**beth.carroll@syngenta.com**
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Record Type: Record

To: Mabel E. Echols OMB_Peer_Review/OMB/EOP@EOP

cc:
Subject: FW: Syngenta Crop Protection comments on the OMB proposed Bulleti n on Peer Review and Information Quality

This copy has page 10 correctly noted (rather than page 9)
Thanks
Beth Carroll

> Dear Dr. Schwab,
>
> Please accept the comments from Syngenta on the subject proposed Bulletin.
> I will also send a copy by fax. A hard copy will follow but I understand
> the mail
> takes quite some for delivery.
>
> Thank you for the opportunity to comment.
>
> Sincerely,
> Beth Carroll
>
> <<Syngenta Peer Review Bulletin comments 12.14.03.doc>>
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>
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- Syngenta Peer Review Bulletin comments 12.14.03.doc

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via electronic submission
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December 15, 2003

Dr. Margo Schwab
Office of Information and Regulatory Affairs
Office of Management and Budget
725 17th Street, NW
New Executive Office Building
Room 10201
Washington, DC 20503

Subject: Office of Management and Budget Proposed Bulletin on Peer Review and Information Quality under Executive Order 12866 and supplemental information quality guidelines [FR Doc. 03–23367] 68 FR 54023, September 15, 2003

Dear Dr. Schwab:

Syngenta Crop Protection, Inc. appreciates the opportunity to provide comments on the Subject Notice concerning the Office of Management and Budget (OMB) Proposed Bulletin on Peer Review and Information Quality. Syngenta submits scientific studies, data, or other technical information for use within the regulatory framework of several Federal Agencies including but not limited to the Environmental Protection Agency, the Department of Agriculture, and the Department of the Interior, and we are encouraged by the improvements in the use of sound science we expect from Agencies' and Departments' adherence to the Information Quality Act (IQA) Guidelines. The Peer Review Bulletin as developed by OMB/OIRA and OSTP is a clear enhancement of those IQA guidelines and should be incorporated as an amendment by individual Agencies to their Information Quality guidance documents. As a member of the regulated industry we endorse the new Bulletin directing independent scientific peer review of information used to make influential or significant regulatory decisions and believe it will strengthen the process by which the Agencies ensure that scientific studies meet the requirements of the IQA of quality, transparency, objectivity, utility and integrity of information disseminated by Federal Agencies. Accompanying this letter are also specific comments on the bulletin.

Sincerely,

N. Beth Carroll, Ph.D.
Environmental Stewardship Manager
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## Part I -- Comments on the Background and Request for Comment

Syngenta generally supports the Proposed Bulletin on Peer Review and Information Quality (the Bulletin) as a significant opportunity to improve the scientific review process as conducted by federal agencies. Currently there is uncertainty and lack of consistency and transparency in the peer review process within and across federal agencies. OMB has the authority under the Information Quality Act (IQA), P.L. 106-554, the Paperwork Reduction Act, 44 U.S.C. §§ 3504(d)(1) and 3506(a)(1)(B), Executive Order No. 12866 to augment the requirements of the IQA to ensure the "quality, objectivity, utility, and integrity" of information, including significant or precedent regulatory processes and decisions, disseminated by the federal agencies. In addition to our stated support of the Bulletin, with this submission Syngenta also offers comments and suggestions for improvements in this directive.

The Bulletin states: *A "peer review" as used in this document for scientific and technical information relevant to regulatory policies, is a scientifically rigorous review and critique of a study's methods, results, and findings by others in the field with requisite training and expertise.* Further the document states that *a "study" refers broadly to any research report, data, finding, or other analysis.* However, in Section 2. Peer Review of Significant Regulatory Information, the document states: *Agencies need not, however have peer review conducted on studies that have already been subjected to adequate independent peer review. For purposes of this Bulletin, peer review undertaken by a scientific journal may generally be presumed to be adequate. This presumption is rebuttable based on a persuasive showing in a particular instance.* OMB accounts and allows for the possibility that the "journal peer review process" may not satisfy the Bulletin guidance with a rebuttable presumption provision. However there is no clarity on what a "persuasive" argument for rebuttable presumption should be, nor is it clear which stakeholders will be able to make the claim. The Bulletin should address this shortcoming perhaps using examples of a rebuttable presumption.

