

TO: Dave L. Morgan

TGG: JCL: MMG: AJO: RF
XF: _____

FROM: T. G. Grumbles

DATE: July 10, 1989

VISTA

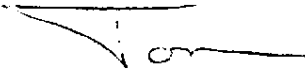
Interoffice
Communication

SUBJ: ATTACHED REGULATION

The attached regulation needs to be communicated to the field, an assessment of what we need to do for compliance made, and appropriate actions taken to comply.

Specifically, we need to determine what emergency response information our transports should carry, what we have to attach to BOL's and the COEDS changes necessary to meet the requirements of the technical name appearing on BOL's with N. O. S. entries.

I'll be available to assist, but I believe you should coordinate this effort. Please let me know what happens and how I can assist.



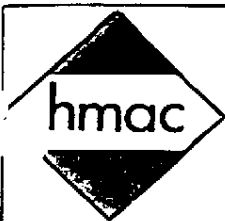
T. G. Grumbles

dlj

Attachment

cc: D. Kuhn, L. Kelm, F. Thomas, W. L. McClain, D. L. Cohen

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Hazardous Materials Advisory Council

Suite 907, 1012 Fourteenth Street, N.W., Washington, D.C. 20005, (202) 783-7460

S P E C I A L B U L L E T I N

June 29, 1989

RSPA FINALIZES HM-126C

The Research and Special Programs Administration has finalized Docket HM-126C, "Emergency Response Communications Standards," and a copy is enclosed. Published in the June 27 Federal Register (54 FR 27138), the rule is effective April 2, 1990 and compliance is authorized July 31, 1989.

Much of RSPA's final rule mirrors its Notice of Proposed Rulemaking from 1987. Here are some of the highlights:

- emergency response information on hazardous materials shipments must be carried on transport vehicles and maintained at facilities. DOT's Emergency Response Guidebook or similar documents like IMO's "Emergency Procedures for Ships Carrying Dangerous Goods" may be used to satisfy this requirement.
- shipping papers must contain a telephone number accessible to emergency responders at all times for comprehensive information on the material being shipped. CHEMTREC can be designated as the contact.
- the emergency response phone number may NOT be placed on packages of 30 kilograms or less as proposed in the NPRM.
- foreign shippers must comply with the emergency response provisions of Subpart G of Part 172, but will NOT be required to provide a domestic U.S. phone contact as requested in HMAC's comments to the docket. However, RSPA did leave the issue open for future rulemaking.
- n.o.s. entries on shipping papers must include the product's "technical name." For mixtures or solutions of two or more hazardous materials, the "technical names" of at least the two predominant hazardous components will be required.

#

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Tuesday
June 27, 1989

Part IX

**Department of
Transportation**

**Research and Special Programs
Administration**

49 CFR Part 171 et al.

**Emergency Response Communication
Standards; Final Rule**

VVV 000000113

DEPARTMENT OF TRANSPORTATION

Research and Special Programs
Administration

49 CFR Parts 171, 172, 173 and 176

[Docket No. HM-126C; Amdt Nos. 171-102,
172-116, 173-213, 176-28]

RIN 2137-AA88

Emergency Response Communication
Standards

AGENCY: Research and Special Programs
Administration (RSPA), DOT.

ACTION: Final rule.

SUMMARY: This final rule amends the Hazardous Materials Regulations (HMR; 49 CFR Parts 171 through 179) to impose new requirements for emergency response information on shipping papers, and placement of emergency response information on vehicles and at transportation facilities. This action is necessary to improve the emergency response information requirements in the HMR in order to enhance communication pertaining to the safe handling and identification of hazardous materials involved in transportation incidents.

FOR FURTHER INFORMATION CONTACT:
Jelen L. Engrum, Standards Division,
Office of Hazardous Materials
Transportation, U.S. Department of
Transportation, 400 Seventh Street SW.,
Washington, DC 20590. Telephone: (202)
365-4488.

EFFECTIVE DATE: These amendments are effective on April 2, 1990. However, compliance with the regulations amended herein is authorized as of July 31, 1989.

SUPPLEMENTARY INFORMATION:

I. Background and Summary of
Comments

As a result of the investigation of an accident which occurred near Odessa, Delaware in October 1982, the National Transportation Safety Board (NTSB) recommended that the DOT "... Determine by mode of transportation, the feasibility of requiring comprehensive product-specific emergency response information, such as Material Safety Data Sheets, to be appended to shipping documents for hazardous materials transported in bulk quantities, giving particular attention to the early emergency response problems posed by n.o.s. commodities in transit." In October 1983, RSPA received a petition from the American Trucking Associations (ATA) which requested DOT "require, by rule, motor carriers

involved in the transportation of hazardous materials to maintain a copy of the Emergency Response (Guidebook), DOT P 5800.2, at each motor carrier facility where hazardous materials shipments are loaded or unloaded from vehicles."

In response to concerns expressed in the NTSB recommendation (I-83-2) and the ATA petition (P-022), on March 18, 1984, RSPA published an advance notice of proposed rulemaking (ANPRM) under Docket HM-126C in the Federal Register (49 FR 10048). The ANPRM, entitled "Required Use of Emergency Response Guidebooks and Material Safety Data Sheets", quoted the NTSB recommendation and the ATA petition in their entirety, and solicited comments on the benefits and consequences of requiring the use of the Emergency Response Guidebook (ERG) or Material Safety Data Sheets (MSDS) to communicate information on the hazards of materials moving in commerce.

Evaluation of the comments to the ANPRM indicated a need for requiring additional emergency response information on hazardous materials transported in commerce. The majority of commenters supported RSPA requiring additional emergency response information. However, only two commenters supported the NTSB recommendation that an MSDS accompany every bulk shipment of hazardous materials. Several commenters stated that although some of the information on an MSDS might be useful, they believed that use of the ERG would be a more effective method of communicating fundamental hazard information to emergency response personnel, and that the ERG should be maintained as the primary reference.

Based on RSPA's evaluation of the merits of the comments to the ANPRM, on August 30, 1987, a notice of proposed rulemaking (NPRM) was published entitled "Emergency Response Communication Standards" under Docket No. HM-126C (53 FR 31480). The NPRM solicited comments on requiring improved emergency response information on shipping papers and packages, and placement of emergency response information on vehicles and at facilities involved in hazardous materials transportation. The NPRM addressed both bulk and non-bulk packages.

In the NPRM, it was noted that widespread support was expressed by commenters to the ANPRM for requiring use of the ERG. Many commenters believe that to better inform emergency response personnel about the hazards of a material, the use of the ERG would

satisfy the emergency response information requirements. The NPRM included a proposal to require that persons offering hazardous materials for transportation provide on the shipping paper a twenty-four hour emergency response telephone number of a person knowledgeable about the hazardous materials being shipped. In addition, the NPRM contained a proposal to require that technical names be shown on shipping papers and packages for materials which are described under "n.o.s." or generic descriptions. A detailed discussion of these proposals, as well as the comments to these proposals follows.

II. Discussion of Comments Made to the
NPRM

RSPA received more than seventy comments to the NPRM under Docket HM-126C. Comments were received from associations, chemical companies, emergency response organizations, and Federal and State agencies. Most commenters supported the intent of the proposed rule to improve emergency response communication during transportation incidents involving hazardous materials. However, many commenters expressed concern over certain aspects of the proposal and requested clarification on the use of certain technical names (i.e., proprietary or trade names) for "n.o.s." entries, maintenance of a twenty-four hour emergency response telephone number to obtain product-specific information on the hazardous material being transported, and the feasibility of requiring placement of the ERG, MSDS or other emergency response information on vehicles and at facilities.

Major Issues

A. Emergency Response Information

ATA strongly supported requiring additional emergency response information on shipping papers and packages, and placement of the ERG at facilities. However, ATA expressed concern about requiring the placement of the ERG on transport vehicles. ATA stated:

"(t)he cost of providing the ERG and insuring that it is on all transport vehicles will result in the expenditure of millions of dollars which would not be cost effective to safety in the trucking industry."

ATA did not provide quantitative or qualitative data in their comments to support this contention. It should be noted that the NPRM did not propose imposing mandatory use of the ERG on vehicles or at facilities to satisfy the emergency response information

information requirements. Consequently, in § 173.12, a new paragraph (f) has been added to allow the use of waste stream numbers, instead of the required technical name description, for hazardous waste packaged in lab packs. It should be noted, however, that there is no exception in § 173.12, or elsewhere, from identifying the names of constituents contained in lab packs, if the constituent is a hazardous substance or a poison.

