

Clean Air Act Amendments
Legislative History – Senate Report No. 101-228

Chemical Safety Board— Subsection (e) of the new section 129 establishes an independent safety board, to be known as the Chemical Safety and Hazard Investigation Board, which is to investigate accidents resulting from the production, processing, handling or storage of chemical substances causing death, serious injury, or substantial property damage (including damage to natural resources).

The new Chemical Safety Board is modeled on the structure, activities and authorities of the National Transportation Safety Board (NTSB), an independent Federal agency which investigates accidents in the transportation industry (aviation, railroads, pipelines, highway and marine transportation). The antecedents of the NTSB go back to the Air Commerce Act of 1926 which created an independent agency to investigate, record and make public the causes of accidents in the rapidly growing commercial aviation industry. Through several reorganizations, including the Federal Aviation Act of 1958 (which firmly separated the rule-making and investigatory functions in aviation safety programs) and the organization of the Department of Transportation in 1966, the Bureau of (Aviation) Safety has generally been a 5-member, quasi-independent entity charged with determining the cause or probable cause of fatal air crashes in commercial and general aviation and recommending measures to a regulatory- authority (the Federal Aviation Administration) that might prevent similar accidents in the future.

The Independent Safety Board Act of 1974 established the current NTSB which also has investigatory responsibilities in other transportation sectors. The NTSB does not, itself, impose safety requirements on the transportation industry; its function is investigatory. The NTSB now functions with approximately 350 FTEs and an annual budget of approximately \$25 million. Many of the issues raised in the following discussion reflect lessons learned during the long history of the Federal effort to improve the safety of air travel by supporting an independent and expert safety board to investigate serious accidents, to determine the probable cause or causes of such accidents and to recommend improvements in equipment, training or procedures which, when required of those in the industry, might reduce accidents and fatalities.

The Chemical Safety Board established by the bill is to have three members. All three Board members including a chairperson, who will also be the chief executive and administrative officer of the Board, are to be nominated by the President and confirmed by the Senate. The members are to have demonstrated technical expertise in professional fields related to accident investigation including accident reconstruction, safety engineering, human factors, chemical safety, toxicology or chemical regulation. In selecting Presidential nominees for the Board, special emphasis should be put on expertise in “human factors” and the role that operator failures play in causing accidents. In other fields, the United States Government has fallen behind the international community in the use of operator training and the development of operating and emergency procedures to prevent accidents and minimize their consequences.

The Board members will serve for a term of five years. They may be reappointed and may continue in office (after the five-year period) until a successor is appointed. The Board is given the power, subject to civil service laws, to hire staff including investigators, attorneys, and administrative law judges. The chairperson of the Board is given authority for directing the work and assignments of the staff except that each Board member shall be assigned such personal staff as are necessary to carry out responsibilities of a member. The chair's conduct of the executive function is subject to oversight by the Board as a whole.

The President may remove any member of the Board from office, if the President finds that such person is guilty of inefficiency, neglect of duty, or malfeasance in office.

The Board will operate by majority vote, but may (by vote) delegate responsibilities to the chairperson or other member, except that it shall require a majority vote of the full Board to issue a report on the cause or probable cause of an accident, make a recommendation to the Administrator or the head of another Federal agency, or promulgate a rule.

The independence of the Board in its official duties (finding the cause or probable cause of chemical accidents and recommending requirements or orders which will prevent accidents in the future) is essential for several reasons. First, it is unlikely that an agency charged both with rule-making and investigating functions would be quick to acknowledge that existing requirements were insufficient to prevent an accident. In fact, the investigations conducted by agencies with dual responsibilities tend to focus on violations of existing rules as the cause of the accident almost to the exclusion of other contributing factors for which no enforcement or compliance actions can be taken. The purpose of an accident investigation (as authorized here) is to determine the cause or causes of an accident whether or not those causes were in violation of any current and enforceable requirement. When the causes are fully understood, that understanding may then be used to modify requirements to reduce the possibility of recurrence.