Data generated to support regulatory decision making for pesticides are typically conducted according the established testing guidelines and procedures. The guideline development process itself includes a rigorous scientific peer review process to ensure that the most appropriate scientific approaches and methodologies are used to meet clearly defined study objectives. Guideline development is typically followed by a validation step(s) to prove that the study guidelines produce reproducible data appropriate for regulatory decision-making. Finally the strict quality control (Good Laboratory Practice Standards) required for regulatory data generation ensures through independent review that a) the test guidelines are followed during study conduct and any deviations recorded and b) that the study raw data are available for review and consistent with the study summaries and conclusions. The data therefore meet all requirements for reproducibility and transparency stipulated.

This is in stark contrast to many studies in the scientific literature, where often novel and unique - and therefore yet non-validated - test designs and methodologies are used. Data generation typically occurs without any formal quality control process in place. Peer review is usually applied after the study has been finalized and typically limited to the data summaries and conclusions provided by the study authors.

Even where findings have been further verified through consistent peer reviewed studies, this does not meet the exceptional standards provided by experiments conducted under the rigid

standards of Good Laboratory Practices (GLPs) studies. GLPs are a science management process which assures the quality and integrity of a study are documented by ensuring a study plan is developed and followed, a single person is responsible for the study, standard methods and procedures are used to establish uniformity, activities and data are promptly recorded to guarantee the study can be reconstructed and verified, and the study process is independently monitored by a trained quality assurance unit. These studies are audited by the Enforcement and Compliance Branch of EPA. Non-compliance can result in civil or criminal penalties, including fines and/or jail sentences for false statements or criminal intent.

A GLP conducted study undergoes rigorous scientific review at EPA's Office of Pesticide Programs (OPP) by Agency scientists who thoroughly review a study written to a prescribed format that ensures all necessary experimental detail is included as well as representative original raw data submitted in support of a pesticide registration. It is important to realize that before a GLP report can be issued it has to undergo thorough internal review by an independently managed Quality Assurance group who check to ensure that the data in the report is supported by numbers and statements in the raw data and that all the other requirements of GLP have been met. Moreover, should it be required the entire original raw data package along with all supporting calculations and rationale for study decisions and changes are retained in perpetuity under prescribed archive conditions. Subsequently OPP issues Data Evaluation Record (DER) and the assessment undergoes a process of peer review by other scientific experts within OPP.

Compare this reasonably scientific sound DER process with the process of numerous journals, including many published by federal agencies, which asks the author(s) of journal articles submitted for publication to make recommendations of reviewers for said article. How many authors would recommend reviewers that he/she thought would reject their paper? Clearly this type journal process has bias and is unacceptable for data generation that is to be relied upon in policy making.

The Bulletin states: *Existing agency peer review mechanisms have not always been sufficient to ensure the reliability of regulatory information disseminated or relied upon by federal agencies.* Syngenta agrees with that assessment and submits that while the Agencies have many scientifically sound procedures in place, there are numerous areas which require improvement in order to meet the standards required by the Peer Review Bulletin and ultimately the Information Quality Act. In this age of rapid communication scientific errors can spread and be considered valid very quickly, as seen in the example above. A study by Dr. John M. Budd et al. (Budd, J, Sievert, M, and Schultz, M, *Phenomena of Retraction*, JAMA 1998; 280:296-297) in the Journal of the American Medical Association evaluated 235 scientific journal articles that had been formally retracted for reproducibility failure, scientific misconduct, etc. This is not necessarily surprising. However the interesting part of the study showed that these retracted articles continue to be cited in the scientific literature. The average retraction time was on average over two years so it is not necessarily unusual to see citations within that time frame, however these researchers found that even after the retractions had been published, the flawed studies continued to be cited (2,034 times). Add this to the misconception that passing the "journal peer review" qualification certifies that the paper's results are real and you have a mix that will disastrously lead to regulation by public opinion.