Most commenters supported including the technical name for n.o.s. or generic descriptions on shipping papers. However, because many technical names are quite lengthy or complicated, and commenters are concerned about the disclosure of proprietary information or trade secrets, they recommended including chemical family or generic names, common names, registered trade names, or other names in the NIOSH registry in place of technical names for n.o.s. entries. Trade secrets include chemical formulations, and the commenters believe that this information would not be protected if they were required to include the technical names of these constituents on shipping papers. RSPA believes that in emergency response situations, the addition of technical names for n.o.s. entries is the best way to identify the primary and subsidiary hazards associated with a material. RSPA also realizes that some chemical technical names are extremely complex. In order to accommodate the use of chemical names that are more readily recognizable and usable to emergency responders, the definition in § 171.8 for "technical name" includes chemical names designated or recognized by the International Union of Pure and Applied Chemistry (IUPAC), the Chemical Abstracts Service, or in the Registry of Toxic Effects of Chemical Substances (RTECS). However, trade names may not be used as technical names.

Further, RSPA believes there is sound reasoning to require improved identification of chemical constituents. Commenters' concerns that "trade secret" information may be disclosed by showing these constituents on shipping papers for "n.o.s." descriptions have not been substantiated. As required by this final rule, if a hazardous material is a mixture or solution of two or more hazardous materials, only the technical names of at least two components most predominantly contributing to the hazards of the mixture or solution are required to be entered on the shipping paper. Furthermore, this final rule does not impose mandatory revelation of an exact formulation, only disclosure of

valuable safety related information to be used in the transportation network. Additionally, it is our belief that identifying the two major constituents which contribute to the hazards of a material will result in only limited, if any, instances where proprietary information would be revealed. Current provisions of the HMR for identifying constituents in poisons, hazardous substance mixtures and solutions, and any n.o.s. description for water shipments have not revealed a problem regarding the release of proprietary information.

Recently, RSPA has been made aware of a potential problem concerning the identification of constituents of materials that are subject to the provisions of 21 CFR 1301.74, as administered by the Drug Enforcement Administration (DEA). Paragraph (e) of that section states: "In addition, the registrant shall employ precautions (e.g., assuring that shipping containers do not indicate that contents are controlled substances) to guard against storage or in-transit losses." RSPA is not aware that the current constituent identification requirements of the HMR have resulted in violations of the DEA requirements by persons shipping hazardous materials that are also controlled substances. The requirements of this final rule should not cause any significant compliance difficulties. Of the controlled substances reviewed by RSPA, each has a general or other technical name which may be used to identify the controlled substance in accordance with the requirements of this final rule, but which do not use terminology which readily identifies the hazardous material as a controlled substance.

C. Telephone Contact for Emergency Response Information

Comments to the notice generally supported RSPA's proposal to require that shipping papers contain the twenty-four hour telephone number of a person with detailed knowledge of the hazardous characteristics of the materials being shipped. The Chemical Manufacturers' Association (CMA) indicated support for the provision that allows shippers to list CHEMTREC, or other organizations, with similar capabilities, as the initial contact point for emergency response information. CMA pointed out that it would be impractical for an individual or small company to provide a phone number in the absence of this provision.

CHEMTREC is a public service of the CMA. CHEMTREC has the capability to provide immediate advice by telephone for the on-scene commander at a

chemical emergency, and can then promptly contact the shipper of the hazardous material for detailed assistance and an appropriate response follow-up. CHEMTREC operates 24-hours a day, seven days a week to receive toll-free calls. CHEMTREC notifies the National Response Center (NRC) of significant incidents. If requested, they will connect a caller directly to the NRC, as required by Federal law and regulation. Other industry or government organizations may exist or be established which may provide similar services for specified categories of materials. RSPA recognizes the difficulty experienced by small companies, who may not always have a 24-hour telephone number or have an individual available to respond to inquiries on a 24-hour basis. This final rule allows for the use of an emergency response telephone number other than the shipper's, provided the shipper has furnished an agency or organization with detailed information concerning the hazardous material, and that the agency or organization is capable of, and has accepted responsibility for, providing such information. This option will provide a shipper the flexibility of selecting a name and number which will ensure a 24-hour availability of knowledgeable assistance.

Although most commenters supported the proposal to require a 24-hour emergency response telephone number on shipping papers, several expressed concern about the requirement in § 172.604(a)(2) for the telephone number to appear on the shipping paper "in association with the basic description". These commenters requested that the phone number be allowed anywhere on the shipping paper, as long as it is noted that the number is shown for the purpose of emergency response. In this final rule, the requirements in § 172.604(a)(2) (i) and (ii) have been modified to require shippers to: (1) enter the emergency response telephone number on shipping papers "following the description of the hazardous material", or (2) entered once on the shipping paper when the number applies to each material entered on the shipping paper, it is clearly highlighted for easy identification, and it is indicated that the telephone number is to be used to obtain emergency response information.

In the NPRM, RSPA proposed, as an option for a package having a gross weight of 30 kilograms or less, that the 24-hour emergency response telephone number may be displayed on the outside of the package in association with the proper shipping name rather than on the shipping paper. The United Parcel

Service (UPS) and the Air Transportation Association of America supported the requirement that shipping papers contain a 24-hour emergency response telephone number to obtain emergency response information concerning hazardous materials, but suggested that the 24-hour emergency response telephone number should not be placed on packages instead of being placed on shipping papers for packages of 30 kilograms or less. This suggestion was based on their concern that, if a package is found to be damaged or leaking, emergency response personnel should not jeopardize their safety by coming into contact with a leaking or damaged package to obtain the emergency response telephone number.

Upon further consideration, RSPA agrees with the commenters. Consequently, the exception, as proposed in the NPRM, to allow shippers to place the emergency response telephone number on packages instead of being placed on shipping papers for packages of 30 kilograms or less has not been adopted.

D. Additional Considerations

Applicability of emergency response information requirements to international shippers. The NPRM did not propose to except persons importing or exporting hazardous materials from compliance with requirements for written emergency response information. To clarify the applicability of emergency response information requirements to import/export shipments of hazardous materials, § 171.11, applicable to shipments of hazardous materials conforming to the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions), is revised in this final rule to require compliance with emergency response information requirements in Subpart G of Part 172 of this subchapter. It should be noted that no change in the requirements of § 171.12 have been adopted in this final rule, therein, shipments of hazardous materials made in accordance with the provisions of this section are not excepted from the shipping paper or emergency response information requirements. RSPA notes that both ICAO and the International Maritime Organization (IMO) publish documents containing emergency response information which could be used to satisfy the written emergency response information requirements specified in this final rule, when used in conjunction with a properly prepared shipping paper.

With regard to providing a 24-hour emergency response telephone number, the Hazardous Materials Advisory Council (HMAC) strongly urged RSPA to require foreign shippers that ship hazardous materials into the United States to designate a representative in the U.S., and to ensure that the contact is supplied with sufficient emergency response information to adequately assist emergency responders. Other commenters, such as the Air Transport Association of America and the International Air Transport Association (IATA) were concerned that overseas telephone numbers would be of little use in an emergency in the U.S., and that there could be some difficulty in obtaining emergency response information for import shipments of hazardous materials. RSPA has similar concerns regarding the effectiveness of an overseas 24-hour emergency response telephone number contact for foreign shippers. Although HMAC's proposal to require that foreign shippers designate a representative in the U.S. appears to have merit, it is beyond the scope of this rulemaking. RSPA anticipates addressing this issue in future rulemaking. Until that time, the emergency response information requirements of this final rule apply to all shippers of hazardous materials. Accordingly, the appropriate sections of the HMR, §§ 171.11, and 171.12a, have been revised to require that import shipments of hazardous materials, subject to the provisions of these sections, must conform to the requirements for emergency response information as prescribed in Subpart G of Part 172 of this subchapter.