Second, the Board is intended as an organizational stimulus to an appropriate amount of regulatory activity by the Environmental Protection Agency in this area. Subsection (f) of the new section 129 gives the Administrator authority to issue requirements to prevent accidents (and mitigate their consequences) at facilities handling extremely hazardous substances. Were this authority completely discretionary, there is some doubt whether the Agency would use it at all. It may have been possible to stimulate use of the accident prevention authority with a series of specific statutory directives including deadlines for the promulgation of regulations, a list of devices or facilities to be covered, a menu of specific hazards to be addressed, and so on. However, that degree of specificity in statutory language might be counterproductive at this point in the development of Federal accident prevention authorities. As an alternative, the Board is created as an independent source of expertise which may make recommendations for rules and orders to the Administrator. These recommendations may include a schedule for implementing the proposed actions. The

Administrator is required to make a formal, public response to each recommendation. A Board which did not operate independent from the Administrator's direction would defeat the objective of stimulating regulatory action-a stimulus created through the organizational tension built into the statutory relationship between the Board and the Agency.

The independence of the Board was strengthened by amendments adopted during Committee markup. Introduced legislation (S. 816) authorized a five-member board with two members appointed by the Administrator of the Environmental Protection Agency and two members appointed by the Secretary of Labor. Only the chairperson would have been appointed by the President and confirmed by the Senate. As reported, the bill authorizes a three member Board with all three appointments made by the President and confirmed by the Senate. In addition, the reported bill includes new language assuring that reports and recommendations prepared by the Board are not subject to review or modification by other Federal officials (including the Administrator or any official of the Office of Management and Budget) before they are released to the public. These amendments to the introduced legislation were made to assure that the official actions of the Board would be considered and taken independently and not at the direction of other Federal agencies or officials.

For purely administrative purposes, the Board is to be located within the Environmental Protection Agency and will, thus, be able to use the accounting and personnel mechanisms of an established Federal entity. This will assure a more rapid startup of the Board as an operating agency and avoid many of the difficulties with respect to space, hiring authority and disbursement of funds which new agencies typically face when first established.

The Board has five enumerated duties:

- (1) to investigate serious accidents which result from the production, processing, handling or storage of chemical substances and report in writing on the cause or probable cause of each accident;
- (2) to make recommendations to the Congress, other Federal agencies, State and local governments and entities in the commercial and industrial sector on steps that can be taken to reduce the likelihood or consequences of chemical accidents including the proposal of specific rules and orders to be issued by the Administrator or the Secretary of Labor to prevent or minimize the consequences of chemical accidents;
- (3) to establish requirements for reporting accidents including measures to preserve evidence which may substantiate the cause or probable cause of the accident;
- (4) to conduct general studies and investigations where there is evidence of a potential hazard to human health or property as the result of accidental releases; and
- (5) to review and make recommendations on the role of hazard assessments and risk management plans in preventing chemical accidents.

The principal role of the new chemical safety board is to investigate accidents to determine the conditions and circumstances which led up to the event and to identify the cause or causes so that similar events might be prevented. The accidents which the

Board is to investigate are those which result from the production, processing, handling or storage of a chemical substance (not limited to the extremely hazardous substances listed under subsection (c)) which result in a death, serious injury, or substantial property damage.

The Board is to enter into a memorandum of understanding (MOU) with the National Transportation Safety Board which establishes the NTSB as the lead agency with respect to the investigation of chemical accidents in the transportation sector. The MOU shall assure that the responsibilities of the (Chemical Safety) Board are fulfilled and shall not diminish in any way the jurisdiction or responsibility of the NTSB for transportation related accidents. There should be no conflict between the interests of the two agencies in this respect.

The Committee received a communication from the Chairman of the National Transportation Safety Board, the Honorable Jim Burnett, dated February 18, 1988, further outlining the relationship between the NTSB and the new (Chemical Safety) Board. Mr. Burnett's letter cited the following statutory language giving NTSB primary authority for transportation accidents:

Any investigation of an accident conducted by the Board under this paragraph (other than subparagraph (E)) should have priority over all other investigations of such accident conducted by other Federal agencies. The Board shall provide for the appropriate participation by other Federal agencies in any such investigation, except that such agencies may not participate in the Board's determination of the probable cause of the accident. Nothing in this section impairs the authority of other Federal agencies to conduct investigations of an accident under applicable provisions of law or to obtain information directly from parties involved in, and witness to, the transportation accident. The Board and other Federal agencies shall assure that appropriate information obtained or developed in the course of their investigations is exchanged in a timely manner. (49 U.S.C. 1903(a)(1))

