SW28P

TRANSCRIPT

JOINT PUBLIC MEETING
ON THE DEVELOPMENT OF REGULATIONS
FOR THE TRANSPORTATION OF HAZARDOUS WASTE
UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT of 1976
October 26, 1977, Des Plaines, Ill.

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U.S. ENVIRONMENTAL PROTECTION AGENCY
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ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF SOLID WASTE
DEPARTMENT OF TRANSPORTATION
MATERIALS TRANSPORTATION BUREAU
OFFICE OF HAZARDOUS MATERIALS OPERATIONS

JOINT PUBLIC MEETING

ON THE

DEVELOPMENT OF REGULATIONS FOR
THE TRANSPORTATION OF HAZARDOUS WASTE

REPORT OF PROCEEDINGS had in the foregoing entitled matter on Wednesday, October 26, 1977, in the East Ballroom A, at the Ramada O'Hare Inn, Higgins and Mannheim Road, Des Plaines, Illinois, at the hour of 9:45 o'clock a.m.

PRESENT:

Co-Chairmen:

WALTER W. KOVALICK, JR., Chief
Guidelines Branch, HWMD
Office of Solid Waste, EPA

Alan I. Roberts, Director
Office of Hazardous Materials Operations
Materials Transportation Bureau
U. S. Department of Transportation

PRESENT (Continued):

Panel Members:

HARRY W. TRASK , Program Manager
Pesticide Waste Management, Guidelines
Branch, HWMD
Office of Solid Waste, EPA

ARNOLD M. EDELMAN, Environmental Scientist
Guidelines Branch, HWMD
Office of Solid Waste, EPA

MARK L. MORRIS, Environmental Engineer
Guidelines Branch, HWMD
Office of Solid Waste, EPA

DOUGLAS CROCKETT, Attorney
Office of General Counsel
U. S. Department of Transportation

MR. KOVALICK: Good morning, ladies and gentlemen.

Those of you who can now find chairs, now that they have added chairs, will take them. We will begin.

Let me welcome you to this public meeting, joint public meeting between the United States Environmental Protection Agency and the United States Department of Transportation, to discuss the topic of transportation of hazardous waste.

Let me introduce myself, my name is Walter Kovalick. I am Chief of the Guidelines Branch of the Hazardous Waste Division of EPA, in Washington.

To my left is my co-chairman, Alan Roberts, who is the Director of the Office of Hazardous Materials Operations, Materials Transportation Bureau of the DOT.

The remainder of the Panel is composed of EPA representatives. On my far right is Mark Morris, an Environmental Engineer, Guidelines Branch of the Hazardous Waste Division.

Next to him is Arnie Edelman, who is an Environmental Scientist, in that same Division, and on my immediate right is Harry Trask, who is Program Manager of the Pesticide Waste Management Program at the Guidelines Branch.

And, on my far left is Douglas Crockett,

with the Office of General Counsel, of the Department of Transportation.

Before I discuss the procedure for this morning's meeting, let me give you a brief overview of the relationship between the Department of Transportation regulations which currently exist and the prospective EPA regulations that we are going to be discussing today.

As you may know, the Resource Conservation and Recovery Act of 1976, abbreviated as RCRA, was signed into law in October of last year. It mandates a comprehensive Federal-State-local approach to all aspects of waste management, including resource conservation and recovery, land disposal of municipal and industrial wastes, and authorizes a new regulatory program for hazardous wastes.

The Environmental Protection Agency under Subtitle C of that law, that is, Hazardous Waste Management, is required to write standards for generators, shippers, transporters, and receivers of hazardous waste. In addition, EPA is required to develop criteria and a list to define what are hazardous wastes.

During the analysis of these requirements in our statute, it became apparent that current Department of Transportation regulations under the Hazardous Materials

Transportation Act of 1974 may have the potential to be expanded to partially meet the mandates of RCRA. EPA would like to maximize the coordination of the ~~RECA~~ RCRA regulatory requirements with existing rules for the benefit of all parties.

The Act requires that regulations developed under Subtitle C of RCRA be consistent with the requirements and regulations of the Hazardous Materials Transportation Act. In addition, it authorizes the EPA to make recommendations to the DOT respecting regulations for hazardous waste under the HMTA and for the addition of materials to be covered by HMTA.

Now the authority for the regulation of hazardous waste transportation is contained in both HMTA and RCRA. The Hazardous Materials Transportation Act is concerned with the protection of public safety, health and property during the loading, transportation, storage incident to transportation, and unloading of hazardous materials. HMTA requires the Secretary of Transportation to designate a material as hazardous if its transportation may pose an unreasonable risk to health and safety or property. The materials designated as hazardous may include, but are not limited to: explosives, radioactive materials, etiologic agents, flammable liquids or

solids, combustible liquids or solids, poisons, oxidizing or corrosive materials, and compressed gases.

Now in contrast are the Subtitle C or the hazardous wastes provisions of the RCRA, which are concerned with the protection of the public health, as well as the environment, from improper hazardous waste management during transportation, as well as treatment, storage or disposal. Hazardous wastes as defined by RCRA are those which may pose a substantial present or potential hazard to human health or the environment.

I will emphasize -- I am sure that this will come up many times today. I am trying to point out the distinctive difference in our missions as we are trying to work through the regulations together. HMTA deals with public safety, health and property and RCRA deals with human health and the environment.

The Administrator of EPA shall take into account, when defining hazardous wastes, toxicity, persistence and degradability in nature, potential for accumulation in tissue, and other related factors such as flammability, corrosiveness and other hazardous characteristics.

As for the transportation of hazardous wastes under the R~~esearch~~ Resource Conservation and Recovery Act, which I hope you got a copy of at the table, Section 3002 of

our Act requires the Administrator of EPA to develop standards for generators or shippers, as we might also know them, of hazardous wastes concerning labeling practices for any containers used for storage, transport or disposal that will identify accurately such wastes; use of appropriate containers, and use of a manifest system to assure that all hazardous waste generated is designated for treatment, storage or disposal to a facility which has a permit under the Resource Conservation and Recovery Act. So this manifest is the form used very similar,as you might note, to shipping papers that you might be familiar with, for identifying the quantity, composition, and the origin, routing, and destination of hazardous waste during the transportation from the point of generation to the point of ultimate storage or disposal.

Now this manifest form as currently envisioned is very similar to DOT's shipping paper. This leads us to several questions which we hope will be addressed during the meeting today. For example, should DOT expand its shipping paper requirements to include EPA requirements? Should DOT requirements apply to hazardous wastes that do not meet the DOT criteria; which is another point I am sure we will be discussing.

Some of the prospective requirements that EPA has are: use of appropriate containers, furnishing of information about the wastes, and labeling on containers, all those things that currently are regulated by DOT as well. There are other questions, such as, should EPA reference DOT standards or adopt our own? Not necessarily different.

Another section in which there was some concern about in RCRA is Section 3003, which are the instructions to the Administrator to develop standards for transporters of hazardous waste concerning items such as recordkeeping, transportation of hazardous waste only if properly labeled, compliance with the manifest system, that I discussed briefly, transportation of all the hazardous wastes shipped to be designated permitted facilities.

In addition, the Administrator is considering the development of standards for the acceptance of hazardous waste for transport, loading and stowage of hazardous wastes, notification in the event of a spill and spill reporting, marking and placarding of vehicles, and notification of the transportation of hazardous wastes.

Many of the standards being considered under the RCRA for transportation are currently required under

the Hazardous Materials Transportation Act. Specifically, they include the definition of a hazardous material, or, in EPA's case, the waste, labeling, placarding, packaging, what we call, manifest, and what is known under the DOT regulations as a shipping document, spill notification and reporting, loading and stowage. In addition, the Hazardous Materials Transportation Act has provisions for the development of standards concerning recordkeeping and registration.

In December of 1976, the Department of Transportation evidenced concern for the development of regulations for hazardous waste transporters. HM-145, Environmental and Health Effects Materials Advance Notice of Proposed Rulemaking, published December 9, 1976, in the Federal Register, presented several questions concerning hazardous wastes: "With regard to hazardous wastes, what classification system may be used to clearly identify mixtures as opposed to single compound materials; what packaging may be appropriate for transportation; and how existing transportation documentation can be used to cover transport of hazardous wastes from the generator or the shipper to the disposer or the consignee." Several comments were received expressing concern that EPA regulations not be consistent with those of DOT.

The regulations by EPA for transportation must be promulgated by mid-1978 to become effective about six months later. Now, that is a brief background.

Let me discuss the procedural rules for this meeting today. As Co-Chairmen of the Panel, Alan and I will conduct this meeting to facilitate the orderly conduct of business, including scheduling of presentations by participants, and excluding material which is irrelevant or repetitious. The time allotment for oral statements shall be at the discretion of the Chairmen, but shall not ordinarily exceed 15 minutes. With the permission of any person offering an oral statement, questions may be asked by members of the Panel. Blank cards will be available during this time. You may write your questions on the 3 by 5 cards, they will be brought to us on the Panel, and we will ask the questions of the speaker, off the cards.

A transcript of the meeting will be made and a copy of the transcript, together with copies of all documents presented at the meeting, and all written submissions will constitute the record of the meeting. A copy of the record of the meeting will be available for public inspection by December 16, 1977, at the U. S. Environmental Protection Agency, Office of Solid Waste,

Hazardous Waste Management Division, Docket Section, Room 2111, 401 M Street, S.W., Washington, D.C. 20460. Also, at the Department of Transportation, Room 6500, Trans Point Building, 2100 Second Street, S. W., Washington, D.C. 20590. Anyone wishing to submit a written statement may do so by November 9, 1977, to either of these addresses, which are also in the Federal Register Notice.

Let me take a moment now to remind you that those of you who did not fill out a registration sheet this morning, those of you who arrived very early this morning, we would appreciate it if you would do that. If you do that, you will be mailed a copy of the transcript of the proceedings.

I would appreciate it if during the morning, you would go out to the registration table and fill out a registration sheet. There is also a space on the registration sheet to indicate, if you wish today, to give an oral statement. The oral statements are very important day, as well as if you wish to give a written statement. If you indicate that, we will follow up and try to get into the record before we actually go to press.

Let me also make mention of the fact, as some of you may know. We have just completed six days of public meetings on EPA regulations. We are considering

all aspects of hazardous wastes, not just transportation. At registration, you will find a white brochure which has a list of cities with early October dates on them, on which is a description of the regulations that we are currently considering. If you wish a draft copy of the regulations that you may hear some of the speakers discuss today, please leave your business card or your name and address at the registration table. We will return with those lists to Washington and mail you a copy of the early drafts, which are not proposed in the Register, these are just early drafts.

Let me now -- Alan, do you want to say anything to open?

MR. ROBERTS: Individual register notices concerning this hearing, also just discussed a series of questions. I would request that the persons making statements here, they would follow the written comments, make every reasonable effort to be responsive to those questions. I don't think there is a lot of generalities to be generated from something like this. I think the questions should be addressed by both agencies. I think we both would be very appreciative if, commenters, either making statements here today or in writing, would be as responsive as practicable to the questions raised in the notice of the Federal

Register. That's the only comment I have.

MR. KOVALICK: That's a real good point.

We are getting some additional agendas printed. It's an excellent turn out we have today. Those of you who have an agenda see that we have approximately five individuals scheduled prior to the lunch break. We plan to take a lunch break at 12:30 to 1:45. We plan at 1:45 to hear additional six, seven individuals who are currently signed up, and anyone else who signs up during the day, if you are giving a statement, we have to have one copy of the statement for the court reporter, so it will appear properly in the record.

Even though we haye a fairly lengthy day today, we plan to adjourn by 5:00 o'clock or 5:15. If you find it possible to abbreviate your remarks to highlight your responses to the questions, and submit your whole statement for the record, we would very much appreciate that.

I am informed that the first speaker, who I believe is, Mr. Harvison, of the National Tank Truck Carriers, is here. I thought he was going to be delayed. The speakers, who are in this order, Mr. Clifford Harvison, of the National Tank Truck Carriers, will be first; Mr. Thomas Altpeter, of the Midwest Research Institute, will be on standby, and Dr. Roy Ball of the American Society

for Civil Engineers, will be on alert for the third speaker.

Is Mr. Harvison available?

MR. HARVISON: Yes.

MR. KOVALICK: Will you accept questions when you are through?

MR. HARVISON: Yes.

Mr. Chairmen, first I want to apologize that I do not have copies of my written statement. They are basking, thanks to one of the airlines, in Phoenix, Arizona. However, I will supply the copies directly to Mr. Roberts upon my return to Washington.

Mr. Chairmen and members of the Panel, my name is Clifford Harvison, and I am the Managing Director of the National Tank Truck Carriers, Incorporated, 1616 G Street, N. W., Washington, D.C.

NTTC is a trade association with the tank truck industry. Our members transport a variety of liquid and dry products throughout the 48 continental United States. As prime service carriers to the major energy carrying companies, it is axiomatic that the tank truck industry, its duties fall to the transportation of hazardous commodities, has knowledge about and are responsive to the regulatory structure of the U. S. Department of

Transportation. Additionally, to the trade association, both aspects of the tank truck industry, the private and domestic carriers are aware of the EPA Administrator mandate regarding hazardous wastes and hazardous substances. That's why I believe that this session is both timely and positive for two reasons: First, it seems to be that the rulemaking is truly in its formative stages. And secondly, it demonstrates the willingness of both federal entities in the necessity of internal cooperation, which will hopefully pre-empt duplication of their efforts in resultant regulatory double standards.

I am sure that we are most anxious to avoid the bureaucratic power grab for regulatory jurisdiction which seems to dominate the Federal breathern at the Occupational Safety and Health Administration.

We believe that the cooperation already shown by both EPA and DOT, regulatory duplication and jurisdictional overlaps can in fact be avoided. What we propose is frightfully simple, and it is that the current DOT regulatory structure be utilized for publication purposes, and EPA be charged with providing primary technical input and evaluation. Both entities would be involved in enforcement.

Furthermore, we are suggesting that the Secretary

of Transportation and the EPA Administration jointly appoint a committee in the format of Section 11.007, and to monitor the progress and efficiency of other regulations, the committee should operate under the initial two year concept provision.

In advancing this proposal, NTTC is cognizant of two basic points. First, that the Department of Transportation does not have the technical expertise or staff to develop the mandated regulations. But it does have access to the transportation community, which must comply.

Second, EPA, while not having the ear of the transportation industry, will certainly have the technical expertise and backup. The proposal we are suggesting would work this way: EPA would submit petition to certain DOT members under Title 49, and other members of the public. Together with the petition, EPA would supply whatever technical and editorial justification it so chose.

DOT would then be responsible for docketing, federal registration publication, management and evaluation of responses that follow the comment period. DOT would either amend or decline to amend.

Mr. Chairman, we propose this contract within

the light of the positive factors already shown today, and I shall enumerate on them further. Initially, it is quite clear that the RCRA Act mandates EPA/DOT cooperation. We can understand that the technical environmental concerns are DOT's bag. At least, we can appreciate that a trucking terminal or railroad yard must chill the hearts of some EPA personnel. However, we consider that, legally speaking, you have no choice but to cooperate.

Additionally, we believe that many elements work within the EPA/DOT and influx with the requirements of RCRA. The placarding system is in place. Documentation regulations are in place. Classification system is in place. Under our reporting rules, NTTC regulatory rules, documentation should include "our name and identification number". Our vehicle should give ready access to carrier management in case of an accident.

Again, Mr. Chairman, allow me a fervent personal prayer: that it is my hope that one and all recognize a good regulation does not have to cover 100 percent of contingencies to be effective. There will be some commodities, the characteristics of which are so treacherous, that they can't be classified under the present DOT rules. We have some specification containers that will be unsafe for certain hazardous wastes. Let's not hold up the

implementation of the Act because a few square pegs won't fit into a few round holes.

DOT has long recognized and dealt with this problem with special permit procedures, just as EPA has granted various special permit procedures. At this point, during my 12 years of trade association work, I've seen together, all together, too much positive regulation delayed or forgotten generally, because some individual, who chose to be a lawyer rather than an attorney, looked at the hole rather than the donut.

Surmise, just surmise -- give you a conceptual rather than specific answer to the ten discussion topics posted in the notice of this meeting. I am sure that the answer I have given to all of those ten questions require DOT to have regulatory control over the implementation of RCRA, and does, in fact, suggest transportation problems dealing with hazardous waste management.

In this regard, Mr. Chairman, I would like to voice a concern that you mentioned that is specifically concerning the shipping paper requirements. And that is, we hope that while certain amendments to the shipping paper requirements are most necessary and should be accomplished, we hope that you will avoid a mandate of putting countless chemical names, formulaes,

percentages, et cetera, et cetera, on the shipping documentation.

We believe, and particularly in this case, that information of course must be available in case of an accident and we also believe that the information should be available and catalogued at the source of generation. It is not always for a fact, but we think that there is a reason for all of this and some of it, to say the least, would be quite voluminous. It really wouldn't do that much good at the accident site for dealing with the either professional or volunteer emergency personnel responses, or what have you. It is just as we supported RCRA when it was in its beginning stages before Congress.

Mr. Chairman, I thank you and the Panel for your time this morning, and I'd be happy to attempt to answer any questions.

MR. KOVALICK: Thank you very much, Mr. Harvison.

While the Panel thinks a moment, those of you in the audience who might have questions for Mr. Harvison, there are several persons in the back of the room who have blank 3 by 5 cards and if you will raise your hand, they will come up and give you one during the course of our questions, and we will follow that procedure for the

other speakers today. Be alert, they are ready to give you cards.

Does anyone -- Alan -- would you like to start?

BY MR. ROBERTS:

Q Mr. Harvison, did you issue a statement previously?

A It was a separate detailed statement, to EPA, in this case.

Q Well, let me pursue a question, Question No. 5, "Should hazardous materials --"

A That's not the correct question.

Q I'm sorry, I was talking about Question No. 7.

A Do you have a copy of the document here?

Q (No audible response.)

"In the event of a spill, the material cleaned up may become a hazardous waste. Should DOT or EPA develop the regulations for handling the spilled hazardous material?" It is becoming a very significant fundamental problem based on several instances in recent times about who handles the mess after the incidents take place. You indicated that your general statement was responsive in the general way.

A That's correct. Who would maintain at current costs, Mr. Roberts, in that DOT should, in essence,

handle the regulatory problems evidenced in that question. I would add, for instance, right now, that in the tank truck industry sometimes, it was revealed that the commodity does not have to be spilled to be released into the environment, to create a hazardous waste.

In the tank truck industry, particularly when one is cognizant of the very, very high quality control standards evidenced and mandated by the chemical industry, again, what is the problem, what is called contaminated loads? And this is where any material that formed material that may have been in the tank before mixes with the product coated on the tank or perhaps there is some product degradation particularly in certain sensitive chemicals, that by the time the unit reaches the delivery point, we've got contamination problems. And so we are currently handling that and other DOT regulatory structures.

Now to go specific on your question about product incident, accident, when a product is released, I would say definitely that we would continue to seek DOT's primary guidance just because, in essence, it is still a transportation problem.

Q Then your answer to that is DOT should develop the regulations for handling the spilled hazardous material?

A DOT should develop the regulatory format for handling that. I can't conceive of any one rule possible when one considers the thousands of commodities that are transported every day in bulk. I can't see a regulatory structure that would deal individually within every one of those contingencies.

I do believe, however, that regulatory permits, particularly one that would mandate prompt response by the carrier, and getting ahold of the generator in this case, or, in this case, the shipper, who is considering the virgin product that was spilled at this point, that should be the regulatory format. I can't see taking all of the chemicals and saying, this is what you do when this one is spilled. That's an impossible situation just from the standpoint of volume.

Q In the earlier part of your response you said, "regulatory format". I think your answer again is that DOT should formulate regulations for the half million spilled hazardous materials?

A That is correct.

Q Would that be in a general sense or specific sense?

A That is correct. And it is almost, as I say, the same situation mandating the course of the EPA

naturally. In some cases, the Coast Guard would become physically involved at a spill.

Q Well, recording is the easy part. The requirements of RCRA are the requirements I am concerned about.

A I don't think DOT personnel should respond to the incident at the site, I don't mean that. The only thing I am saying is that a regulatory format should be formulated to mandate. Certain actions should be taken immediately upon release.

Q Well, I guess the key word to my question that I didn't use is "responsibility". You said, seeing that DOT not only specified requirements for handling the spilled hazardous material, but it also specified who is responsible for handling that.

A That is correct. It is still within the transportation mission as far as we are concerned; for the sake of consistency and uniformity, that is a DOT problem.

MR. KOVALICK: Mr. Harvison, first of all, you have to appreciate that our law says that within 18 months --

(Brief interruption.)

MR. KOVALICK: Thank you.

(Continuing) -- should develop and promulgate

regulations affecting the transportation of hazardous waste. And so you have to give me a little comfort in suggesting that we form a committee to attempt to persuade, if that's the logic you are saying, for DOT to add onto the regulations for hazardous wastes. Obviously, that makes us non-responsive, by Congressional mandate. So, do you have any comfort for solving our irreconcilable problem?

A I don't think the problem is irreconcilable. I tried to allude that as far as we are concerned, in a legal sense, there is no, really no, option as we read the law, and I am talking directly to this point. There is a mandate for cooperation.

Q Yes.

A I don't mean to put DOT as not being responsive and EPA as being overly responsive. I think you are doing the right thing. But as I tried to point out, and as I said specifically in my statement, DOT/EPA cooperation in this sense, is mandated. That is the only way we can look at it.

While we have only an 18 month deadline, and that's why I was positive in the opening statement, saying that I think this hearing and others that have been held in conjunction with the RCRA regulations, are positive

steps. There have already been a lot of positive groundwork done and I've tried to participate in that. I think you're doing the right thing, that's why I came.

Q Okay. Let me ask a question that relates to Question 1 of the Discussion Topics. You made a statement that you feel,that you thought,the classification was in place, meaning, I presume, DOT's classification of hazardous materials. However, what we tried to highlight in Question 1, to refresh your memory, was because DOT has a slightly different position than ours, that is, health and safety, and ours is public health environment. But there are some materials that you made a most persuasive argument of environmental damage, I would not expect DOT to recognize as their mission, if I were they.

Therefore, how does that work? How are we able to fulfill our mission of regulation of biocumulatives and others, DOT would probably, and I would in their place, decline that because that is not part of the transportation mission. So, do you see the problem?

A I see the problem. But again, Mr. Kovalick, it is my fervent personal prayer, that is, that I recognize and my industry recognizes that there are certain commodities that are not going to fit hand and glove in the classification of DOT and what have you.

You see, there are some commodities and properties of which are so treacherous that they are not going to fit in. The only thing I ask you is that when you consider the mandates of the Act, would you consider the requirements? Think of the 18 months deadline and come out with positive regulations with regard to these extremely dangerous commodities that are going to have to be studied. Of course, we recognize that in essence, we have to set them aside.

We feel, very frankly, that the vast amounts of tonnage of industrial wastes, particularly industrial liquid wastes, and I'm speaking from a tank truck standpoint, we think that you probably have 90 percent of your problem taken care of. The only thing we're saying is, let's not fall into the trap of holding the whole shooting match up, if you will, for the sake of a problem that is only 10 percent of the scene.

Yes, we recognize that you are not going to be able to handle every possible contingency with the first draft of the regulations. This is another reason why I suggest that an industry advisory committee for the study should contain or should be composed, rather, of representatives of government, industry and environmental groups. Should oversee this with the objective

of, first of all, to make sure that the mandates of the Act are indeed completed, and secondly, giving some guidance on how to treat this, maybe, five or ten percent of the problem, really doesn't fit into the regulatory structure, and possibly never will.

I say DOT's special permit problem, special permit, in a case nozzle tank permit, has always recognized that there are exceptions to the general rule. But let's not stop the whole regulatory process for the sake of a small part of the problem.

Q But what I hear you say, and correct me if I am wrong, that if it were true that there are certain environmental hazardous materials, ~~treaterous~~ treacherous, as you call them, which for a variety of reasons, whatever the agency and public feel should be regulated, you feel that EPA should regulate those materials?

A Again, going back to my basic theory, under our presentation, we feel that EPA has the technical expertise and staff to point those commodities up.

Q And if they are environmental materials, do you also agree that it wouldn't really be feasible for DOT to adopt this?

A What I'm saying, what I am saying is that I feel that those commodities, with the technical expertise and

background that EPA has, you really can't shift them to the Department of Transportation and say, "Hey, you've got a bad actor here." All I'm saying is, you've got the technical background material, put a petition to DOT and let DOT regulate on it. They must, depending on the background, the technical background, that is, and put it on the docket. If industry and other parties can't refute it, then it is amended. The only thing we're saying is is it amended under Title 49.

Q All right. We have at least a couple of questions from the floor and maybe from the Panel. Mr. Edelman.

BY MR. EDELMAN:

Q I have a question from the audience and also a question from myself. A load of ethyl mercury is spilled in Indiana at 3:00 a.m. What good would that information be in a shipping room in Upstate New York?

The question I have that follows this question: You mentioned that it was your hope that an EPA developing shipping document manifest would not clutter that shipping document with detailed information that is unnecessary. And, to extend that question, what information is necessary on a shipping document for answers on the spot to properly handle a spill situation?

A Most assuredly classification. In plain simple English, I have always -- I had personal feelings and this is after many years of conversation with our safety personnel, I have always taken the position that both the placard and the shipping document, which is only two pieces of paper, must be clear to the eye of the public.

In the highway mode, 99 out of a 100 cases, the first personnel at the scene is a member of the public. A lot of policemen and a lot of firemen generally quote, "a fellow traveler" and I would like that printed in context, please.

So the first thing you have to do is warn the public. I believe, if at all possible, and I recognize this is a rough situation in a hazardous waste, because you are probably dealing with a complex waste, is that the name of the commodity, the common generic name of the commodity should be on there, most certainly for the public's benefit.

We have to presume that under this that some people understand the meaning of the word "flammable". We have to understand that Joe Doe knows what corrosive mean. It would come up with, I think, Mr. Roberts will attest to this, the best possible way of informing the public that we have. It is not perfect but it is a good

sound system. But I would say particularly the amount and type, most definitely, and its common generic name inasmuch as you can.

Q Should special recommended procedures and emergency phone numbers be required on a shipping document?