Applicability of the emergency response information requirements to Canadian shipments of hazardous materials. The requirements under § 171.12a allow hazardous materials shipments from Canada to be transported in the United States, which are transported in accordance with the Canadian "Transport of Dangerous Goods Regulations" (TDG). The TDG regulations contain requirements for the use of certain emergency response information for shipments of hazardous materials. The requirements for completion of the "Emergency Response Form" are set out in the Canadian "Regulations for the Transportation of Dangerous Commodities by Rail." However, the Canadian "Emergency Response Form" only applies to carload, trailerload, truckload or containerload quantities of hazardous materials transported by rail. These Canadian requirements do not, in all instances, fulfill the requirements specified in this

final rule. Therefore, § 171.12a has been revised by the addition of paragraph (a)(7) which requires compliance with the emergency response information provisions of Subpart G of Part 172.

Applicability of emergency response information requirements to empty packagings. The requirements under 49 CFR 173.29, for empty packagings that contain any residue of a hazardous material, specify that unless a packaging is cleaned and purged of all residue, or filled with materials not regulated under 49 CFR, it must be transported in the same manner as required when it previously contained a greater quantity of hazardous materials. This provision also applies to conformance with emergency response information requirements.

Requests for public hearing. Three commenters, the ATA, the Regular Common Carrier Conference (RCCC), and the International Association of Fire Fighters (IAFF) requested that RSPA conduct a public hearing on the merits of the proposals contained in the NPRM. ATA and RCCC requested a joint hearing with DOT and OSHA to address the nature and extent of hazardous materials incidents in the trucking industry and the information necessary to protect employees and others in the event of such incidents. ATA stated:

(This hearing will allow both agencies to hear from the affected industries and to better understand the conflict which will arise as a result of the lack of delineation of regulatory authority of the two agencies. It would also provide DOT and OSHA with the opportunity to hear suggestions which could help to promote national uniformity and increased safety through practical and a realistic communication standard.

RSPA conducted a public hearing on certain aspects of this rulemaking action after issuance of the ANPRM. Comments received during the hearing and the comment period on the ANPRM generally supported the proposal to require that additional emergency response information be included on the shipping paper, such as a 24-hour emergency response information telephone number, and additional shipping descriptions. A majority of the commenters supported the use of the ERG as the document for providing emergency response information in the event of an incident involving hazardous materials. RSPA received over seventy responses to the ANPRM. Based on the responses received to the ANPRM, RSPA issued an NPRM proposing specific regulatory requirements dealing with emergency response communications. In response to the NPRM, more than seventy comments

were received and evaluated. Furthermore, comments to other pending rulemaking actions, such as Docket HM-181, dealing with similar topics addressed in this rulemaking (i.e., additional requirements for technical names for n.o.s. descriptions), were evaluated. RSPA does not believe that a public hearing on the proposals contained in the NPRM would have provided substantive additional information beyond the comments already received, evaluated, and discussed in responses to the ANPRM and NPRM.

In specific response to the ATA and RCCC request, RSPA fully appreciates the necessity for uniform and non-conflicting requirements, to the maximum extent possible, between various agencies of the Government. In order to provide compliance flexibility, thereby limiting the potential for duplicative or conflicting requirements, RSPA has not required a specific form or document which would be necessary in order to comply with the requirements of this final rule. Emergency response information must be in a form or document that permits reference to the hazardous materials being shipped and provide guidance relative to the hazards, risks, precautions and mitigation methods necessary. This information can be transmitted using an MSDS, the ERG, or any other document that provides the information prescribed.

ATA also expressed concern about the potential overlap of DOT and OSHA regulations and suggested a memorandum of understanding (MOU) to delineate respective authorities. RSPA agrees that it should coordinate with OSHA officials on a continuing basis, but a formal MOU only could constitute an agreement to coordinate interagency activities. Matters related to resolution of jurisdictional issues (e.g., the meaning of the "exercise" provision of the Occupational Safety and Health Act: 29 U.S.C. 653(b)(1)) must be handled in the manner specified by law (e.g., review and decision by the Occupational Safety and Health Review Commission). In order to facilitate interagency coordination, RSPA solicits information on hazardous materials issues that should be discussed with OSHA officials on an ongoing basis.

The LAFF also requested that a public hearing be held regarding the proposals contained in the NPRM and, in addition, stated the following:

The LAFF strongly disagrees with the position of the DOT that material safety data sheets (MSDSs) not be provided and maintained in those locations as required in 172.600(a). We believe that the MSDS, the primary vehicle for transmitting chemical

information, should be required and available for use by fire fighting and other emergency response personnel during a hazardous materials emergency. We believe that the reasons provided by the DOT in the Notice of Proposed Rulemaking are not only based on special interest (industry and/or those being regulated) but are significantly rhetorical and unsubstantiated. While we agree that MSDS were not originally developed for the purpose of providing information for emergency response, they are now in fact the most utilized vehicle for providing such information. As you are well aware, the Federal Hazard Communication Standard, most State Right-to-Know standards, SARA and many other federal, state and local regulations require the utilization of the MSDS. Fire fighters and emergency response personnel utilize this information at fixed facilities and would obviously be able to utilize this information equally as well when responding to transportation incidents.

We also strongly disagree with the proposal that the DOT Emergency Response Guidebook be used to satisfy the proposed requirements. The DOT ERG has never had public review other than through an "unofficial" and very unbalanced advisory committee. If the ERG is to be utilized, we propose that it receive full review in accordance with the Administrative Procedures Act. Accordingly, we also do not agree with the allowance of the use of the CHEMTREC telephone to satisfy the requirements of 172.604, especially without further definition of what "accepting responsibility for" would mean and without public review of the CHEMTREC operation and their legal responsibilities. If a telephone number is to be included, aside from the responsible shipper, we propose the telephone number of the National Response Center be utilized. As you are aware, the NRC telephone number is a toll-free number that is staffed seven days a week, 24 hours a day. While the NRC has the capability to immediately patch the caller into CHEMTREC's information and referral service as well as into governmental agencies, utilizing the NRC has other valuable functions not performed by CHEMTREC. Notification of the NRC serves many vital functions, including permitting federal involvement to proceed in a timely and effective manner. We believe this would greatly assist fire fighters in handling hazardous materials incidents.

RSPA has not required nor prohibited the use of the MSDS as a means of providing information to workers covered by the Right-to-Know legislation and Superfund Amendment and Reauthorization Act of 1986 (SARA). We recognize the importance and use of the MSDS in providing information to employees and in planning functions. However, as has been made evident in the course of this rulemaking action, no single standard exists for the preparation of MSDS to provide emergency response information for transportation incidents. While an MSDS may provide

information during an incident involving hazardous materials, the MSDS may not, in all instances, provide specific information relative to response actions to be taken during transportation related incidents. Conceivably, for "less-than-truckload" and "less-than-carload" shipments, a carrier would possess numerous MSDS for the different materials being transported. In the event of a hazardous materials emergency, they may not be the most appropriate means to ascertain the appropriate emergency response action to be taken. Additionally, a number of different MSDS may exist for the same material when shipped by different individuals. Information on these multiple MSDS may in fact vary, thus potentially leading to confusion during initial emergency response actions.

The requirements issued in this final rule are intended to provide specific information relative to the hazards of the materials being transported and provide immediate initial emergency response guidance until further specific information can be obtained from the shipper or others relative to long term mitigation actions. To date, only the ERG and similar documents such as those published by ICAO and IMO have consolidated this initial response information into a single, multimodal, easily understood, and recognizable document directly correlated with identification numbers and emergency response guidance. However, RSPA has not imposed a requirement that the ERG be carried on each transport vehicle and be maintained at facilities involved with the transportation of hazardous materials. Rather, this final rule requires that specific emergency response information accompany shipments of hazardous materials and be present at transportation facilities. This information may be in any format, including an MSDS, the ERG, or other similar document, so long as that document provides information, which at a minimum, provides the description of the hazardous material, immediate health hazard information, risks of fire and explosion, immediate precautions to be taken in the event of an accident or incident, immediate methods of handling large and small fires, initial methods for handling of spills or leaks, and preliminary first aid measures.

The LAFF asserts that the ERG has never had a public review other than through an "unofficial" and very "unbalanced" advisory committee. The ERG is not a regulatory document. There is no requirement currently in the HMR nor in this final rule which mandates the use of the ERG. The ERG was developed

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in an effort to fulfill RSPA's responsibilities to provide for a safe transportation environment for hazardous materials, and in an effort to provide better information to emergency responders in the event of an incident involving hazardous materials in transportation.