It is important to note that this statutory provision specifically preserves the authority of agencies other than NTSB, like the (Chemical Safety) Board created here, to investigate accidents which are transportation-related to the extent that they have such authority under other law— authority which would be established for the Chemical Safety Board by the proposed section 129 of the Act. As noted above, the phrase “producing, processing, handling or storing an extremely hazardous substances” used throughout this section is to be read in the broadest way to include the transportation of such materials from one site to another. Mr. Burnett's letter further describes the potential relationship between the NTSB and the (Chemical Safety) Board as follows:

Where information is relevant to both the Safety Board (NTSB) and the CSHIB (Chemical Safety and Hazard Investigation Board), the CSHIB would have access promptly to the data acquired by the Safety Board without subjecting persons who possess the data to multiple requests for the same information from different Federal agencies. To the extent that the CSHIB needs information that is not germane to the

Safety Board's investigation, the CSHIB would be free to acquire the information directly.

The (Chemical Safety) Board is not precluded from seeking information directly from parties involved in an accident which is in: the primary jurisdiction of the NTSB and is being investigated by that agency, whether that information is germane to an NTSB investigation or not. However, whenever possible, the (Chemical Safety) Board should rely on information collected by NTSB rather than conduct separate information-gathering activities.

The role of other parties in accident investigations conducted by the Board may be established by regulation. In the case of chemical accidents many parties will be present during the initial stages of an investigation. Generally, the owner or operator of the facility, union representatives, local emergency response and public safety personnel, and representatives of State and Federal agencies with enforcement responsibilities will be onsite in the period immediately after an accident. All of these parties have legitimate functions which warrant their presence on the scene.

However, questions arise when representatives of possible claimants or insurers seek access to the accident site. Under other authorities (aviation) such parties have been prevented from entering accident sites during the conduct of the governmental investigation. Such exclusion is not provided for here. To further protect the rights of those who may suffer injury or loss as the result of chemical accidents, the Board is instructed to carefully preserve the evidence it gathers as it may be relevant for use in later litigation. Further, the Board is directed to conduct its investigation (including laboratory testing of materials and equipment involved in an accidental release) so as not to jeopardize such proceedings. This is not, however, an instruction to the Board to conduct its own investigations in a manner which facilitates the use of its findings in other proceedings to determine fault or liability. In most cases the standard of evidence in the Board's proceedings will be less rigorous than that required in a court of law.

The findings, conclusions and recommendations of the Board are not to be used in civil proceedings for damages which result from an accident investigated by the Board. In conducting its investigations, the Board will need the fullest cooperation from facility owners and operators, equipment suppliers and other parties involved in an accidental release to determine the probable causes of the event. The likelihood that conclusions drawn from information provided to the Board will be used in a suit from damages will discourage full cooperation. Furthermore, and as noted above, the standard of evidence used by the Board in reaching its determinations of probable cause is likely to be less rigorous than evidentiary standards used in a civil proceeding and thus a conclusion, finding or recommendation of the Board should not be given the same weight as other evidence in such a proceeding.

The Board is encouraged to participate in the investigation of accidents which occur at facilities located in other nations, both to contribute its own expertise to a determination of the cause or probable cause, and also to gain insight and experience

which may be useful in preventing accidents or minimizing their consequences with respect to events or facilities of a similar type located in the United States. To the extent that participation would be inhibited by “sunshine” laws, including the Freedom of Information Act, which are applicable to the Board’s U.S. operations, it shall develop mechanisms that may facilitate participation in foreign investigations which are not inconsistent with FOIA, but which also do not unnecessarily divulge information that would be held confidential in the nation in which the accident occurred.

