

Amendment No. 230

S. 333

AMENDMENT NO. **230**

Purpose: To add additional provisions relating to risk assessments

IN THE SENATE OF THE UNITED STATES—104th Cong., 1st Sess.

S. 333

To direct the Secretary of Energy to institute certain procedures in the performance of risk assessments in connection with environmental restoration activities, and for other purposes.

February 3 (legislative day, January 30), 1995

Referred to the Committee on Energy and Natural Resources and ordered to be printed

AMENDMENT intended to be proposed by Mr. MURKOWSKI (for himself and Mr. LOTT)

Viz:

1 At the end of the bill add the following:

2 **SEC. 11. AMENDMENT OF TITLE 5, UNITED STATES CODE.**

3 (a) IN GENERAL.—Chapter 6 of title 5, United
4 States Code, is amended by adding at the end the
5 following:

6 “SUBCHAPTER II—RISK ASSESSMENTS

7 “§ 621. **Definitions**

8 “In this subchapter—

9 “(1) AGENCY.—The term ‘agency’ has the
10 meaning stated in section 551(1).

1 “(2) BENEFIT.—The term ‘benefit’ means the
2 reasonably identifiable significant benefits, including
3 social and economic benefits, that are expected to re-
4 sult directly or indirectly from implementation of a
5 rule or an alternative to a rule.

6 “(3) BEST ESTIMATE.—The term ‘best esti-
7 mate’ means an estimate that, to the extent feasible
8 and scientifically appropriate, is based on one or
9 more of the following:

10 “(A) Central estimates of risk using the
11 most plausible assumptions.

12 “(B) An approach that combines multiple
13 estimates based on different scenarios and
14 weighs the probability of each scenario.

15 “(C) Any other methodology designed to
16 provide the most unbiased representation of the
17 most plausible level of risk, given the current
18 scientific information available to the agency
19 concerned.

20 “(4) COST.—The term ‘cost’ means the reason-
21 ably identifiable significant costs and adverse effects,
22 including social and economic costs, reduced
23 consumer choice, substitution effects, and impeded
24 technological advancement, that are expected to re-

1 sult directly or indirectly from implementation of, or
2 compliance with, a rule or an alternative to a rule.

3 “(5) EMERGENCY.—The term ‘emergency’
4 means a clearly imminent and substantial
5 endangerment to public health, safety, or natural re-
6 sources.

7 “(6) MAJOR RULE.—The term ‘major rule’—

8 “(A) means—

9 “(i) a rule or a group of closely relat-
10 ed rules that the agency proposing the rule
11 or the President reasonably determines is
12 likely to have a gross annual effect on the
13 economy of \$50,000,000 or more in rea-
14 sonably quantifiable increased direct and
15 indirect costs, or has a significant impact
16 on a sector of the economy; or

17 “(ii) a rule or a group of closely relat-
18 ed rules that is otherwise designated a
19 major rule by the agency proposing the
20 rule, or by the President on the ground
21 that the rule is likely to result in—

22 “(I) a substantial increase in
23 costs or prices for wage earners, con-
24 sumers, individual industries, non-
25 profit organizations, Federal, State,

1 or local government agencies, or geo-
2 graphic regions; or

3 “(II) significant adverse effects
4 on competition, employment, invest-
5 ment, productivity, innovation, the en-
6 vironment, public health or safety, or
7 the ability of enterprises whose prin-
8 cipal places of business are in the
9 United States to compete in domestic
10 or export markets; but

11 “(B) does not include—

12 “(i) a rule that involves the internal
13 revenue laws of the United States; or

14 “(ii) a rule that authorizes the intro-
15 duction into commerce, or recognizes the
16 marketable status, of a product;.

17 “(7) PERSON.—The term ‘person’ has the
18 meaning stated in section 551(2).

19 “(8) PLAUSIBLE.—The term ‘plausible’ means
20 realistic and scientifically probable.

21 “(9) RISK ASSESSMENT.—The term ‘risk as-
22 sessment’ means—

23 “(A) the process of identifying hazards,
24 and quantifying (to the extent practicable) or
25 describing the degree of toxicity, exposure, or

1 other risk the hazards pose for exposed individ-
2 uals, populations, or resources; and

3 “(B) the document containing the expla-
4 nation of how the assessment process has been
5 applied to an individual substance, activity, or
6 condition.