The ERG, first published in 1980 and republished in 1984 and 1987, was developed in cooperation with representatives from a number of diverse groups. Representatives include members of the DOT, firefighters, the International Association of Fire Chiefs, the International Association of Chiefs of Police, The Fire Marshal Association of North America, the National Fire Protection Association, a cross-section of major manufacturers of hazardous materials, including representatives from Dow Chemical, DuPont de Nemours, and Union Carbide, CHEMTREC and the International Association of Fire Fighters. Each participant in the development of the ERG was invited to present suggestions, recommendations and other information relative to the guidance presented in the ERG. A number of participants, including the IAFF, presented issues relative to the development of information and recommendations contained in the ERG. All issues were discussed and decisions made by RSPA relative to the final content of the ERG.

Since the issuance of the 1980 and subsequent editions of the ERG, more than 2.5 million copies have been distributed, without charge, to emergency response organizations. Thousands of other copies of the ERG have been purchased by others from commercial sources. Such wide distribution has provided extensive review by a large audience and constructive comments have been solicited, especially comments concerning its use in handling incidents involving hazardous materials. For example, the current edition of the ERG specifically requests such comments and provides an address to which such comments should be forwarded. RSPA maintains an open log on comments relative to the ERG, each comment is evaluated and an attempt is made to address each issue during development of subsequent editions.

The IAFF also objected to the allowance of the use of the CHEMTREC telephone number to satisfy the requirements of § 172.604 and recommended use of the National Response Center's telephone number. RSPA has not mandated the use of the CHEMTREC number, nor the specific use of any organization's number.

Therefore, the CHEMTREC telephone number, or any other agency's or organization's telephone number may only be used if the shipper has supplied the required information, and the agency has accepted the responsibility for providing information relative to the shipper's hazardous material.

The NRC has generally not been provided with information relative to a specific shipper's hazardous materials shipments, and usually cannot identify a specific shipper contact, nor has it "accepted responsibility for" providing information relative to a specific shipper's hazardous materials shipments. A requirement that an emergency response telephone number be provided for each shipment of hazardous materials is an attempt to provide emergency responders with more product-specific information relative to the hazards of the materials being transported. Nothing in the current regulations or this final rule prohibits or limits an emergency responder's efforts in obtaining information from all available sources. This position is in fact borne out by a statement in the ERG which states, "As a first responder at the scene of a hazardous materials incident, you must seek additional and more specific information about any material in question as soon as you are able." RSPA certainly encourages those involved in responding to hazardous materials incidents to use all available sources of information in order to make better informed judgments on how to handle them.

III. Relationship to Requirements Under Other Federal Statutes

On August 24, 1987, OSHA published a final rule (52 FR 31852) which amended their Hazard Communication Standard (HCS). The amended HCS requires virtually all employers to establish hazard communication programs to provide information to employees on the hazards of chemicals in the workplace. The amended HCS recognizes a variety of work situations, including those where employees only handle chemicals in sealed containers that are not opened under normal conditions of use (e.g., trucking terminals, warehousing, marine cargo handling and retail sales). Under the HCS, such employees must be provided information and training to protect them in the event of a spill or leak. The emergency response communication requirements of this final rule complement those of the HCS.

In addition, RSPA believes that the use of the emergency response information required under this rule, in

association with the shipping paper information, will also assist carriers in complying with portions of the emergency notification requirements of section 304 of Title III of the Superfund Amendments and Reauthorization Act (SARA). The emergency notification requirements of SARA, Title III, apply to transportation, and storage incident to transportation, as well as fixed or stationary facilities that are not transportation facilities.

IV. Review by Sections

Section 171.8. In § 171.8, the definition for "technical name" is revised to include chemical names recognized in scientific and technical journals and handbooks.

Section 171.11. In § 171.11, paragraph (d) is revised to require compliance with the emergency response information requirements for international shippers who import hazardous materials into the United States aboard aircraft.

Section 171.12a. In § 171.12a, a new paragraph (a)(7) is added to require shipments of hazardous materials being imported into the United States from Canada to be in compliance with the requirements for emergency response information specified in the new Subpart G of Part 172.

Section 172.202. This section is revised by adding a new paragraph (d) to require that shipping papers must contain an emergency response telephone number for the description of the hazardous material being shipped as specified in the new Subpart G of Part 172.

Section 172.203. This section is revised by moving paragraph (i)(2) and redesignating paragraph (i)(3) as paragraph (i)(2). Paragraph (i)(3) is removed. The requirements from paragraph (i)(2) are incorporated into a revised paragraph (k) to require that the "technical name" must be shown on shipping papers than contain "n.o.s. and generic" descriptions for hazardous materials. A new paragraph (m) is added to this section incorporating some of the requirements for poisonous materials which previously appeared in paragraph (k) of this section.

Section 172.301. In § 172.301, paragraph (c) is redesignated as paragraph (d), and a new paragraph (c) is added to require marking of the technical name of the hazardous material on non-bulk packages which contain hazardous materials described under n.o.s. descriptions, and on non-bulk packages of certain poisonous materials described under generic descriptions. In both instances, the technical name must be shown in

parentheses, immediately following the proper shipping name.

Section 172.302. This section on marking requirements for export shipment of hazardous materials by water is rendered obsolete by the changes in § 172.301. Therefore, this section is removed.

Subpart G to Part 172. A new Subpart G is added to Part 172 containing requirements for emergency response information.

Section 173.12. This section is revised to add a new paragraph (f) which provides an exception from showing the technical name for n.o.s. descriptions in shipping papers and package markings for hazardous waste materials packaged in accordance with the lab pack provisions, unless the hazardous material is a hazardous substance or meets the definition of a poison.

Section 172.30. This section is revised to require that a dangerous cargo manifest contain a 24-hour emergency response telephone number.

V. Administrative Notices

A. Paperwork Reduction Act

The changes and new requirements for information collection in §§ 172.201, 172.203, 172.602, and 172.604 have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (Pub. L. 96-511) under OMB control numbers 2137-0034 and 2137-0580 (expiration dates: June 30, 1992).

B. Executive Order 12291

The RSPA has determined that this final rule (1) does not meet the criteria specified in section 1(b) of Executive Order 12291 and is, therefore, not a major rule; (2) is not considered to be a "significant" rule under DOT Regulatory Policies and Procedures (44 FR 11034); (3) will not affect not-for-profit enterprises or small governmental jurisdictions; and (4) does not require a Regulatory Impact Analysis or an Environmental Impact Statement under the National Environmental Policy Act (49 U.S.C. 4321 et seq.). A regulatory evaluation is available for review in the Docket.

C. Executive Order 12612

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 12612, and it has been determined that the final rule does not have sufficient Federalism implications to warrant the preparation of a Federalism Assessment.

D. Impact on Small Entities

Based on limited information concerning size and nature of entities likely affected by this final rule, I certify this regulation will not have a significant economic impact on a substantial number of small entities. A regulatory evaluation is available for review in the Docket.

E. Regulatory Information Number (RIN)

A regulatory information number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN number contained in the heading of this document can be used to cross reference this action with the Unified Agenda.

List of Subjects

49 CFR Part 171

Hazardous materials transportation, Definitions.

49 CFR Part 172

Hazardous materials transportation, Shipping papers, Markings and Emergency response information.

49 CFR Part 173

Hazardous materials transportation, Packagings.

49 CFR Part 176

Hazardous materials transportation, Maritime carriers.

In consideration of the foregoing, 49 CFR Parts 171, 172, 173 and 176 are amended as follows:

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

1. The authority citation for Part 171 continues to read as follows:

Authority: 49 U.S.C. 1803, 1804, 1805, 1802; 49 CFR Part 1.

§ 171.8 [Amended]

2. In § 171.8, the definition of "technical name" is revised to read as follows:

§ 171.8 Definitions and abbreviations.

"Technical name" means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name currently recognized in the Registry of Toxic Effects of Chemical Substances

(RTECS). The term does not include trade names.

3. In § 171.11, a new paragraph (d)(10) is added to read as follows:

§ 171.11 Use of ICAO Technical Instructions.

(d) * * *

(10) Shipments of hazardous materials under this section must conform to the requirements for emergency response information as prescribed in Subpart G of Part 172 of this subchapter.

4. In § 171.12a, a new paragraph (a)(7) is added to read as follows:

§ 171.12a Canadian shipments and packagings.

(a) * * *

(7) Shipments of hazardous materials subject to the requirements of this section must conform to the requirements for emergency response information as prescribed in Subpart G of Part 172 of this subchapter.