A I am pointing right now to the CHEMTREC program which is sponsored by the Manufacturers' Chemist Association. They have an excellent program. I would want to be the last one to say CHEMTREC's phone number, which is an emergency 24-hour service run by the chemical industry for the benefit of the public. I'd really want to look into the legal problems and say from a social standpoint, I'd love to see CHEMTREC's phone number on here, yes, and that's purely a personal situation. But I really don't know what the legal contingencies of that are, or I would say the very bottom line, the contact points, be they phone numbers, name, reference or what have you, with the generator, should be on there, and they will be on there and the manifest system as we understand it, as they are occurring on the bill of lading and shipping documents.

In other words, get back to the guy who developed the products and find out what it is. I don't -- you've asked me that question before --

MR. ROBERTS: I just want to break in. Someone wrote, "they seriously contend --" I don't quite understand the question.

BY MR. EDELMAN:

Q The question is, "If a load of ethyl mercury is spilled in Indiana at 3:00 a.m., what good would that information be in the shipping room in Upstate New York?" I assume the question is referring to having detailed information on the shipping document.

MR. ROBERTS: Excuse me. I think whoever wrote the question should elaborate on what he is asking us there before we pursue it. I don't quite understand it.

MR. KOVALICK: Why don't you send up another card?

MR. ROBERTS: I don't know what he is talking about in Upstate New York.

BY MR. EDELMAN:

Q What information is available at the scene of the a-cident regarding the material that was spilled?

MR. KOVALICK: While we're waiting for a clarification, our question seems to be directed both to the Panel and perhaps for your comment, which you did not allude to in your remarks but you could comment: Will not spill situations resulting from transportation incidents

be fully addressed under Section 311 of Public Law 92-500 of the Federal Water Pollution Control Act.

We are not the chief spokespersons for that but it suffices to say that two factors relate to that. First of all, that the Act comes under the Federal Water Pollution Control Act to some extent, but as to navigable waters, which have been very broadly defined. And, secondly, only unlisted substances is covered by those regulations, I should say, when they are promulgated soon. There are about 300 substances, a little over that.

A Yes. Those are the so-called hazardous regulations of EPA. They are not out yet, so I'm not familiar with them.

Q But I think the context of your statement was, that you said DOT ought to be regulating spills. In effect, EPA is already regulating the actions to be taken, penalties and so forth, by spills.

A Mr. Kovalick, that is true, and I would like to elaborate at this point that one of the basic reasons that HM-145, and I believe Mr. Roberts would confirm this, issued in the first place, resulted from the petition for rulemaking to the U. S. Department of Transportation by National Tank Truck Carriers, and the reasons I put in that petition dealt specifically with the regulatory

overlap problems created by the then anticipated release of Section 311 regulations.

In other words, in October -- excuse me, December 31st, 1975, I believe, EPA published a notice of proposed rulemaking, listing 311 regulations. And the emphasis on HM-145 was the fact that we as tank truck carriers, we tender certain products and may or may not know whether those products, if spilled, would be under 311 regulations as a hazardous substance released and we as carriers would be charged with massive forfeitures.

So what we wanted in HM-145 was for the shipper, in this case, the generator, to simply put a check mark or a box on the bill that says, in essence, "Hey, if you spill this you must contact EPA immediately. It is a hazardous substance."

And the reason for that is that many chemicals are tendered, they are not hazardous under DOT but many chemicals are tendered to the tank truck industry under trade names and, or in compliance with other trade names. So, we may have a hazardous substance for which we have a tremendous liability and we don't report a spill or we don't even know it. We don't even know the fact that it is indeed a hazardous substance.

MR. KOVALICK: We have a comment from the audience for the record. "The Department of Transportation in the Transportation Safety Act of 1974, defines hazardous materials as any material that poses a threat to public health or welfare, which implies that all hazardous wastes would be included and identified by a section of DOT which implies EPA should not interfere in transportation aspects which implies needless duplication of regulatory activity by EPA into transportation Act business which proves that the Resource Conservation Recovery Act is a bad law.

(Laughter.)

MR. KOVALICK: Unquote. I return with a question for you which I am reading.

MR. ROBERTS: Do you want to comment on that?

MR. KOVALICK: No, I don't want to comment on that.

(Laughter.)

MR. HARVISON: Mr. Kovalick, if you want all these bad laws, the RCRA is a bad law, too.

MR. KOVALICK: I'm reading this so you know that.

BY MR. KOVALICK:

Q Regarding Mr. Harvison's statement, it has been suggested that DOT be under the regulatory aspect of the

transportation of hazardous wastes, I think EPA, in an opinion supported by the members of the National Tank Truck Carriers based upon a survey of each member?

A I can answer the question. No problem.

The Association makes policy the same way that other democratic institutions do and that is with a board of directors. The National Tank Truck Carriers has approximately 215 domestic members, that is individual companies. We have a board of directors and a staff of 52 individuals.

This specific question regarding DOT and EPA was addressed to the board of directors by formal ballot. And there was not one dissenting vote to the opinion that we are expressing here this morning. And I hope that that type of unanimity, not only first it points out our trade association makes policy, but also hopefully responds to the theory of the question.

MR. KOVALICK: Any questions.

MR. EDELMAN: This is a follow-up of the earlier question.

BY MR. EDELMAN:

Q I think you may have already answered it. If only a generic name is provided on the manifest, what good would that do local emergency personnel in cleaning up

the accidents? Certain constructions are extremely hazardous and some handling information should be available on the scene of the accident, not three or four states away. And -- I can't read the rest of the card -- and not locked up until, say, the opening time.

A I think I can respond to that in two ways. First of all, knowledge is -- shippers(?) have their own 24-hour emergency response service. Half of the nation's shippers already have that service. I believe Monsanto Company and several of them have access to good information.

Secondly, I would remind the questioner that this is a "where angels fear to tread" situation regarding hazardous spills. As our experience has proven, beyond a doubt, that you just can't write a set of instructions for a hazardous spill. There are so many contingencies involved in the highly volatible chemical that's spilled. Maybe one of your first questions is, in responding to that spill, is it raining or not; is it into a waterway or water stream? If so, what type of water stream. You can write volumes of books about all the possible spill contingencies for each and every product

Again, going back to my earlier statement, you can probably get the information over the phone faster

then you can look it up in any anthology.

MR. KOVALICK: Alan.

BY MR. ROBERTS:

Q I think that I have belabored you long enough, Mr. Harvison, but I just want to be very clear on one point I believe you've made regarding Question No. 1; a very lengthy question. In essence, it says, "Should DOT modify its definition of hazardous materials to include all hazardous wastes? Should EPA then incorporate DOT regulations by reference or should EPA consider a separate set of regulations to supplement the gaps in DOT regulatory coverage, in that EPA regulations would cover only wastes which are hazardous, and not all hazardous materials?"

I gather from your comments, and a very simplistic manner, what is on your comments, I would assume that you said, and I'll read it. I think you said, "DOT should do it all so far as transportation is concerned," am I correct?

A DOT should publish it all, should make the final decisions, but be highly responsive to EPA's technical expertise.

Q This would include materials beyond the scope of the present DOT regulations?

A That is correct. They may have to be handled

separately, and again, let's not hold up 100 percent of the regulations for five or ten percent of the problem.

Q Okay. Thank you.

MR. KOVALICK: This is a -- I guess a question and a comment.

BY MR. KOVALICK:

Q If DOT's regulated role of commodity becomes a hazardous waste, the next logical step is to seek proper disposal. However, disposal sites under the Resource Conservation Recovery Act or RCRA, would be regulated under EPA, so under what brand of mechanism could the affected shipper avoid dual regulations. I don't know if that's a -- that may be an all morning question.

A We are anticipating, first of all, how this is. It might be forfeited for the questioner at the meeting regarding the transportation regulations at the Ramada Inn in Rosslynn, a week ago Wednesday, EPA representatives made certain comments regarding when a particular commodity fell under hazardous wastes.

Perhaps Mr. Trask or Mr. Edelman might want to comment on that, but I think that the question was answered. It's in a transcript of that meeting, and that is, that this has got to be a designated waste. It has got to be going to a designated disposal facility,

to follow the regulatory regime.

And really, the question is more in the area of contaminated loads. I think the question was, "If a DOT regulated commodity . . . something happens to it, and all of a sudden it becomes a hazardous waste." There is something when a load as a practical point is not released, and I am talking contamination now, not a spill environment. If something happens to that commodity, either it's contaminated by another product in the tank or container or degrades in the tank and what have you, that load is returned to the shipper and then a decision is made.

Is it going to be redefined. Is it going to be sold to what element in the economic industry or chemical industry, people who do nothing but buy and reprocess contaminated chemicals. Such a decision making process in back of what happens to that load does not, in my opinion, at least, axiomatically become a hazardous waste.

Q We are running over the time we are going to allot for speakers, but let me read one statement. Let me comment that we are getting several cards that ask for clarifications on all of the EPA proposed regs, about how DOT regs affects them and how EPA proposed regs

affect them, for you.

A I'll be here. If I can make it, I'll be here throughout the entire day, and explain as much as I can to anybody.

MR. KOVALICK: Our problem is, we are trying to gather data on our questions, so it means for those we are not reading, to catch us during the breaks or at the end of the meeting. We will be available and limit ourselves to not answering questions from the Panel. If we can, we will get through all the speakers and possibly come back to them.

I do have one statement to read and I guess Alan has at least one question, and then we will go on to the next speaker.

The statement is, "A spilled material by definition is no longer being transported, but it is under the environment, EPA should develop regs to address all spills of hazardous wastes." So, I guess that's a comment on the opposite side.

A I wouldn't consider that as a comment.

Q This is another question for you, Mr. Harvison.

You stated that 90 percent of the problem, "is being handled and transported in a satisfactory manner. What data supports this contention?"

A No, I didn't state that it is being handled. I am anticipating. I would be the first to admit that I have no technical data. What I said was, that regulations, I believe thanks to current DOT classification, placarding, commodity and container requirements, will take care of 90 percent of the problem. We, in the tank truck industry, are hauling today very safely, very efficiently, and economically, one heck of a lot of sludge, glasses and pickling solutions and what have you. We are doing it and we are doing it safely.

What I am saying is, that these regulations, the way they're written, the way they're proposed, rather, 90 percent of the problem will fit hand and glove with the DOT requirements. The 90 percent figure is no tangible basis. We are well aware that there are many, many wastes that cannot be handled. First of all, cannot be handled in tank vehicles and rail cars. Radioactive wastes, certain other types of wastes, are extremely sensitive. We recognize that. But again, I apologize to the questioner but I do not have chapter and verse on the 90 percent, and won't bother to produce it.

MR. KOVALICK: I believe that the 90 percent statement was addressed much earlier to the point that 90 percent of the entire scope of the problem is simply handled with

the existing format or scheme of things.

A Proposed scheme of things.

Q I didn't mean that that meant everything was satisfactory.

A No, I'm not saying that.

Q But the question does raise a point that I would like to pursue just for one moment. I'd like to approach this from two standpoints: one, is the potential foursome type of failure in the transportation to get from Point A to Point B?

A Which is statistically predictable.

Q The other thing is to form some manner or mechanism to guarantee that a material got to where it was intended to go in the first place. Do you feel sure that the latter portion of this thing is being adequately addressed? In other words, do you have assurances that the material is going for shipping and not being dumped in somebody's sewer, for example?

A Yes. The way that the proposed manifest has been explained to me, that there would be three signoffs, that while mostly you can't have a regulatory regime, you are going to have either an EPA, fish or fowl, of every load, of every waste, that thousands of them are transported throughout the country. There will be, as I

understand it, within the manifest system, a signoff provision with all the legal background for forfeiture provision with falsification.

In other words, we believe that the Act contemplates whether a stringent or severe penalty provision for anyone who is attempting to defraud these.

MR. ROBERTS: Do you have any question about DOT's authority to engage in a regulatory requirement as specified, say, in transit of destination, hazardous wastes material, do we have that authority, in your opinion? I know you don't practice the law.

A Do you wish a legal conservative implementation of the '75 Act, Hazardous Materials Transportation Act. I would say that today, if you came out with regulations along that line, National Tank Truck Carriers is going to raise its regs as long as, of course, its tagged in with hazardous materials.

Q Well, the question is, as you suggested earlier, that DOT would have the authority to do everything that is intended by this Act. Take an example. Take a solution as contaminated as PCB.

A Okay.

Q And everything is going according to the published regulations with one exception; instead of

taking it to the proper disposal facility, he takes it to a gravel pit and dumps it. Do you find anything in the DOT statutory authority that would permit DOT to engage in enforcement relative to the fact that he wilfully dumped it on somebody's private property, not in a place of licensed disposal of that material.

A I would say that he is currently in violation of two, if not three, existing statutes. First of all, the enactment clause on a 2-500, and secondly, most assuredly, the Interstate Commerce Act regulated carrier, and I would like to see it effective here before the DOT gets to him.

Q After imposing social penalties on somebody -- I would like the opportunity, however, to research such a question and respond to you directly with respect to the possible violation of the existing oversight statute of the Department of Transportation. I will respond for the record.

Q My question is representative of the common carrier group.

A The question is a real live question, I appreciate that.

Q I recognize you said the statutory authorities. The question was addressed specifically to the Hazardous

Materials Transportation Act.

A I would like to have the opportunity and will indeed research that, and have my attorney research that, and we'll respond for the record.

MR. KOVALICK: I guess that's just about it.

Again, we seem to have several questions that seem to be for the Panel. We're going to hold those until later in the day and we'll get to you individually.

Off the record for a moment.

(Remarks made off the record.)

MR. KOVALICK: On the record.

Thank you very much, Mr. Harvison.

(Applause.)

MR. KOVALICK: I hope our questioning will not deter any future speakers.

(Laughter.)

MR. KOVALICK: While we are waiting for Mr. Thomas Altpeter from the Midwest Research Institute, I would like to alert Dr. Roy Ball that he will be next, followed by Mr. Morris Hershson of the National Barrel & Drum Association.

Don't forget, if you have questions or wish to participate, we have cards available.

Mr. Altpe ter.

MR. ALTPETER: Apparently there is some mistake. I don't have a statement at this time.

MR. KOVALICK: Okay. Thank you. Sorry if there was an error.

Dr. Ball, representing the American Society for Civil Engineers, from the University of Tennessee. Dr. Ball.

Well, we will come back later.

Mr. Hershson. You're here.

MR. HERSHSON: I have filed a written statement, which is too lengthy to bore this group with.

MR. KOVALICK: Why don't you take the lectern.

MR. HERSHSON: I didn't want to waste time.

I said, I have filed a written statement which is too lengthy to read, concerning my specific industry. However, I would like to state that I have aligned myself with generally evasive comments from Mr. Harvison's statement. I believe that transportation regulations of DOT should goven the transportation of hazardous wastes. I think that whatever regulations EPA finds necessary for alternative disposal or for additional generation, which are both outside the field of transportation, should remain with EPA. And that EPA should permit the transportation to remain with the agency which has the

greatest experience in that field, and with which industry is presently involved.

That's my general statement.

MR. KOVALICK: You've generated at least one question.

MR. HERSHSON: Good. I knew I would from Mr. Roberts.

BY MR. ROBERTS:

Q I have not read your statement, Mr. Hershson, but I've read an earlier statement that you've presented to the Rosslynn meeting.

A They are practically the same.

Q Then I've read it several times then.

Several questions have been raised informally concerning the use of drums. You are an expert in that field and while we have you up here, we might as well ask the question; two questions.

A All right.

Q One is, at the present time at 49 CFR 173.28, there is a restriction against the use of the reuse of the 17 series drum for Poison B materials, the drums having been reconditioned may not be reused in Class B poisons.

In light of the joint attention and effort being devoted to this field that we are discussing here today, I would like to have your reaction, current reactions to

that particular restriction.

A Well, I've always felt a restriction was unnecessary and I have, I think, stated that on several occasions. That comes of consolidation and simplification of the Act which is principally attempting with M-153 and -55. We would recommend acception of 73.28 be modified or amended. So that Class B poisons should be permitted in new or reconditioned drums, because there is no real hazard in reconditioned drums in that field anymore than there is in flammable.

Q Same reason for reconditioned regulation?

A Right.

Q The second part of that question. The comment is raised, if a drum is intended to go to a waste disposal facility, where it is going to be lawfully and legally buried, as a disposal mechanism, a number of people have raised the point, why should they have to go through the reconditioning process on a drum's life that is going to be very short, when its purpose is to do nothing but to go to a waste disposal facility for permanent disposal?

A Well, there are several aspects to that situation. In the first place, I find that inconsistent with the general objectives of the EPA, to take a current reusable drum which may have a life of three, four, five, six

additional trips and bury it. You are thereby burying a drum which would take the place of six new drums with the concommitant use of iron, ore, coal, energy, et cetera. So, it is inconsistent, of course, from one aspect of the Act to bury a drum, and on the other hand say we need resource conservation.

The second part of your question is whether or not a reconditioned drum should be used since we represent reconditioners. I think a reconditioned drum should be used rather than new. I think there are some technical and important significant reasons why a drum should either be used or reconditioned, for the transportation of even one mile, let alone two or three hundred miles of a hazardous waste.

Q Leakage, of which there is no guarantee of an unreconditioned drum. The regulations say that reconditioned drums must be tested for leaks.

That perhaps incompatibility of the material being placed in the drum, with the basic material previously in the drum. And for those two reasons alone, I think that it is dangerous to use unreconditioned drums for the disposition of hazardous wastes and alternate materials. I have recommended to EPA that a very intensive study be made for packaging, whether it be paper,

steel, plastic, box for the specific purpose of this disposition of hazardous materials.

A Not to use good reconditioned drums which I endorse today under the present regulations, and B, in order to create a vehicle which would be suitable for this purpose, and which would be designed for this purpose, rather than take packaging designed for a multitude of purposes.

Q Well, going back to your earlier part of the statement, I still have several questions, and I think that it is important that we pursue this a little bit, because drums are a significant factor in the interchange between DOT and EPA, and the standards for the packages to be used for materials; DOT regulations plus additional materials not presently subject to DOT regulations. We have a term that is reconditioned, therefore, it is usable under regulations, assuming it has passed the required test for another trip for a commercial product.

You're also suggesting that reconditioned drums be used for hazardous material, even if it is going to go one mile, it's a hazardous waste.

In fact, there is some kind of paradox in what you are saying, in that, if there is good resource, in

terms of burying a good reconditioned drum, and you infer that we mutually infer that we should all need authorization for reconditioned drums for hazardous wastes. Which way are you going to have it?

A If you were going to use drums for the ultimate disposition of hazardous wastes, I would say you should use a reconditioned drum because of the safety factor. I am not in favor of using used drums, if drums are reusable for the reasons I have already advanced. But since we cannot have any other package of that size, that could be used for that purpose, and until we develop under EPA's research, I hope, until we develop some specific package for that purpose, I see no alternative, if we are going to use drums, but to use either a new or reconditioned drum, and obviously reconditioned drums are cheaper.

Q If we are going to a waste facility, I would assume we are not concerned with the efficacy of a product in terms of its commercial value, in the sense that we don't want to contaminate Coca Cola with served (?) I think we all understand that. That's a poor illustration. But material of that type. I think we understand that. If it is to a waste facility, is this incompatible. The question that you've raised is really a significant problem to be addressed.

A I am told that it is important. I am not a technical man in that respect that I can give you any technical data. I can check it and find out, and submit an answer to you. But the leakage part problem is definitely important because if a drum is going to leak, it can leak in that first mile as well as the 15th mile, in terms of leaking a hazardous material, because the drum is reconditioned and untested, but I think you have a genuine real hazard that can cause serious problems.

Q One of the drafts, and I don't know whether it's final or semi-final, but the present draft that I saw does not jibe with the DOT or OSHA regulations. There are no specification of containers in DOT for 73 degrees.

A Right.

Q Obviously, some materials on that level on the part of the draft regulations would be subject to hazardous wastes regulatory requirements.

Are you suggesting that reconditioned drums would be required under DOT regulations where the materials have a higher flash point?

A I am suggesting that it would be advisable.

Q What about materials not presently subject to DOT regulations outside flammability?

A I am suggesting that it would be advisable.

Q Do you know of any instances based on recent experience which would illustrate the need for that in terms of transport requirements?

A Well, there is a whole file of accident reports that you have access to in California's Safety Council with transportation of hazardous materials, but I don't know if any of those materials are necessary to hazardous wastes or hazardous materials. We have many of such hazardous materials delivered in certain drums and leakage in transport, and therefore it can be argued that in some of those instances, they are not in reconditioned drums.

Also, there is no requirement that the drums be registered by DOT, not being a red label product.

MR. ROBERTS: Okay. Thank you.

MR. KOVALICK: We have several other questions. For a person who hasn't given a statement, you are getting a lot of questions.

MR. HERSHSON: I shouldn't have come up here.

MR. KOVALICK: I hope you don't believe that.

BY MR. KOVALICK:

Q Again, I have to ask you to comment on our dilemma. We understood your endorsement on Mr. Harvison's remarks in which we would present EPA evidence to DOT, as to the need to regulate biocumulative materials that

they currently do not regulate. That is above, if you will, above the toxicity levels that they might currently choose criteria that we feel cause hazard to the environment. And again, we have a mandate protecting the environment. How do you view our dilemma and, in good conscience, which again DOT reviews their mission and finds that those materials are not affecting the criteria even though they do affect the environment. How do we make sure that our mandate is assured by becoming a petitioner to DOT rather than regulating it ourselves?

A Well, the best way I can answer your question is this. I think Mr. Harvison's question and basic thesis of the agency involved in transportation regulations should remain involved in this industry. Now, if the DOT, for example, in answer to your question about the product mix, can it remember how to pronounce a regional word, does DOT, for example, refuse to exercise its transportation regulatory authority with reference to that product because of its own mandate under its own Act, then you have an interagency dilemma, and it seems to me that if the two agencies cannot come together under your own mandate, if I were running your office, and I'm glad I'm not, if I were running your office I would develop the regulations under those circumstances and

under that dilemma. I would issue the regulation, having first attempted to comply with the section of your own Act to get consistency with the DOT regulations. So if I were there, I would say, well, you don't want to handle this, and we think it is important, we're issuing the regulation on that product.

MR. KOVALICK: Thank you.

Mr. Trask.

BY MR. TRASK:

Q Mr. Hershson, I would like to pursue a slightly different angle -- I'm sorry, I can't look at you and talk at the same time.

MR. ~~KOVALICK~~ HERSHSON: You're lucky.

BY MR. TRASK:

Q (Continuing) -- and this is in the area of how we should treat the standards that are being developed for generators, and I'm speaking now with generators who are your sources of supply for your reconditioned plants. It has been suggested that in order to speak to one of the major purchasers of RCRA, which is Resource Conservation and Recovery Act, that we somehow relax the standards and list those instead that are available for those wastes, that are somehow going to the resource material recovery.

I am wondering how you view what we should be doing, how far should we relax these, if at all.

A I think you should relax your generation requirements and your current requirements for empty drums which previously contained hazardous materials.

Q The question of the generator in reconditioning, in the same manner and to the same extent, are considering relaxing those requirements, going from the generator to the salvage company facility. Because the purpose of your Act, to some extent, is resource conservation and instead of a resource conservation facility, you start making them into a usable solvent, take your drums and make them into reusable drums, then the requirements for the generator and the requirements for the recovery treatment facilities should be eased under both circumstances.

A Well, specifically, the record requires that you deliver standards for record keeping, manifest and reporting. All three. Those are only part of the general requirements, but those are needed for a permit here. Which, if any, of those should we relax or should we eliminate them altogether? How do you feel about that?

A Well, I heard in Rosslynn, that with reference to, for example, a salvage recovery facility, when giving

thought to exempting, we merely would have record keeping requirements for him under those circumstances. Is my recollection correct?

I also heard, in reference to the same salvage recovery facility, that you are considering easing any requirement for issuance of a permit for such a salvage facility for hazardous wastes; am I correct in that?

Q (Nodding.)

A That the reconditioning drum facility should have the same exemptions as the salvage recovery.

Q Do you really believe that relaxing these restrictions or standards on the generators would have a significant economic impact on your industry?

A Relaxing --?

Q In other words, would it make drums easier to get for your reconditioner? You mentioned to me one time some time ago that drums were not readily available, would this change that?

A I'm not certain that it would or wouldn't. I think the reason for the drum shortage, outside the purview of this meeting, the reason for the drums should just have to do with throwing away light weight drums, and therefore not have any significance to reference to EPA or even DOT at this moment. But I don't know whether

it would increase or decrease, and I have no thought on that.

MR. KOVALICK: Mr. Roberts.

BY MR. ROBERTS:

Q Mr. Hershson, when you were talking about the transportation requirements, I am being parochial about this, do you see any rationale in terms of the -- the motivation that this seems to be giving to recycling or recovery? Do you see any rationale in that portion of the Act pertaining to the transportation contols that would call for unequal treatment of materials? In other words, more rules on materials going to the trash dump than to the recycling facilities? Do you see any?

A Are you talking about incentives of both Acts?

Q Incentives of the hazardous -- RCRA?

A Yes. I see a very important reason for reconditioning treatment, because when you treat a used drum going through a reconditioning facility, you are, in effect, conserving your recovery resources. When you bury that material in a disposition facility, you are doing just the opposite. So there's great rationale in reconditioning treatment, yes.

Q What agency should regulate the safety mandate?

A Well, it seems to me that if EPA were to ask

DOT for the easing of these requirements, assuming the requirements have to be eased under your DOT regulations, but I doubt that they do, but assuming that they do, it seems to me that you would be violating the spirit, even the letter of your own Act where you are coinciding regulations with EPA. I don't see how DOT authority would be undermined or would be exaggerated.

Q Well, let me go back for a moment. One of the commenters wrote a card and tried to provide his analysis of the Hazardous Materials Transportation Act. I thought it was very interesting because he left out key words, "unreasonable risks," which is part of that definition.

Now if I had been polychlorinated biphenyl ~~polycoordinated by~~ phenon (??) pardon me for taking all of that, that is, to a waste disposal facility -- you're not allowed to do that anymore -- or a facility for recycling or a facility for commercial purposes, or placement for transport, that's a lousy word. All I am doing is making my point in terms of transportation safety. Do you believe that there should be different treatment given to that transportation of that particular material during the course of transportation because of the incentives portion or incentives aspect of the RCRA?

A Well, you are using a bad example for me when

you use PCB's. I don't think there should be incentives to give either transportation or anything else for PCB's.

Q What is the OD of 500 material?

A Just stay away from any such material. There is some toxicity that's considered to be more of a toxicity, not significantly acute in terms of the transportation portion that's being dealt with.