7 “(10) RISK CHARACTERIZATION.—The term
8 ‘risk characterization’—

9 “(A) means the element of a risk assess-
10 ment that involves presentation of the degree of
11 risk to individuals and populations expected to
12 be protected, as presented in any regulatory
13 proposal or decision, report to Congress, or
14 other document that is made available to the
15 public; and

16 “(B) includes discussions of uncertainties,
17 conflicting data, estimates, extrapolations, in-
18 ferences, and opinions.

19 “(11) RULE.—The term ‘rule’ has the meaning
20 stated in section 551(4).

21 “(12) SUBSTITUTION RISK.—The term ‘substi-
22 tution risk’ means a potential increased risk to
23 human health, safety, or the environment from a
24 regulatory option designed to decrease other risks.

1 **“§ 622. Applicability**

2 “(a) Except as provided in subsection (b), this sub-
3 chapter shall apply to all risk assessments and risk charac-
4 terizations prepared by, or on behalf of, or prepared by
5 others and adopted by, any agency in connection with
6 health, safety, and risk to natural resources.

7 “(b)(1) This subchapter shall not apply to risk as-
8 sessments or risk characterizations performed with respect
9 to—

10 “(A) a situation that the head of the agency
11 considers to be an emergency;

12 “(B) a rule that authorizes the introduction
13 into commerce, or recognizes the marketable status
14 of a product; or

15 “(C) a screening analysis.

16 “(2)(A) An analysis shall not be treated as screening
17 analysis for the purposes of paragraph (1)(B) if the result
18 of the analysis is used—

19 “(i) as the basis for imposing a restriction on
20 a substance or activity; or

21 “(ii) to characterize a positive finding of risks
22 from a substance or activity in any agency document
23 or other communication made available to the public,
24 the media, or Congress.

25 “(B) Among the analyses that may be treated as a
26 screening analyses for the purposes of paragraph (1)(B)

1 are product registrations, reregistrations, tolerance set-
2 tings, and reviews of premanufacture notices and existing
3 chemicals under the Federal Insecticide, Fungicide and
4 Rodenticide Act (7 U.S.C. 136 et seq.) and the Toxic Sub-
5 stances Control Act (15 U.S.C. 2601 et seq.).

6 “(3) This subchapter shall not apply to any food,
7 drug, or other product label or to any risk characterization
8 appearing on any such label.

9 **“§ 623. Rule of construction**

10 “Nothing in this subchapter shall be construed to—

11 “(1) preclude the consideration of any data or
12 the calculation of any estimate to more fully describe
13 risk or provide examples of scientific uncertainty or
14 variability; or

15 “(2) require the disclosure of any trade secret
16 or other confidential information.

17 **“§ 624. Requirement to prepare risk assessments**

18 “(a) Except as provided in section 622, the head of
19 each agency shall prepare for each major rule relating to
20 human health, safety, or natural resources that is pro-
21 posed by the agency after the date of enactment of this
22 subchapter, is pending on the date of enactment of this
23 subchapter, or is subject to a granted petition for review
24 pursuant to section 627—

1 “(1) a risk assessment in accordance with this
2 subchapter;

3 “(2) for each such proposed or final rule, an as-
4 sessment, quantified to the extent feasible, of incre-
5 mental risk reduction or other benefits associated
6 with each significant regulatory alternative to the
7 rule or proposed rule; and

8 “(3) for each such proposed or final rule, quan-
9 tified to the extent feasible, a comparison of any
10 human health, safety, or natural resource risks ad-
11 dressed by the regulatory alternatives to other rel-
12 evant risks chosen by the head of the agency, includ-
13 ing at least 3 other risks regulated by the agency
14 and to at least 3 other risks with which the public
15 is familiar.

16 “(b) A risk assessment prepared pursuant to this
17 subchapter shall be a component of and used to develop
18 the cost-benefit analysis required by subchapter II, and
19 shall be made part of the administrative record for judicial
20 review of any final agency action.

21 **“§ 625. Principles for risk assessment**

22 “(a)(1) The head of each agency shall apply the prin-
23 ciples set forth in subsection (b) when preparing any risk
24 assessment, whether or not required by section 624, to en-
25 sure that the risk assessment and all of its components—

1 “(A) distinguish scientific findings and best es-
2 timates of risk from other considerations;

3 “(B) are, to the maximum extent practicable
4 scientifically objective, unbiased and inclusive of all
5 relevant data; and

6 “(C) rely, to the extent available and prac-
7 ticable, on scientific findings.