5. The heading of Part 172 is revised to read as follows:

PART 172—HAZARDOUS MATERIALS TABLES, HAZARDOUS MATERIALS COMMUNICATIONS REQUIREMENTS AND EMERGENCY RESPONSE INFORMATION REQUIREMENTS

6. The authority citation for Part 172 is revised to read as follows:

Authority: 49 U.S.C. App. 1803, 1804, 1808; 49 CFR Part 1.

7. In § 172.201, a new paragraph (d) is added to read as follows:

§ 172.201 General entries.

(d) *Emergency response telephone number.* A shipping paper must contain an emergency response telephone number, as prescribed in Subpart G of Part 172 of this subchapter.

8. In § 172.203, paragraph (i)(2) is removed, paragraph (i)(3) is redesignated as paragraph (i)(2), paragraph (k) is revised and paragraph (m) is added to read as follows:

§ 172.203 Additional descriptions requirements.

(k) *Technical names for "n.o.s." and other generic descriptions.* Unless otherwise excepted, if a material is described on a shipping paper by one of the proper shipping names listed in paragraph (R)(3) of this section, the technical name of the hazardous material must be entered in parentheses in association with the basic

description. For example "Corrosive liquid, n.o.s. (Caprylyl chloride), UN1760" or "Corrosive liquid, n.o.s., UN1760 (contains caprylyl chloride)". The word contains may be used in association with the technical name, if appropriate.

(1) In addition to the n.o.s. descriptions listed herein, the requirements of this section apply to all shipping descriptions for poisonous materials which are subject to the requirements of paragraph (m) of this section, and for which the proper shipping name does not specifically identify the poisonous constituent by technical name. For example, "Motor fuel antiknock compound (Tetraethyl lead), Poison B, UN1649" or "Motor fuel antiknock compound, Poison B, UN1649, (Tetraethyl lead)".

(2) If a hazardous material is a mixture or solution of two or more hazardous materials, the technical names of at least two components most predominately contributing to the hazards of the mixture or solution must be entered on the shipping paper as required by this paragraph. For example, "Flammable liquid, corrosive, n.o.s. (contains Methanol, Potassium hydroxide), UN2924".

(3) Proper shipping names for which the provisions of this paragraph apply are as follows:

Acid, liquid, n.o.s.
Alcohol, n.o.s.
Alkaline liquid, n.o.s.
Cement, adhesive, n.o.s.
Combustible liquid, n.o.s.
Compressed gas, n.o.s.
Corrosive liquid, n.o.s.
Corrosive liquid, poisonous, n.o.s.
Corrosive solid, n.o.s.
Dispersant gas, n.o.s.
Etching acid, liquid, n.o.s.
Etiologic agent, n.o.s.
Flammable gas, n.o.s.
Flammable liquid, corrosive, n.o.s.
Flammable liquid, n.o.s.
Flammable liquid, poisonous, n.o.s.
Flammable solid, corrosive, n.o.s.
Flammable solid, n.o.s.
Flammable solid, poisonous, n.o.s.
Hazardous substance, liquid or solid, n.o.s.
Hazardous waste, liquid or solid, n.o.s.
Infectious substance, human, n.o.s.
Insecticide, dry, n.o.s.
Insecticide, liquid, n.o.s.
Irritating agent, n.o.s.
Nonflammable gas, n.o.s.
Organic peroxide, solid, n.o.s.
Organic peroxide, liquid or solution, n.o.s.
ORM-A, n.o.s.
ORM-B, n.o.s.
ORM-E, n.o.s.
Oxidizer, corrosive, liquid, n.o.s.
Oxidizer, corrosive, solid, n.o.s.
Oxidizer, n.o.s.
Oxidizer, poisonous, liquid, n.o.s.
Oxidizer, poisonous, solid, n.o.s.
Poisonous liquid or gas, flammable, n.o.s.

Poisonous liquid or gas, n.o.s.
Poisonous liquid, n.o.s.
Poison B liquid, n.o.s.
Poisonous solid, corrosive, n.o.s.
Poisonous solid, n.o.s.
Poison B, solid, n.o.s.
Pyrophoric liquid, n.o.s.
Pyrophoric liquid, n.o.s.
Refrigerant gas, n.o.s.
Water reactive solid, n.o.s.

(4) The provisions of this paragraph do not apply—

(i) To a material that is described using the proper shipping name "Hazardous Substance, liquid or solid, n.o.s." provided the material is described in accordance with the provisions of § 172.203(c) of this part; or

(ii) To a material that is described using the proper shipping name "Hazardous Waste, liquid or solid, n.o.s." that is also a hazardous substance and which is described in accordance with the provisions of § 172.203(c) of this part.

(m) *Poisonous materials.* Notwithstanding the hazard class to which a material is assigned—

(1) If a liquid or solid material in a package meets the definition of a poison according to this subchapter, and the fact that it is a poison is not disclosed in the shipping name or class entry, the word "Poison" shall be entered on the shipping paper in association with the shipping description.

(2) If the technical name of the compound or principal constituent that causes a material to meet the definition of a poison (according to this subchapter) is not included in the proper shipping name for the material, the technical name shall be entered on the shipping paper in the manner prescribed in paragraph (k) of this section.

(3) If the inhalation toxicity of any material falls within the criteria specified in § 173.3a(b)(2) of this subchapter (subject to definitions and implementation conditions of paragraphs (c) and (d) of the same section), the words "Poison-Inhalation Hazard" shall be entered on the shipping paper in association with the shipping description. However, the word "Poison" need not be repeated if it is entered as part of the basic description or in conformance with paragraph (m)(1) of this section. This paragraph does not apply to packagings containing inner receptacles of one liter capacity or less.

9. In § 172.301, paragraph (c) is redesignated as paragraph (d) and paragraph (c) is added to this section to read as follows:

§ 172.301 General marking requirements.

(c) *Technical names.* Each non-bulk packaging containing hazardous materials subject to the provisions of § 172.203(k) of this part must be marked with the technical name of the hazardous material in parentheses immediately following the proper shipping name, in accordance with the requirements and exceptions specified for the display of technical descriptions on shipping papers in § 172.203(k) of this part.

§ 172.302 [Removed]

10. Section 172.302 is removed.

11. A new Subpart G is added to Part 172 to read as follows:

Subpart G—Emergency Response Information

Sec.

172.600 Applicability and general requirements.

172.602 Emergency response information.

172.604 Emergency response telephone number.

Subpart G—Emergency Response Information

§ 172.600 Applicability and general requirements.

(a) *Scope.* Except as provided in paragraph (d) of this section, this subpart prescribes requirements for providing and maintaining emergency response information during transportation and at facilities where hazardous materials are loaded for transportation, stored incidental to transportation or otherwise handled during any phase of transportation.

(b) *Applicability.* This subpart applies to persons who offer for transportation, accept for transportation, transfer or otherwise handle hazardous materials during transportation.

(c) *General requirements.* No person to whom this subpart applies may offer for transportation, accept for transportation, transfer, store or otherwise handle during transportation a hazardous material unless:

(1) Emergency response information conforming to this subpart is immediately available for use at all times and hazardous material is present; and

(2) Emergency response information required by this subpart is immediately available to any person who, as a representative of a Federal, state or local government agency, responds to an incident involving a hazardous material, or is conducting an investigation which involves a hazardous material.

(d) *Exception.* The requirements of this subpart do not apply to hazardous materials which are excepted from the shipping paper requirements of this subchapter.

§ 172.602 Emergency response information.

(a) *Information required.* For purposes of this subpart, the term "emergency response information" means information that can be used in the mitigation of an incident involving hazardous materials and, as a minimum, must contain the following information:

(1) The description of the hazardous material required by §§ 172.202 and 172.203;

(2) Immediate hazards to health;

(3) Risks of fire or explosion;

(4) Immediate precautions to be taken in the event of an accident or incident;

(5) Immediate methods for handling small or large fires;

(6) Initial methods for handling spills or leaks in the absence of fire; and

(7) Preliminary first aid measures.