Q You have to be going to a waste facility, a recycling facility, or you have been going to someplace for commercial purposes. By the same truck, you may have three drums side-by-side. One billed to recycling; one billed to commercial user and a farmer's fill, for example. Do you feel like the rules affecting the Act should apply differently to the three different fills?

A I think you and I have a different concept about how these two Acts will work. In unison, that's very possible.

Q Now, if EPA came to you and said, "We would use your regulation concerning classifications; flammability, for example, insofar as transportation requirements are concerned. In other words, packaging requirements, flammable material for other requirements, EPA will endorse.

As a matter of fact, they have a disconnection

with the package which is different, and the case of Drum A against Drum B has nothing to do with you because of the transportation requirements that you have; that's the kind of package it is, and the shipping paper, the back writing and so forth. But the ultimate disconnection is not your concern. It is the concern of EPA and of this Act.

Q Then you say DOT should stay away from any terminology that uses words like "hazardous wastes," "DOT hazardous material," regardless of what the criteria?

A I don't necessarily say that. I think you also have categories of hazardous wastes. I hadn't thought about that.

Q Hazardous material poses same hazards?

A It poses the same hazards. It should be subject to the same DOT regulations, and the DOT regulations today makes no distinction as to where the drum is going.

Q I realize I have been belaboring this with you, but the point that addresses all the comments and all the expressions, is that DOT should do this and it sounds like DOT is being negative towards doing anything. I just want to draw out points of view from all its aspects.

The basis for asking you this is your statement

that some recognition should be given to these so-called "empty drums".

A Yes, but the latitude I'm not -- the latitude from DOT -- it's my latitude from EPA, and that's the great distinction here. It seems to give latitude, in my opinion, on both ends, not in the middle, not in transportation.

Q Okay.

MR. KOVALICK: Thank you, Mr. Hershson.

MR. HERSHSON: Thank you.

(Applause.)

MR. KOVALICK: Our next question, before I go on to Mr. Graziano -- Mr. Graziano might want to move to the podium -- I have a statement for the record.

The Panel's questions concerning why the shortage of reconditioned drums and the answer by Mr. Hershson that the shortage is because of the use of light gauge drums, I'd like, as representative of the Steel Shipping Container Institute to make a statement to rebut Mr. Hershson's statement.

So I will add Mr. Schultz, from the Steel Shipping Institute, to the end of this afternoon's speakers and we are planning on hearing from him then.

We have Mr. Graziano of the Association of American Railroads.

MR. GRAZIANO: Good morning.

MR. KOVALICK: Will you accept questions?

MR. GRAZIANO: Absolutely.

Considerable background has already been given on the subject by EPA in public meetings held to discuss the Resource Conservation and Recovery Act of 1976. EPA has been moving ahead developing regulations which affect transporters of hazardous materials. In 1976, the DOT published an advanced notice of proposed rule-making, HM-145, to deal with environmental and health effects materials in transportation. In a joint communique of September 22, the DOT and EPA notified the public of this hearing and presented a series of discussion topics. Those discussion topics were identified in the Federal Register by EPA/DOT, and also in a brochure. I would like to address those discussion topics one by one.

It is clear from the action to date that the EPA has taken the lead in developing regulations for hazardous waste transportation. Several proposals have been circulated to industry suggesting certain transportation requirements. DOT has likewise recognized a need to address this concern by issuing HM-145. While EPA has moved ahead as a result of the RCRA Act, DOT, as a

regulatory agency for transportation, must continue to cooperate toward the development of regulations for transportation which will not be conflicting, overlapping, or in contradiction with one another.

What approach should be taken? In the spirit of looking for a common solution for the problem of accommodating hazardous waste transporters, EPA should carefully review DOT quantitative and qualitative criteria for hazardous materials and adopt, where necessary, those DOT requirements. Where it is not possible for EPA to adopt DOT criteria, then EPA criteria should also be stated in the DOT Hazardous Materials Regulations as they apply to shippers and transporters when transporting materials not specifically covered by DOT regulations. Because of the interrelationship between hazardous materials which will be identified as hazardous waste and subject to DOT regulations, it is not sufficient to rely on publication of transportation requirements for hazardous waste solely by EPA.

Those regulations must be accommodated in the DOT Hazardous Materials Regulations. This accommodation can take place in several ways. However, by following the format of the DOT regulations, a separate section could be established for environmentally hazardous

materials. This section could cover requirements which are not consistent with DOT. DOT should review possible amendments to regulations to accommodate EPA concerns in the environmentally hazardous area.

Should DOT modify its definition of hazardous materials to include all hazardous waste? Yes. Materials which are identified by the EPA as requiring identification, packaging control, classification, and labeling should be properly identified under the DOT regulations.

This may require DOT establishing in the regulations a new class of materials as suggested above -- environmentally hazardous for those materials which are not directly covered by DOT regulations. This would mean the adoption of EPA criteria for those materials, with specific identification found in a separate section within the DOT Hazardous Materials Regulations. In this way transporters and shippers would have a ready reference to the transportation requirements for environmentally hazardous waste. DOT Hazardous Materials Regulations for transportation are the proper repository for regulations which affect transportation of materials identified as hazardous.

Should EPA then incorporate DOT regulations? EPA should publish a set of regulations which deal with

requirements of the Resource Conservation and Recovery Act. However, EPA regulations dealing with transportation should also be found in the DOT regulations.

Discussion Topic No. 2. Where EPA and DOT concerns on materials are the same, flammable materials, for example, EPA should carefully review DOT requirements and adopt them. Where DOT regulations do not speak to hazards such as bioaccumulative, carcinogenic, infectious, or lower degrees of toxicity, then a special category for these materials should be established, as I indicated above. This adoption is necessary if the cycle of waste generation, generation, and disposal is going to be successfully completed by all persons who have a responsibility for meeting these requirements.

I would recommend the establishment of an environmentally hazardous classification for adoption by DOT. The establishment of this category, in my opinion, is consistent with DOT efforts to logically identify the kind of hazard presented by the material. Materials which are environmentally hazardous only, do not present the same kind or degree of hazard in transportation as would hazardous materials. However, by establishing this class, it would alert shippers, transporters, and emergency services personnel of the

type of hazard presented by these materials. Its establishment conveys the concern of the EPA for the material. Where a material is both a DOT regulated material and a material regulated by the EPA, an a-dition to the DOT description and classification should be provided for to adequately identify the EPA concern.

Discussion Topic No. 3. In my opinion and the opinion of the railroad industry, DOT should modify as necessary shipping paper requirements to accommodate EPA requirements. A separate document for transportation purposes is merely another burden on the shipping and transporting companies. A separate manifest system is not necessary to accomplish the purpose of RCRA. This proposed duplication can be avoided by coordination between EPA and DOT. We believe that information necessary to satisfy both EPA and DOT can be accommodated in a single shipping document.

Topic No. 4. The current DOT requirements are sufficient for handling hazardous waste in transportation when hazardous waste meets the requirements of DOT regulations.

If DOT regulations are amended to include EPA hazardous wastes and a special class as recommended is adopted and shipping paper requirements are consistent,

EPA and DOT could give consideration to adoption of a label or a placard which would be consistent with DOT requirements; but its use should only be required where DOT does not provide for either a label or placard.

Topic No. 5. Registration requirements seem to be an unnecessary burden and a duplication of effort insofar as the transporters of hazardous materials and wastes are concerned. All rail carriers are currently required to be registered with the Interstate Commerce Commission. In addition, rail carriers are an immediately identifiable transportation entity. Every carrier is listed in the publication known as the Official Guide, which includes the name, title, and location of all principal officers of the company. Suggesting that a further registration is necessary for these carriers is essentially an overlapping of current requirements imposed by other jurisdictions. I do not believe it is necessary for rail carriers to register as transporters of hazardous waste. If the information is needed by the EPA, it can currently be obtained from other federal entities.

Topic No. 6. With respect to notification of spills of any material identified as hazardous, a single telephone response number should be utilized. Since the Coast Guard has responsibility within the DOT for

emergency response, it would seem logical to suggest the Coast Guard as the organization to notify the spills of hazardous waste. Significant benefits can be derived by both EPA and DOT in having a single telephone number for referral of emergency response. A single telephone number would be of immense benefit to the shippers, transporters, and other public organizations who would have only one single number to call.

With respect to DOT incident reports, it is my opinion that these reports can be modified to provide the necessary information desired by EPA regarding a spill of a hazardous waste. This action would be preferable to EPA developing a separate and distinct report for hazardous waste. Those reports should be filed with DOT. If DOT adopts certain hazardous waste requirements, then reports could be shared with EPA. When a material is spilled which is both a DOT hazardous material and an EPA environmentally hazardous waste, a single report required to be filed with DOT by the shipper or carrier could be shared with EPA, assuring consistent application of information.

Topic No. 7. Current DOT regulations with respect to spilled material address acute hazards principally directed to the protection of life, whereas the

EPA is principally concerned with materials which affect the environment. These concerns, while apparently addressing different goals, are not necessarily inconsistent.

It is possible and even urged that if spilled material must be handled that cooperation between the EPA and the DOT would be beneficial to the shipping and transporting Washington services, as well as other agencies that are concerned about spilled materials.

I might add that regulations which set the control goals should be provided for on a performance oriented basis and not intend to write, all in detail, all the necessary steps by chapter and verse.

Topic No. 8. Significant progress has been made by transportation companies involving response to spills. Companies have developed procedure manuals and programs for emergency respnse and cleanup. The railroad industry has developed a program to identify materials which when spilled present hazards to the public and has recommendations on cleanup and neutralization of such spills. This information has been developed in a computer format and will be available in hard copy. Company procedures have been in existence for some years, and insofar as the rail transportation of these materials

is concerned, they have been effective.

Prior to developing an opinion on a regulatory program on cleanup of spills, a thorough examination of this area should be made by EPA and DOT.

Topic No. 9. The loading and stowage chart developed by the DOT should only be modified after careful review and consideration by technicians of the consequences of such modification. For example, if the modification of the loading and stowage chart will create a more hazardous condition, then it should be avoided. If, on the other hand, it can be shown that mixed loading and stowage of materials will not create a more hazardous condition, then the requirements of the loading and stowage chart could be modified.

As Director of the Bureau of Explosives and principal spokesman for the railroad industry in matters involving hazardous materials, I urge DOT and EPA to work toward the goal of developing a single set of transportation regulations covering EPA hazardous wastes for shippers and transporters, thereby eliminating conflicting, overlapping, and contradictory regulations.

Conflicting, overlapping, and contradictory regulations will produce nothing more than mass chaos for who issue the regulations by people called upon to

implement them. This sentiment was most pointedly made in a seminar I attended earlier this year in Los Angeles. During a question and answer period, a Traffic Manager of a small company asked the question, "With DOT, EPA, OSHA, and other agencies all issuing regulations and requirements, is there anyone at the federal level looking out for the concerns of the people who must use these regulations on a day to day basis so that we don't have conflicting, overlapping, and contradictory requirements?"

I suggest that that is the job of the Panel at the table. Thank you.

MR. KOVALICK: Thank you, Mr. Graziano.

(Applause.)

MR. KOVALICK: Alan, will you start?

MR. ROBERTS: All right.

BY MR. ROBERTS:

Q Again, I must ask you the question I've asked others, "Do you see any rationale or logic in DOT promulgated safety regulations? Whatever distinctions would be made into the area of the discussion here today. It can apply only to waste materials, apply to all materials with similar characteristics?

A I know you've asked this three or four times,

but frankly I am having difficulty understanding your question. Are you seeking to elicit from the speakers whether or not DOT requirements go far enough or whether the law permits them to go far enough?

Q I've a fundamental problem, Mr. Graziano. In terms of applying the Hazardous Materials Transportation Act, there is no reference to the term "waste" to materials, whatever form or whatever intended purpose they may have. So we have again three materials that have material-like hazards that went to three destinations, two of which have something to do with the RCRA jurisdiction, one of which has nothing to do with RCRA?

A Point A or B for commercial purposes. All of the materials fall within the same criteria, whatever that may be as to their risks during transportation decided by the materials. I have to pursue this with you because of your reference to hazardous waste, and I realize that's the topic at this particular hearing "hazardous waste".

But in asking you the question, the purpose was to find and determine your views relative to all materials posing a like risk during transportation, and do you feel that the same rules should apply to these materials or are you only addressing yourself to

hazardous wastes?

A Well, again, are you talking about only hazardous waste regulations; are you talking about other aspects of EPA regulations which might involve transportation. For example, the Hazardous Substance Act.

Q No. Excuse me. Allow me to clarify it further.

You and Mr. Harvison and Mr. Hershson, all three were rather unanimous in supporting DOT's adoption of regulations pertaining to the materials presently under consideration by EPA for regulation of hazardous wastes. The question is, are you -- is it your purpose merely to keep it under DOT in one bag, or is it a concern for the safety of these materials, and if so,is your concern only to materials having like hazards, regardless of their destination?

A Yes, I don't think destination really makes any difference, does it, because it is still involving the transportation cycle.

Q Right.

A And I think that point to me is pretty clear.

Q Okay. Then do you see any need for DOT to make specific reference to the term "hazardous waste" as a definitive mechanism to get into the regulations of materials that it does not presently regulate?

A If your question really is, does the Act contemplate the use of the term, obviously, it doesn't, but does it contemplate the use of the kinds of hazards that we're talking about, again, I think the answer is yes.

I think you're posing an unreasonable risk to life and health and welfare, in a manner, in a form, in quantity of the sufficient latitude. Now, whether or not you care to interpret it that way, I think is another question. But I would interpret it that way, and it gives you the opportunity, if you choose, to address waste materials, and for that fact, any other materials which may have a "hazardous" effect. And that term "hazardous" has been used by several organizations, OSHA, EPA, even the Consumer Product Safety Commission. Even some toys are hazardous, but they are not hazardous in the extent that they were previously hazardous.

Q Just like I get from your statement today, they may, and maybe from your viewpoint, it's possible, that when you're referring to hazardous wastes, you're adopting regs.

A I think you can. If you are not adopting regulations that are referenced in a specific reference to hazardous wastes, it is certainly applicable.

I think your statute accommodates the opportunity

for you to determine that certain materials presents -- certain waste materials -- presents substances as hazardous and therefore are capable of adoption.

Q I would have to agree with that. In some areas, reading the draft material, I would assume that in all circumstances, sludge coming out of the waste water plant, which is waste.

A I don't know that, but it's possible.

Q And the wastes out of hospitals, places like that, medical facilities. You see it in terms of the placarding, that whatever placarding that is adopted should be consistent with DOT requirements?

A Yes.

Q Is that present DOT requirements or contemplated?

A I don't talk about contemplated. I am talking about current DOT requirements. In the adoption of the current placard scheme, suggestion is made that the symbol, the key word, and the color of the placard indicate in some references the kinds of hazard that exists for the material.

And if the material is hazardous, maybe there would be a green placard or some other symbol on it, that symbol and that wording should be such that it would indicate to those that have to deal with the material what

the hazards are that the material poses. So, we see by your statement when you say "consistent with DOT requirements" for placarding, but as they are right now?

A Yes. I feel that it is necessary in this process to go right now to suggest that an expansion is necessary as you go about the formal rulemaking on it, and the comments of industry and the public to determine what.

Q Perhaps you may want to clarify your statement because it's much clearer the way I heard it, I didn't read it, as to what you really meant by that particular --

A Well, let's just change this. Simply, if a DOT requirement consists at the moment of circulating placards under EPA, if the material meets the DOT requirements, it should be adopted. The placarding system is the manner and the means of identifying the hazard. If, however, a material which is not identified by DOT but is identified as an EPA hazardous waste, it has to be identified for the public through the placarding system. It can be worked out by that placarding system, but it should be consistent with the DOT requirements.

MR. KOVALICK: Could I just ask a question following through on that?

BY MR. KOVALICK:

Q Suppose, for example, waste containing some toxic materials which might normally fall under the poison class except that the definition is not within the current DOT range, so there's no placard today for that material. So would your suggestion be then that we urge DOT together create a new diamond-shaped placard, in order to be consistent with something, or on the other hand, that EPA have a marking or different shape so as not to be confused with DOT. That would be another option that is not inconsistent because DOT is silent. So are both of those or one of those preferable?

A Either of those options are worthy of discussion.

Q So the point is, DOT is silent, which is what Mr. Roberts is driving at. There is no inconsistency.

A That's a very important point that was brought up earlier, where there is no requirement, we have to develop something new, either collectively or individually.

A That's correct. But even in developing that proposal, I think you should review the DOT requirements, for example, for the diamond-shaped placard and other criteria that they have already develop-d. I suppose what we are saying is, that we prefer -- do not try to reinvent the wheel on the whole scheme.

BY MR. ROBERTS:

Q Let me go back again. Based on what you know right now, about everything that's been under consideration, in drafts and scope, say, in your opinion right now, the principal representative of the AAR, the Bureau of Explosives, as you see right now, do you see a need for expansion of requirements, for other further material?

A No, I think that that would have to be looked into, Alan. I would want to review that very carefully. I don't think that this is the forum for such decision or any expression of an opinion without reviewing it, would be acceptable.

Q Well, okay. I want to ask you one more question, hopefully. Question No. 7. "In the event of a spill, the material cleaned up may become a hazardous waste. Should DOT or EPA develop the regulations for handling that spilled hazardous material?" I would like to refer to one section of existing DOT regulations, I'm really not either bragging or complaining about it, but it is there. It concerns Section 174.57, "cleaning cars which has hazardous material which has leaked from a plackage in a rail car or on other railroad property must be carefully removed." End of rule.

I would go back to the question, "In the event

of a spill, the material cleaned up may become a hazardous waste." I think that's a logical assumption. Should DOT or EPA develop the regulations for handling the spilled hazardous material?

Now, we can hook this particular rule to the word "remove". Where, how, what means, whatever, it is a suggestion that EPA or DOT further develop regulations that would address this particular area?

A I'm not suggesting any further regulations with respect to that, at the moment. I think what I am suggesting is that before a rulemaking is put forth to the public which suggests certain courses of action, and are found to have regulations not in company practices, that EPA and DOT review carefully to see whether or not they are going to accomplish these objectives that you are trying to address.

Q In the statement there that the material must be removed, for example, it's pretty clear that you can't inspect either on railroad property or railroad cars. I agree with you it doesn't address where it should be removed to or how it should be removed, or even who should remove it. These are the questions that I think it falls under, fundamental, legal, fundamental problems of trying to codify a requirement detailing the removal

of material.

MR. ROBERTS: Thank you.

MR. KOVALICK: Mr. Edelman has several questions from the floor. Mr. Edelman.

BY MR. EDELMAN:

Q I'd also like to ask one question in reference to Item No. 9, about loading and stowage of hazardous wastes, specifically for the railroad.

Let me address the express concern to us, specifically in the State of California and Texas, that in the next year regarding incompatible wastes in transportation vehicles. It is my current understanding that the DOT regulations do address the loading and stowage of materials, but they are not that concerned with the mixing of chemicals. It is not to anyone's advantage to to mix a pure chemical if they are to be permeated to a product. Do you feel that this area should be addressed in the regulations since there is a very great potential that wastes that are picked up, be loaded into tank cars, multiple wastes, and the potential for mixing of incompatible wastes.

Should this be addressed by DOT or EPA?

A In my response to Topic No. 9, I indicated that if modification of the loading and stowage create

a more hazardous condition; in other words, the mixing of incompatible wastes, then that should be avoided. That should be looked at by technicians and people who are qualified to determine whether or not mixing of wastes is acceptable.

If, on the other hand, it won't create a problem, then I think that loading and stowage could be modified. Now, I think you ought to be mindful of the fact that the loading and stowage chart basically speaks to individually packaged materials, and does not, I believe, contemplate materials which may have more than one hazard that are contained in a single container. And I think your question goes, what happens if we have a big tank and start putting three or four different kinds of wastes in it.

My answer to that is if three or four different kinds of wastes are not going to cause a problem, then go ahead and do it. But if they are, and that should be again decided by the technician, then that should be avoided.

Q I still have a few questions and also a statement. The statement is, It appears, One. EPA should determine a list of materials, a duty of RCRA and inform DOT.

Two, DOT has the duty to regulate transportation of all materials designated as hazardous and a threat to the public, to the public safety or the environment.

Three, EPA should develop a commercial response system, a personnel qualified to handle spills, the experts in protecting the environment, the Coast Guards assistance.

And, four, EPA should establish various disposal sites and process facilities to destroy and dispose of all hazardous waste materials.

That is EPA's mandate.

MR. KOVALICK: And another statement which I should read, and then we will go back to questions.

If EPA defines material as hazardous, quote-unquote, be they a waste or not, then DOT should address the requirements involved in assuring the safe handling of that material to DOT's protection.

Let EPA define the hazard and DOT define the safe handling.

We're getting some mini statements from the floor here.

A general question: Does the Panel consider the word "waste" description of the hazard or a destination for the material?

And I guess the answer is "neither." It is a material, a kind of material.

Thank you, Mr. Graziano.

BY MR. KOVALICK:

Q Can the Panel or Mr. Graziano address how the railroads would respond to implementation of a joint EPA/DOT regulation on the State level by one or more State agencies. This makes reference to the fact that you may be aware that EPA is allowed to give the program, if you will, of operating hazardous wastes, some control to the State agencies, be it environmental, DOT, CSPC or joint arrangement.

Would you care to comment?

A Would you like to comment first?

Q From our perspective, we are endeavoring to require the Governor to make a statement as to who the responsible agency will be in terms of developing each part. The responsibilities we may undertake are under our CIA and if those include economic or safety, then they can be included in that plan.

A I listened very carefully to the word "implementation" and while our industry, I believe, has no problem with the implementation, I do suggest strongly that any state regulations that are adopted be

consistent and compatible with DOT, if not in fact in your image of that.

I think it is not in anyone's best interest to have regulations at the state level which are inconsistent with national regulations, when carriers and shippers must ship domestically throughout the United States. So that our urging would be that you adopt, the States adopt regulations, and those regulations be consistent, not a mere image.

MR. KOVALICK: Mr. Edelman, do you want to proceed with the questions you have.

BY MR. EDELMAN:

Q First of all, your statement dealing with the Coast Guard, in the event of an emergency, your response notification of a spill emergency situation, you recommended that the Coast Guard be an agency to whom a spill situation is reported.

You, by this comment, are proposing establishment of a federal agency, a response system, the way we are referring to reporting only.

In a particularly bad winter w-en you are reporting to the Coast Guard, you didn't seek emergency aid from that Coast Guard number, did you?

I'm not sure if that's a plea or not.

A It sounds like one of my constitutents here.

The Coast Guard, as I understand it, the DOT people can correct me if I'm wrong, have prime responsibility for spill response and spill notification in the Department. And I believe, Alan, that that is the telephone number that you use for notification when a hazardous material gets spilled, is that correct?

MR. ROBERTS: Yes.

A It would seem to me that if that number is already established and in use by OHMO, it would circulate it to the world, if that number should be continued to be established, we don't need to establish another number to accomplish the same purpose.

MR. ROBERTS: I'd better qualify that.

The reporting requirements in the hazardous material regulations under Sections 15 and 16 concern any requirements for the immediate reporting of certain types of accidents, either high cost accidents, if that's the correct expression, high consequence, more than $50,000 property damage, injuries or injuries requiring hospitalization and fatalities, that are directly involved. This is an immediate telephone requirement and it has no direct relationship under the spills contingency plan.

The spill contingency function, which is handled

separately through the immediate reporting system, for serious hazardous materials accidents, I would give the Agency the information necessary to make a judgment as to whether its investigator should be assigned to the scene to investigate the accident after the fact, but not to participate in the spilled clean up type responsibilities.

That's a preview of that particular regulation.

MR. TRASK: I have a couple of questions.

BY MR. TRASK:

Q Should there be filings with other agencies, such as sent to EPA, a copy of the DOT reports?

A I think EPA should receive copies of DOT reports. Those regs should be modified to reflect your concern about hazardous wastes.

I believe DOT could, at least through the use of its system of reporting, provide you with copies of those reports.

MR. ROBERTS: Under the Freedom of Information we would be required to if they asked for it.

MR. TRASK: Another question in this same general area.

BY MR. TRASK:

Q Mr. Graziano, you stated that you did not feel that a duplication of shipping documents was necessary.

Since the manifest forms an intricate part of RCRA, are you then suggesting that DOT shipping paper requirements, i.e., shipping certification statement or HM column, be worked into the manifest format and manifest be the preferred format?

A No.

Q Second part. What is Mr. Robert's opinion?

MR. TRASK: He says he has none.

MR. ROBERTS: As I stated earlier I have no notions about this whole thing. I am simply asking questions that may sound leading in my motivation, but I am just -- I am very interested in the outcome of this in terms of the attitudes and opinions of all commenters, concerning how could two agencies get together and work out this legislative mandate.

In what form or manner should we accomplish this purpose? I am mostly interested in hearing from commenters as to the extensive scope of the mandate of RCRA requiring implementation of additional control of the transport environment. I have no preconceived notions about what the outcome should be.

MR. KOVALICK: Mr. Trask, that was a very short answer to the question. However, let me just state that in deciding what information is required, that information

requirement should be found in the DOT regulations or shippers and carriers two views. I must say that DOT in recognition of the various formats that can be used for materials has not specified a format, rather they have specified information and that's important. The information is what's necessary whether it comes out on computer paper or whether it comes out on any other kind of paper, I think is of less significance. And the fact that the information that you require is there.

MR. MORRIS: I have a question from the floor, Mr. Graziano.

BY MR. MORRIS:

Q Section 3002 of the Solid Waste Disposal Act as amended by RCRA, particularly Subsections 1, 2 and 4, "The plant regulations (inaudible) of such hazardous waste to persons transporting such wastes." This language seems to require a new accurate manifest covering such wastes while in the hands of the transporter.

A It seems to me that it can be interpreted and looked at in more than one light. For the transporter to know that there is two percent carbon tetrachloride, two percent mercury lead and five percent of something else and on up the ladder, ad infinitum. It's not going to serve its purpose, it's just pointing out material,

even if its spilled. Our requirements are eventually laid down as to how that spill must become commented.

It doesn't serve the transporter and isn't of significant benefit to have all the percentage breakdowns of the materials, would have all of the materials identified, especially since material happens to be flammable and/or solvent. And, there are 10 or 12 types of solvents in a composition.

MR. ROBERTS: Let me inject something in there. One of the concerns that has been raised in verbal communications is labeling and placarding coming from Section 3002, specifically subparagraph 2. I think the key words there should be recognized to the last few words.