8 “(2) Discussions or explanations required under this
9 section need not be repeated in each risk assessment docu-
10 ment as long as there is a reference to the relevant discus-
11 sion or explanation in another agency document.

12 “(b) The principles to be applied when preparing risk
13 assessments are as follows:

14 “(1)(A) When assessing human health risks, a
15 risk assessment shall be based on the most reliable
16 laboratory, epidemiological, and exposure assessment
17 data that finds, or fails to find, a correlation be-
18 tween a health risk and a potential toxin or activity.
19 Other relevant data may be summarized.

20 “(B) When conflicts among such data appear to
21 exist, or when animal data are used as a basis to as-
22 sess human health, the assessment shall include dis-
23 cussion of possible reconciliation of conflicting infor-
24 mation, and, as appropriate, differences in study de-
25 signs, comparative physiology, routes of exposure,

1 bioavailability, pharmacokinetics, and any other rel-
2 evant factor, including the availability of raw data
3 for review. Greatest emphasis shall be placed on
4 data that indicates a biological basis of the resulting
5 harm in humans. Animal data shall be reviewed with
6 regard to relevancy to humans.

7 “(2) When a risk assessment involves selection
8 of any significant assumption, inference, or model,
9 the agency shall—

10 “(A) describe the plausible and alternative
11 assumptions, inferences, or models;

12 “(B) explain the basis for any choices
13 among such assumptions, inferences, or models;

14 “(C) identify any policy or value judgments
15 involved in choosing from among such alter-
16 native assumptions, inferences, or models;

17 “(D) fully describe any model used in the
18 risk assessment and make explicit the assump-
19 tions incorporated in the model; and

20 “(E) indicate the extent to which any sig-
21 nificant model has been validated by, or con-
22 flicts with, empirical data.

23 “(3) A risk assessment shall be prepared at the
24 level of detail appropriate and practicable for rea-
25 soned decisionmaking on the matter involved, taking

1 into consideration the significance and complexity of
2 the decision and any need for expedition.

3 **“§ 626. Principles for risk characterization and com-**
4 **munication**

5 “In characterizing risk in any risk assessment docu-
6 ment, regulatory proposal or decision, report to Congress,
7 or other document that is made available to the public,
8 each agency characterizing the risk shall comply with each
9 of the following:

10 “(1)(A) The head of the agency shall describe
11 the populations or natural resources that are the
12 subject of the risk characterization.

13 “(B) If a numerical estimate of risk is provided,
14 the head of the agency, to the extent feasible and
15 scientifically appropriate—

16 “(i) shall provide—

17 “(I) the best estimate or estimates for
18 the specific populations or natural re-
19 sources which are the subject of the char-
20 acterization (based on the information
21 available to the department, agency, or in-
22 strumentality) or, in lieu of a single best
23 estimate, an array of multiple estimates
24 (showing the distribution of estimates and
25 the best estimate) based on assumptions,

1 inferences, or models which are equally
2 plausible, given current scientific under-
3 standing;

4 “(II) a statement of the reasonable
5 range of scientific uncertainties; and

6 “(III) to the extent practicable and
7 appropriate, descriptions of the distribu-
8 tion and probability of risk estimates to re-
9 flect differences in exposure variability in
10 populations and uncertainties;

11 “(ii) in addition to a best estimate or esti-
12 mates, may present plausible upper-bound or
13 conservative estimates, but only in conjunction
14 with equally plausible lower-bound estimates;
15 and

16 “(iii) shall ensure that, where a safety fac-
17 tor, as distinguished from inherent quantitative
18 or qualitative uncertainties, is used, such factor
19 shall be similar in degree to safety factors used
20 to ensure safety in human activities.

21 “(2) The head of the agency shall explain the
22 exposure scenarios used in any risk assessment, and,
23 to the extent feasible, provide a statement of the size
24 of the corresponding population or natural resource
25 at risk and the likelihood of such exposure scenarios.

1 “(3)(A) To the extent feasible, the head of the
2 agency shall provide a statement that places the na-
3 ture and magnitude of individual and population
4 risks to human health in context.

5 “(B) A statement under subparagraph (A)
6 shall—

7 “(i) include appropriate comparisons with
8 estimates of risks that are familiar to and rou-
9 tinely encountered by the general public as well
10 as other risks; and

11 “(ii) identify relevant distinctions among
12 categories of risk and limitations to compari-
13 sons.