One solution to the problem of "journal peer review" potentially being inadequate would be to have the published journal article re-peer reviewed if it were to be used as a basis for a regulatory or policy decision. This re-review would entail adherence to all the requirements for transparency set out in the Bulletin and development for criteria involving review of the original data and methodologies. The process for journal review if used in any regulatory decision-making that affects policy should be made as transparent as the selection process criteria for peer reviewers described in the Bulletin. The journal reviewers' names, affiliations, any conflicts of interests, any financial interests in the matter at issue, any advocation of a position on the specific matter at issue, and any receipt or seeking of substantial funding from the agency or other non-governmental advocacy groups should at least be disclosed if the article is used in any regulatory policy-making. This process could also be applied to studies that were not conducted under GLPs.

Syngenta supports the Bulletin's direction to grant the qualified peer reviewers access to sufficient information. Indeed we believe as the bulletin states: *While the scope of peer reviewers' responsibilities will necessarily vary by context, peer reviewers must generally be able to render a meaningful review of the work as a whole.*
]

**Proposed Guidance**

Syngenta agrees with the Bulletin proposal that OMB/OIRA in coordination with OSTP should ensure that agencies conduct peer reviews of the most important scientific and technical information relevant to regulatory policies that they disseminate to the public and that peer reviews are reliable, independent and transparent. It should be clarified here that any studies used as a basis in precedent setting regulations (regulations that will be used to direct policy) would fall under the mandates of the Bulletin. This includes research conducted by the National Institutes of Health and the National Science Foundation.

**Additional Requests for Comment**

1. *It may be that the overall scope of this Bulletin should be reduced or enlarged, or that fewer or more exceptions should be made.*

   Under the IQA, OMB directed Federal agencies to issue IQA guidance on how to ensure the quality of data being disseminated and indicated that the quality principles applied by Congress to the Safe Drinking Water Act (SDWA) amendments of 1996(42 U.S.C. § 300g1(b)(3)(A), (B)) should be adopted. Thus, OMB has already directed the use of peer review in satisfying the IQA standards, and the proposed Bulletin should be written to provide direction on peer review as is accomplished under the SDWA. Under that law an agency is directed, to the degree an agency action is based on science, to use the best available, peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices.

   The Bulletin discusses the difference between scientific/technical information or data and scientific or regulatory policy, but should be expanded to clarify those differences and to reaffirm (Workshop on Peer Review Standards for Regulatory Science and Technical Information, November 18, 2003; http://www7.nationalacademies.org/stl/) that decisions which set regulatory precedent must be included in the peer review process.

The terminology "regulatory information" (e.g. not just rule-making), "significant" regulatory information, and "influential" information should be harmonized with the terminology used in the Information Quality Act guidance.

Additionally the Bulletin must require that studies conducted by contractors or third parties undergo the same rigorous and thorough peer review. Third party studies cannot be exempt from the process.

2. *OMB also seeks comment on whether some provisions of this proposal should be strengthened, modified, or removed.*

Syngenta recommends that the bulletin be added as an amendment to the agencies' and departments' IQA guidance documents. The bulletin should also be strengthened with regard to actual direction on how to achieve independent, unbiased, balanced and transparent peer review processes. Examples of the process should be highlighted in the Bulletin.

The process for "journal peer review" if used in any regulatory decision-making that affects policy should be made as transparent as the selection process criteria for peer reviewers described in the Bulletin. The journal reviewers' names, affiliations, any conflicts of interests, any financial interests in the matter at issue, any advocation of a position on the specific matter at issue, and any receipt or seeking of substantial funding from the agency or other non-governmental advocacy groups should at least be disclosed if the article is used in any regulatory policy-making.