In the paragraph it says labeling practices for any containers used for the storage transport of a disposal of such hazardous wastes such as identified accurately as such wastes. I would not say that the present DOT label would in any manner accomplish the purpose of that mandate.

To assign DOT a new combustible label has some people concerned. Any particular DOT label presently prescribed by the Department of Transportation regulations would accomplish this. In the DOT requirements, it is

important.

All this type of language would label the issues of marking, we would say marking of the contents which would come under Section Subpart D of your regulations 172.300 series mark contents on the packages. I believe that is to be clarified because there is a key genesis requirement as to who must place information on the packaging as to what's in that particular package. That's probably one of the most difficult things for some of the generators to accomplish, especially people cleaning up messes coming out of railroad cars, for example.

Q I beg your pardon.

A So here you have the words accurately identified. I think it's a very important set of words and I think everybody should very seriously pay attention.

MR. KOVALICK: We have a couple more from the floor. This is in reference to our brief discussion about states supplementing RCRA. Is the speaker inferring that the states should not be allowed to enforce regulations or stringent federal regulations even though they feel that federal regulations are inadequate?

A I think there would be some burden of proof that they are inadequate before you make the statement.

It is theoretical. I think you have to adopt the assumption, at least for the moment, that for purposes of the discussion, that the EPA has the mandate from Congre-s to develop regulations which will satisfy that mandate. Whether or not it satisfies everyone's liking remains to be seen. However, if states do have materials which they feel should be regulated under the RCRA Act or even under DOT, they can petition EPA or DOT and have relief or amendment of the regulation and that's the mechanism that should be used rather than establishing their own criteria and their own requirements over and above the last band which is required at the federal level.

MR. KOVALICK: Just to clarify for the questioner, I feel I should point out both sections 3009 of RCRA which says the states cannot have requirements that are less stringent than EPA's in terms of adopting and creating a state program. However, it is silent on being more stringent. Section 3006, it talks about word such as "equivalent to the federal program and consistent with state programs, but not identical". The word "identical" does not appear in Sub-title C.

So there is a dilemma here which basically says that federal regulations are a floor and this questioner is implying that "is it not possible for a

state to go above the floor" and I guess in fairness I would have to say it is technically possible, however, you are urging them to use the mechanism of developing the regs now nationally rather than doing that on a state by state basis.

This is in the manner of a statement, I gather, EPA should petition the DOT for an amendment to 49 CFR 149.201 for shipping regs such as the hazardous material wastes and oils, gases, poison, et cetera with appropriate labels. Let me answer yes, that's possible. That's why I address the large percent, 90 percent to a question mark for materials. The others could be identified in a meeting in accordance with this established DOT procedure. So this is a question related to Mr. Graziano's statement -- Mr. Harvison's statement -- of petitioning DOT for changes.

(Discussion had off the record.)

MR. ROBERTS: A number of these questions we have here are really -- have nothing to do with Mr. Graziano's presentation. I suggest we save some until later. They have to do with jurisdictional matters and intrastate carriers and things like that.

Mr. Graziano, as he stated, I think, only represents interstate carriers. The only intrastate

carriers within the United States, I think, haul logs. I don't think we are covering them this week. So I prefer to hold those until later on.

MR. KOVALICK: We will save those.

Thank you very much, Mr. Graziano.

(Applause.)

MR. KOVALICK: I would like to press on with the schedule, because during the question period, someone indicated that they wished to give a statement, a Mr. Gordon Russo of Washington, D.C. following Mr. Schultz of the Steel Shipping Containers Institute.

To press on with the schedule. This afternoon we will work until 12:30 with Mr. William Johns of the American Trucking Association. Yes, he is available.

MR. JOHNS: (Tendering document to the Panel.)

MR. KOVALICK: Will you accept questions?

MR. JOHNS: I will be more than happy to accept some questions and reject others. Some of them might be beyond our particular interest.

MR. KOVALICK: Fine. Thank you.

MR. JOHNS: My name is William E. Johns, Director of Safety and Security for the American Trucking Association, Inc.

In Docket HM-145 of the Office of Hazardous

Materials Operations, American Trucking Association, Inc., filed comments that the Department of Transportation should be the sole federal authority for safety, health and environmental regulations governing transportation. We wish to unequivocally restate that belief at this time. This is the only way in which a well structured and well coordinated set of regulations can be developed. As different government agencies, such as, EPA, OSHA, DOT, the Department of Energy, DOD, NRC, Consumer Protection and Safety Commission, attempt to carry out their Congressional mandates, industries of all types are being subject to overlapping, duplicative and sometimes conflicting regulations of each. Industry is subject to the visitations of armies of compliance personnel from these agencies, each attempting to enforce and achieve safety in its own way. In this climate, the compliance problems of industry are being unbearable.

In considering the need for regulation of "hazardous wastes", it is important to remember that, for materials meeting present definitions of hazardous materials, the regulations of the Department of Transportation apply whether the material is newly-processed or is a waste material. In response to inquiries from industry, the Department of Transportation has clearly

stated this position. Therefore, it is only logical that DOT extend its functions to exercise control over those additional commodities which do not meet the present definitions of hazardous materials, but which may create environmental problems under conditions incident to transportation.

We do not believe that the end result should be accomplished by any modification of the present DOT definition of hazardous materials. The hazardous materials regulations should remain unchanged. Any commodity currently subject to the hazardous materials regulations have proven their effectiveness and are adequate to control the environmental hazards of any commodity subject thereto.

Additional substances identified as hazardous waste under Resource Conservation and Recovery Act and which do not meet the current DOT criteria for hazardous materials should be dealt with separately from those substances which do meet the hazardous materials definitions. For the purpose of transportation regulations, it will be essential to maintain clear distinctions between the DOT regulations for hazardous material, either new or waste, as they are understood in the transportion community and those hazardous wastes which are

not presently subject to regulation.

To the extent that it is necessary to establish classes of hazardous wastes, every effort must be made to minimize any confusion between the classes of waste and the present DOT classes of hazardous materials. We urge that no hazardous waste be listed in transportation regulations unless it creates an acute hazard to persons or the environment under conditions likely to occur during transportation.

For example, if a substance is hazardous only after prolonged chronic exposure of personnel, or becomes hazardous to the environment only after large quantities have been left in place for an extended period of time, its transportation should not be subject to regulation if the quantities handled do not pose a threat in an actual transportation movement. We know of no evidence to indicate that normal post-accident cleanup procedures would not afford adequate protection.

We believe that a complete separation of the present controls for hazardous materials and those for hazardous wastes offers the least likelihood for confusion, misunderstanding and inadvertent violations of the regulations. Parts 180 to 189 of Title 49, CFR, are reserved for expansion of the hazardous materials regulations.

They would appear to be available for use in the promulgation of appropriate DOT regulations for the transportation of waste materials warranting such controls.

Motor carriers are deeply concerned with the interaction of RCRA Sections 3002, applicable to generators, and 3003, as applicable to transporters, insofar as they may tend to cause a further proliferation of shipping documents. In the implementation of regulations under RCRA, we urge that all appropriate references use the term "shipping paper" rather than "manifest" which, in the minds of transportation personnel connotes a specific kind of shipping paper. For guidance in this matter, we urge that you consider and incorporate a definition of "shipping paper" essentially as it is set forth in Section 171.8 of the current hazardous materials regulations, backed up with appropriate references to the information that must appear on the shipping paper such as that required under the hazardous materials regulations as set forth in Section 172.202 and 172.203. This approach would permit the continued use of commercially available and presently used shipping papers such as the Uniform Straight Bill of Lading, in its various forms.

Interstate motor carriers are currently affected

by the Bill of Lading Act which specifies certain information which must be on all shipping papers. For shipments of hazardous materials, the special prescribed information as to the proper shipping name of the commodity, its hazard class and the prescribed shipper's certification can be readily entered. Similarly, the DOT requirements for highlighting the presence of hazardous materials can be met by existing types of shipping papers.

Present practices of showing the name of the shipper and the cosignee on shipping papers should adequately meet the mandate of the RCRA. The act of the carrier's employee in signing the shipping paper when picking up the load, and the signature of the cosignee's representative obtained upon delivery should afford adequate proof that the transportation was properly carried out. The transporter (carrier) has neither the ability nor the right to independently determine that the shipper (generator) has cosigned his material to an authorized disposal site. The transporter's obligation, for any type of shipment, is to deliver it to the destination designated by the shipper. If a hazardous waste is cosigned by the generator to an improper destination, the responsibility for the violation must rest wholly with the generator and/or the receiving point.

Transporters cannot be burdened with a multiplicity of shipping papers covering a single shipment. For this reason, in an actual transportation movement, it is essential that shipping paper requirements for shipments of hazardous waste utilize the approach already in effect for DOT-defined hazardous materials so that transporters may continue to utilize existing forms.

With respect to labeling, marking and placarding of shipments of wastes which meet the present DOT definitions of hazardous materials, we wish to reiterate our position that such materials be subject only to the present DOT requirements. In the absence of any information to the contrary, it is our belief that the DOT-prescribed class gives an adequate indication of the environmental hazards of the material and that no additional labeling, marking or placarding is necessary.

As stated previously, we believe that special labeling, marking and placarding of shipments of hazardous waste should be limited to those substances which would create an acute hazard in the one-time or occasional accidental release, as might occur during transportation. There should not be any need to require additional controls for substances which create hazards only over long periods of chronic exposure. Any additional labels, and

placards found necessary should be developed by DOT to insure compatability with requirements for hazardous materials.

We are aware that provisions of the Hazardous Materials Transportation Act of 1974 authorize the registration of transporters of hazardous materials. So far, no effort has been made to implement this provision of the law. To do so seems likely to create enormous complexities for motor carriers who are already subject to a multiplicity of registration requirements.

A motor carrier generally cannot operate in interstate commerce without first obtaining authority from the Interstate Commerce Commission. Present ICC authority for the transportation of general commodities normally authorize the carrier to transport hazardous materials, with the possible exception of Class A and B explosives and materials in bulk. Such authority would also permit the carrier to transport hazardous wastes.

In the case Long Island Nuclear Service Corp. Common Carrier Application, the ICC held that radioactive wastes and contaminated materials to be transported to burial sites are "property" within the meaning of the Interstate Commerce Act, and are subject to ICC regulation. A similar interpretation could be extended to other

classes of hazardous wastes.

The interstate carrier holding ICC authority must generally register that authority with the appropriate regulatory agency of each state in which it operates.

Similarly, most states require that intrastate carriers obtain authority from the state regulatory agency before they can commence operations. In some states, such as Colorado, a trash hauler must obtain authority from the state. If the trash hauler is not subject to state regulations, he is often subject to health department regulations of local jurisdictions, which may also include licensing.

Overall, those conducting truck operations of all kinds are on record with one or more governmental agencies. We feel that additional registration requirement for transporters of hazardous wastes would be unduly burdensome.

We see no way in which registration would expedite the control of an emergency such as a spill. The principal concern would be to identify the material and then take the necessary steps to clean it up. Identification of the material, its source, and its destination are achieveable through insp-ction of the shipping paper. If the transport vehicle is on the scene, the

identity of the owner and operator can be readily obtained and recorded and would be available for future follow-up. If the transport vehicle cannot be identified for any reason, the existence of a registration requirement would be of no significance.

With respect to the reporting of transportation incidents involving both hazardous materials and hazardous wastes, we believe it is essential that all such reporting be made to one agency, preferably the Office of Hazardous Materials Operations of DOT. We urge that any extension of the requirements for immediate reporting of hazardous wastes incidents utilize the criteria now in effect with respect to the immediate reporting of hazardous materials incidents. We also urge that requirements for written reporting utilize the present 5800.1 form required by DOT for the reporting of hazardous materials incidents. With a minimum of change, we believe that this form can be adapted for both purposes.

With respect to the transportation of hazardous materials, as presently defined and controlled by DOT, the regulations have long required that shippers and carriers work to make the regulations effective within their operations, and to conduct the training of employees that is necessary to accomplish the objective. American

Trucking Association, Inc., has made training materials available to motor carriers for many years, and this material has been updated to reflect this amendment. Our material covers the provisions of the regulations, the responsibilities of the motor carrier and its employees for compliance, the means available to insure compliance, and general information about the need to exercise the utmost care in the handling of hazardous materials. Such training could be expanded to cover the same areas of knowledge with respect to hazardous wastes.

We seriously question the feasibility of training motor carrier employees in the specific clean up techniques for different kinds of hazardous wastes. Our materials directed at the general commodities carriers do not now deal with the specific techniques for handling the present classes of hazardous materials in emergencies. Rather, we provide information as to the need to contact the shipper, or a centralized source of information and assistance such as Chemtrec.

The present regulations of DOT governing the loading and storage of hazardous materials have demonstrated their worth and effectiveness in avoiding mixing of substances. Barring a specific showing to the

contrary, we believe the present regulations in this matter are adequate for hazardous wastes.

Gentlemen, that's our statement.

MR. KOVALICK: Thank you, Mr. Johns.

(Applause.)

MR. KOVALICK: Do you want to start?

BY MR. ROBERTS:

Q Mr. Johns, now in your statement, you indicated that hazardous material poses an acute hazard during transportation. Can we assume from your statement that you are basically saying that materials presently regulated by this hazardous material prior to DOT, are the materials that should be regulated in terms of hazardous wastes in transportation.

A Yes, that's right.

Q Unless you are alleging that DOT doesn't express hazards at the present time.

A To our knowledge, we do pursue all those particular hazards, in our opinion. We recognize that there are some materials which in the disposal situation over a period of years may create a hazard for the public health, so we are limiting our remarks only to the hazards which might result during the actual transportation.

Q You are aware of some of the requirements of RCRA?

A Yes, I am.

Q As far as EPA?

A I think there is definitely an inference in the RCRA requirements that they approve of delivery of hazardous wastes, which I would not consider post-acute accurate hazard.

Q For instance, just let DOT stay away?

A We have no problem now with approved delivery form. We make deliveries; we make approved deliveries.

Q In the present DOT regulations for shipping documents, you made reference to, are you aware of the fact that the present DOT requlations, except for shipment by water, you are required to show the name of the shipper?

A I am. I am aware of that but on the bill of lading we do have that requirement.

Q And the bill of lading emanates from the Bill of Lading Act of 1930?

A That is right.

Q Are you with the Bill of Lading Act in decisions of interstate commerce which you recognize blind shipments? Do you know the term "blind shipments?"

A I am aware of the term but I am not that familiar with it.

Q What blind shipment is basically, where the buyer really doesn't know from whence the product came because it had been sold under the trade name of the shipper, who had not actually manufactured the product. That's about as clear a definition as I can give.

Getting to the point now, are you suggesting by your statement that the carriers always show the name of the shipper/generator. That it should become a specific requirement of the regulation and that the shippers be shown in all cases?

A We would have no problem with that as a requirement. In most cases we do have the name of the shipper and the cosignee shown on the shipping paper.

Q Is the name of the shipper on shipping papers not necessarily the name under the existing law and regulations be the name of the person who is actually the physical generator of the material?

A That's correct.

Q The person physically puts it on the vehicle and the document HM-112 that was still under debate, and it was made a requirement for shippers.

So I take it from your statement that ATA

would make a statement that the true generator shipper be shown on the shipping tag?

A Yes, I understand that at this time we would take no opposition to that.

Q Okay. Now recognize that there is an element of proof of delivery in the RCRA requirements so far as that aspect is concerned, taking into account your comment about acute hazards, whatever they may be, if EPA adopts requirements that go well beyond so-called acute hazards and accomplishing this mandate which presently is for DOT to repose requirements that relates approved delivery, or would you prefer to see that done before the EPA, independent of DOT?

A As a general principle, we would rather see this accomplished through DOT.

Q That in contravention stimulates in initiating a regulatory program involving ourselves with hazardous waste.

A We still oppose a position of regulations of those materials which do not afford an acute hazard during transportation.

MR. ROBERTS: But if -- okay. I think I understand what you are saying. But in terms of your statement on labeling, I don't know if I can find it now, if you

didn't mark it.

Are you aware that RCRA does require any usable labeling affirmation that was specifically identified or identified accurately such wastes in this other statement that jibes with that. In the transport requirements it says "Transportation of such wastes always be properly labeled." When you read that, going back to requirements 3002, paragraph 2, you made a statement about labeling. Were you talking about a DOT label or were you talking about a label that's addressed in 3002 which I -- DOT parlence marked the name of the content.

A Let me make a statement here. This is talking about the DOT label. But really we have not that much concern with labeling as this is a shipper or generator function which very seldom affects the carrier. Unless there is some restriction, the carrier operation is attached to that particular label.

Q Okay. Just one more question. In terms of the clean up responsibility, and I believe you tie your entire presentation to training.

Recognizing again RCRA's responsibilities, should DOT involve itself in clean up requirements or defer to the EPA's established requirements, assuming that to accomplish it, it must go much further. EPA must go

further than just addressing key hazards transportation.

A On the first instance, if you are referring only to hazardous materials, we don't believe that this becomes hazardous wastes automatically. It becomes a waste but is still a hazardous material and it self-destructs. In most cases we have only wastes, not often hazardous at all. If it is a hazardous substance, we believe that that should include the clean up and the process that goes with any accident or any incident.

MR. ROBERTS: Okay.

MR. KOVALICK: I have both a question of my own and one from the floor that seems to speak to this.

BY MR. KOVALICK:

Q The question from the floor is, "Acute hazards are the only ones to be regulated in transportation as your statement indicates." Are, therefore, environmental hazards which "prolong exposure" and not covered under DOT health and safety deal consistently with some examples of the DOT regs. On radioactive materials, again, the implementation is radioactive materials are often hazardous because of chronic and long term exposure as well as single or etiologic, which might not fall to the acute category.

Again, we're asking the question. Mr. Roberts

was trying to ask and I'm trying to ask, which is, as I understand your association's point of view on acute materials. Unfortunately, from your point of view, I lost -- for example, biocummulators, like waste PCB, so I understand you don't recognize perhaps the need for that but given that we have to do that, we're trying to get what you would recommend. That is, shall we take these materials as exceptions: carcigens, biocumulators, PCB's and shall we design regulations for this small subset of chronic hazardous material or wastes, or do you prefer to read all those regs in the DOT. That's the essence of what I am trying to get.

A I understand the problem. We've talked about it quite a bit. Getting back to radioactive material, I'll give you an example. If you expose six bulls to radioactivie material, they may not die on the spot, might not die for ten years.

Q That's the point of the question.

A But the exposure, that short period afterward would result in a bad condition. I think we should look at it as being acute condition. We have other materials I think and asbestos is one.

If an individual works with asbestos day in and day out over a long period of time, and his health can

be damaged. And this is my conclusion from what I've read. I would not consider that to be acute in the transportation sense. In the sense that the spill of asbestos and I think that you might get exposed to it for an hour, two hours, three hours, and then it is free loaded and taken on its way. I would not consider that to be an acute hazard.

Q I understand your contention but the scientific community is still out on that question. Well, I suppose carcinogens --

Well, I still would like to know what your association's judgment is regarding whether EPA should design those regulations, for that special set which already recognizes the problem as critical. As Mr. Graziano said, whether DOT should control those materials in the regs.

A We feel that the criteria should come from the scientific side of the community.

Q That's assuming.

A I would like to see the regulations by DOT.

Q By DOT, fine.

Thank you. I am sorry to belabor it but it is very interesting. Thank you.

(Luncheon recess had until 1:50 o'clock, p.m., on the same day.)

AFTERNOON SESSION (1:50 p.m.)

MR. KOVALICK: Let me reconvene our public meeting on -- joint meeting between the U. S. EPA and DOT.

Welcome to those of you who were not with us this morning. Our format is one of taking statements from individuals who have contacted us prior to the meeting, then taking statements from individuals who indicate an interest during the meeting.

We are not permitting questions directly from the floor to the person giving the statement. We are providing you an opportunity to list questions on cards and the Panel will ask those questions of the speakers.

Proceeding with the agenda that some of you have, let me alert the next two speakers: Mr. Fred Flowers,of General Electric, will follow the first speaker, and Mr. Bob Wilson of Stauffer Chemical, will follow Mr. Flowers.

Let me also remind you that -- two things that I mentioned this morning. Please register at the table outside the door. It is primarily for your benefit as well as ours. By registering you will receive a copy of the transcript of the proceedings and you will also be added to our mailing list for all regulations that are promulgated and proposed -- proposed and then promulgated in the Federal Register.

In addition, I mentioned this morning -- you heard discussions about draft regulations, referring to EPA. If that's news to you, if you will leave your name and address or business card at the desk -- registration desk -- we will mail you whatever current drafts we have available.

Finally, we've received a number of questions addressed to the Panel on a variety of subjects, including DOT and EPA authorities, spills and so forth. We are saving them, and if we get finished early enough and you want to stay, we will respond to these and then we will deal with questions from the floor.

Our main purpose is to hear the speakers today and gather information from them. We are going to try to be done between 5:30 and 6:00, for those of you who have travel arrangements and want some assurity. We will call a halt to this at 6:00 o'clock if we still have work on-going.

Now I'd like to call on Mr. Sigeti, of the National Industrial Traffic League, please.

MR. SIGETI: Thank you.

MR. KOVALICK: May I ask you a question? Are you willing to answer questions after your presentation?

MR. SIGETI: Yes, if my voice holds up. I have a

little laryngitis.

MR. KOVALICK: I think you will have to pull that mike down so that it will be close enough to you. It will help your largyngitis, hopefully.

MR. SIGETI: Ladies and gentlemen, my name is Ernest Sigeti. I am the Manager of Regulatory Services of Allied Chemical Corporation with offices located in Morris Township, New Jersey.

I appear before you, and make this statement in behalf of the National Industrial Traffic League. I am the Chairman of that organization's Safety Environmental and Related Regulatory Matters Committee. This statement is submitted in response to the Environmental Protection Agency's public notice published in the Federal Register of May 2nd, and September 29th's issue, pages 51625 and 6. The League, through its attorneys, submitted a 10 page statement on the subject of this hearing, dated July 1, 1977. The League stands by that statement and in the interest of saving time, will restate portions of that document only to the extent necessary for clarity.

The League is a voluntary organization of shippers, groups and associations of shippers, boards of trade, chambers of commerce, et cetera, located throughout the United States. The members of the League conduct

various types of industrial and/or commercial enterprises -- large, medium and small, and are substantial users of the various modes of surface transportation -- by rail, by truck and by water.

The League has been in continuous existence for 70 years and has participated in major proceedings affecting the members of the shipping public before the federal agencies with jurisdiction over transportation and before the Congress of the United States.

The League is dedicated to the promotion of a financially sound and efficient national transportation system. The League believes that this goal can best be achieved by regulation which is not duplicative or unnecessarily burdensome and complicated. The overlapping of jurisdictions, whether between agencies of the Federal Government, or between the National Government, on the one hand, and the states and their subdivisions, on the other, must lead to confusion and unnecessary duplication of effort and should be avoided whenever possible.

The day-to-day operations of the League are governed by its policies, which may be amended only at the November annual membership meetings. As pertinent to this hearing, the 1975 meeting produced the following two policies:

N-1 Safety Jurisdiction -- The League favors the Department of Transportation's having exclusive jurisdiction of transportation safety within the United States.

N-2 Recognition of Need -- The League supports transportation safety regulations that recognize the safety and economic needs of the nation.

A portion of my statement is labelled, "The League's Response to the 10 Questions Contained in the Federal Register of September 29 labelled Discussion Topics."

Topic No. 1. The first question in No. 1 is, "Which agency should take the lead in developing the regulations for hazardous waste transportation?"

The question seems to presuppose that presently there is no regulation of the transportation of hazardous wastes. Of course we all know that the DOT has had the responsibility of formulating and enforcing regulations applicable to hazardous materials (virgin or waste) while in transit since 1967 and the I.C.C. performed a comparable function in years prior to that. Thus, even as we sit here today hazardous waste materials are being regulated while in the stream of commerce.

MR. KOVALICK: Excuse me, I will have to ask you to move closer to the mike. The people in the back of the

room can't hear you.

MR. SIGETI: All right.

A more appropriate question might be: Should the regulation of hazardous waste material, while in transit, be transferred from the DOT to the EPA? Should the answer be positive? The next question necessarily ensues: How can waste hazardous materials be defined in relation to non-waste hazardous materials? That which is a waste product to one company may meet the lower standards of another. When such a product is rejected by the first company because of impurity or other reasons, would the EPA regulate its movement because the rejecting company feels it is a waste material or would the DOT regulate it because the receiving company views it as first class material?

All these questions can be avoided simply by having the DOT continue to regulate the flow in commerce of all hazardous materials, be they virgin, substandard, waste or what have you. The League believes this position is manifest because we can conceive of no particular reason why, for example, a leaking tank car of virgin sulfuric acid should be treated any differently by emergency personnel then an identical tank car of waste (spent) sulfuric acid.

I would call to your attention that 49 CFR 172.101 lists alphabetically all products which the DOT has found to present a danger via one or more of the modes of transportation. One will not find any differentiation in classification or treatment of virgin versus waste of the same product. Specifying on labels or placards that a particular commodity is being transported in its waste condition, would tend merely to confuse those who have a need to know, while the shipment is in transit.

The spirit of Section 1006(b) of the Solid Waste Disposal Act calls for the avoidance of "duplication to the maximum extent practicable, with the appropriate provisions of other laws. . . ." In this regard it is strongly suggested that your agency, or I should say Agency, execute a Memorandum of Understanding with the DOT as did the Atomic Energy Commission (predecessor of the Nuclear Regulatory Commission) concerning the transportation of radioactive materials. See the resulting regulations contained in 49 CFR 173.389 through 426. See also the Federal Register of October 11, 1977, pages 54856 and 7, which announces an interagency agreement among your agency, that is the EPA, and the HEW, the Food and Drug Administration, et cetera.

Another question in No. 1 is, "Should DOT

modify its definition of hazardous materials to include all hazardous wastes?" If a commodity poses a hazard while in transit, regardless of the Solid Waste Disposal Act, the DOT should impose regulations upon that commodity. This conforms to the language 49 CFR 172.100(a) which states, "The table set forth in Section 172.101 constitutes a designation of the materials listed therein as hazardous materials for the purposes of the transportation of those materials in commerce." In short, if a commodity presents a hazard while in transit, the DOT is obligated to impose regulations and, conversely, it is respectfully suggested that if a given commodity (whether waste or virgin) does not constitute a hazard while in transit, it should not be listed. The fact that a particular material left in a landfill for a few years might generate a hazard to the environment is totally irrelevant insofar as whether that material is or is not a hazard while in transit.