(b) *Form of information.* The information required for a hazardous material by paragraph (a) of this section must be:

(1) Printed legibly in English;

(2) Available for use away from the package containing the hazardous material; and

(3) Presented—

(i) On a shipping paper;

(ii) In a document, other than a shipping paper, that includes both the basic description of the hazardous material as specified in § 172.101, and the emergency response information required by this subpart, (e.g., a material safety data sheet); or

(iii) In conjunction with a shipping paper, in a separate document, such as an emergency response guidance manual, in a manner that cross-references the basic description for the hazardous material on the shipping paper with the emergency response information contained in the document. For example, the ICAO "Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods" and the IMO "Emergency Procedures for Ships Carrying Dangerous Goods", for shipments by air and water respectively, could be used in association with a shipping paper to satisfy the requirements of this paragraph, if the document contains the information specified in paragraph (a) of this section.

(c) *Maintenance of information.* Emergency response information shall be maintained as follows:

(1) *Carriers.* Each carrier who transports a hazardous material shall maintain the information specified in paragraph (a) of this section in the same manner as prescribed for shipping papers (including dangerous cargo manifests). This information must be immediately accessible to a transport vehicle operator or crew in the event of an incident involving a hazardous material.

(2) *Facility operators.* Each operator of a facility where a hazardous material is received, stored or handled during transportation, shall maintain the information required by paragraph (a) of this section whenever the hazardous material is present. This information must be in a location that is immediately accessible to facility personnel in the event of an incident involving the hazardous material.

§ 172.604 Emergency response telephone number.

(a) A person who offers a hazardous material for transportation must provide a 24-hour emergency response telephone number (including the area code or international access code) for use in the event of an emergency involving the hazardous material. The telephone number must be—

(1) Monitored at all times;

(2) The number of a person who is knowledgeable of the hazards and characteristics of the hazardous material being shipped, has comprehensive emergency response and accident mitigation information for that material, or has immediate access to a person who possesses such knowledge and information; and

(3) Entered on a shipping paper, as follows:

(i) Immediately following the description of the hazardous material required by Subpart C of this Part 172; or

(ii) Entered once on the shipping paper in a clearly visible location. This provision may be used only if the telephone number applies to each hazardous material entered on the shipping paper, and if it is indicated that the telephone number is for emergency response information (for example: "EMERGENCY CONTACT: ***").

(b) The telephone number required by paragraph (a) of this section must be the number of the person offering the hazardous material for transportation or the number of an agency or organization capable of, and accepting responsibility for, providing the detailed information concerning the hazardous material. A person offering a hazardous material for

transportation who lists the telephone number of an agency or organization shall ensure that agency or organization has received current information on the material, as required by paragraph (a)(2) of this section before it is offered for transportation.

PART 173—SHIPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

12. The authority citation for Part 173 continues to read as follows:

Authority: 49 U.S.C. 1803, 1804, 1805, 1806, 49 CFR Part 1.

13. In § 173.12, a new paragraph (f) is added to read as follows:

§ 173.12 Exceptions for shipment of waste material.

(f) *Technical names for n.o.s. descriptions.* The requirements for the inclusion of technical names for n.o.s. descriptions on shipping papers and package markings, §§ 172.203 and 172.301 of this subchapter, respectively, do not apply to packagings prepared in accordance with the requirements of this section, except as follows:

(1) Packages containing materials meeting the definition of a hazardous substance must be described as required in § 172.203(c) and marked as required in § 172.324 of this subchapter; and

(2) Packages containing hazardous materials subject to the provisions of § 172.203(m) of this subchapter must be described in accordance with § 172.203(m) of this subchapter.

PART 176—CARRIAGE BY VESSEL

14. The authority citation for Part 176 continues to read as follows:

Authority: 49 U.S.C. 1803, 1804, 1806; 49 CFR Part 1.

15. In § 176.30, a new paragraph (a)(3)(i) is added to read as follows:

§ 176.30 Dangerous cargo manifest.

(a) * * *

(3) * * *

(i) An emergency response telephone number as prescribed in Subpart G of Part 172 of this subchapter.

Issued in Washington, DC on June 22, 1989, under authority delegated in 49 CFR Part 1.

Travis P. Dungan,

Administrator, Research and Special Programs Administration.

[FR Doc. 89-15190 Filed 6-26-89; 8:45 am]

BILLING CODE 4910-60-M

Interoffice
Communication

TO: John Irvine - Ponca (FAX)
Bruce Borsuk

FROM: T. G. Grumbles
DATE: July 17, 1989

SUBJ: ALCAMIZER 4-2 INVENTORY STATUS

FOR: JCL: MMG: AJO: P

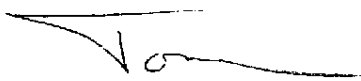
XF: Dune

VISTA

I have been unable to find Alcamizer 4-2 on the inventory. We searched the computerized inventory listing, which is as up-to-date as possible by trade name and by various CAS numbers given to me by you guys.

The memo from Ogino (attached) indicates that it is on the inventory. It could be listed on the "confidential" part of the inventory which is unavailable for general search unless a bona fide intent to import is filed with the agency.

At this point, I suggest we push Mitsui to give us a written certification that 4-2 is on the inventory. The certification should include an inventory number or rationale, such as it is a mixture of materials on the inventory.



T. G. Grumbles

dlj

Attachment

NOTE: John the two CAS numbers you gave me are inventory listed as follows:

1314-13-2: Zinc Oxide (ZnO)
11097-59-9: Magnesium [carbonate (2-) hexa decahydroxylis
(aluminum) hexa-CH₁₆Al₂Mg₆O₁₉]

VVV 000000127

FAX

~~T. G. Grumbles - VCC Houston~~
~~cc: J. L. Irvine - VCC Ponda City~~

Interoffice
Communication

From: H. Ogino - VCFE Tokyo
 Date: July 12, 1989 / Ref. No. 891722
 Subject: ALCAMIZER 4-2 - Your Fax July 11

VISTA

Contacted with Kyowa Kasei.

Alcamizer 4-2 is on the USEPA Inventory list and no problem. Kyowa Kasei is marketing this product thru Mitsui N.Y. Chemical Division with some stocks in the U.S. We were advised Mitsui N.Y. had already been contacted and had provided sample & brochures to VISTA. In order to avoid the communication confusion, we were requested to contact them thru Mitsui N.Y. in future.

Best Regards,


 H. Ogino

HO/mj

P.S. The telephone number you gave was incorrect.

VVV 000000128

B226

Date

① Alcamizer 4-2 - TRADE NAME

Mitsui Comp.
Kyowa Industries

Synthetic Aluminum Hydroxide

② Hydro TALCIT CAS # 12304-65-3
375

303 -

RN = 12304-65-3

CASREGNO

399

SRN =

XU = indicates a substance exempt from reporting under the proposed rule.
for partial updating of the TSCA inventory data base production and use reports

11097-59-9

Magnesium (Carbonate) (2) hexadecahydroxybis
(aluminum) hexa- $C_{16}H_{16}Al_2Al_2O_{17}$

1314-13-2 XU

Zinc oxide (ZnO) OZN

96492-31-8 —

119758-00-8

couldn't find

CA ABS

Chem Name

119757-99-2 —

Chem D

Chem Sys

TSCA

ASO

Is there
another
bracket?
Is this 2-
or what?

TSCA

July 7, 1989

DIALOG INFORMATION SERVICES

PTS PROMT - 72-89/July 7
(Copr. 1989 Predicasts)

S1 1 ALCAMIZER?

1/4/1
01059250

Kyowa Chem emphasizing plastic additive sales.

Japan Chemical Week July 12, 1984 p. 2

Kyowa Chemical Industry has developed Alcamizer PVC stabilizer with excellent thermal stability, and has also introduced Kisuma magnesium hydroxide for use as a modifier for plastics and an inorganic flame retardant.

CA SEARCH 1967-1989 UD=11026
(Copr. 1989 by the Amer. Chem. Soc.)

S4 2 ALCAMIZER?

4/5/1

108222657 CA: 108(26)222657g PATENT

Vinyl chloride resin compositions resistant to heat and weathering

INVENTOR(AUTHOR): Takato, Koichi; Maeda, Shuichi

LOCATION: Japan,

ASSIGNEE: Dainippon Ink and Chemicals, Inc.