14 “(4) When an agency provides a risk assess-
15 ment or risk characterization for a proposed or final
16 regulatory action, such assessment or characteriza-
17 tion shall include a statement of any significant sub-
18 stitution risks to human health identified by the
19 agency or contained in information provided to the
20 agency by a commenter.

21 “(5) If—

22 “(A) an agency provides a public comment
23 period with respect to a risk assessment or reg-
24 ulation;

1 “(B) a commenter provides a risk assess-
2 ment, and a summary of results of such risk as-
3 sessment; and

4 “(C) such risk assessment is reasonably
5 consistent with the principles and the guidance
6 provided under this subtitle,

7 the agency shall present such summary in connec-
8 tion with the presentation of the agency’s risk as-
9 sessment or the regulation.

10 **“§627. Regulations; plan for assessing new informa-**
11 **tion**

12 “(a)(1) Not later than 1 year after the date of enact-
13 ment of this subchapter, the President shall issue a final
14 regulation that has been subject to notice and comment
15 under section 553 for agencies to implement the risk as-
16 sessment and characterization principles set forth in sec-
17 tions 625 and 626 and shall provide a format for summa-
18 rizing risk assessment results.

19 “(2) The regulation under paragraph (1) shall be suf-
20 ficiently specific to ensure that risk assessments are con-
21 ducted consistently by the various agencies.

22 “(b)(1) Review of the risk assessment for any major
23 rule shall be conducted by the head of the agency on the
24 written petition of a person showing a reasonable likeli-
25 hood that—

1 “(A) the risk assessment is inconsistent with
2 the principles set forth in section 625 and 626;

3 “(B) the risk assessment produces substantially
4 different results;

5 “(C) the risk assessment is inconsistent with a
6 rule issued under subsection (a); or

7 “(D) the risk assessment does not take into ac-
8 count material significant new scientific data or sci-
9 entific understanding.

10 “(2) Not later than 90 days after receiving a petition
11 under paragraph (1), the head of the agency shall respond
12 to the petition by agreeing or declining to review the risk
13 assessment referred to in the petition, and shall state the
14 basis for the decision.

15 “(3) If the head of the agency agrees to review the
16 petition, the agency shall complete its review within 180
17 days, unless the Director of the Office of Management and
18 Budget agrees in writing with an agency determination
19 that an extension is necessary in view of limitations on
20 agency resources.

21 “(4) Denial of a petition by the agency head shall
22 be subject to judicial review in accordance with chapter
23 7 of title 5, United States Code.

24 “(c) The regulations under this section shall be devel-
25 oped after notice and opportunity for public comment, and

1 after consultation with representatives of appropriate
2 State agencies and local governments, and such other de-
3 partments and agencies, offices, organizations, or persons
4 as may be advisable.

5 “(d) At least every 4 years, the President shall re-
6 view, and when appropriate, revise the regulations pub-
7 lished under this section.

8 **“§ 628. Decisional criteria**

9 “For each major rule subject to this subchapter, the
10 head of the agency, subject to review by the President,
11 shall make a determination that—

12 “(1) the risk assessment under section 624 is
13 based on a scientific and unbiased evaluation, re-
14 flecting realistic exposure scenarios, of the risk ad-
15 dressed by the major rule and is supported by the
16 best available scientific data, as determined by a
17 peer review panel in accordance with section 640;
18 and

19 “(2) there is no alternative that is allowed by
20 the statute under which the major rule is promul-
21 gated that would provide greater net benefits or that
22 would achieve an equivalent reduction in risk in a
23 more cost-effective and flexible manner.

1 **“§ 629. Regulatory priorities**

2 “(a) In exercising authority under any laws protect-
3 ing human health and safety or the environment, the head
4 of an agency shall prioritize the use of the resources avail-
5 able under such laws to address the risks to human health,
6 safety, and natural resources that—

7 “(1) the agency determines are the most seri-
8 ous; and

9 “(2) can be addressed in a cost-effective man-
10 ner, with the goal of achieving the greatest overall
11 net reduction in risks with the public and private
12 sector resources to be expended.

13 “(b) In identifying the sources of the most serious
14 risks under subsection (a), the head of the agency shall
15 consider, at a minimum—

16 “(1) the plausible likelihood and severity of the
17 effect; and

18 “(2) the plausible number and groups of indi-
19 viduals potentially affected.