The spirit of Discussion Topic No. 1 might lead one to believe that the DOT has not been concerned, for example, with etiologic agents. Of course, that is not the case. See 49 CFR 173.386.

Topic No. 2. While I believe a large part of the League's statement up to this point, constitutes an

answer to No. 2, I would specifically add that if the DOT were to expand its list of current hazardous materials to include those waste products, which the EPA may define to be hazardous under conditions not associated with transportation, nothing positive would be accomplished. On the contrary, the transportation bill of lading will become burdened with additional information of no consequence to those who transport freight and might serve to detrack from vital information presently contained on shipping papers. Additionally, if freight cars, trucks, barges, et cetera, were to display placards for the EPA materials, it would dilute the impact of placards presently affixed to vehicles transporting DOT hazardous materials. In short, such placards and labels would produce an effect similar to the little boy who continuously cried wolf.

Topic No. 3. The hazardous waste materials manifest required by the Act is, to use the language of that law, for the purpose of assuring " . . . that all such hazardous waste generated is designed for treatment, storage, or disposal in treatment, storage, or disposal facilities . . . for which a permit has been issued as provided this subtitle: . . ." It would appear to the League that the purpose of the manifest is not related

to the transportation of waste material. The manifest will serve as an inventory control document. Again, the shipping papers, currently in use, should not be further burdened with extraneous information. However, if it is your Agency's desire that a manifest accompany hazardous waste shipments, it is suggested that the manifest be in a sealed envelope, attached to the shipping papers, thus not confusing personnel of the carriers.

Topic 5. It is presumed that the primary thrust of No. 5 is to assure that each hazardous waste shipment arrives at the proper destination; the purpose is not to assure the safety of the shipment while in transit. Under the circumstances, there does not appear to be a need for the transporters of hazardous materials to be registered.

Topic 6. As I have consistently stated, the League sees no useful purpose being served by treating the waste versions of given commodities (assuming one can define waste) from their virgin counterparts. In short, the current regulations concerning the notification of accidents and spills of hazardous materials in transit, should remain undisturbed.

Regarding Topic No. 7, the League takes no position on this question.

No. 8. It is believed that the answer to No. 6 applies equally to No. 8.

Lastly, No. 9. The League will require additional time to formulate a response to the question of waste mixtures. We propose to submit a written reply by November 9th.

Thank you.

MR. KOVALICK: Thank you very much, Mr. Sigeti.

Let me remind the audience, while we are asking our questions, if you want a card just raise your hand and one will be brought to you.

BY MR. KOVALICK:

Q I'd like to start with a similar question that I asked Mr. Johns earlier, which is, "Given that EPA has this mandate to recognize materials which would be called biocumulative, carcinogenic or mutagenic," is it your statement that DOT should stick to the currently regulated materials that they cover today?

I was unclear from your statement as to whether the League prefers that those additional materials are to be regulated; EPA to adopt supplemental regulations covering them or DOT to incorporate those additional materials. In other words, for DOT to recognize a broader mandate then they currently have.

A Premising your question, which I'd like to just first -- and that is, apparently, that something I said led you to believe that I thought the current mandate, Part I, 72.101 was immutable, for all times. That certainly is not the case.

What we are saying is this: That if a product, not presently regulated, should be regulated, because of its hazards evidenced while in transit, then the proper procedures, the appropriate procedures should be taken to initiate rule making proceedings before the DOT. Presumably any citizen can do that, and I would suspect that greater weight would be given to any petition filed by EPA then that by the ordinary citizen.

But that, plus the fact, that we also suggest a Memorandum of Understanding between the two agencies, should go very far in that direction. But if, in fact, there are numerous products which pose some sort of hazard. The previous speaker spoke of asbestos, and again, I take no position as to whether asbestos is or is not a carcinogenic agent. But the point is, for the sake of argument, that if one works with the product for 10 or 15 years, one has a higher possibility of obtaining lung cancer, for example. That seems to be an appropriate subject for OSHA, but I don't see what in the

world that has to do with a cargo or truckload, for that matter, of asbestos being shipped from one point to another. It constitutes no danger. The danger of placarding every possible conceivable item which might be dangerous, somehow or other, is that, everytime you come up with another product on which another label and yet another placard must be affixed, you are, regardless of your good intentions, detracting from the effect of those placards which already exist.

Just as the more regulations are promulgated, the more likely it is that they will be inadvertently violated in some form or other. This is one of those counterproductive efforts that have to be considered.

So when we sit or stand and think in terms of "should we regulate this, that or the other thing; come up with a fushia colored placard," for example, one must realize that one is detracting from the impact of other placards. It is not what we want, it is a fact of life.

Q Well, I didn't mean to extend the discussion into placards. I was basically, again, trying to focus-- not to belabor -- on this point that if there are materials, such as your example on asbestos or other biocumulatives, that do end up, in EPA's judgment, to be a hazardous waste, not because of transportation, particularly. Perhaps

because of disposal or other reasons, still speaking of where do you want those materials to appear, even though they may not have a transport risk, as you describe it, on DOT's 172 series, or do you prefer to have them appear under EPA?

A Neither of the above.

The law specifically says that they will be of benefit and the law specifically says that there must be a label. As to what color that label will be, how big and what it might say is something else again. But indeed, we now have OSHA labels; we have DOT labels; now we are going to have EPA labels. I would suggest that when we look at this container, it's going to look like that of a world traveler and when looking at a world traveler's suitcase you can't tell whether he's coming from or to New York, Brussels, Berlin, or anything else. And that's what you are running up against.

We just cannot label every blasted thing hazardous.

Q Well, I understand that point.

Let me move on to another item in your statement.

Do I understand, Mr. Sigeti, that, where you say, "shipping papers currently in use should not be

further burdened with extraneous information. However, if it is your Agency's desire that a manifest accompany the waste" --and I should correct that, it is the law that says that-- "it is suggested that the manifest be in a sealed envelope attached to shipping papers."

From that, I conclude that your position is that we should have a separate document called a manifest to accompany wastes. Is that correct?

A Well, attached to the current shipping papers -- right, that's what the law says.

Q No. That's your position.

A No. I am saying that the law says that there will be a manifest, so there is no point in our discussing the merits of it. It is the law.

Now the only question is whether it will be incorporated on the bill of lading. I have been in the transportation business since 1955 and that bill of lading is getting more crowded all the time.

Q Well, I just want to clarify. So it is the position of your organization that we ought to have another document accompany the waste then?

A The League always supports the law, whatever it may be. If the law requires a manifest, the League supports a manifest. However, the law doesn't say that it will be

displayed prominently or anything else. Now the beauty of the thing with an envelope is that, what reason do you need to see what the content of the product is unless there is a spill. Now you might write across the envelope, "Open in case of emergency"; in which case, there it is. But in 99 cases out of a 100, when a shipment is transported from here to there, I don't want the truck driver being puzzled and confused by what, at that moment, is of no consequence.

MR. KOVALICK: Okay. Mr. Roberts.

MR. ROBERTS: I really have nothing to ask you with regard to your statement. I have a comment. It points out one of the problems that I personally have, facing the mandate.

You made a statement here' written permission supported by a document in a sealed envelope. And then, almost ad hoc, you toss the statement in, well, it can be opened in case of an emergency. I would -- you know -- now that's a serious proposition. That's a very major suggestion you are making there.

A Any sealed envelope can be opened.

Q Well, I would suggest that your comments, the way it is committed here in writing, and the way you made your statement, you are suggesting that nothing be done

in terms of communication relative to these materials during transport. That only some arrangement be made through the use of a sealed envelope to get from Point A to Point C.

Now, my only comment to the question -- you suggest that the possibility of a statement being added to the envelope. I am suggesting that that is a very significant comment. And possibly, some people in looking at this thing, should look at things like that much more seriously then I would suggest has happened up to this point. Because, if the material does spill in transport, it does apparently become some form of a hazardous waste; if it is material that is listed by either agency.

MR. SIGETI: Well, hazardous, by EPA standards. We are talking about products which are hazardous by EPA but not by DOT.

MR. ROBERTS: Right.

MR. SIGETI: Which, almost by definition, I think requires some lapse of time as opposed to an immediate.

MR. ROBERTS: Well, I think we ought to get into that. Are you suggesting that because of a lapse of times in terms of, say, chronic toxicity, that nothing should be done immediately to clean up a spill should it occur in transportation?

MR. SIGETI: No, but if it should impose an immediate threat, then it should be under DOT regulations right now at this moment.

MR. ROBERTS: We are talking about the meaning of threat in terms of burning people, corroding them to death, immediately causing them fatality through inhalation of the vapors or the fact that the material is spilled and subsequently, due to that chronic exposure, some adverse event takes place. For example, a contamination of a rail car, where through several subsequent events, other materials are affected by it. Now, is there something to be done to clean it up? Is the material hazardous wastes at that time and should some regulatory control be imposed in terms of its proper disposal? It all ties back to the statement about putting the added comment on the envelope.

MR. SIGETI: Well, any comment -- well, that is in the event of a spill. Now everything you have spoken of follows that point; if there's a leakage or a spill or the container has lost its integrity. At that point the envelope can be opened, although I don't really consider that to be substantive or, getting in touch with the manufacturer, which is usually done in the case of the DOT, through the contract system. The problem with the contract

system is that it cannot be activated without knowing the name of the product. To come up with a list that might be in the manifest, and again, we have a manifest, whether either or both of us likes it or not, that act of Congress, if one were to open a manifest and find 2 percent of this, 3 percent of that, 5 percent of something else, unless one has a Ph.D. on the site with a chemical degree, I don't know what good that's going to do. I would submit that that certainly is no substitute for calling Chemtrec and telling them what the name of the product is on the bill of lading. And then they have their records and they will read off what to do in the next 30 minutes. And then if it's Allied Chemical Products, they will call me at 2:00 in the morning or some such other time. And, I will get in touch with the technical people in Allied who live with this stuff and we will then tell you what to do with it.

If anyone thinks they can take that manifest and use it as a substitute for actual knowledge of the manufacturer, I think he's grossly misleading himself.

MR. ROBERTS: Okay. I don't want to belabor it. I just want to read back your statement. Hopefully, not out of context. It's the last part on top of page 7. "it is suggested that the manifest be in a sealed envelope,

attached to the shipping papers, thus not confusing personnel of the carriers."

My only reason for raising this with you and added to that, a comment in terms of possibility from a similar consideration. I would request that possibly you investigate that further and possibly submit, consider the possibility that you may want to submit modified comments. Possibly.

MR. SIGETI: All right. I will take it under advisement with the League.

MR. ROBERTS: Okay.

MR. SIGETI: Hopefully, we will have a reply by November 9th, but I am not certain of it.

MR. KOVALICK: The only problem with November 9th is that is the day we are going to go to press with printing the record. We will be glad to have your comments after November 9th, but just everyone won't be able to read them, except in the docket book.

MR. ROBERTS: Just one other question that relates to some of your other comments about labeling. Looking at Section 3002, Subparagraph 2, how would you read the requirements for labeling as specified therein?

MR. SIGETI: In relationship to the EPA mandate under RCRA, and also in relationship to presently proposed

labeling requirements of the Department of Transportation. I will read the gist of it, it says, "labeling practices for any containers used for the storage, transport or disposal of such hazardous wastes such as will identify accurately such wastes". Mainly the last four words.

MR. SIGETI: Well this could be done in several ways that I can envision. One of them is, if the product has a name and if you're talking about waste from an industry manufacturing process, my understanding is that normally the same waste that is produced day after day in bulk is nothing new and is produced in such volumes that it probably will not be mixed. In which case it doesn't seem terribly difficult to me to produce the name for this product; have it on file with the Chemtrec, and then put that name on a particular label. I don't see anything very difficult about that.

One might also do what I believe has been suggested, and that is, come up with the chemical formula for what's in it. Although, I would strongly suggest that if the same product were in its virgin state, there is no label required, which in a sense, makes this law of Congress a little absurd. That is to say, if it is a little wasted, diluted or contains foreign matter, then suddenly we get hysterical and we start slapping labels

all over the place. I would submit that there isn't one iota or degree of increased danger in the product. So we come up with, what's to me, lacks rationality. So, in the end we have something, whatever this product is, which is fundamentally very dangerous in some respect or other, and heaven forbid we should drop a dead mouse in it. It's contaminated. It's waste. Now, the whole force of the federal government challenges it, and runs for us like Don Quixote.

On the other hand, if it's an identical product and is pure, no one seems to care about it. Now that may be a strange interpretation, but that's the way I read it.

MR. ROBERTS: I appreciate your comments because they have been along, more or less, along the line of a number of questions I have already asked you today, concerning the risks of all these materials in transportation, whether they be for purposes of going to a waste disposal or recycling facility or for some other commercial purpose, or a commercial purpose. Thank you.

MR. KOVALICK: We have one question from the floor and then we will proceed. This question says: "Since most waste products do hot have a commodity name, how do you propose to adequately describe it without the chemical composition information?"

MR. SIGETI: Well, it reminds me of my son when he was 3 or 4 years old. Most children think their fathers are the ~~found~~ foundation of all great wisdom and I never like to disappoint them. And so we went someplace and he would say, "Why is that called a chair?" "Well," I said, "because if they called it a desk, people would get confused." Well, that's the way adults get out of things.

I would suggest that all we do in civilization is put labels on things. I mean not DOT, EPA labels, but names. Now, in my opinion, we have a lot of Ph.D's around, and I am sure they can come up with names with 26 or more letters in them. And that seriously--it may sound somewhat joking --I think we can come up with names for most of these products, and then those names, and the importance of it, not with regard to this proceeding, but the hazard really is such, and I think the waste product as the DOT considers it, is getting to be more and more of a problem. That which we use to flush down a sewer system, we don't anymore. We are not allowed to. And we are an industrial society and we will be producing more wastes. We can't dump it in the ocean anymore. We can't dump it down an abandoned coal mine in Pennsylvania. We have to send them somewhere.

And we should, hopefully, be concerned and

to salvage something out of it rather than to continue to destroy the assets of the society, not to continue polluting the environment. We have to give these names.

Now the problem at Allied seems to be not so much with the manufacturer's formula or what have you, it is the research lab, where we have a beaker of this and a test tube of that. We are going to have to work on that sort of thing. There are various solutions we might have for that but that bears on Question No. 9 which I have promised I won't address myself to until the Environmental Regulatory Committee, which has been alerted, and I specifically asked for solutions to No. 9, until we reach that point.

But to suggest that we can't come up with names for waste materials, I think we give the scientists of this country a gross injustice.

And some speaker before me talked about how we have to put all these into the Chemtrec system. Well, I would suggest that all of you would be astounded if you ever went down to Washington to the Manufacturing Chemists Association's offices, to see all of the things they have identified. They have the generic name, they have the chemical name and they have the trade names. Hopefully, they are all cross referenced, and we keep

adding to this list. And they do this all on a pittance budget of $200,000 a year. So, I suppose, maybe for another $50,000 or a $100,000, we can come up with names and put in cards for waste materials to the extent that they pose a hazard while in the flow of commerce. If we are going to take everything, like cigarette butts, because cigarettes cause cancer, somehow, then I think we get to a point where we are making such a mess out of this problem that we can't solve it.

And just one little thing for a little humor before I leave. I think it is a disgrace if we don't mention HM-126. You remember I spoke about placards and what have you on a car of nitrogen, nitrogen being inert. If you put a green placard on for compressed gas because it's compressed gas and then when you take it out, then you've got, more or less the same atmospheric temperature, you have theoretically an empty car, but yet it's full of nitrogen. What placard will we put on it, and all that sort of thing. Is it hazardous or isn't it hazardous. It is not really unless somebody slids down into the tank car, in which case, he will be asphyxiated. So the attorney for the League said, "I don't see how you can make a statement like that. Here's something that will kill someone and yet you suggest we put no placard on it

because it is not hazardous. So I said to the great John F. Donovan, that more people are killed in water, would you therefore suggest that when we ship a tank load of water, we put a placard on it? The answer is obvious.

I think that's an extreme analogy of what we are doing here today, but I think it is valid relationship.

MR. KOVALICK: Thank you very much, Mr. Sigeti.

(Applause.)

MR. KOVALICK: While Mr. Flowers of the General Electric Company is coming forward, I have another question related to solid materials and related to EPA's definition of hazardous wastes. What we are contemplating is, again, we will try to get into that later, but let me refer the writer to the copy of the Research Conservation and Recovery Act, Section 3001. That is where it defines the criteria, that is, the factors we are to take into account. That may tide you over until we get back to the general subject.

Mr. Flowers, are you willing to accept questions?

MR. FLOWERS: Yes.

MR. KOVALICK: Thank you.

MR. FLOWERS: My name is Frederick D. Flowers and I am Senior Specialist - Technical Traffic and Hazardous

Material, Nuclear Energy Operation of the General --

MR. KOVALICK: They can't hear in the back. Would you get a little closer to the mike.

MR. FLOWERS: Okay.

My name is Frederick D. Flowers. I am Senior Specialist - Technical Traffic and Hazardous Material, Nuclear Energy Operation of the General Electric Company, located in San Jose, California.

My purpose in appearing here today is to present comments on proposed rules for the Development of regulations for the Transportation of Hazardous Waste on behalf of the General Electric Company, with corporate offices in Fairfield, Connecticut.

The General Electric Company, as a shipper and transporter of hazardous waste, make the following comments in response to discussion topics set forth in Federal Register Docket 77-28591, September 29, 1977. I would like to go over this by topic.

Discussion Topic 1. We believe that the Department of Transportation (DOT) should be the prime federal regulatory agency to develop regulations for hazardous waste transportation. Our position is predicated on the years of experience and outstanding record in the control of hazardous material and the thousands of materials

already regulated by the DOT, which should not be overlapped by Environmental Protection Agency (EPA) regulations.

The current approach to be taken on hazardous waste is to allow present DOT regulations to apply for those items already regulated as hazardous material. The EPA could incorporate these materials by reference to DOT regulations.

Those materials designated by Resource Conservation and Recovery Act (RCRA) as hazardous waste and not presently regulated by the DOT should be combined into several major categories by the EPA. These designated items would be turned over to the DOT and made a part of DOT regulations under categories of "EPA Hazardous Waste Materials".

The EPA would designate the type of containers required and would specify the DOT specification container when necessary. The EPA and DOT should jointly determine and develop new labels and placards compatible with current DOT designs for this material and describe how it should be shown on shipping papers. After a while these factors would be incorporated within DOT regulations. The EPA would incorporate these materials by reference to DOT regulations.

Topic 2. The DOT should not modify its definition of hazardous material but would however specifically address the transportation of hazardous waste (not presently covered by DOT, but considered hazardous by EPA) as indicated above.

Topic 3. The DOT should modify its shipping paper requirements to meet the needs of the EPA. There is already shipping paper regulations in existence, which could be modified to meet RCRA requirements for a manifest. Present DOT form could be used if additional EPA certificate is not required. Should EPA certificate be required, use present form and make additional forms available for use if only EPA materials are being shipped to avoid duplicate certifications.

Topic 4. Current DOT regulations for labeling, marking and placarding are sufficient for handling hazardous waste materials presently regulated by DOT. For those materials not presently regulated by DOT we recommend the procedure as previously outlined under discussion topic No. 1.

Topic 5. One big question in our mind is: Why does the RCRA require notification of hazardous waste transportation when the DOT does not require such notification? If regulations for shipment of hazardous

waste are incorporated within DOT requirements, these shipments could be handled in the same manner as other hazardous materials presently regulated by DOT.

Along this same vein, registration requirements need not be developed if hazardous waste is handled the same as hazardous material under present DOT regulations.

Topic 6. Notification for any spill of EPA designated hazardous waste material should be directed to the DOT and not the EPA. The DOT presently has in existence requirements to be notified in case of accidents or spills of hazardous material associated with transportation and to receive a report of the incident. This is a long standing procedure which could easily incorporate any information required by EPA in regard to spills.

The DOT could advise EPA or other appropriate agencies as required if EPA designated the material as hazardous and it is shown as such within DOT regulations.

Topic 7. EPA should develop requirements for handling any spilled material considered hazardous by EPA. Such requirements should be incorporated within EPA regulations and these requirements could be incorporated by reference within DOT regulations.

Topic 8. Training programs should be conducted by EPA on a voluntary basis, if so desired. EPA

regulations, however, should include sufficient information to provide guidance to all associated parties in regard to emergency response and clean up of hazardous waste and reference to such information could be incorporated within DOT regulations. If found to be necessary, training programs could be made a requirement at a later date.

Topic 9. This statement needs more definitive explanation regarding "incompatible wastes". Does incompatible waste mean hazardous as far as DOT is concerned? If so, then DOT regulations already exist stipulating specific segregation of hazardous waste.

If the term further applies to waste materials which EPA considers environmentally incompatible, then this fact should be conveyed to the DOT and specific requirements incorporated into DOT regulations to address this situation.

We appreciate the opportunity to participate in this public meeting and compliment the EPA and DOT for their foresightedness in coordinating regulatory requirements for the transportation of hazardous waste, thus eliminating duplicate requirements for compliance by shippers and transporters.

Respectfully submitted, Frederick D. Flowers.

MR. KOVALICK: Thank you very much, Mr. Flowers.

I'll start. I have a couple of items on your statement. I gather, from the cooperative tone that you suggested throughout for the EPA and the DOT, that General Electric advocates this recognition of environmental hazard by the DOT. In other words, in order for us to cooperate and develop jointly labels or placards, it would have to be a broadening of the statement that I ran through briefly this morning.

Do you think that's appropriate under the Hazardous Materials Transportation Act?

MR. FLOWERS: That's correct.

MR. ROBERTS: The other question I had -- and this relates to the reporting on incidents of spills. And I mentioned earlier this morning that many states may take on the hazardous waste management program, which isn't just transportation, but a variety of other things. And they have suggested to us that it is not adequate for them to be not getting reports on incidents, if you will.

Would it be your -- it is your recommendation then that DOT receive all reports and feed them to us. I can certainly that in the case where the State takes on the program from the U.S. EPA, is it still your view that the incident report goes to the U. S. DOT and they then

have to forward it on to the State?

MR. FLOWERS: That could be included in the other appropriate agencies, yes.

MR. ROBERTS: As opposed to the incident report going both to the State and the DOT?

MR. FLOWERS: I think in that type of situation, the individual has enough on his hands trying to take care of the incident.

MR, ROBERTS: This is not during the first three hours. I am talking about within 15 days. Obviously some States would like to know that directly, that's why I am asking.

MR. FLOWERS: I would assume that the Department of Transportation would immediately notify the State.

MR. ROBERTS: We just signed an agreement; I'm not looking forward to it with much relish. We just signed an agreement with the State of Illinois concerning the 580.1 report, wherein we agreed to supply the State of Illinois copies of all reports made concerning incidents occurring in the State of Illinois, thereby precluding the State from imposing the same requirement on a local level. In other words, to save carriers from making duplicate reports: one to Illinois and one to DOT, I signed an agreement with the State of Illinois that I

would supply those reports so the Illinois carriers would not have to do it.

MR. FLOWERS: All I can say to that is, "Amen".

MR. ROBERTS: I'm not happy about it because the administrative load is amplified nationwide. I don't know we are going to do it.

MR. FLOWERS: Mr. Roberts, speaking to that point, I think it gets down to, things that are federally regulated, should be federally regulated throughout the State, and it is our contention that we hope the federal regulations, and that the States adopt the federal regulations. That should be the situation. We do not see the need for the adoption of Federal -- State regulations-- anticipating the development of State regulations that override Federal regulations, which would interfere with commerce.

BY MR. KOVALICK:

Q I have a question from the floor related to the container discussion, container specs for waste. "Why should EPA prescribe the container if DOT regulated material spec is already known?" And I think you suggested using the DOT material spec.

The rest of the question is, "If a none DOT regulation material, that is, the other materials, why

can't the same container that transported the virgin material be used?" Which gets at the question of using that grade container for the waste, which was a part of the question to Mr. Hershson this morning.

A We were speaking of a situation where there would be a material that we felt like the EPA, the additional EPA hazardous material regulations, would be in a better position to evaluate the type of container that would be required. Should you so desire or if you decide you need a DOT spec, specification container, then you would so identify that container.

Q For example, let's take an example, it might be easier. If there was some caustic material above 50 milligrams per kilogram body weight above poison B, if I'm correct, you would either choose that kind of container, that is, a poison B container or specify some other kind of container. That would be our two options?

A Right.

We don't have any other questions?

MR. TRASK: Yes.

Mr. Flowers, I'm a bit confused about how you would treat the non-DOT regulated materials, at the moment. I think I heard you say one time that we should add to the DOT standard section for the EPA materials. And

then you later said that we should not modify the DOT criteria. And I am a little confused as to how we ought to do that.

A I think that the first topic that we discussed says that the present hazardous materials that can be identified under DOT regulations should be identified as such, and where we made the recommendation to modify --

MR. ROBERTS: Would you point that out to me?

MR. TRASK: I don't have a copy of your statement here. I'm not sure where it came in your statement.

MR. KOVALICK: Well, as I recall, you were suggesting that where we did have EPA, EPA hazardous waste materials, they create a new class; perhaps handle, I presume, biocumulative, or carcinogens not currently recognized. I think Mr. Trask was asking, isn't that in fact creating a new criteria? When you do that, is that called a new criteria; is that anything that EPA recognizes as a criteria for that class of material?

A Whatever EPA recognizes or develops as their criteria, would be the one.

MR. KOVALICK: Falls into that new class?

A That's right. There would be no modification--

Q Of current DOT criteria?

A No, no modification at all.

MR. KOVALICK: All right. Thank you.

Mr. Roberts.

BY MR. ROBERTS:

Q Since you brought it up and Mr. Sigeti also mentioned that further consideration will be made of No. 9, I think it might warrant some clarification. Perhaps you may want to comment on it?

A There are principally two loading and stowage compatibility requirements, both of which I think many of us agree are rather archaic. One is 17481, for rail, and the other one is 177848, for highway. What is possibly by inadvertency, in the way this is stated, it ignores the provisions of Section 17321, mainly A, B, and C, which is the general prohibitions against the shipping of certain materials that will involve dangerous evolutions into either gas, pulverized, decomposed materials that are unstable. Now, if that's the nature of the concern about this, I would suggest that all of these prohibitions be specified in the regulations in terms of the prohibited materials. We apply this restriction to materials that we realize are under the classification of hazardous materials under the Department's regulations.

