST FOR CORRECTION

The Chamber seeks the correction<sup>35</sup> of faulty information, which correction would be of benefit to business and industry, to governmental agencies, and to the public, as all would be assured of improved scientific soundness of regulatory decisions and policy. There can be no doubt that reduced confidence in the values of physical and chemical properties casts doubt on the environmental predictions scientists make and the decisions based on them.

Specifically, the Chamber requests that the data quality problem that is the subject of its RFC and of this Appeal should be addressed through a coordinated *inter*-governmental, multi-Agency effort that takes on as a whole the problem of data quality such as the Chamber has noted. This is a necessary since physical/chemical constant data are used by many government agencies in addition to EPA.<sup>36</sup> Such an inter-governmental effort should

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<sup>35</sup> In its RFC the Chamber requested that EPA assure that the databases consistently and uniformly indicate the same, correct numerical value for any listed physical or chemical property parameter associated with the identified chemicals and chemical mixtures. As a note of clarification, the Chamber reasonably presumed (but did not explicitly state) that the Agency should understand this to mean: “at some agreed upon standard reference conditions.” Standardized data values can subsequently be adjusted to other physical conditions and these can be tabulated, or the data can be adjusted for site specific conditions as needed, *apart* from the content of information in the databases. The Henry’s law constant, for example, is dependent on physical conditions, so EPA databases, if not standardized, must specify conditions corresponding to a stated value given in databases. The EPA databases do not do this. A “Henry’s law constant” may depend on pH, oil content, or organic carbon content. However, values listed in databases as “Henry’s law constant” are generally understood to correspond to be partition coefficients between *pure* solvents and air, the solvent being water unless explicitly specified otherwise. Application to a particular site may involve modification of database values due to the presence at a site of particular other components in the solvent (or even gas) phase; however, this requires site-specific models that have nothing whatever to do with databases. Moreover, in instances where reliable numerical values cannot be established, some basis for establishing data uncertainty and variability should be incorporated into data representations.

<sup>36</sup> For example, such information is used by the Department of Defense, the Department of Energy, and the Food and Drug Administration

Information Quality Guidelines Processing Staff

April 8, 2005

Page 12 of 12

include the involvement of the Director of the Office of Measurement Services, the Chief of the Standard Reference Data Program, and other technical experts who work at the National Institute of Standards and Technology (NIST) in Gaithersburg, MD. NIST is a recognized world leader in the development of reliable data.

We look forward to receiving a satisfactory response from EPA. If Agency representatives have questions concerning this Appeal, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "William L. Kovacs". The signature is written in a cursive style with a large initial "W".

William L. Kovacs

cc: John Graham