PATENT: Japan Kokai Tokkyo Koho ; JP 8827546 A2 ; JP 6327546 DATE:

880205

APPLICATION: JP 86167861 (860718)

PAGES: 5 pp. CODEN: JKXXAF LANGUAGE: Japanese CLASS: C08L-027/06A;

C08K-003/22B; C08K-003/26B; C08K-005/05B; C08K-005/10B; C08K-005/39B

SECTION:

CA237006 Plastics Manufacture and Processing

IDENTIFIERS: heat stabilizer vinyl chloride polymer, sorbitol heat stabilizer, hydrotalcite heat stabilizer, zinc dithiocarbamate heat stabilizer, light stabilizer vinyl chloride polymer

DESCRIPTORS:

Heat stabilizers... Light stabilizers...

metal compds. and polyol derivs., for vinyl chloride polymers

CAS REGISTRY NUMBERS:

75-01-4D polymers, heat and light stabilizers for

96492-31-8 stabilizers, Alcamizer II for vinyl chloride polymers

VVV 000000132

77-99-6 126-58-9 136-23-2 839-90-7 1309-42-8 6865-35-6 14324-55-1
14634-93-6 56509-15-0 stabilizers, for vinyl chloride polymers
50-70-4 115-77-5 1309-48-4 1314-13-2 uses and miscellaneous,
stabilizers, for vinyl chloride polymers

4/5/2

107024414 CA: 107(4)24414s PATENT

Heat-retaining agricultural films

INVENTOR(AUTHOR): Komazaki, Shingo; Murakami, Akira; Watanabe, Takeshi

LOCATION: Japan,

ASSIGNEE: Tokyo Printing Ink Mfg. Co., Ltd.; Marui Kako K. K.

PATENT: Japan Kokai Tokkyo Koho ; JP 86218646 A2 ; JP 61218646 DATE:

860929

APPLICATION: JP 8558224 (850325)

PAGES: 4 pp. CODEN: JKXXAF LANGUAGE: Japanese CLASS: C08L-023/02A;
C08K-003/26B; A01G-009/14

SECTION:

CA238003 Plastics Fabrication and Uses

IDENTIFIERS: agricultural film EVA filler, thermal insulator agricultural
film, hydrotalcite filler agricultural film

DESCRIPTORS:

Thermal insulators...

agricultural films, hydrotalcite-filled polyolefins for

Agriculture and Agricultural chemistry...

films for, thermally insulating, hydrotalcite-filled polyolefins for

CAS REGISTRY NUMBERS:

24937-78-8 agricultural films, hydrotalcite-filled, for good thermal
insulation

12539-23-0 filler, Alcamizer I, for EVA for agricultural films

96492-31-8 filler, Alcamizer II, for EVA for agricultural films

9002-88-4 low-d., agricultural films, hydrotalcite-filled, for good
thermal insulation

F & S Index - 1980-89/Jun, Week 4
(Copr. 1989 Predicasts)

S1 1 ALCAMIZER?

1/5/1

1151630

Japan Chemical Week July 12, 1984 p. 2

PROMT: YES

Kyowa Hakko Kogyo : New Alcamizer PVC stabilizer has excellent thermal
stability

COMPANY:

Kyowa Hakko Kogyo

PRODUCT: Plastics Stabilizers (2869318)

EVENT: Product Design & Development (33)

COUNTRY: Japan (9JPN)

VVV 000000134

CHEMSEARCH(TM) 1965-May89 9,062,049 subs
(C. Dialog Inf.Ser.Inc.1989)

S1 4 ALCAMIZER?

1/5/1

CAS REGISTRY NUMBER: 119758-00-8

FORMULA: W99

CA NAME(S):

HP=Alcamizer IV (9CI)

SYNONYMS: Alcamizer 4

SUBFILE: CHEMSIS 12CI 1 LITERATURE REFERENCE(S) IN FILE 399.

1/5/2

CAS REGISTRY NUMBER: 119757-99-2

FORMULA: W99

CA NAME(S):

HP=Alcamizer III (9CI)

SYNONYMS: Alcamizer 3

SUBFILE: CHEMSIS 12CI 1 LITERATURE REFERENCE(S) IN FILE 399.

1/5/3

CAS REGISTRY NUMBER: 96492-31-8

FORMULA: CO₃.2AlH₆O₆.xH₂O.4Mg

REPLACED CAS REGISTRY NUMBER(S): 99627-91-5

CA NAME(S):

HP=Aluminate(Al(OH)₆3-) (9CI), NM=(OC-6-11)-, magnesium carbonate
(2:4:1), hydrate

SYNONYMS: Alcamizer II; Alcamizer 2; Alkamizer II

COMPONENT CAS RESISTRY NUMBER(S):

((69048-27-7))

(3812-32-6 18893-33-9)

SUBFILE: CHEMNAME 6 LITERATURE REFERENCE(S) IN FILE 399.

1/5/4

CAS REGISTRY NUMBER: 12539-23-0

FORMULA: CO₃.2AlH₆O₆.3H₂O.4Mg

REPLACED CAS REGISTRY NUMBER(S): 101359-73-3

CA NAME(S):

HP=Aluminate(Al(OH)₆3-) (9CI), NM=(OC-6-11)-, magnesium carbonate
(2:4:1), trihydrate

SYNONYMS: Alcamizer I; Alkamizer I; Alkamizer 1

COMPONENT CAS RESISTRY NUMBER(S):

((69048-27-7))

(3812-32-6 18893-33-9)

SUBFILE: CHEMNAME 16 LITERATURE REFERENCE(S) IN FILE 399.

VVV 000000135

CHEMNAME 1967-May89 2,040,309 subs)
(C. Dialog Inf. Ser.Inc. 1989)

S1 2 RN="96492-31-8"

1/5/1
CAS REGISTRY NUMBER: 99627-91-5
FORMULA: UNKNOWN
SEE REPLACING CAS REGISTRY NUMBER: 96492-31-8
SUBFILE: CHEMNAME 7 LITERATURE REFERENCE(S) IN FILE 399.

1/5/2
CAS REGISTRY NUMBER: 96492-31-8
FORMULA: $\text{CO}_3 \cdot 2\text{AlH}_6\text{O}_6 \cdot x\text{H}_2\text{O} \cdot 4\text{Mg}$
REPLACED CAS REGISTRY NUMBER(S): 99627-91-5
CA NAME(S):
HP=Aluminate($\text{Al}(\text{OH})_6$ 3-) (9CI), NM=(OC-6-11)-, magnesium carbonate
(2:4:1), hydrate
SYNONYMS: Alcamizer II; Alcamizer 2; Alkamizer II
COMPONENT CAS RESISTRY NUMBER(S):
((69048-27-7))
(3812-32-6 18893-33-9)
SUBFILE: CHEMNAME 6 LITERATURE REFERENCE(S) IN FILE 399.

TGG: JCL: MMG: AJO: RF

XF: _____

TO: Distribution

FROM: T. G. Grumbles

DATE: July 19, 1989

SUBJ: EMPLOYEE INFORMATION MEETINGS AT LCVCM ON JULY 14

Interoffice
Communication

VISTA

Attached is the list of questions from the meeting and the brochure we handed out. I've made no attempt to group the questions, but have made initial assignments as to who should draft answers. Most are for me and Dr. Drumwright. Our goal is to have a document done by July 28 for distribution at VCM.

It is clear what the major concerns are based on the questions. They are as follows:

1. Facts on Ross and Fogleman's illness.
2. What are the limitations of current medical screening, and what will the Company do for further screening specific to brain tumors.
3. Will the Company study the LCVCM plant population. They are concerned about their small group not the VCM industry.
4. Do other chemicals at the plant, such as EDC, HCl, and Chlorine have similar chronic effects.

Some of these questions can be answered based on science and some will involve policy decisions.