Q As recently as about two years ago, we had

a case like that. There was no definition of the DOT regulations to be submitted with materials subject to decomposition. Therefore, we notified the shipper that it was our position that this was a forbidden material and may not be out for transportation in commerce.

Also, under the provisions of Section 17351 we have a stability requirement pertaining to materials generally regarded as forbidden explosives should they fail to meet the specific test of stability requirements of 75 degrees centigrade for 48 consecutive hours.

Now, with all that in mind, those people who are planning additional comments -- Mr. Sigeti -- wherever you are, and also, anyone else who is making further comments -- I think that this particular question, at least from the DOT standpoint of asking the question, is it necessary for DOT to modify its existing requirements pertaining to these things, including 17321, 17351, as well as 17481 and 177848.

Before someone makes a rapid judgment as to whether that's necessary or not, I would recommend a very, very careful reading of Paragraphs A, B and C of 17321, because I think you will find a couple of little loopholes in there that have possibly been overlooked by people over the years. And, possibly, if we are really

going to properly address this area in terms of mixing different things up in tank wagons and whatever, it possibly should be reassessed.

I just wanted to clarify that because apparently when we came to this question, there were a number of comments and there were some hangups with it. I think it needs to be clarified. So, if you want to add to your comments later about that, or you may have something now.

A No, I have no further comments at this time.

MR. KOVALICK: There's one more question from the floor, Mr. Flowers.

BY MR. TRASK:

Q Mr. Flowers, what is your position on a nationwide uniform manifest?

A A nationwide uniform manifest?

Q Yes. I believe that your statement indicated that you thought DOT should modify its shipping paper requirements to accommodate the RCRA hazardous waste information needs and this question, I think, agrees with that.

A I think basically the information could be placed on a bill of lading; it could be made a combination manifest. However, as we pointed out earlier, our contention is, if this is not satisfactory, then the

requirements as called upon by RCRA, for a manifest to identify the quantity and the hazards of the material and exactly where it's going to in a licensed facility, then, I don't have the slightest idea at this time, if that is what you are asking.

Q Now, if I could speculate just a bit on this. This question has come up a number of times at other meetings we have held, and I think what the questioner is asking here is, should we have a rigid, fixed form, instead of the current uniform bill of lading format that is now widely used?

A I think definitely there should be a stipulated type of format because, for instance, we have the situation in the State of California, where I happen to be from, where there is a specific form issued by the State of California by EPA to be filled out in exactness. You don't just get general formalities or idea or information, you are issued a specific format by the California EPA. And therefore, I think again, to get the federal situation, to have a better understanding, there should be a federally established manifest, specifically formated.

MR. KOVALICK: All right. Thank you very much,

We keep getting cards on OHMO and EPA authorities and plans, and we will continue to hold those

until the end.

While Mr. Wilson of the Stauffer Chemical Company comes to the podium, let me alert Mr. Patrick Wicks, of Chem-Nuclear Systems, that he will be next and also -- off the record for a moment.

(Remarks made off the record.)

MR. KOVALICK: Back on the record.

Will you accept questions, Mr. Wilson.

MR. WILSON: Certainly. Yes, I will.

Mr. Chairmen, and members of the Panel, my name is Robert Wilson and I am employed by Stauffer Chemical Company as the Director of Transportation Operations in the Distribution Department. My responsibilities relative to this area includes development of procedures and training programs for loading and unloading personnel of bulk rail and truck equipment. Additionally, I am Stauffer's coordinator of our CHEMTREC internal response network.

Stauffer is a manufacturer of agricultural, industrial and specialty chemicals; plastics, fertilizers and food ingredients with annual sales over one billion dollars. Stauffer, in common with other chemical manufacturers, must necessarily generate waste materials at various production facilities. These wastes result from

unsaleable product or by product, equipment cleaning, waste water treatment sludes, collected air pollution control wastes, et cetera. Certain of these wastes will be characterized or identified as hazardous. Although we make extensive efforts to minize these wastes, process and product requirements and pollution control facilities make a certain amount unavoidable. Therefore, Stauffer has a direct interest in the guidelines and regulations that are to be developed for the transportation of hazardous waste.

Since we are concerned at this public meeting with the transportation and control of hazardous wastes, we should review certain definitions and constraints in order to keep this discussion to a minimum. The term "hazardous waste" relates to "discarded" material. All other materials that are recycled, regenerated, sold, consumed for energy value, transferred for use by others, recovered or exchanged are not wastes. We are limiting this discussion, therefore, to the control of "discarded" material because we firmly believe that the other recycleable materials are or will be controlled from a safety point of view within the existing DOT regulations as they will be amended.

With this constraint applied to the wastes

under discussion, the remainder of this presentation relates to the numbered "Discussion Topics" published with this meeting notice in the September 29 Federal Register.

In response to Discussion Topic No. 1, Stauffer firmly believes that it is most important to have only one federal agency identified as having overall jurisdiction in transportation of hazardous wastes. This is necessary in order to avoid development of uncertainty among the regulated or duplication of effort in the application of regulations. We do believe that the health, environmental and etiologic hazards referred to in the preamble can be captured into the existing DOT regulations and cite the advance notice of proposed rule making, HM-145, as the existing mechanism. The development of a separate set of regulations would be of benefit to no one and would, in fact, be counterproductive. We would strongly recommend that the DOT be encouraged to complete HM-145 with the assistance of the EPA and the regulated parties so that these definable hazards can be adequately controlled in transportation.

Stauffer has urged the adoption of a new hazardous materials classification, called "Other

Regulated Materials-E (ORM-E)" or, as MCA proposed, a class called "Environmentally Regulated Materials (ERM)" as a means of classifying these health, environmental and etiologic hazard wastes. Stauffer's proposal was submitted as a response to HM-145 and dated June 1, 1977. Because of the brief time allotted for this presentation, we will not go into the proposed new hazard classification but will instead include our response to HM-145 as Attachment No. 1 to this presentation for placement in the record.

Under Discussion Topic No. 2, we would recommend that the new hazardous material classification proposed as ORM-E include a definition of a "hazardous waste". With this mechanism in place, special requirements on hazardous waste shipments such as carrier registration numbers and special certifications on shipping papers can also be included in the DOT regulations.

We will speak more definitively to a proposed combination hazardous waste manifest and shipping paper to show that both the EPA and DOT requirements can be combined to a single format.

Discussion Topic No. 3. By combining the hazardous material manifest and the DOT shipping paper into a single form, many benefits are derived. The

generator of the waste, the transporter and the receiver will have only one form to handle. Additionally, copies of shipping papers are normally held by the transporters for a three year period in order to comply with the statute of limitations established by the ICC. This availability of the shipping paper/waste manifest would certainly aid federal and state agencies who wish to review shipping records. The use of a combined standard form for all 50 states would also eliminate the inevitable problems should each state wish to develop its own separate hazardous material manifest. We offer as Attachment No. 2 to the presentation a proposed form as an example of how both EPA and DOT shipping paper requirements can be combined.

If you will turn to this form, I will point out some of the major new items. We have taken a standard straight bill of lading and combined it with the hazardous waste manifest now being used in the State of Texas as a requirement of the Texas Water Quality Board. A copy of this form and backup information is also attached for your reference. You will note that there are three separate boxes for the shipper, carrier and consignee each requiring a business address and a shipping address if it is different, an emergency phone number and, if it

develops as a requirement, a registration or permit number. We have also included in the section for the description of the hazardous materials separate columns to include hazardous properties and waste code number should one be developed or required in certain states. Finally, there are three separate certification requirements to be signed by each of the three parties involved. Included in the shipper's certification is the standard DOT hazardous materials statement as well as a proposed statement for passage of the hazardous waste to the carrier.

We wish to point out that this example is intended only as an illustration that it is possible to combine the bill of lading with the hazardous waste manifest. There would be no objection to a separate hazardous waste manifest as an option that may be preferred by other shippers and carriers.

Discussion Topic No. 4 relates to the marking, labeling and placarding of the containers or packages. We must again recommend against duplication of markings, labels or placards while a waste is in transit. If the product were not already classified as one of the existing hazardous materials, then an environmental or health effects label and/or placard consistent with the proposed

hazardous waste classification and existing DOT labeling and placarding could be offered. The proliferation of multiple labeling would be counter-productive and confusing and would, as a result, fail to accomplish the purpose for which it was intended. The shape and size of these labels and placards should remain within the established DOT design standards. Also, the existing DOT requirements for markings, labels and placards should be extended to cover this proposed new hazardous classification ORM-E.

With regard to registering transporters of these hazardous wastes, per Discussion Topic No. 5, we would point out that the existing DOT and ICC regulations provide adequate control and registration of transporters of hazardous materials and thus hazardous wastes and see no benefit in establishing additional registration requirements. Accidents or spills involving hazardous materials are subject to special incident reporting procedures already established in the DOT regulations. When the health hazard wastes are also incorporated into the DOT regulations, they would also be captured into this reporting system.

One note of concern on the proposed EPA registration requirements for carriers. Stauffer and many other

chemical companies produce small volumes of waste which require infrequent transport to a disposal site. Because of our plant locations and the infrequent number of small shipments, we must turn to common carriers. While these carriers regularly move hazardous materials, it would be very burdensome for them to stencil certain trucks with a hazardous waste registration number as proposed in the EPA regulation. There would, on the other hand, be no resistence to placing a registration number, if it is found to be necessary, on a shipping paper. We believe vehicle markings with registration numbers are unnecessary and offer no improvement in the safe movement of hazardous wastes.

Discussion Topic No. 6 relates to accident or spill reporting and control. For the past six years, the Manufacturing Chemists Association has operated a Chemical Emergency Transportation Center known as CHEMTREC. CHEMTREC was established to give emergency handling information in the event of an accident involving chemicals in transit on a 24-hour-a-day basis. This system has been judged by public safety agencies, transporters and governmental agencies as extremely effective. The CHEMTREC system could provide for emergency response information on hazardous wastes in addition to the

chemicals it is now prepared to handle.

There is also a procedure under consideration by the DOT under notice HM-126 which provides for a three digit hazardous information numbering system to be placed on shipping papers and placards. This system would provide immediate identification not only of a hazardous material's primary hazard but would also identify the secondary and tertiary hazards. This rule making proposal is considered an important tool in providing emergency personnel at the scene of a spill with immediate precautionary information on the multiple hazards of a leaking product. Hazardous wastes would be incorporated into this proposed hazardous information numbering system when placed in the DOT regulations.

The existing DOT procedure for reporting spills of hazardous materials can be adapted to include hazardous waste spills. The Federal Government's internal procedures for promptly notifying other agencies of a spill is a matter of discussion between the agencies involved. We would, however, recommend that a single phone contact be the key connection between the carrier or shipper and the federal agencies. Concurrently, incident reports should also be filed at one central point for dissemination, as required.

Discussion Topic No. 7 points out that a spilled hazardous material could become a hazardous waste. If this occurs, then the "waste" would be classified and transported from the site of the incident to the disposal location as discussed in previous items in this proposal.

Regarding the possible introduction of spill control procedures, we believe that a response from CHEMTREC will provide the necessary containment and clean-up information for immediate handling of the products. In addition, CHEMTREC would notify the parties involved with the shipment in order to provide assistance in the clean-up. Existing regulations requiring assistance in clean-up will more than adequately provide incentive requirements for the involved parties to participate.

Discussion Topic No. 8 questions the need to train shipper and carrier personnel in spill clean-up and emergency response. As mentioned in the Federal Register, the DOT currently requires training of personnel in the safe handling of products. The extension to spill clean-up and emergency response is, we believe, unnecessary for two reasons. First, experience in handling spills shows that each incident requires its own specific solution. There are so many variables

involved beginning with size of spill, location of incident, weather conditions, et cetera, that required training programs can becom- excessive and still not provide the answers for the next field situation encountered. Concurrently, the training required under the current DOT regulations, which, by the way, we assume will include hazardous wastes, will provide personnel with sufficient knowledge to make judgments and recommendations at a spill location.

The stowage and storage of mixed wastes is exposed in Discussion Topic No. 9. We believe it would be a natural extension of the proposed changes to the DOT regulations incorporating hazardous wastes that the loading and storage charts be expanded to include requirements to prevent any mismatching.

In closing, Stauffer is most interested in the establishment of one agency to control the transportation of hazardous waste. We firmly believe that through prudent changes to existing DOT regulations, the health and environmental hazardous wastes can be captured and controlled. The EPA's assistance and assignment of wastes to this classification is of prime importance. The development of the regulatory controls related to shipping papers, marking, labeling, placarding and

selection of specification packages and containers can be developed by the DOT based on the proposal and responses to HM-145.

Finally, any accidents or spills in transit of hazardous wastes can also be captured within the existing incident reporting systems including Manufacturing Chemists Association's CHEMTREC emergency response network. Thank you very much.

MR. KOVALICK: Thank you very much, Mr. Wilson. for a very precise time-wise as well as content-wise statement.

Mr. Roberts, do you have a lead-off question?

MR. ROBERTS: Yes, I do.

BY MR. ROBERTS:

Q Mr. Wilson, at the bottom of page 3 and the top of page 4 of your statement, you made reference to the fact that there is no need to register carriers because the ICC regulations presently provide an adequate control and registration of transporters of hazardous materials. I will defer to your expertise, sir, and I respect it.

Isn't it true that the private motor carriage business in the United States is larger than the common and contract motor carriage business?

A That's not my area of expertise. I can --

Q Well, I'll put that question to Mr. Johns on the floor, representing the ATA, and will accept your response from the floor -- is that correct, Mr. Johns?

MR. JOHNS: That general statement or --

MR. ROBERTS: General statement. Am I generally correct in making that statement?

MR. JOHNS: Generally correct, but in the hazardous materials field, I don't think so.

MR. ROBERTS: Have transportation with petroleum products?

MR. JOHNS: Yes.

MR. ROBERTS: Okay. I won't argue.

BY MR. ROBERTS:

Q In what manner would you suggest we address the private carriage fleets in the United States in terms of the transport of hazardous wastes?

A Private carriers involved and operated by the companies generating the wastes, I think they can be captured into the system, at that stage of the game.

Q Then your response is still negative in terms of the fact that these carriers in some other way are registered or identified by --

A They are captured under the controls. I would think that the majority of the hazardous materials that we are really concerned with here are moved and controlled by the companies and not the private carriers, as Mr. Johns stated.

Q Now at the bottom of page 4 of your statement, you said there is a procedure under consideration by the DOT under notice HM-126 which provides for a three digit hazardous information numbering system to be placed on shipping papers. What document are you referring to, sir?

A HM-126.

Q 126 to my knowledge does not propose anything like that.

A Yes, I would say it's referring to the MCA and other chemical company respondents, to HM-126.

Q Is it not correct that 126 is just a request for public comments --

A Yes. One of which is the three digit HIS system under discussion.

Q Okay.

A Was that not presented at the U.N. on behalf of the U. S. Government?

Q Not presented by the U. S. Government.

A It was modified?

Q No. It was supported by the U. S. Government as opposed to other systems under consideration. It was not proposed by the U. S. Government though.

On page 5, third paragraph, you made reference to CHEMTREC. "CHEMTREC will provide the necessary containment and clean-up information for immediate handling of the products."

A Immediate response information, yes.

Q Isn't it basically in the form of a 24-hour operation by communicators to provide very general information of this nature. But isn't their principal function to get ahold of shippers or other expertise outside of CHEMTREC to assist in handling the hazardous material spill?

A The first response from the answeer at CHEMTREC is to go to the CHEMTREC card destination and read to the emergency response people requesting information, what the general immediate handling procedures are for that particular product or class products, whatever they can answer to.

At that time the operator at CHEMTREC will solicit extra information from the caller and try to locate the shipper or the receiver of the goods or someone else who they've identified as knowledgeable in the

hazardous properties of the product and the procedures containment of that spill.

Q The last sentence in that paragraph and I will quote, "Existing regulations requiring assistance in clean-up will more than adequately provide incentive requirements for the involved parties to participate." Would you describe that regulation, please?

A I think that's a general statement towards the public and, well, towards Section 311 of Public Law 92, or something like that. 95-500, thank you.

Q So that's the reference for your saying the existing regulations --

A Yes.

MR. ROBERTS: That's all.

MR. KOVALICK: I have one question to follow up on CHEMTREC and systems that provide information. Perhaps you can, being a generator of wastes, as you point out, help us.

BY MR. KOVALICK:

Q From our information, from studying some 14 broad industry categories, in terms of the kinds of waste they generate and how they dispose of them, which, by the way, are available through the National Technical Information Service, indicates that generators often-times, at

least, up until the passage of RCRA, are often hard pressed to describe their waste in any detail at all; first of all, that is beyond red slime or green mud or whatever. Secondly, many of them pointed out during that voluntary survey that we conducted, that not only is the batch for this month's process different from the batch from next month, the batch from the next shift's process is different from this shift. And I guess, with that information, I have difficulty understanding the principle that, I guess Mr. Sigeti first offered and you have offered, that it's going to be "easy or with competent help we can easily define these materials which, from my information, are like several orders of magnitude more variety then the virgin materials that are registered with CHEMTREC".

So, knowing that as my problem, I would appreciate it if you could comment on whether that's really feasible. I must admit that I am somewhat surprised that several of you have argued that. If that's true, that could solve a lot of problems. It's the first time I have ever heard it.

A I think the first adage is to try to keep it simple. And if a product is made up of several components but the overall qualification is a corrosive, we know it

as a corrosive. And whether you value the internal complements in that mixture and it still stays corrosive, it will be shipped as a corrosive.

Now, as it moves in transit and there's an incident, let's say, the -- through CHEMTREC you can identify the shipper, and the shipper should know the special involvement in that particular product, could get information to the scene. But in the interim, the basic idea is that it is a corrosive, keep it out of water, whatever you have to do to contain it, know how to neutralize it and so on; that's basically where we're at. That's why I say try to keep it in a package. And I agree that in certain instances, a waste product generated will vary from shift to shift or operation to operation. That's true.

MR. KOVALICK: Thank you.

Mr. Edelman.

BY MR. EDELMAN:

Q Mr. Wilson, on the first page of your statement you mention the term "hazardous waste" relates to "discarded" material, and should not include recycled, regenerated, sold, consumed for energy value or discarded materials. Later on in that paragraph you state, "We firmly believe that the other recycleable materials

are or will be controlled from a safety point of view within the existing DOT regulations. . . ."

Are you suggesting --

A "as they will be amended."

Q -- "as they will be amended."

A Don't leave that out.

Q Okay.

A HM-145.

Q If they are not amended, would you recommend not carrying those wastes which are going for recycling or should there be transportation controls for those wastes that DOT is not currently regulating?

A I think we are talking about -- I think we ought to try to keep it in some sort of prospective. I would say -- I think someone mentioned 90 percent awhile ago -- that 90 percent of the generated waste involved here, are already classified as a hazard. The concern now is with these new health hazards, and in those instances, they are not captured in this area. But they are, we think, a relatively small matter at this stage of the game, which can be brought in under HM-145. So the statement -- I will stand on that statement.

Q Also, you're proposing OR --

A ORM-E.

Q ORM-E over ERM. I assume that would work then if a material met the DOT definition and was also a hazardous waste or a hazardous substance. It would fit under a DOT classification, and if it wasn't, then it would fit under the ERM classification.

A Yes, that's basically the steps in the classification process.

Q So that would be the final classification?

A If it did not come under one of the hazardous classifications which specifies packaging everything across the board, then you would capture it in an ORM-E or some other classification.

MR. EDELMAN: Thank you.

MR. KOVALICK: Thank you very much.

(Applause.)

MR. KOVALICK: While Mr. Patrick Wicks of Chem-Nuclear Systems is coming to the microphone, let me alert Mr. William Schaffer, of Monsanto Company; you will be next.

Mr. Wicks, will you accept questions

MR. WICKS: Yes, I will.

First, I didn't have time to prepare a written statement for you, but now I am kind of glad, because you guys are going back and grilling everybody on what

in writing. You can't do that to me.

MR. KOVALICK: But you will accept questions?

MR. WICKS: I will accept questions.

I did want to answer the discussion topic that you indicated you wanted input on. First, I'd like to tell you a little bit about what Chem-Nuclear does.

We are a service company. We provide various waste management services both for nuclear wastes and for chemical wastes. And we get involved in all aspects of waste management, including transportation disposal and in certain cases, management waste at the generator site.

With respect to Discussion Topic 1, I concur with one of the other speakers that the regulations which are promulgated eventually should be incorporated into the current DOT regulations in some manner. I am not going to suggest just exactly how or which page they should be incorporated in under CFR 149, but that is my general comment, that I think that there should be one set of transport regulations that is basically under DOT, so that they are all essentially in one spot, whether it covers strictly hazardous material under the current criteria and in addition to adding EPA hazardous waste, once those criteria are defined.

With respect to Discussion Topic 2. We believe that this should probably be a new set of materials designated -- I'm not sure what kind of name should be given to it in terms of the regulations, but I believe there should be another aspect of materials designated to cover the materials which do not now currently meet DOT hazardous material criteria but which meet the EPA criteria.

Item 3, we believe that the DOT regulations should be modified to the manifest that is required by RCRA. I, in my own mind, am not firm as to just how that should be done, whether it should be a completely separate form or it should be a modification of the current shipping papers. I think that's not of a great concern to our company, and I think that either way it is done, it can work out satisfactorily.

With respect to Discussion Topic 4. I think that EPA and DOT should jointly develop a placard for the new class of materials that will be designated. My suggestion is to call it by the name of environmental hazard, as the type of hazard that it represents, as opposed to corrosive or some other placard designation already used.

I didn't think that the word "poisonous" or

"dangerous" or "toxic" or some similar term should be used, because I think that is very much overstating the case in terms of the hazard that these materials will represent in the transportation mode in the event there is an accident spill or other occurrence.

Item No. 5. A number of people in the trucking and railroad industries indicated their concern over possible registration -- re-registration under a new system where there is activities in transporting hazardous wastes. I can understand and sympathize with that they don't want to go through another process of registration, but I think there are a lot of companies out there who are in the business right now, who are small, who don't know what they are doing, and who do cause problems from time to time, and in many cases they will not be interstate carriers, they will be intrastate; therefore, the regulations, if they are part of the DOT requirements, will not affect them unless the local or the state -- or whoever the local agency is, and ask those regulations.

So I think there is a problem with some of the smaller carriers in operation now, I think that all carriers should be registered in some form or another. If they are already registered in an appropriate fashion, that that doesn't need to be duplicated, but that is not --

the current registrations, I believe, do not cover the field at the present time.

On Discussion Topic 6. There should be a reported mechanism for spills and other similar accidents, whatever system is presently in existence now I think should be continued, whether it be reported to DOT or the Coast Guard or EPA, I don't think it matters much. I think the reporting should probably go to an agency and if that agency knows that other agencies have an interest in those matters, then they can forward copies of the reporting documents and so forth on to them. I think when you get into a spill situation, the most important thing to do is not to report it or call EPA or DOT and notify them that it has occurred, the most important thing is to do something about it.

So I think if requirements are written in the new regulation to cover spills, that at least they should recognize that the most important thing to do is to take appropriate action to contain the spill, to do what's necessary to clean it up. It should also be reported to the appropriate agencies, but that doesn't necessarily have to be the first thing to do.

On Discussion Topic 7, we went through the same thing. My comment there is that the regulations should

somehow prohibit the improper disposal of spilled materials which fall within the classification of hazardous wastes. We know of, and have heard of a number of cases where the transportation company has a spill and it is left there, it is not properly cleaned up. I think that's not done as much as it used to be, but we've heard cases of the same done very recently. That of course, is not the aim of these new regulations. The spill should be cleaned up properly and disposed of properly. A number of transportation companies are here and so they are aware of the situation. I am sure they would agree with me. But other transportation companies need to be informed of this requirement also.

With respect to Item 8 Discussion Topic regarding training. I don't think that it is necessary to have a formal training program requirement at the present time. I think that might be a good idea later and not now. I think it is important that EPA and then DOT conduct some of the programs that they have done in the past to informally train people who are in the business. I don't think there should be a formal training required, however.

With respect to Item 9, the compatibility question. As an operator in the field, we don't see compatibility as being a big problem or incompatibility

being a big problem. We don't face the problem very often. Maybe this is made out to be more of a potential problem then it really it. I think so. We run into it occasionally. We are always guarding against it. But we don't see it very often. So I think there is a concern here that might not be completely warranted. I think there might be some general statements made in the regulations, however, which should be in consideration.

But usually, if there is going to be an incompatibility problem with the generator of the waste, you'll probably be aware of it immediately; if it is going to blow up, it is going to blow up right then. I think most people will be taking adequate precautions to preclude it in most cases, in 99.9 percent of the cases, maybe more. So I don't think it is a big problem.

If I can make a couple more comments on some statements that were made by other commenters. One is that there was a man drum conditioning organization protesting the use of drums for burial of wastes. I think that's a matter of choice. In many cases the containment of wastes in drums is recommended, and often times it is a necessity in terms of safety and reducing the hazards to use those drums for disposal also.

Making it a requirement that no drums could be disposed of at a licensed hazardous waste facility would be indigenous and in most cases it would cost considerably more money to recover those drums and get them to a reconditioner then it would be worth. I can name any number of reasons why it wouldn't be feasible to do it in all cases, at least not to make it a requirement.

Another statement was made regarding what proportion of hazardous wastes are currently covered by the existing DOT hazardous material criteria. The statement has been made several times that 90 percent is currently covered by the DOT requirements. I disagree strongly with that. I think the number might be closer to five or ten percent. In our experience, with the kinds of waste we are handling and seeing, I would say no more than five percent of those are currently covered by the DOT hazardous material criteria.

So that the new criteria that EPA develops will be a substantial addition. Nobody knows yet how substantial because the criteria aren't set yet. But it will be a substantial addition. That's not to say that we shouldn't go ahead with the regulations. My point is, there are lots of waste that are being transported right now that are not covered under a specically

hazardous waste by any reasonable criteria that are not covered by the DOT hazardous materia criteria. That is not to say also that they are not handled properly now, which they probably are. We handle ours properly and I am sure many other companies handle theirs properly also. But that doesn't mean that we have to put placards on the waste that we have, because we don't, only five or ten percent.

