risk to exposed workers will be considered by the Secretary only if the evidence presented for the specific substance subject to the rulemaking meets the following criteria:

Criteria. (i) A complete metabolic profile, including identities of trace metabolites, is presented for the experimental animal species;
(ii) A complete metabolic profile, including identities of trace metabolites, is available for a human population group representative of those who are occupationally exposed;
(iii) Documented evidence is provided for ascribing the carcinogenic activity of the substance in the test animal species to metabolite(s) produced only in that species and not in humans; and
(iv) Documented evidence is provided to show that other metabolites produced also in humans have been adequately tested and have not been shown to be carcinogenic.

(d) Use of high doses in animal testing. Arguments that positive results obtained in carcinogenesis bioassays with experimental animals subjected to high doses of a substance are not relevant to potential carcinogenic risks to exposed workers will be considered by the Secretary only if the evidence for the specific substance subject to the rulemaking meets the following criteria:

Criteria. (i) Documented evidence is presented to show that the substance in question is metabolized by the experimental animal species exposed at the dose levels used in the bioassay(s) to metabolic products which include one or more that are not produced in the same species at lower doses.
(ii) Documented evidence is presented to show that the metabolite(s) produced only at high doses in the experimental animal species are the ultimate carcinogen(s) and that the metabolites produced at low doses are not also carcinogenic; and
(iii) Documented evidence is presented to show that the metabolite(s) produced only at high doses in the experimental animal species are not produced in humans exposed to low doses.

(e) Benign tumors. The Secretary will consider evidence that the substance subject to the rulemaking proceeding is capable only of inducing benign tumors in humans or experimental animals provided that the evidence for the specific substance meets the following criteria:

Criteria. (i) Data are available from at least two well-conducted bioassays in each of two species of mammals (or from equivalent evidence in more than two species);
(ii) Each of the bioassays to be considered has been conducted for the full lifetime of the experimental animals;
(iii) The relevant tissue slides are made available to OSHA or its designee and the diagnoses of the tumors as benign are made by at least one qualified pathologist who has personally examined each of the slides and who provides specific diagnostic criteria and descriptions; and
(iv) All of the induced tumors must be shown to belong to a type which is known not to progress to malignancy or to be at a benign stage when observed. In the latter case, data must be presented to show that multiple sections of the affected organ(s) were adequately examined to search for invasion of the tumor cells into adjacent tissue, and that multiple sections of other organs were adequately examined to search for tumor metastases.

(f) Indirect mechanisms. The Secretary will consider evidence that positive results obtained in a carcinogenesis bioassay with experimental animals are not relevant to a determination of a carcinogenic risk to exposed workers, if the evidence demonstrates that the mechanism by which the observed tumor incidence is effected is indirect and would not occur if humans were exposed. As examples, evidence will be considered that a substance causes a carcinogenic effect by augmenting caloric intake or that the carcinogenic effect from exposure to a substance is demonstrated to be the result of the presence of a carcinogenic virus and it is demonstrated that, in either case, the effect would not take place in the absence of the particular carcinogenic virus or the augmented caloric intake.

(b) Substantial new evidence. Notwithstanding any other provision of this part, the Secretary will consider in a rulemaking proceeding on a specific substance any arguments, data or views which he determines are based upon substantial new evidence which may warrant the amendment of one or more provisions of this part. For the purposes of this part, “substantial new evidence” is evidence directly relevant to any provision of this part and is based upon data, views or arguments which differ significantly from those presented in establishing this part, including amendments thereto.

(c) Petitions for consideration of substantial new evidence—(1) Petition. Any interested person may file a written petition with the Secretary to consider “substantial new evidence” or one or more “substantial new issues” which contains the information specified in paragraph (c)(2) of this section. The Secretary shall treat such a petition as a request to amend this part, as well as a petition to consider “substantial new evidence”.

(2) Contents. Each petition for consideration of “substantial new evidence” or one or more “substantial new issues” shall contain at least the following information:

(i) Name and address of the petitioner;
(ii) All of the data, views and arguments that the petitioner would like the Secretary to consider;
(iii) The provision or provisions that petitioner believes are inappropriate or should be added to this part in light of the new data, views, and arguments;
(iv) A statement which demonstrates that the data, views, and arguments relied upon by petitioners are directly relevant to the substance or class of substances that is the subject of a rulemaking or an Advance Notice of Proposed Rulemaking;
(v) A detailed statement and analysis as to why the petitioner believes that the data, views, and arguments presented by the petitioner:
(A) Differ significantly from those presented in the proceeding(s) which establish this part;
(B) Are so substantial as to warrant amendment of this part; and
(C) Constitute a new issue or new evidence within the meaning of paragraphs (a) and (b) of this section.

(3) Deadline for petitions. (i) Petitions which comply with paragraph (c) of this section, shall be filed in accordance with the schedule set forth in the Advanced Notice of Proposed Rulemaking.

(ii) In extraordinary cases the Secretary may consider evidence submitted after the deadline if the petitioner establishes that the evidence relied upon was not available and could not have reasonably been available in whole or substantial part by the deadline and that it is being submitted at the earliest possible time.

(d) Secretary’s response. (1) The Secretary shall respond to petitions under this paragraph in accordance with §1990.106.

(2) Whenever the Secretary determines that the “substantial new issue” or the “substantial new evidence” submitted under this paragraph is sufficient to initiate a proceeding to amend this part, the Secretary shall:

(i) Issue a notice to consider amendment to this part and not proceed on the rulemaking concerning the individual substance until completion of the amendment proceeding; or
(ii) Issue a notice to consider amendment to this part and consolidate it with the proceeding on the individual substance.

§1990.146 Issues to be considered in the rulemaking.

Except as provided in §1990.145, after issuance of the advance notice of rulemaking, the proceedings for individual substances under this part shall be limited to consideration of the following issues:

(a) Whether the substance, group of substances or combination of substances subject to the proposed rulemaking is appropriately considered in a single proceeding;

(b) Whether the substance or group of substances subject to the rulemaking meets the definition of a potential occupational carcinogen set forth in §1990.103, including whether the scientific studies are reliable;