The Board is given authority to conduct hearings, subpoena witnesses and compel testimony, and to administer oaths in the conduct of its accident investigations. These hearings will generally be recommended to the Board by investigatory staff, will be conducted by administrative law judges employed by the Board, and will be conducted according to the Administrative Procedures Act. The Board may collect written information for the same purpose by order directed to any person engaged in the production, processing, handling or storage of chemicals on matters which are pertinent to the investigation of an accident. An officer or employee of the Board may conduct an inspection and take samples (including samples of substances present in processes or releases) at any facility where an accidental release causing a fatality, serious injury or substantial property damage has occurred. These authorities to conduct hearings, gather information, and conduct inspections are to be construed in the broadest way so as to facilitate the activities of the Board and the objectives of this Act. The Administrator is authorized to use the information gathering authorities of section 114 of the Act to conduct any study or enforce any rule or order which is in furtherance of the objectives of this section.

The role of members of the Board in actual accident investigations is not specified. They may, of course, be present at the scene of an accident, at evidentiary hearings and in other proceedings. The precise role that each member takes in these activities will be the prerogative of the member and will depend on his or her expertise and the division of responsibilities within the Board.

The purpose of the investigation is to determine the conditions and circumstances which led up to the accident and to identify the cause or probable cause. It is not the role of the Board to apportion blame or to fix liability; that is the responsibility of a court of law. Rather, the Board is to identify those actions, omissions, events, and conditions (or combination thereof) which led to the accident or incident for the purpose of recommending modifications to processes, equipment, and procedures to prevent similar accidents or incidents in the future. The Board should take on “all cause” theory in discharging its investigatory duties. It is not the single, necessary or sufficient cause which is to be the focus of the Board’s inquiry, but all circumstances which contributed to the accident (and which may effectively be modified to improve safety) are circumstances of concern. “Multiple causation” is, in fact, the norm and it is expected that the Board will follow many strands of inquiry in response to each accidental release. When stating its conclusions on cause or probable cause it is not expected that the Board will accuse a party or fix fault. Rather, and to the extent practical, the Board is to give a precise and factual statement of why the event occurred. It is to be understood

that the Board's report may not absolutely identify the cause (when insufficient information is available) and may include statements which indicate only the probability that a particular factor contributed to the outcome (e.g., "in all likelihood", "may have been an influencing factor", etc.). It is to be emphasized again that the purpose of the Board's investigation is not to buttress the case for a remedy to those injured or suffering loss by allocating liability, rather it is to provide remedy for the community as a whole by identify those factors which caused the accident and which may be modified to prevent a recurrence.

The Board is required to issue a report on each investigation it conducts which will describe the event and identify the cause or probable cause. These reports are a statement of the Board (not staff) and are to be issued on a majority vote of the Board and should be issued in a timely manner, usually within 6 months of the accident unless a prolonged investigation of contributing causes is necessary. To assure quality in the report, the Board may wish to establish a procedure which allows for publication of a preliminary staff draft report, followed by a period of public comment, before the Board votes on the final report. In the compilation of materials which lead up to a report, the Board will establish a public docket for each investigation which will include field reports, factual summaries prepared by staff, communications, and the comments of interested persons or parties to the investigation.

Based on its investigation and report, the Board is to make recommendations to the Administrator with respect to rules and requirements which may be promulgated under subsection (f) of the new section 129 and administrative orders which may be issued under subsection (h) of this section to assure the safe operation of facilities producing, processing, handling or storing chemical substances. These recommendations may also include proposals to list chemicals as extremely hazardous substances under subsection (c). To the extent possible, the Board will make its recommendations in the form of a proposed listing, rule or order. The recommendation may include a schedule for the issuance of and compliance with the rule or order.

No specific compliance deadline is established under subsection (f) for the accident prevention requirements promulgated by the Administrator. Generally, requirements which only mandate changes in procedure (for instance updating process safety documentation at the time of any facility modification) can be implemented by both new and existing facilities almost immediately. However, other changes which involve capital investment or the development of specialized programs may require more time to implement at existing facilities. The Board should generally include in its recommendations for proposed rules a compliance schedule which reflects these considerations. In this regard, section 112 of the Clean Air Act requires existing facilities to be in compliance with emissions standards within three years. The Board may consider a longer period where it would be justified by the need to acquire permits or implement substantial modifications to plant and equipment. In some instances, other provisions of the bill provide up to four years for the most extensive capital retooling. New facilities shall be in compliance with all requirements under this section before they commence operation.