3. *This proposal also identifies circumstances that raise questions about the independence of peer reviewers (e.g., agency employees and agency-supported research projects, but it does not flatly preclude the selection of peer reviewers who raise some of those concerns. Members of the public are welcome to comment on whether these provisions strike the appropriate balance between safeguarding the fact and appearance of impartiality, on the one hand, and ensuring that qualified peer reviewers will not be precluded from service based on unnecessarily stringent conflict-of-interest requirements, on the other.*

The peer reviewer selection process at the Agencies should be completely transparent as in the selection of a jury for a court of law. Currently for EPA Scientific Advisory Panels (governed by the Federal Advisory Committee Act or FACA) EPA asks for proposals to the designated federal official of qualified reviewers. However there is no transparency of the selection process after submission of the proposed candidates. There should be an openness of the process that highlights not only the qualifications/ expertise/experience of the reviewers but also assures a lack of bias in the individual reviewer and indeed of the entire panel.

4. *OMB also seeks comment on whether any of the provisions of this proposal would unnecessarily burden participating scientists or discourage qualified scientists from participating in agency peer reviews.*

An open transparent process for selection of peer reviewers should not be unnecessarily burdensome for participating scientists. If transparency of funding,

affiliations with industry or non-profit environmental advocacy groups is problematic for a particular reviewer, this reviewer should not be relied upon for unbiased review.

5. *Specifically, OMB seeks comment on whether peer reviewers' disclosure requirements should be limited to a specific number of years, perhaps to activities occurring during the previous five or ten years, instead of extending back indefinitely.*

   Syngenta supports limitation of peer reviewers' disclosure requirements to ten years.

6. *More generally, OMB seeks suggestions regarding how agencies can encourage peer-review participation by qualified scientists.*

   The peer review process should be improved from its current state so that reviewers are seriously evaluated for their expertise in the scientific subject, given advanced notice of the timelines, provided with all of the relevant information required for the review, given a clear concise charge and assurance that the process would be driven by sound science. Should the process be revised as such, qualified scientists would likely find participation worthy of their time.

7. *In addition, OMB seeks comment on whether agencies should be permitted to select their own peer reviewers for regulatory information. Within the broad confines of this guidance, the agencies would retain significant discretion in formulating a peer review plan appropriate to each study. It is however, arguable that an entity outside of the agency should select the peer reviewers and perhaps even supervise the peer review process. The latter approach might lend the appearance of greater integrity to the peer review process, but could be unduly inefficient and raise other concerns.*

   Agencies should be able to select their own peer reviewers if it is within a completely transparent system, e.g. all nominated candidates and the selection process that the Agency is evaluating should be accessible and transparent to the public. Currently for EPA Scientific Advisory Panels (governed by the Federal Advisory Committee Act or FACA) EPA asks for nomination of qualified reviewers. However there is no transparency of the selection process after submission of the proposed candidates. There should be an openness of the process that highlights not only the qualifications/ expertise/experience of the reviewers but also assures a lack of bias in the individual reviewer as well as in the entire panel.

8. *Finally, OMB seeks comment from the affected agencies on the expected benefits and burdens of this proposed Bulletin. OMB believes that most agencies usually submit the types of studies covered by this Bulletin to a least some peer review. As a result, while this Bulletin should improve the quality of peer reviews, it may not impose substantial costs and burdens on the agencies that they are not already incurring.*

   Syngenta believes that the federal government agencies and departments using a sound peer review process of scientific information in their decision-making (regulatory or not) should improve the quality of the information they are using according to the IQA. The benefits of using peer reviewed, sound science in regulatory decisions and policy-making far exceeds risk concerns. In fact the concern should be ensuring use of improved scientific peer review processes to ensure that costly mistakes are not made.