Another subject was brought up about -- I guess the question came from the Panel regarding any kind of special treatment or any laxity in the rules with respect to resource recovery. I don't see any justification for that approach. Certainly the objective of the Resource Recovery Act is to promote resource recovery. It is also to promote proper hazardous waste disposal and proper treatment, recycling of materials and so forth. But I see no justification in the approach that you say solids that are going through a recovery system should be thought of differently in terms of the transportation requirements and anything related to it, and the reporting requirements and so forth, they should fall within the same purview as all other related activities.

Those are the extent of my comments. I will answer any questions.

MR. KOVALICK: Thank you very much, Mr. Wicks.

Mr. Roberts, are you ready to start?

BY MR. ROBERTS:

Q Mr. Wicks, is Chem-Nuclear operate motor vehicles?

A Yes.

Q Transporting waste materials, mostly hazardous wastes?

A Yes.

Q Are you presently required to register your identity with any federal or state agencies?

A Yes, we are. We are -- it turns out that I am involved with the chemical wastes part of our business where we don't operate our own vehicles of transportation; for the nuclear waste disposal, we do operate our own vehicles and I'm sure we have to register them.

Q Chem-Nuclear -- chemical wastes, are you registered with anybody?

A We do not operate our own vehicles; we use common carriers.

Q You indicated that you thought some kind of registration should be imposed, if I understood your statement correctly, because there are small carriers out there that don't know what they are doing.

A Correct.

Q That's essentially what you said.

A Right.

Q Now what kind of carriers are those?

A One or two are five men operations; they will hire themselves out to carry wastes. They have little or no expertise in being able to do that. In many cases it is intrastate so that the Federal Government has no control over the situation. Whether the State has an interest in it, I don't know. But my point is there are lots of small operations who handle hazardous wastes with the same number of hazards and hazardous commodities, for that matter, I am sure, who have inadequate knowledge and experience and equipment and capabilities to do the job properly.

Q Is this based on your specific knowledge of their operation --

A Yes. I have specific knowledge of those operations.

Q Do you feel one of the remedies would be to put them under some form of registration?

A I would say it's a possible remedy. I think that's about the only remedy necessary. I think the manifest system will improve that situation substantially. But I think the registration would help.

MR. KOVALICK: Mr. Edelman.

BY MR. EDELMAN:

Q This is a question from the audience. You mentioned the problem of small haulers.

A I meant their operations, not their height.

(Laughter.)

Q Right. Small shippers.

How are you prepared to change the manifest requirements to provide for collection and transportation of small quantities, i.e., to service small generators.

A We face the same thing in our own operation. I think the manifest system has to take that into account. For example, if a person -- a small operation -- by terms of number of people or manner of equipment and so forth, not by their height, were picking up small quantities from various customers and then accumulating them on a truck and eventually getting it full and going to a disposal lot, a permitted disposal site, I think that in that case, it's very easy that each generator has his own manifest, and at each pick up point, he has a separate manifest, and at the end of the run when he gets to the disposal location, he has 10 or 20 manifests for the materials that were picked up.

There are other situations that are not quite

that easy, but I think that's an easy way of getting onto it. That's more paperwork, but I don't know of any other way of getting around it, easily.

Q I just want to follow with my own question.

Ir your experience have you found generally in small companies that transport hazardous wastes, that they go around and collect bulk shipments from various sources and then consolidate them within the single tank? Does that happen a lot?

A They will try to do that, yes. That way, we have an incompatibility problem.

MR. KOVALICK: Mr. Trask.

BY MR. TRASK:

Q Mr. Wicks, you indicated that there is a substantial problem with many of the small transporters who are not -- I think you used the term -- very well educated or trained.

A I did not say they weren't well educated. I said they didn't have knowledge of the art.

Q Excuse me. Weren't very knowledgeable and yet you also indicated that we ought not to be thinking about training programs for these kinds of people. And, doesn't it seem to make some sense that we should be thinking about them?

A I said that I thought that EPA should be doing -- have some ongoing training programs. I did not go as far as to say, however, that -- or to say that you probably should not make a particular type of training a requirement to someone running an operation. I think that's going a little bit too far. I think maybe the control is in the registration. The company would have to demonstrate its capabilities.

Q I have a couple of questions from the audience. There are related and you might want to answer them together. First, the original nine to ten ratio was made in the context of the existing DOT classification regulations. For example, a product is flammable, corrosive, et cetera. Are you maintaining that 90 percent are neither flammable, corrosive, nor could fit in other existing DOT classifications.

The second question related. Can you give an example of the ways that you consider to be "hazardous", that is, not covered by CFR 49?

A Well, to Question 1, I know one or two people, but anyway -- the 90 percent was confusing to me. I wasn't sure what was meant by that ratio.

What I thought was meant, or one of the possibilities was that, the statement was, 90 percent of the

hazardous wastes now transported are, I should say, not the DOT hazardous material criteria, that's not correct as far as I am concerned. That's not to say that by adopting new criteria we only add 10 percent to all of the hazardous commodities that are shipped. That may be true also.

In other words, 90 percent is now covered by hazardous material criteria existing, 10 percent may be added, but that serves all hazardous commodities and hazardous wastes. Whereas, if you are just talking about hazardous wastes, you're --

MR. KOVALICK: I think the question, if I may interject here, do you have any example off the top of your head which is not clear exactly, but if you did, maybe that would help clarify.

A Yes. I have an example of an industrial waste which has maybe 50 to 100 parts per mercury. It's not formally classified and it has the DOT hazardous criteria.

Q For example, if it were in a solvent, would it not be classified as a waste.

A Flammable (inaudible).

Q Are you counting NOS as not meeting any DOT criteria, or as meeting it; that's what I am asking.

A What do you mean, NOS?

Q The solvent, NOS. That is a DOT --

A No. NOS certainly could meet the criteria.

Q So these are other than those?

A Yes. Sure.

BY MR. ROBERTS:

Q Mr. Wicks, it isn't fair talking to someone like you about this because you are not in the business. Have you ever cleaned out a laboratory on contract?

A We have accepted wastes from laboratories. We have cleaned the whole thing out.

Q In the performance of that function, did you actually go into the laboratory and --

A No. The customer did the collection, the packaging, marking, et cetera.

And put the material, packed them properly and put them in drums and various containers and was concerned about the compatibility problem, and put the incompatible ones in certain containers.

Q Was this a university?

A Most of them have been industrial.

Q Considering the probability, some of those materials would be under the DOT regulations?

A Yes. Yes.

Q And what would they do, provide you with

certificates after it was properly packed, marked and labeled?

A Yes.

Q And this was taking the bottles off the shelves and putting them into what?

A I can't remember the whole details but I think what they did was to package them in larger containers, these were probably pint or quart jars; pack them in a certain material in drums, and if the materials that were in there met the DOT criteria, they were marked appropiately with placards and so forth.

Q Well, I am not trying to use entrapment; I am trying to enter into a problem. Apparently you are not exactly the right person to talk to as compared to some people who have been in my office who actually hold themselves out to go into the laboratory itself and clean it up. But, relative to the function you perform, do you know of any problems that exist in that type of activity relative to the present DOT packaging requirements?

A No. Not really.

Q Any problems?

A No. I don't see any real problems in that activity.

Q Well, for example, if in a glass bottle there's

a certain acid, and the existing regulations say that that bottle will be packed in a certain fashion in a 12-B65 box, then are you taking to the facility 12-B65 boxes because six bottles out of 500 require packaging of 12-B65 boxes?

A I agree with you that in cases like that, that is probably an unnecessary expense under the regulations.

Q Would you hold yourself out to go into a laboratory --

A Not that anyone's asked me yet, but, yes.

Q In your opinion, based on reading this Act, I assume you have heard here today, would you consider yourself a generator or would you consider the university the generator?

A In some cases we might be the generator, and in some cases -- in most cases we would probably consider ourselves the generator -- we would consider ourselves the shipper, let me say it that way.

Q The university may be all free?

A Right.

MR. ROBERTS: Okay. Thank you.

MR. KOVALICK: I have one other question. You may want to do this later or do it now, but the questioner wants to know, "Can Mr. Wicks document his

comments on spills that are not properly handled?" I guess they are looking for some examples in reference to improperly handled spills.

A I could if I really had to. I don't think either the person or I want to do that.

MR. TRASK: One more.

BY MR. TRASK:

Q In the State of Michigan, anyone who is engaged in hauling wastes is required to be licensed annually by the State DNR. These licenses are proper only after indepth inspection. Are you suggesting that these waste haulers, however small, probably don't know what they are doing?

A No, I am not suggesting that. The system under which we've operated is that the State agency has no authority over waste haulers at all. But if they did, they would probably do the same thing as developing a system where they were reviewed and so forth, but they don't. And in many states, that's the case, I am sure. The system could be improved very well, and I am not saying that all small waste haulers don't know what they are doing. Some of them know very well.

MR. KOVALICK: Again, you have received several questions which I am going to hold until later, so thank

you very much.

(Applause.)

MR. KOVALICK: Let me ask Mr. Schaffer's indulgence for a change. What I'd like to do now is read for the record five new statements that I've accumulated, and after that, I am going to call a ten minute recess for a much needed break for some of us, I am sure. Then I am going to reconvene the meeting at 4:00 precisely to hear Mr. Schaffer's statement and continue on.

I am going to read these for the record, if you would like to listen.

Here's a comment from a large chemical manufacturer: There seems to be a misunderstanding on the part of some that a chemical waste, and in many cases, a hazardous waste, is simply a waste mixture of what would be a group of otherwise virginal easily identified chemical substances. In practice, many wastes of our company, and those of other companies, comprise complex chemical substances which are not usually carried in commerce, which may be difficult to clearly identify chemically, thereby making it very difficult to expect CHEMTREC to be able to handle spill controls.

At the ~~Roselle~~ Rossyln hearing, EPA indicated its understanding of the problem by indicating its probably

acceptance of general processed descriptions to define the generator's waste.

The second question -- statement from this morning. On the subject of safe containers for ultimate disposal of hazardous wastes. Recommend the requirement that reconditioned drums or new drums must be used for final disposal or hazardous wastes. When the hazardous waste involved could cause injury, damage or fire if the contents leak out; example, highly toxic material, strong acids or low slash pump materials. The cost of the recycled drum over the old used drum,may be incurred to encourage more recycling instead of disposal.

Another comment. My observation regarding leaking drums containing waste liquid in sludges results in improper storage at generator site. Drums containing products are usually stored in a protected area where the weather will not corrode the drum. However, drums used for storage or collection of products of no value are usually kept out of doors, unprotected from the elements to cause corrosion. Therefore, the problem is primarily not whether a used or reconditioned drum should be used for collection and shipment of wastes, but should be the proper storage at the generator site.

I've handled many liquid wastes in drums and

the problems the majority of the time comes from drums left too long outdoors unprotected from the weather. EPA should look into this.

Footnote: We are, in one of our regulations.

Another comment: Operators at waste treatment facilities contract to dispose of prespecified wastes from previously determined generators. The generators are responsible for assuring that the wastes are within the specifications. Combining wastes from multiple generators, even similar, destroys the principle that the generator has, that the generator has the responsibility for the composition of the wastes.

Final comment. We talked about wastes going to a disposal site for recycling facilities. Recycling implies value, therefore, liquids, et cetera, going to a facility, or if they are to be reused as is, should not be defined as waste. Waste has no value. Intermediate products that could be reused or recycled, should be regulated as any manufactured product.

Those are the mini statements that I have. I'd now like to recess the meeting for 12 minutes, we'll reconvene at 4:00.

(Whereupon a recess was taken in the above-entitled matter.)

MR. KOVALICK: If you will take your seats we will begin again. The first speaker this afternoon will be Mr. William Schaffer, of the Monsanto Company, on behalf of the Manufacturing Chemists Association.

While he is coming to the podium and while you're taking your seats, I want to alert Mr. Jack Pulley of Dow Corning Corporation and Mr. Schultz.

Off the record for a moment.

(Remarks made off the record.)

MR. KOVALICK: Mr. Schaffer, are you willing to accept questions.

MR. SCHAFFER: First, my name is spelled S-c-h-a-f-f-e-r, I don't want the wrong Bill Schaffer to get into trouble, and secondly, I will answer questions to a limited extent, based on the fact that I do represent a national organization that's committee arranged, and I can't possibly answer for 193 companies. So, if I duck a question, it is only because I don't have a consensus viewpoint of MCA on that question, which will tend to be most of the questions probably.

Would you like to read it while I go along now?

This statement was actually written as a letter presentation rather than an oral presentation because we weren't quite sure whether we'd make it or not.

My name is Bill Schaffer, and I am Manager of Regulatory Compliance and Field Distribution for Monsanto Company, located in St. Louis, Missouri.

I am presenting the Manufacturing Chemists Association comments as a member of the Hazardous Materials Sub-Committee of the Transportation and Distribution Committee.

The following comments by the Manufacturing Chemists Association are submitted for your consideration. Many of the member companies of MCA will submit individual company comments in connection with this subject proceeding. A couple have already made comments today, and I hear you will get written comments from others.

Under this supplemental advanced notice of proposed rulemaking; notice of Joint Public Meeting of the Environmental Protection Agency and the Office of Hazardous Materials Operations/DOT, the subject is Development of Regulations for the Transportation of Hazardous Waste.

The Manufacturing Chemists Association (MCA) is a non-profit trade association having 193 United States company members representing more than 90 percent of the production capacity of basic industrial chemicals within this country. Our members have plants located in nearly

every state, for the manufacture of chemicals, some of which are classified as environmental and health effects materials. The wastes associated with many of these products would also be defined as hazardous under proposed EPA guidelines. Therefore, MCA companies have a direct interest in hazardous wastes transportation regulations. MCA submitted comments to the DOT in response to DOT Docket No. HM-145 "Environmental and Health Effects Materials" in June of this year. Those comments were directed to environmental and health effects materials in transportation but they bear a direct relationship to the same problems of hazardous wastes in transportation. They should be incorporated into this record as MCA comments.

In July, 1977, MCA also responded to EPA on Advanced Notice of Proposed Rulemaking 40 CFR Part 250-Hazardous Waste Guidelines and Regulations. Again, those comments, as they were made in connection with the transportation of hazardous wastes, should become part of the MCA comments in this proceeding.

Now to the Comments on Questions in Discussion Topics.

Many of the questions posed in the discussion topics have already been answered in our previous comments

to DOT and EPA as aforementioned. But we would like to state some of the basic premises again.

No. 1. MCA believes it is the responsibility of the Department of Transportation (DOT) to control products and hazardous wastes only when in transportation and that DOT should adopt appropriate regulations to provide for such controls.

No. 2. Generally speaking, the DOT should not modify its definition of hazardous materials to include all hazardous wastes. Under DOT regulations, materials, that is, virgin products or wastes, that do not meet hazard definitions are not considered hazardous in transportation. To treat wastes as more hazardous than materials not considered wastes, but having the same chemical hazards, seems inappropriate. This does not mean that the DOT should not modify its regulations to require some sort of identification and listing of environmental or health effects materials, wastes or otherwise.

Deviating a little bit from the statement here, we did get in our HM-145 comments, you heard earlier today that we suggested ERM, we also suggested ORM-E.

No. 3. The question of manifests versus DOT bill of lading requirements poses problems depending upon the complexity of your materials versus internal paper-

work systems. If possible, a manifest system for hazardous wastes incorporating the DOT required data on hazardous material would eliminate some paperwork; however, for those generators who want to use a manifest and a bill of lading with DOT required information on it, this should also be allowed.

No. 4. Current DOT requirements for labeling, marking and placarding are sufficient for handling of hazardous wastes that qualify as hazardous materials under DOT definitions. For hazardous wastes not meeting DOT definition, only precautionary labeling and marking seems feasible. Placarding does not appear necessary.

No. 5. Here's a cop-out. The remainder of the questions are highly controversial and at this time MCA reserves comments until we are better able to develop a consensus opinion with our member companies. And I am sure, deviating again from the statement, that you've seen even in the companies that have been here, they deviate on the emergency response.

That's about all I've got from the MCA. I will be glad to answer any questions pertaining to what I've given.

MR. KOVALICK: Mr. Roberts.

MR. ROBERTS: I always have a question.

BY MR. ROBERTS:

Q In the third paragraph of your statement, you said, "some of which are classified as environmental and health effects materials." By whom?

A By EPA. Under their proposed environmental under Public Law 92-500, Section 311.

Q Well then, "some of which are proposed to be classified as environmental and health effects materials." In other words --

A I think it's far beyond proposal, Mr. Roberts. I think its just due to come out as promulgation as these are the substances. I don't think -- I'd be happy if it weren't so proposed, but I don't believe that it is.

MR. KOVALICK: Mr. Edelman.

BY MR. EDELMAN:

Q Under Item No. 4, you mention that EPA should not develop placarding for hazardous wastes vehicles and that only precautionary labeling and marking should be used.

Do you have any suggestions on the type of labeling or marking specifically for say, both transports. Should there be marking on the bulk container or also when you have containers within a larger vehicle, should there be marking or labeling on that vehicle?

A I might say that this is not an MCA position because I'm not sure of the consensus opinion on it. Monsanto's viewpoint, I will give you.

First, the question of labeling. We are not talking about a diamond-shaped label. We are talking about labeling to the extent of putting handling precautions in case of leak or spill.

Secondly, we are talking about marking such as we do on a proper shipping label. If we can put down a chemical waste nomenclature we will do that, and do do that. In we are talking about a bulk shipment on placarding. The placarding, if it is not hazardous under DOT definition, it doesn't require DOT placarding. Then we see the only thing to do is send a label along with it on both the loading and unloading parts of the vehicle, to indicate the same thing we would if had it in a 55 gallon drum. We attach that, which we do today, under both taggings.

Q So you do support the idea of marking some sort of identification on a bulk shipment to say what's in it. Or give an indication of what would be --

A I don't believe I said that. I said on bulk shipments I would support putting a label in a packet attached to the loading and unloading. I don't see a

need for the marking of a product that's non-hazardous under DOT definition anymore than you do with virgin material.

Q Could I ask you on behalf of Monsanto?

A All right.

Q You point out that we should work towards allowing many options under the manifest apparently, that is --

A Not many options, I mean two.

Q Well, two options. Either we allow an integrated shipping paper/manifest form or we allow two pieces of paper. So, in terms of your company, do you have a preference?

A Well, I think because of the fact that your -- the EPA regulations are going to allow the states to adopt their own, and I am sure that the states are going to take the position of a manifest paper. It's just a gut feeling because a lot of them have it already, and more of them are promulgating new regulations that way, that I see a manifest as being the piece of paper that's going to exist on hazardous wastes when they go to a dump. I'm saying, if your system allows it, taking the DOT definition and the DOT hazard class and the certificate required by DOT and putting it on the manifest is not too

difficult on a lot of products. Now, if you get into a mixture where you're going to require a lot of identification on the hazardous manifest, I am saying it is going to be difficult to do.

There's a lot of information on the shipping papers now. And not only that, for identification labels later by EPA state and federal people, you probably wouldn't want it in all of your shipping papers. You would want to keep those separate for other reasons or use for other reasons.

Q Another question which is outside your statement, but again, for Monsanto perhaps, to return to a comment that Mr. Roberts has been asking most of the morning about labeling, and this statement in RCRA that says, "Labels," if you remember, "for containers, for storage treatment disposal, such as will identify accurately such wastes."

From Monsanto's point of view, do you a prospective on what that requires -- something beyond the word "flammable," I presume, or not?

A Well, if you're talking about a hazard label, we don't see that as under the DOT definition of a hazard label, diamond-shape. We say a precautionary label, on which we say on many products. We, at MCA, and also

Monsanto, we've used combustible labels for years, long before the DOT ever came along with the combustible category. We identified products when they were combustible on the labels. We would tend to identify those hazards that have been identified by EPA on precautionary labels.

Q I guess I was trying to distinguish between a category of hazards, like combustible, and identify accurately such wastes in terms of its constituents, for example. Is that information, in your mind, required or contemplated? Maybe I'm catching you on the spot.

A Well, I think in the draft guidelines, as I recall some of it, I didn't participate, because that's solid waste management in our company and it's also solid waste management at MCA.

As I recall the identification, and we've looked at this years ago, we identified waste on packages by product, whether they were poisonous, corrosive, and so on, we've done that for our own benefit.

I don't necessarily feel that in the long range that makes sense for every company, but the position that we've taken just for identification and segregation.

MR. KOVALICK: Mr. Roberts.

MR. ROBERTS: Thank you.

BY MR. ROBERTS:

Q Are you presently subject to any valve tagging requirements at the present time?

A Yes, we are. We're subject to it under, I believe, EPA on pesticides.

Q Pesticides. What is your feeling as to the efficacy of the valve tagging requirements under pesticides?

A Well the way the regulation is written, Mr. Roberts, it is very difficult to say that its, I believe it says that you shall give to the carriers two copies or a copy of the label. I don't believe the carrier will actually take that label with him to the destination and give it to your customer. If you tended it to the carrier to give to your customer in a real situation, which is required. It says carrier. It doesn't indicate that it be a truck carrier or rail carrier or air carrier. It says you will do that on a bulk shipment.

We use a tag system. We use a tag system on hazardous parts also, other than pesticides. We believe that our customers are entitled to know as much about our product as if he were buying it in 55 gallon drums.

Q Well, that's what I am pointing, is the tag actually placed on the valve, not in the envelope given

to the carrier.

A Oh, yes, the it is placed under the valve. We have a polyethylene packet rolled up, folded, and attached right to the valve.

Q Are you doing that now for materials covered by the pesticide requirements of EPA?

A And the DOT, both products. It's not required by the DOT but we think it's a good idea.

Q And how's that working?

A Well, we think it's working fine. We haven't had any lawsuits, we haven't had any problems.

(Laughter.)

Q Well, I guess maybe my question is more mechanical in terms of the physical ability to keep them on there during transportation.

A Oh, that's no problem at all.

Q Okay.

A I mean, we're talking about a good weatherproofing material and no problem there, whatsoever.

Q When you're talking about valve tagging, you're not talking about a loose flopping tag on a piece of string?

A No. It's roll -- it's a full label. It's a full product label folded in a polyethylene pamphlet,

wrapped up and stapled and put with a metal hat. Many companies do it. Monsanto -- we're not the only company that does that.

MR. KOVALICK: Mr. Trask.

MR. TRASK: Yes, a question from the floor -- two questions.

BY MR. TRASK:

Q A previous statement implied that CHEMTREC gives instructions on dealing with emergencies. My impression is that CHEMTREC gives some information and then contacts the shipper to respond. Which is correct?

A I understood your question correctly, and again, I can't say I am not an expert with CHEMTREC because I am involved all the time, but as the system works, the respondent at MCA upon receiving a call, pulls from the bucket file the information about that product or product class. He does at that time read on that card the things to do with that product. In case of fire, what to do; if it's leaking, what to do; to dikes or dams and so on.

At that time you get the information about the shipment, find out who shipped it or where it's going, so you can go to the shipper and he has right on that same card the telephone number of the company who made that product, of where to contact them. He makes that contact

and says that that company will get in contact with the people at the emergency scene.

And, if it doesn't work within a certain period of time, it goes almost through the same cycle again quite often. But it does both of what you said, I believe your question raised.

Q Yes. I tend to agree, after having seen that CHEMTREC system in operation, I think that's essentially true what you are saying, that when the caller asks CHEMTREC about that waste, and he is given whatever information that is available, if that is not enough information, then the caller is referred to the chemical company, or the chemical company is advised to get in touch with him.

A Many of those chemicals are not hazardous under the DOT definition and the company is so told that its innocuous, you can sweep it up, you can do a lot of things. CHEMTREC goes beyond what's on the bucket file in many a case.

Q That's the second time this question has come up. I hope that lays it to rest.

The other question is, "Today, many shippers utilize shipping documents supplied and executed by the carrier. If a separate manifest is required, do you

agree that the shipper should provide the manifest in all cases?

A I think it depends on how you promulgate the regulations. If you say the generator is the generator, and not necessarily the shipper, you are talking about the person who is making the waste, it isn't the transporter that created the waste. If your regulations say that that's the way it will be, that's the way it will be.

Q That's not the way it would be. I don't know how many companies -- most major companies don't have that pyramid bill of lading.

MR. ROBERTS: I'd like to interject on that. A lot of people don't seem to be aware of it, but the Bill of Lading Act really requires the carrier to provide both ladings.

A Absolutely.

Q Then why under DOT, in this area, don't we say there will be a shipping paper. We'd bypass the whole issue and say, somewhere, there will be created a shipping paper.

A I think we go farther than that, Mr. Roberts, we call it a shipping paper, a shipping paper document, either one will identify the necessary criteria you require.

Q There are a few archaic references left, but it's still basically shipping paper, which could be on a sheet of legal notebook paper, as far as we're concerned, and still be part of the requirements. And that again is for private carriers.

Now in terms of the manifest requirement suggested through RCRA. Obviously, it is suggested that the burden be placed on the man offering the material for disposal and prior to the disposal transportation.

There is a question as to whether, in considering constraints that would be recognized by statute. Under the Bill of Lading Act, some separate distinction would have to hear the question raised after the fact, where a distinction would have to be made, relative to a manifest requirement so that was clearly laid on the generator offering the material. A statement separate from the bill of lading.

A Many companies force the carrier to make --

Q Well, I think the general practice in the United States is that the shippers take the bill of lading and get them approved in their own format, even though, technically speaking, it's the carrier that's providing that bill of lading to the shipper at the time the transportation is consummated.

A You can believe we've even gotten him to pay for it. (Laughter.)

Q I won't pursue that any further.

MR. KOVALICK: I think that's all the questions. Thank you very much.

(Applause.)

MR. KOVALICK: Mr. Jack Pulley, of Dow Corning Corporation, to be followed by Mr. Schultz, of the Steel Shipping Container Institute, and followed by Dr. Gordon Russo.

Will you accept questions?

MR. PULLEY: No, in the interest of time.

MR. KOVALICK: All right.

MR. PULLEY: My comments are of a more general nature.

Mr. Chairmen, members of the Panel, ladies and gentlemen. I am Jack Pulley, with Dow Corning Corporation, we manufacture silicones , and our headquarters are in Midland, Michigan. For those of you who are not familiar with us, we are the other chemical manufacturer in Midland, Michigan.

(Laughter.)

One thing that is so nice about speaking so late in the program, is that you have the opportunity to

hear everything that you are going to say at least three times, and the opportunity to abbreviate your talk accordingly, and I have done so.