The Administrator is to respond to recommendations of the Board within 180 days of receipt. The Administrator's response is to be written and will indicate whether the recommendation will be implemented in full, in part or not at all. If the Administrator chooses not to implement some part or all of the recommendation or if it will be implemented but not according to the schedule recommended by the Board, the Administrator will explain in writing why the recommendation will not be fully implemented.

The Board may also make recommendations to the Secretary of Labor with respect to the use of authorities which the Secretary may have under the Occupational Safety and Health Act to prevent accidental releases. There is no requirement that the Secretary respond to such recommendations within a specific period of time.

The Board may conduct other and more general investigations in furtherance of the purposes of this section. The Board may conduct such studies in cooperation with other entities including Federal and State agencies, industry and trade groups and non-profit and public interest organizations. In particular, the Board should cooperate closely in the work of the National Spill Test Facility operated by the Department of Energy.

The Board may also conduct investigations and studies at sites where any of the 360 chemicals listed pursuant to section 302 of the Emergency Planning and Community Right-to-Know Act of 1986 or other extremely hazardous substances are present, whether or not an accident has occurred when there is evidence of a hazard or potential hazard. The Board may also issue more general reports to the Congress and make recommendations to other Federal or State or local agencies and to owners and operators of facilities engaged in chemical production or handling to suggest measures that might be taken to improve the safety of operations.

The Board is to be actively involved in the preparation and use of hazard assessments required under subsection (d) of section 129. Because of its expertise the Board will be uniquely qualified to suggest procedures for the conduct of hazard assessments which will contribute to the identification of potential accident scenarios and definition of the likely effects. The Board is to prepare and transmit to the Administrator within 18 months of enactment a report including recommendations on the role of hazard assessments in preventing chemical accidents. In preparing such report, the Board shall consider which substances it believes should be listed pursuant to subsection (c) and the elements of hazard assessment which are most appropriate for facilities of various types. The report is also to consider the role of risk reduction plans as may be required under subsection (f). The Board is to periodically revisit these questions and is to revise its previous recommendations as appropriate taking into account new information which has become available since the previous review.

The Board shall establish regulations for the prompt reporting of accidental releases which are subject to its investigatory jurisdiction. These reporting requirements may be coordinated with other reporting requirements established by the Agency (for

instance, under section 103 of CERCLA). These rules shall also provide for the preservation of evidence at the site of the accident so that the Board may properly conduct an investigation to determine the cause or probable cause when its representatives arrive at the site of the accident.

The regulations of the Board for accident reporting may provide that any person directed to make a report contact the National Response Center rather than the Board directly. This will assure coordination of such reports with responsibilities under the Comprehensive Environmental Response, Compensation and Liability Act, the Clean Water Act and the Hazardous Materials Transportation Act. If the National Response Center is to be the initial point of contact under such rules, then the Board shall- assure that officials at the National Response Center promptly notify the Board or its officers whenever an accidental release requiring an investigation has occurred.

Requirements imposed under subsection (e) with respect to reporting may be enforced by the Administrator using the authorities of section 113 of the Clean Air Act.

The Board is given authority to promulgate administrative rules as may be necessary to carry out its functions. These will include rules for the conduct of field investigations and hearings.

The Board is to receive administrative support from the Administrator of the Environmental Protection Agency in establishing facilities and managerial and accounting functions.

Information collected by the Board in an investigation or study is subject to the same trade secret protection afforded other information gathered by the Environmental Protection Agency under the Clean Air Act. Although protection may be provided, it must be formally requested in writing by the person whose competitive position may potentially be damaged and is only subject to protection at the direction of the Board through case-by-case determinations. In no event shall a request for trade secret protection interfere with the Board's duty to investigate an accident, determine the cause or probable cause and report to the public the results of the investigation including the sequence or events which led up to the accident and the cause or causes. No information as to the release or emissions from a facility (including the chemical name of the substance released) shall be afforded trade secret protection.