**Part II – Proposed OMB Bulletin and Supplemental Information Quality Guidelines**

Section 1. Definitions

Syngenta supports the definition of "Regulatory Information" as any scientific or technical study that is relevant to regulatory policy. We wish to reiterate however that any regulatory decision that sets a precedent must be considered "relevant to regulatory policy". We also

strongly support that information is "relevant to regulatory policy" if it might be used by local, state, regional, federal and/or international regulatory bodies.

Syngenta encourages OMB/OIRA and OSTP to outline the critical information required to categorize data as "influential". Any influential data being used for regulatory or policy decisions should be subject to reproducibility to satisfy that standard of the Information Quality Act.

The definition of "study" is acceptably broad, but should be modified to include journal articles because review of such articles should go beyond the rudimentary requirements for publication in a journal.

Section 2. Peer Review of Significant Regulatory Information

Syngenta finds the segregation of "*significant regulatory information"* and "*especially significant regulatory information"* in the Draft Bulletin to be extremely confusing. This could easily be simplified by following the categories used originally in the IQA guidelines. All types of information disseminated by the federal government, regulatory in nature or otherwise, must follow the IQA guidelines.

Syngenta appreciates that OMB would exempt from peer review significant regulatory information that relates to national defense or foreign affairs; however exempting that information that is disseminated in the course of an individual agency adjudication or proceeding on a permit application is not acceptable in that these categories are not defined to determine what information they cover. For example, an adjudication may require certain briefs or papers for the courts that could be exempt but the scientific information upon which the brief is based must be subject to peer review.

The Bulletin states: *Depending on these factors, appropriate peer review mechanisms for significant regulatory information can range from review by qualified specialists within an agency (if they reside in a separate agency program)…..* This should be clarified with definitions and examples as to what constitutes a separate agency program.

Section 3. Additional Peer Review Requirements for Especially Significant Regulatory Information

See Section 2 above. The terms "*significant regulatory information"* and "*especially significant regulatory information"* in the Bulletin should be harmonized with the categories used originally in the IQA guidelines. All types of information disseminated by the federal government, regulatory in nature or otherwise, must follow the IQA guidelines.

Syngenta asserts that the 100 million dollar impact in any year is a defined value but how that impact is determined is unclear and would likely be determined on a case-by case basis.

Additionally there should be more definition or clarity in the guidance to the Administrator as to when information is of significant interagency interest or is relevant to an Administration policy priority. Examples in the guidance could be extremely helpful.

Syngenta agrees that peer reviewers should be selected primarily based on possession of the scientific and technical expertise required for the specific scientific questions at hand. We also agree that when multiple disciplines are required, the selected reviewers should include as broad a range of expertise as is necessary assuming all other qualifications such objectivity, transparency and lack of bias are met. Syngenta also strongly agrees that the agency sponsoring the review shall strive to appoint experts who, in addition to possessing the necessary scientific and technical expertise, *do not possess real or perceived conflicts of interest, and are capable of approaching the subject matter in an open-minded and unbiased manner*. However Syngenta does not agree that these individuals must be independent of the agency. In some instances there may be experts associated with the agency who are such authorities in the field that it would be inappropriate to exclude them from the process (e.g. EPA ORD experts advising EPA OPP or EPA OW). OMB must OMB should also add the following further aspects (in bold) to the Bulletin stated factors which are relevant to whether an individual satisfies the above criteria, including whether the individual:
*(i) Has any financial interests in the matter at issue* **including financial interests coming from any real or perceived non-governmental organizations or advocacy groups (additionally OMB must provide clarification on the criteria to be used when considering past funding sources and activities)**
(ii) *has, in recent years, advocated a position on the specific matter at issue* **(including advocation in the popular press)**
(iii) *is currently receiving or seeking substantial funding from the agency through a contract or research grant (either directly or indirectly through another entity, such as a university* **or a foundation or other organization tied to advocacy groups) or**
(iv*) has conducted multiple peer reviews for the same agency in recent years, or has conducted a peer review for the same agency on the same specific matter in recent years.*

OMB should define what criteria it will use to determine bias. Syngenta suggests that there should be transparent disclosure of any potential sources of reviewer bias and that these potential sources must be taken into account during the also transparent selection process of a balanced review panel.