20 “(c) The head of the agency shall incorporate the pri-
21 orities identified in subsection (a) into the budget, strate-
22 gic planning, and research activities of the agency by, in
23 the agency’s annual budget request to Congress—

24 “(1) identifying which risks the agency has de-
25 termined are the most serious and can be addressed

1 in a cost-effective manner under subsection (a), and
2 the basis for that determination;

3 “(2) explicitly identifying how the agency’s re-
4 quested funds will be used to address those risks;

5 “(3) identifying any statutory, regulatory, or
6 administrative obstacles to allocating agency re-
7 sources in accordance with the priorities established
8 under subsection (a); and

9 “(4) explicitly considering the requirements of
10 subsection (a) when preparing the agency’s regu-
11 latory agenda or other strategic plan, and providing
12 an explanation of how the agenda or plan reflects
13 those requirements and the comparative risk analy-
14 sis when publishing any such agenda or strategic
15 plan.

16 “(d) In March of each year, the head of each agency
17 shall submit to Congress specific recommendations for re-
18 pealing or modifying laws that would better enable the
19 agency to prioritize its activities to address the risks to
20 human health, safety, and the environment that are the
21 most serious and can be addressed in a cost-effective man-
22 ner consistent with the requirements of subsection (a).

23 **“§ 630. Establishment of program**

24 “(a) The President shall develop a systematic pro-
25 gram for the peer review of work products covered by sub-

1 section (c), which program shall be used uniformly across
2 the agencies.

3 “(b) The program under subsection (a)—

4 “(1) shall provide for the creation of peer re-
5 view panels consisting of independent and external
6 experts who are broadly representative and balanced
7 to the extent feasible;

8 “(2) shall not exclude peer reviewers merely be-
9 cause they represent entities that may have a poten-
10 tial interest in the outcome, if that interest is fully
11 disclosed;

12 “(3) shall exclude, to the maximum extent prac-
13 ticable, any peer reviewer who has been involved in
14 any previous analysis of the tests and evidence pre-
15 sented for certification by the peer review panel; and

16 “(4) shall provide for a timely completed peer
17 review, meeting agency deadlines, which contains a
18 balanced presentation of all considerations, including
19 minority reports and an agency response to all sig-
20 nificant peer review comments.

21 “(c) The peer review and the agency’s responses shall
22 be made available to the public and shall be made part
23 of the administrative record for purposes of judicial review
24 of any final agency action.”.

1 (b) CONFORMING AMENDMENT AND TECHNICAL
2 CORRECTIONS.—

3 (1) CONFORMING AMENDMENTS.—Part I of
4 title 5, United States Code, is amended by striking
5 the chapter analysis for chapter 6 and inserting the
6 following:

7 **“CHAPTER 6—THE ANALYSIS OF**
8 **REGULATORY FUNCTIONS**

“SUBCHAPTER I—REGULATORY ANALYSIS

“Sec.

- “601. Definitions.
- “602. Regulatory agenda.
- “603. Initial regulatory flexibility analysis.
- “604. Final regulatory flexibility analysis.
- “605. Avoidance of duplicative or unnecessary analyses.
- “606. Effect on other law.
- “607. Preparation of analyses.
- “608. Procedure for waiver or delay of completion.
- “609. Procedures for gathering comments.
- “610. Periodic review of rules.
- “611. Judicial review.
- “612. Reports and intervention rights.

“SUBCHAPTER II—RISK ASSESSMENTS

- “621. Definitions.
- “622. Applicability.
- “623. Rule of construction.
- “624. Requirement to prepare risk assessments.
- “625. Principles for risk assessment.
- “626. Principles for risk characterization and communication.
- “627. Regulations; plan for assessing new information.
- “628. Decisional criteria.
- “629. Regulatory priorities.
- “640. Establishment of program.

9 “SUBCHAPTER I—REGULATORY ANALYSIS”.

10 (2) TECHNICAL CORRECTIONS.—The part anal-
11 ysis for part I of title 5, United States Code, is
12 amended—

1 (A) in the item relating to chapter 5 by
2 striking “**501**” and inserting “**500**”; and

3 (B) by inserting after the item relating to
4 chapter 5 the following:

“**6. The Analysis of Regulatory Functions 601**”.

S 333 AS—2