Reports and recommendations of the Board are not to be subject to prior review by other officers or agencies of the Executive Branch. To assure the independence of the Board, it is required to transmit any report, recommendation, budget request, Congressional testimony or other document to the appropriate Committees of the House and Senate at the same time that such documents are transmitted to any other officer in the Government. Employees of the Board are not subject to the direction of officers in any other department or agency.

The Board is to report annually on its activities to the President and to the Congress. The report shall include:

- (1) a review of the accident investigations conducted during the previous fiscal year;
- (2) a summary of the recommendations including proposed rules or orders made by the Board as the result of such investigations;
- (3) an accounting of the actions taken by the Administrator of the Environmental Protection Agency in response to recommendations of the Board during the previous fiscal year;
- (4) a list of the recommendations by the Board which have not been acted upon by the Administrator;
- (5) recommendations for legislation or regulatory changes which would prevent or mitigate accidents; and
- (6) a description of the future research program of the Board.

Subsection (e) includes an annual authorization of \$12 million for each of the fiscal years 1990 through 1994 to carry out the duties assigned to the Board.

Accident prevention.— Subsection (f) of the new section 129 provides the Administrator with authority to promulgate regulations to prevent, detect and correct accidental releases from all devices and systems at facilities which manufacture, store or process extremely hazardous substances including those listed pursuant to subsection (c) in more than threshold amounts. The Administrator may list substances with respect to which the regulations will apply at the time requirements are promulgated (if the substances have not been listed previously under subsection (c)) or may promulgate general requirements applicable to facilities handling substances not listed under subsection (c).

The authority provided here is to be broadly construed. It is intended to allow the development and implementation of requirements that will prevent the sudden, accidental release of extremely hazardous substances and to mitigate the hazard presented should a release occur. Authority to prevent routine process releases (including small leaks and drips or normal process vents) of air pollutants which may cause chronic adverse health effects or acute effects which are not life threatening is provided under section 112.

The requirements issued under this subsection shall apply to any and all devices and systems used to produce, process, handle or store extremely hazardous substances. Examples of the type of requirements that might be promulgated are listed and include “monitoring, record-keeping, reporting, training, vapor recovery, secondary containment and other design, equipment, work practice and operational requirements.”

The authority to issue accident prevention requirements is not linked to the listing of substances under subsection (c). The only provisions which are mandatory upon the listing of a substance are the hazard assessment required by subsection (d), the leak detection requirements established by subsection (g) and the reporting requirements to be included in any State program approved under section 112. Considering the history

of section 112, it is apparent that mandating comprehensive regulations applicable to all facilities ties handling a substance shortly after it is listed serves only to discourage the listing of the substance.

It is to be noted that the Chemical Safety and Hazard Investigation Board may recommend to the Administrator various requirements to be promulgated under authority of this section. The principal function of the Board is to establish a foundation for regulatory action that will trigger rule-making on an appropriate schedule without prescribing the exact content and deadlines for various rules in the statutory language.

The legislation might have directed the Administrator to issue release prevention, detection and correction regulations for specific industries or extremely hazardous substances by a date certain as has been done frequently in other environmental statutes. That is the "prescriptive" path and it has benefits when, an environmental problem is well understood and there is consensus on the measures which should be applied to achieve a solution. Regulatory deadlines allow the Congress to establish priorities among the many competing demands on the Agency's resources and shield Agency actions from political pressures which may be brought to bear on the regulatory agenda. Furthermore, the deadlines allow citizens to participate in "oversight" of the process by providing cause for a citizen suit to compel action when there has been a failure to perform a non-discretionary duty.

In this instance, however, a different methodology has been chosen to assure that an adequate and timely regulatory response is made to assure that an adequate and timely regulatory response is made to a problem which has been identified as a high priority. The Board is designed as an independent agency with special expertise in the investigation and prevention of chemical accidents. Its recommendations require a formal response from the Administrator, and although the Administrator may decline to issue a recommended requirement for good cause, it is expected that in most instances the Board's recommendations will be implemented in a timely way. In an area of great complexity such as is addressed here, the Committee intends that this institutional mechanism will overcome the regulatory inertia which so frequently plagues an Agency with too many assignments and too few resources, and does so without the inflexibility associated with detailed statutory prescriptions, deadlines, and hammers.