Overall, I believe we have set a positive tone by our approach to date and must continue open and "aggressive" communication with the employees.

em dl
T. G. Grumbles

dlj
.716

Attachment

Distribution: R. A. Conrad, G. M. Shirley-LCVCM
T. H. Huffman, J. R. Drumwright, R. D. Gamblin, J.
A. DeBernardi, M. S. Reynolds

cc: J. Friend-LCCP, J. W. Ware-LCLAB, H. D. Garrison-CKC, R.
W. Seymour-ABER

VVV 000000137

QUESTIONSRESPONSIBILITY

- | | | |
|----|---|-----|
| 1. | ARE TWO BRAIN TUMORS IN A SHORT-TIME IN A SMALL GROUP LIKE OURS INDICATIVE OF A PROBLEM? | JRD |
| 2. | WOULD THE PROBLEM DAN ROSS HAD SHOW-UP ON THE VAN CHEST X-RAY? | JRD |
| 3. | ARE TWO BRAIN TUMORS IN GROUP LIKE OURS A LARGE AMOUNT?
(DON'T COUNT EVERYONE, ONLY THOSE EXPOSED IN OPERATIONS, MAINTENANCE). | JRD |
| 4. | WHAT ABOUT THE CANCER DEATHS IN THE PAST? | JRD |
| 5. | I WORRY MORE ABOUT EDC AND TARS? CAN THESE BE CARRIED HOME AND EXPOSE MY FAMILY? | TGG |
| 6. | WHAT DO WE KNOW ABOUT EDC/TARS EXPOSURE EFFECTS? | TGG |
| 7. | ARE THE RECENT BRAIN TUMORS THE SAME TYPE? | JRD |
| 8. | DID DAN ROSS'S CANCER METASTASIZE? | JRD |
| 9. | CAN DIFFERENT PEOPLE GET DIFFERENT CANCERS FROM SAME EXPOSURE DUE TO INDIVIDUAL DIFFERENCES? | JRD |

QUESTIONS

-1-

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QUESTIONS

RESPONSIBILITY

10.	DID THE BFG STUDY LOOK AT OTHER CANCERS AS WELL?	TGG
11.	HAVE WE TALKED TO OTHER VINYL PLANTS?	JRD/TGG
12.	DID MR. FONTENOT HAVE ANY APPARENT SIGNS/SYMPTOMS FROM THE VAN EXAM?	JRD
13.	DOES THE BLOOD TEST INDICATE CANCER?	JRD
14.	IS VISTA GOING TO PROVIDE CAT-SCANS?	JRD/THH/RAC
15.	WHAT WILL THE COMPANY DO IF ANOTHER BRAIN TUMOR IS FOUND?	TGG
16.	IBS IS REFUSING TO PAY FOR A CAT-SCAN I HAD? WHAT IS THE INSURANCE SITUATION FOR PAYMENT OF THIS TESTING?	ER
17.	IS VISTA LOOKING AT ANY OTHER TESTS BESIDES CAT-SCANS?	JRD
18.	ARE THERE BRAIN TUMORS AT OKC AND ABERDEEN?	JRD
19.	WHAT DOES A CAT-SCAN SHOW? WILL IT PICK VERY SMALL TUMORS?	JRD
20.	WILL VISTA STUDY OUR GROUP, THE LCVCM PLANT?	TGG

QUESTIONS

RESPONSIBILITY

- | | | |
|-----|---|---------|
| 21. | HOW LONG WILL IT TAKE YOU TO ANSWER OUR QUESTIONS? | TGG |
| 22. | BASED ON DEATH CERTIFICATE PROBLEMS, HOW CAN ANY STUDY
BE ACCURATE OR DEPENDABLE? | TGG/JRD |
| 23. | WHAT ABOUT THE DEATH CAUSES OF CHILDREN OF EMPLOYEES?
WILL YOU LOOK AT THOSE? | JRD |
| 24. | WE DON'T CARE ABOUT STUDIES WITH THOUSANDS OF WORKERS,
WHY DON'T YOU STUDY US? | TGG |
| 25. | CAN'T ONE MOLECULE OF A CARCINOGEN CAUSE CANCER? | TGG |
| 26. | WILL YOU GET MORE INFO ON ROSS & FOGLEMAN? | JRD |
| 27. | WHY DO THE VAN TESTING RESULTS TAKE SO LONG TO GET? | JRD |
| 28. | WILL RETIREES BE KEPT UP TO DATE ON OUR STUDIES? | RAC |
| 29. | WILL YOU UPDATE US REGULARLY? | RAC |
| 30. | WHAT ARE THE TYPES OF CANCER ROSS & FOGLEMAN HAVE? | JRD |
| 31. | A FILM SHOWN IN 1972 SAID GLIOBLASTOMAS WERE A RESULT
OF VCM EXPOSURE. HAS THIS CHANGED? | TGG |

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QUESTIONS

RESPONSIBILITY

32. ARE THE 100 ANGIOSARCOMAS FOUND IN WORKERS PVC
AND VCM WORKERS? TGG
33. DOES CIGARETTE SMOKING CAUSE BRAIN TUMORS? JRD
34. WHY DO VISTA BLOOD RESULTS USE HIGHER NORMALS FOR
COMPARISON? JRD
35. WHAT ABOUT EDC AND HCl EFFECTS? WHAT ARE SHORT & LONG
TERM EFFECTS AND AT WHAT PPM LEVEL DO THEY OCCUR? TGG
36. HOW LONG DOES EDC STAY IN BLOOD? JRD/TGG
37. ARE EDC RELEASES AND EXPOSURES REPORTED TO OSHA? TGG
38. WHY DON'T YOU DOCUMENT HIGH EDC EXPOSURES LIKE YOU
DO VCM EXPOSURES? TGG/RAC
39. DO STUDIES LOOK AT THE TOTAL NUMBER OF EMPLOYEES
EXPOSED OR TOTAL NUMBER AT THE PLANT? TGG
40. DO THE CHEMICALS HERE, VCM AND EDC, HAVE A CUMULATIVE
EFFECT? TGG
41. IS LITERATURE SEARCHING ALL THAT WE'RE DOING? TGG/THH/RAC

QUESTIONS

RESPONSIBILITY

- | | | |
|-----|---|-------------|
| 42. | WHAT ABOUT HCl AND CHLORINE EFFECTS? | TGG |
| 43. | SINCE ROSS & FOGLEMAN ARE THE REASON FOR THIS MEETING,
WILL THERE BE A STUDY OF THEIR WORK HABITS, ETC.? | TGG |
| 44. | WHAT ABOUT THE PEOPLE THAT HAVE BEEN HERE 20 YEARS, CAN'T
WE DO SPECIAL TESTS FOR THEM? | JRD/RAC/THH |
| 45. | WHY ISN'T A CAT-SCAN PART OF A ROUTINE PHYSICAL FOR US? | JRD |

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What Vista intends to do

Vista Chemical recognizes and understands the concern felt by our employees and their families.

The company continues to evaluate the literature and participate in industry groups concerned with the health effects of exposure to chemicals used or manufactured in our plants.

In addition, the company is investigating new non-invasive testing measures which could be used to detect abnormalities.

As we move forward, we'll keep employees informed of our progress.

VISTA

Facts About...

**Brain
tumors
and chemical
exposure**

VISTA

Vista Chemical Company
Lake Charles VCM Plant

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What studies show about brain tumors

The scientific literature and study results present conflicting evidence in regard to the association of brain tumors and vinyl chloride monomer.

Some studies have indicated a possible association between brain tumors and VCM. Others have shown no association at all.

In the studies which indicated a possible association, the number of tumors occurring in studied workers was compared to the number of cases known to occur in the general population. While the number of tumors among the workers was higher than those occurring among the population at large, the difference was small enough that one could not say for sure whether the difference was caused by worker exposure to VCM.

The information on exposure to ethylene dichloride and carbon tetrachloride does not indicate an association between these chemicals and brain tumors.

What are the symptoms of brain tumors?

For brain tumors, clinical findings or symptoms are variable.

Headaches seldom are the first indicators of the presence of a brain tumor. Other symptoms such as convulsions or seizures are probably the more common signs.

Intense headaches accompanied by vomiting, visual disturbances, (blurring or seeing double), weakness and/or trouble with coordination should be thoroughly investigated by a physician.

Also keep in mind that brain tumors may result from other causes as well. For example, certain forms of lung cancer may spread to the brain or other locations in the body.

Good health habits, taking part in Vista's health testing program and periodic visits to your own physician are important to stay ahead of any physical condition that could adversely affect you.

Tests that can detect brain tumors

There are a number of specific diagnostic tests which can be used to determine the presence of a brain tumor.

These tests include CAT scans, MRIs (magnetic resonance imaging), skull x-rays, injection of dyes, or combinations of these and other techniques.

However, most of these are invasive tests which carry some risks of their own. For instance, CAT scans involve exposure to more radiation than a normal chest x-ray and should not be undertaken lightly.

In addition, the multi-phasic testing offered by Vista is designed to provide broad screening, not specific diagnostic tests.

Vista's exam uses questionnaires and interviews to obtain good employee medical histories. These histories, used to determine signs and symptoms of potential health problems, are extremely important because problems are usually detectable before actual physical findings are. When screening evaluations indicate problems, more intensive diagnostic procedures may be recommended.