The peer reviewer selection process at the Agencies should be completely transparent as in the selection of a jury for a court of law. Currently for EPA Scientific Advisory Panels (governed by the Federal Advisory Committee Act or FACA) EPA asks for nomination of qualified reviewers. However there is no transparency of the selection process after submission of the proposed candidates. There should be an openness of the process that highlights not only the qualifications/expertise/experience of the reviewers but also underlines a lack of bias in the individual reviewer as well as in the entire panel.

<u>Section 4. Peer Review Procedures</u>

a. Federal Advisory Committee Act
   The Bulletin must identify how an assessment of the treatment of a panel under the Federal Advisory Committee Act would be determined.

b. Agency Guidelines

The Peer Review Bulletin as developed by OMB/OIRA and OSTP is a clear enhancement of those guidelines and should be incorporated as an amendment by individual agencies and departments to their Information Quality guidance documents. Additionally the two categories of information (*"significant regulatory information"* and *"especially significant regulatory information")* should be handled in the same manner and by following the categories used originally in the IQA guidelines. All types of information disseminated by the federal government, regulatory in nature or otherwise, must follow the IQA guidelines.

c. Waiver
The Bulletin should be revised to further define the requirements of a "compelling case" and to clarify which stakeholders can request a waiver.

Section 5. Interagency Work Group on Peer Review Policies

The requirements for an interagency work group are vague. These should be further defined. Additionally, the requirements to adopt recommendations from this work group should be identified.

Section 6. Reports on Agency Peer Reviews

Until there is clear definition as to when information is of significant interagency interest or is relevant to an Administration policy priority the reporting system to OIRA as suggested by the Bulletin will be extremely confusing and will require significant resources. Syngenta suggests that the specifics of a reporting schedule be addressed later in the process after many of the other more basic portions of the Bulletin are addressed.

Section 7. Correction Requests Under the Information Quality Act

Syngenta agrees with the requirement to notify OIRA with a copy of each non-frivolous information quality correction request, to provide a copy of the agency's draft response and further to consult with OIRA on consistency with t he IQA guidelines.

Section 8. Interagency Comment

Syngenta agrees with OIRA's right to request comment from other agencies.

Section 9. Effective Date and Existing Law

Syngenta fully agrees that the Bulletin standards should not displace other peer review mechanisms already created by law, but we do believe that these other peer review mechanisms should be brought into accord with the Bulletin standards as quickly as possible.

Summary

Syngenta Crop Protection supports the intent of the Bulletin to promote the appropriate peer review mechanisms in the scientific review process conducted by federal agencies and departments. Interagency consistency and transparency will contribute to the intent of the

IQA guidelines which are to ensure that scientific studies disseminated by the agencies and departments will meet the IQA standards of quality, objectivity, utility and integrity.

The Bulletin however requires clarification in a number of areas including: the rebuttable presumption provision for "journal peer review"; the differences between studies conducted under stringent Good Laboratory Practice Guidelines and those that are not conducted in this manner; the potential use of a re-review process; transparency in the reviewer selection process; and others contained in the comments submitted by Syngenta. Definitions utilized in the Bulletin require clarification, harmonization with the IQA definitions, and in most cases it would be helpful for OMB to provide examples of the definition/issue under discussion. The Bulletin should also recognize that conflicts of interest and/or bias should also be evaluated with regard to non-governmental organizations and/or public interest advocacy groups.

Syngenta also reiterates that there are other established peer review mechanisms in place which should not be displaced, but rather brought up to the Bulletin standards as soon as possible. We commend OMB/OIRA and OSTP for recognizing the importance of sound scientific peer review of the studies that become the foundation for regulatory decisions and policy, and we look forward to improvements in the Bulletin as a starting point to significantly augment the existing processes in federal agencies and departments.