Basically, the comments are on a very simple premise -- a hazardous material is a hazardous material, period. Regardless of whether it's an article in commerce or a waste material. We feel that this should be the governing pinnacle in this effort. Therefore, the regulations imposed on the transportation of hazardous material should be determined by the property of the material and not upon the ultimate definition. Any differences in these regulations which govern the transportation will be sought, should be justified only by absolute necessity.

And then, when these differences are necessary, at least the two sets of regulations should be compatible.

I think it's of benefit if we just sit back and look a minute on American history, on American society in general. It is moving toward, as it must, a resource recovery type of society and industry, and we are properly placing a great deal of emphasis on the safe disposal of industrial wastes.

As a result, two small -- relatively small industries have sprung up, and it is our position that

these industries must grow, must be allowed to prosper and must be allowed to operate in a safe manner. We encourage this development, the development of these two industries, which we feel is in the vested interest of everyone. However, looking at these industries, they are small, in general. And their demands for materials vary.

One key, we feel, to the stability of these industries is promoting a set of regulations that not only protect health and environment, but also provide the necessary flexibility to meet the various material demands. I believe this example will clarify what I am trying to say.

Many industry big companies have "spent acid". This type of a material can go to any one of four different types of any usage. It can be reused by another manufacturer, right in the process, with no change. It can go to a waste disposal facility. It can go for recycling or reclaiming facility. And our concern is that we maintain a flexibility to channel these resources based on the demands of the resource recovery industry, rather than on the dictates of RCRA regulations.

In Michigan, we have a particular situation. There is a Liquid Waste Hauler Act, in addition to DOT

regulations, and as a result, when we are developing this, potential sources, we run into a situation where we begin asking questions, well can one hauler handle both -- the same material to both a reuser and a waste disposal facility. I would submit that we should not be faced with these types of questions. These regulations should be consistent regardless of where the material goes. Otherwise, we get into word games as to defining what is a waste. Is a waste characterized by the material or is the waste characterized by its ultimate destination.

I'm afraid that we have to accept the definition -- the approach that a waste is defined by its ultimate destination. One man's waste is another man's resource. We want to get away from the word games of trying to play with that particular term.

What specifically we would suggest as has been done many times today. The DOT should take the lead with EPA's expert advice in developing these types of regulations. And, the basic approach should be, we would suggest, that hazardous waste materials be considered simply as a subgroup of hazardous material, and that every waste possible treated as hazardous material.

In this regard, we believe that most DOT regulations regarding hazardous materials can apply

equally to hazardous wastes as to hazardous materials which are determined to be unequal in commerce; for example, labeling, placarding, and other matters of identification.

Getting back to the spent acid situation, we see no difference and no reason that a bulk tank of this same acid going to a waste disposal facility should be labeled or packaged any differently than it should be if it is going to a user of this once used resource. The same argument applies to any packaging regulations. Also to the training of the haulers. An acid spill is an acid spill. And also to the reporting requirements.

A few specific points that I will make as brief as possible, because I believe they have been made very well today, is, if we would believe that the manifest that's been required by RCRA should be either a simple addition to or an expansion of the present shipping papers.

We are concerned with two separate regulations imposed on -- one for shipping papers; one for the manifest system will create confusion and be counter-productive. We would also reflect that transportation on the premises of a specific facility or between a joint facility, should be exempt from any manifest system.

Again, referring to the Michigan situation. We would hope that eventually there would be developed one uniform licensing program, either handled by the State or the Federal authorities. But right now we are in a situation, as I say, where a hauler of "spent acid" could be considered as hauling a waste material or as a commodity, and then in Michigan we begin to deal with two separate regulatory functions.

In closing I might reiterate a complaint that has been expressed many times, that we primarily fear, and that our primary concern is that we may be faced, unless we are careful, with a redundant, overlapping and counter-productive set of regulations.

I would like to compliment the agencies on this type of a meeting and their effort to try and coordinate their efforts in this area. Thank you very much.

MR. KOVALICK: Thank you, Mr. Pulley.

(Applause.)

(Remarks off the record.)

MR. KOVALICK: Mr. Roberts pointed out, Mr. Pulley, that you point out two industries that need encouraging, but you didn't want questions. If you would do that either by letter or verbally, we would appreciate it.

(The names of the two industries were mentioned but were inaudible to the reporter.)

MR. KOVALICK: Now, Mr. Schultz, from the Steel Shipping Container , being followed by Mr. Russo, and then I'll make a recall for Dr. Ball.

Would you accept questions?

MR. SCHULTZ: Yes, I will, within the comments I will make tonight, but they will be brief.

Mr. Chairmen, and Panel Members, my name is I. Schultz. I am president of the Steel Shipping Container Institute, and our headquarters is in Union, New Jersey.

Mr. Chairmen, before I make my remarks, I want to congratulate you on chairing a very fine meeting. And I think that everybody here will agree to that. I think you've kept the thing going and think that the questions of the Panel have been very pertinent to the issues.

My remarks today will be brief. It was not my intention to make a statement today, but in view of the Panel's question concerning why is there a shortage of reconditioned drums, and the answer by Mr. Hershson that it is caused by the use of wide gauged drums, I will give the Panel the view of the Steel Containers

Institute on this matter.

First, I want to say that I respect the opinion of my good friend, Mr. Hershson, but I cannot agree with his comments on this matter. To my knowledge there are no official statistics available to indicate, in fact, that there is a shortage of reconditioned drums. That's still a matter of opinion.

And next, if however there is a shortage of drums, reconditioned drums, we believe at the Steel Containers Institute that such a shortage is a result of two few drums that were manufactured during the recession years, 1974-1975, and the fact that in the last five years there's been something like 30 to 35 million drums per year manufactured.

Now there may be many other reasons besides that. In fact, I don't think that a comprehensive study has been made in this matter, nor do I feel that a marketing issue is necessarily the type of thing that ought to be discussed at this hearing. But since the issue was raised, I did feel of course that I should make a comment.

Now a brief comment concerning energy saving and the recycling of steel drums. Comprehensive tests of the ~~old~~ all 20 -gauge, 55-gallon drum, prove beyond a doubt that the cost saving, light weight container is

reconditionable by standard procedures. The rigid tests which are made by Meyer's Recondition Company, considered one of the largest in the country, show a national success rate involving repeated truck shipments of filled 20-gauge drums, as well as repeated trips to the normal reconditioning process.

Chosen at random for testing, the light head drums were first filled with water by several different manufacturers in the East and Midwest who produce them, and shipped by truck an average of 3300 miles to the Los Angeles plant of Meyer's Drum Company. No drum traveled less than 2100 miles, some traveled as far as 2,500 miles. The carriers were not aware of the program, and as a result, the drums were subjected to normal carrier handling without any special treatment.

After unloading, emptying and inspecting, the drums were processed through the standard type reconditioning line, including cleaning and inspection by outside observers. They were then refilled, reloaded and trucked to Meyer's open plant for unloading, emptying, inspecting, refilling, reloading, and shipment back to Los Angeles. The drums made a total of six round trips of 350 miles each between the plant. There were six complete reconditionings at the Los Angeles plant; each observed and

reported in detail.

After the first trip, all of the drums were changed to see if this operation had any impact on those drums. As a result, all drums were successfully changed. The Meyer's report also stated the general opinion that any normally equipped reconditioner could duplicate this performance. And the consensus is, they all believe, that the ~~old~~ all 20 gauge 55-gallon drum, so called light gauge drum, is amply capable of at least six trips by reconditioning it in a useful life as a shipping container. A determination contrary to all claims from some sources that the ALL ~~0~~20 gauge drum is not reconditionable.

And in closing, I would like to say that because the all ~~0~~20 gauge weighs approximately four pounds less then the 20/18 gauge and 12 pounds less than the 18, it reduces freight costs to provide an important economic benefit to shippers.

For the same reason, it also conserves the steel supply. The steel will produce 50 all ~~0~~20 55 gallon drums as opposed to 45 18/20 gauge and only 37 all 18 gauge. Package reliability is an asset with incorporation of a fatigue resistent body design. The ALL ~~0~~20 gauge drum has been approved by the truck shipping (inaudible) by the National Qualification Board. Thank you, sir.

MR. KOVALICK: Thank you very much.

Any questions.

I guess not, so thank you. Thank you, Mr. Schultz.

Now, Mr. Gordon Russo, of Lawrence (inaudible) & Associates. May I ask if Dr. Ball is here from the University of Tennessee, he will be next in line.

Would you accept questions, Mr. Russo?

MR. RUSSO: I would accept questions within the context of my remarks only.

One of the first questions when someone from a law firm steps to a podium is, who are you representing today. I'd like you to know that we are representing ourselves. Our firm specializes in advice regarding the transportation of hazardous materials, and in view of that kind of background, we've developed some thoughts and philosophies of our own, in approaching this problem.

The only point I want to make is one that was raised this morning by Mr. Roberts in regard to three or four of the early speeches. And, if I could paraphrase the question, Mr. Roberts, and you kind of let me know if I have done so accurately, I believe you asked, "Should existing safety standards for DOT hazardous material be reduced for hazardous waste which need a DOT definition?"

I'll repeat it again. Should a good safety standard for a DOT hazardous material, which are also wastes, be reduced for a hazardous material that is a waste that happens to meet the DOT definition?

MR. ROBERTS: No. If you are asking me a question, Mr. Russo, I --

MR. RUSSO: You asked the question of Mr. Harvison, Mr. Johns and of Mr. Graziano, as I recall.

MR. ROBERTS: I recall a question like that addressed to Mr. Hershson relative to the standards applicable to reconditioned drums, as --

MR. RUSSO: That's right.

MR. ROBERTS: -- relative to the incentive aspects of RCRA in using that type of drum to be as an incentive with relaxed standards applicable for transportation to a waste disposal facility.

MR. RUSSO: Right. The question actually was raised with all four people, I think with a tendency toward packaging, although the word "packaging" wasn't used each time the question was asked.

And my reply, basically, is going to sound as if I am in contradiction with Mr. Pulley's comments, but I think you will find that I am not.

First of all, DOT standards for hazardous

materials are predicted on the fact that those hazardous materials in that particular container will be exposed to the full gambit of transportation. That's the basis for the DOT standard for drums, for boxes, for the labeling system, the filing system that is used. What we're faced with is the transportation of a material that may take place, starting out, for instance, in rail transportation to -- let's take an example, from Chicago to Woodbury, New Jersey, a terminal in Woodbury, New Jersey by truck, from the pier facility by water overseas.

And, I would like to point out that in the study being conducted by EPA with regard to transportation of wastes, one of the characteristics coming out is that wastes, generally speaking, are transported quite short distances. And, what I am pointing to is the fact the standards that were developed or have been developed, for containers or other rules applying to transportation of wastes -- excuse me -- hazardous material, may not necessarily apply to wastes. Not because the material is a waste, but because waste material inherently are exposed to a different transportation environment.

What I am contending is, possibly, one should not require for material that is to be transported ten miles, the same requirements for material that would be

transported by trainloads, five or six thousand miles. And the fact that package, after that, being able to be reconditioned or reused again. To illustrate the point, and I only want to make this a point of consideration. I am not saying that I have any solutions; I actually haven't studied the problem in that depth. But, to illustrate what I am talking about -- we could take a metal drum, for instance, under the requirements that DOT has on that, and consider that in shipping a waste, a generator has three choices. He can use a new drum, he can use a reconditioned drum, and if it is not a DOT hazardous material, he can use a non-DOT drum, or a so-called DOT single-use container that has not been reconditioned.

What I am upholding is that it is possible that an additional choice could be made. That is, that a DOT drum without being reconditioned, might be evaluated by the chemical processor, by the generator, and determined through some criteria, to be adequate for transportation to a disposal site that is probably not more than five miles away. Under today's rules, that could not be done. Under today's rules, for instance, for a number of materials, you would have to use a new drum for that transportation, where either reconditioned drums are not

authorized or single-trip containers are not authorized.

The point I am trying to make here is that hazardous wastes are transported in a different environment then most of our so-called commercial chemicals. And, realizing this, it is very possible that the criteria for transporting hazardous wastes might be very different from those for transporting these hazardous materials. Thank you.

MR. KOVALICK: Thank you, Mr. Russo.

Any questions from the Panel? I guess not. Thank you.

I will make one final call for Dr. Roy Ball from the University of Tennessee, who signed up. Let the record show that he is not present.

What we propose to do now is, we each have a fist full of cards that were given to us earlier in the day, and some more on the way.

What we'd like to -- how about ten minutes on each of our stacks. We'll go about 10 or 15 minutes each and then we will see how far we are and then perhaps questions from the floor will take us not beyond -- not too much beyond 5:30

I think we're wearing the crowd down. (Laughter)

So why don't you start for the first 15 minutes?

MR. ROBERTS: Oh, boy.

MR. KOVALICK: Mr. Crockett also has some questions that he's been dealing with in terms of pre-emptions. I'll let him deal with those.

BY MR. ROBERTS:

Q The question here: Would the phrase ". . . may include but not limited to explosives, et cetera (within the Hazardous Material Transportation Act) answer your legal problems and leave DOT to regulate in this area?"

A I think I made a comment that was relative to this earlier, when I felt that somebody had quoted the Act out of context. This hazardous materials means a substance or material, in a quantity and form which may pose an unreasonable risk to health and safety or property, when transported in commerce.

I have no problem at all with the portions quoted here by the question. As a matter of fact, in the drafting of the legislation, it is very clearly set out that the materials listed in Section 104 were to illustrate the responsibilities of the Secretary and not to limit his ability to carry out responsibility. It is not an inclusive list. It is to illustrate what he is authorized to regulate.

So really, the key goes back to the basic

definition of hazardous material and I did point out that the term "unreasonable risks to health, to safety or property in transported commerce is the key." Obviously it calls for some subjectivity and dialog and interchange through the administrative procedures process in terms of what the Secretary decides is a hazardous material within that context.

I only want to emphasize that these words are there and obviously they are addressed to the hazardous material as posed by those hazards during transportation and not in terms of the intended function of the material at its destination, whether it be to function as a waste material, trash dump or to go into a recycling facility.

So I've always felt that we were obligated to look at it relative to what hazards are posed during the course of transportation by the material, not necessarily what happens to it as it arrives at its intended destination, wherever that may be.

I hope that's somewhat responsive to the question.

Q How would you handle the registration of private carrier vehicles?

A I always have a facetious answer to something like that. Very carefully.

Well, there's some limitations on what we may do in the registration, and actually under statutory authority, we can go much further then we can under the statutory mandates of registration. For example, we can operate under the exemptions process, and we have. And as a matter of fact, in one rule making action involving PCB, in the preamble it was stated that we intended to maintain it under the special permit/ exemption process because of our ability to control it better then if we were to just promulgate general rules authorizing anybody to transport the material without any form of approval or registration.

We also have about 200 discretionary authorizations in the regulations; some of which are administered by the Department, others by the Bureau of Explosives, that do provide a greater degree of control then we have under registration. Registration is good merely to identify who the person is. It's not a license. It is not subject to revocation per se.

But, private carriage vehicles would be to promulgate a rule saying that all private carriers of hazardous materials or hazardous wastes, albeit, shall register. Not a very complex situation to adjust, if it was found desirable, and probably more so if it was found

to be effective; an effective method to do the job.

Supposing we have a form of registration required for carriers using MT3331 carrier tanks to transport liquid (inaudible) and gas, for example, at the present time. I won't go into the merits of that in terms of its effectiveness, from a Government administered program, but there is an existing requirement of that type.

We also have registration requirements for several packaging --

Q I just wanted to supplement what you're saying for anyone whose interested in the registration topic, have him read Section 3010 of the Resource Conservation Act, which I will briefly quote. It says:

> "Not later than 90 days after promulgation of the basic hazardous waste regulations, any person (leaving some things out) transporting hazardous substances (meaning hazardous wastes), shall file with EPA a notification, stating the location and general description of such activity and identifying the hazardous waste."

So, as far as EPA is concerned, there is a requirement, a required regulation for "notification."

And it then goes on to say that it is illegal to transport, among other things, hazardous wastes, unless

the notification has been offered. So in the case of private carriers who transport, their companies must notify as transports.

Q Okay. Well, two cards have come in on my response about Illinois and our exchange of information. I might elaborate on this a little bit. Maybe it will be more responsive to these questions.

First of all, Illinois came in with a very formalized proposal for a -- I guess you would characterize this an agreement or memorandum of understanding between us and the State. On consultation with our fine counsel here and anybody who knows me by nature, I said, "Well, the State of Illinois can get anything from us they want in the form of incident information anyway because of the Freedom of Information Act. But why make a big deal out of it? So we quickly agreed and more or less tore it up and wrote back a letter, just a letter to the State of Illinois saying, we would supply the information, if that would alleviate the grief of a double reporting system for carriers within that State.

I should clarify it. We don't have a large fancy, wax sealed ribbon-type agreement with the State of Illinois. It's just a letter that I wrote to Illinois saying we would do it, which accomplished the purpose.

Now the cards. Your comments on DOT to submit incident reports to the State of Illinois -- is it not true that transporters are also required to report incidents in Illinois direct to that State? Is this Illinois' one way of policing incident reports?

A I don't know that to be a fact. My understanding was that if a report were made to DOT, Illinois was going to modify its requirements and not require the same report be submitted to the State of Illinois. Now somebody here apparently has some information I don't have. The agreement we had with Illinois through my letter, is very, very limited.

Q Well, there were two parts to it: one was an immediate report, a telephonic report, like we have, and another requirement was a subsequent later report. As I recall, it was one of the two, I can't remember. The latter report, I think the statute, which the Agency was operating under, provided that if DOT provided to Illinois copies of the later report, then there would be no need for the carrier to report directly to the State.

A As it stands right now, by statute, the Agency has been told, if you have an agreement on one of these two reporting requirements, you can eliminate separate responses from the carrier. There is still a statutory

requirement to report on an immediate notification, and the Agency isn't authorized by statute to accept DOT notification on that, so there is nothing you can do about it. I am not sure that they are policing. I suppose it can be used for that since, presumably, your report would come in both immediate and late report. But, that's the reason it is broken down like that. We only have the ability to offer them because of our own statute, to offer reports on the later rather than the immediate reports, so they are still important.

Q I might add to that. Only the carriers of public law reporting requirements are covered by the understanding, and this goes to the second card.

You've indicated that OHMO has signed an agreement with the State of Illinois concerning the reports. Do you plan to publish this information in the Federal Register?

A No.

Q Was this a result of a formal or informal application for consistency with DOT regs?

A No. This was not a consistency planned preemption determination-type action. It was merely, I believe, a responsiveness on the part of the State officials, to industry comments here in Illinois, that why not let

DOT give you copies of our reports, we we don't have to make two reports. And it seemed rather sensible. And it is not like today's type of formal agreement we have published in the Federal Register. So the Register would be whatever type of mechanism is employed in the State of Illinois to advise carriers that they do not need a report to Illinois, should they report to DOT.

MR. ROBERTS: Time run out?

MR. KOVALICK: Four more minutes.

BY MR. ROBERTS:

Q Part 1 says -- not Part -- Section 173.1. DOT hazardous materials transportation regulations imposes a requirement. Before I read the rest of it, it's a long one. Is there somebody here from the Department of Defense?

(No response.)

GSA?

(No response.)

It relates to regulations dealing with the Department of Defense and their file of hazardous materials so that DOD is packed in containers that meet or "speaks" -- I don't think we can say that.

(Laughter.)

Q -- DOD shipment specs. DOD sells hazardous

material and hazardous, but does not get involved in shipments incident to sales. GSA sells the same.

Does anybody here recognize this question, or has the person gone?

A VOICE: The person has gone.

MR. ROBERTS: It is a very long and involved thing. I would not want to get into it right now.

BY MR. ROBERTS:

Q Where would intrastate transporters fit into a DOT implemented regulatory scheme? Such carriers are not regulated under the Hazardous Materials Transportation Act, yet. The controls of such carriers and the weight they carry is required by RCRA.

A I believe the card is referring to Section 103.1.

"Commerce means trade, traffic, commerce for transportation within the jurisdiction of the United States: (A) Between a place in a state and anyplace outside that state, or (B) which affects trade, traffic, commerce or transportation described in Clause A."

The second portion of that, Sub-B would be addressing the intrastate transportation of hazardous controls, say, for example, on public highways, by purely intrastate means.

In Docket HM-134, in converting the Department's regulations to the -- under the -- under the authority of the Hazardous Materials Transportation Act of 1974, twice in the preamble it is stated that the adoption does not affect any new class of shippers or carriers.

Now, a number of people are rather concerned about that --Some are rather shocked by it--since there was a statutory provision made for the Department to do it. One of the principal reasons that we did not do it is, we didn't feel we were ready for it in many aspects. For example, under the Act, Puerto Rico becomes a state, for purposes of the Act. And there are about a million homes fueled by propane in Puerto Rico, and yet there are no DOT approved requalification inspection facilities in the "State" of Puerto Rico.

Until such time as things like that can be accommodated, it does not seem appropriate to move into the regulation of intrastate activities on the public highway.

The other thing is, and the question yet to be resolved, and it's going to be a major policy decision, is, to what extent should that regulation apply to intrastate commerce in the context of affecting a trade, commerce, or transportation described in quasai, which is

between that place in one state and may be placed outside of such state. In other words, two trucks moving in the night, side by side. One's intrastate, one's interstate. What the effect of the one intrastate on the commerce moving by the truck going interstate.

It's a lousy illustration, but it does point out and illustrate what is meant by this in terms of affecting commerce; only one type of illustration.

But the point to be made now is that we do not exercise full statutory authority over intrastate transportation under the Hazardous Materials Transportation Act. This does not mean we do not have the authority. That's where we are right now.

MR. KOVALICK: My turn.

MR. ROBERTS: I kept the hard ones for later.

MR. KOVALICK: Hard ones for later.

BY MR. KOVALICK:

Q Please clarify the 14 day comment period to November 9, 1977. Many of the discussion topics are philosophical in nature. It is believed that a longer comment period, 30 days, should be provided, in order to prepare a proper response.

A First of all, the notice of this meeting was in the Federal Register since late September, 30 -- about

30 days before today, and you have another 14 days, so presumably you already have 44 days to think about the questions. But, as I mentioned earlier, the November 9th day is magic because that is the day when we go to editing and printing of this record. If you wish to submit comments later than that time, we will still take them and consider them in our overall docket for the Resource Conservation Recovery Act, but they will not appear in the actual document that is mailed out to this body.

Q Please explain why EPA feels it must impose regulations on the transportation of contaminated, discarded and hazardous materials, while "pure" uncontaminated, hazardous items of commerce, essentially identical in composition to the discarded materials, may or may not have been deemed to require regulations by DOT. It seems counter-productive to regulate transportation of small amounts of a contaminated discarded material, while huge quantities of the same pure material may go unregulated.

A All items proposed by EPA as genetically active, persistent and biocumulative, are right now and have been items of commerce and hence are now transport.

Again, it is not what EPA thought up to do. The law says we shall deal with hazardous wastes and

this question rings out a theme of Mr. Robert's comment this morning, it may be differences between the regulation of hazardous wastes and all other virgin materials with the same characteristics, unless, for example, they were totally incorporated wastes in the DOT regulations. But this comment points out that all items that are genetically active are shipped in commerce. That's true. And they are transported now. That's true. But he doesn't go on to say they are currently regulated, meaning, placarded, labeled and shipping papers, and that is what it amounts to That they are not currently, all of them, placarded or labeled or marked or containing shipping papers in the way that RCRA would contemplate they should be.

Q In EPA, you give several examples, for example, actual incidents of non-DOT regulated materials that have been involved in transportation related incidents that are really significant, question mark; quantities of biocumulative persistent or non-degradable materials in the environment.

A You may wish to correspond or talk to us further about this. We have developed a case study of over 400 damage cases that relate to the movement of waste from generation to ultimate disposal. And in

more than 50 percent of those cases where damage is downwater or air or surface water, and resulted because the waste during the transporting didn't make it. So in that sense, many of the issues that we are dealing with on this manifest, for example, are the reasons we are involved, as to whether there are transportation actual incidents of non-DOT regulated materials.

Someone just passed me an article about the Louieville sludge incident, where a C-56 compound was dumped in the storm sewer as a method of disposal rather than destined for proper disposal. Presumably that wasn't a placarded, labeled, shipping paper commodity when it went into the manhole. And, that may be an example.

Another one I know of, is an incident in Berlin, Missouri, where a waste oil hauler had mixed TCDD or dioxin with the waste oil and used it as a product. And had it been treated as a waste, in the sense of going to a disposal facility, it would have never ended up damaging plants, animals and harming, to some extent, people.

But we have some more cases, so if you would like to discuss that with us, we would be happy to.

Q To facilitate the afternoon discussions, the real differences should be given between the materials or the concepts of what materials are to be included as

hazardous substances, hazardous materials, hazardous wastes, and specifically provide to this audience the identity of those materials that are creating these gaps of regulatory coverage.

A Let me briefly refer you to laws or sections of laws that you might want to look at when you think of hazardous substances. We immediately, in EPA, think of Section 311, of the Federal Water Pollution Control Act, which deals with spills of oil and special hazardous materials. Hazardous substances, excuse me. Section 307 of the Water Pollution Control Act, which has to do with toxic substances in water discharges. And Section, I believe it is 112, of the Clean Air Act, where hazardous substances into the air are identified by EPA.

Hazardous materials today, which the trade has generally be speaking of the DOT designation of hazardous materials, usually including some wastes, and hazardous wastes are a substance of all materials, and we have been talking about those in the context of the Resource Conservation Recovery Act.

Q This is a comment that should be added. Discussion Topic No. 7 asks: If DOT or EPA should develop regulations for "handling" distilled hazardous material, handling requires a good deal more than transportation.

It might be beneficial of a transport viewpoint to narrow the handling definition, i.e., does handling involve clean-up, transport, disposal, neutralization, et cetera?

That's a comment.

I have four -- five questions relating to spills, which I will come back to.

Q Would it be feasible for the toxic hazardous wastes to be identified in several classes by EPA, which would then be taken by DOT, to revise the definitions of Poison B, to establish types of poisons similar to how DOT addresses types of explosives under Class A or Class B.

A I guess the essential answer is yes. I mean, that's one of the approaches that was extended this morning, that possibly adding two current classes of DOT additional levels or criteria is an approach.

I have three questions related to nuclear wastes.

Q The United States Regulatory Commission has allowed the disposal of certain low levels of short, half-life isotopes as non-radioactive wastes. Does EPA concur with the current NRC standards for this practice or is there more stringent EPA standards under consideration?

A We are working with the Nuclear Regulatory Commission and if you read Section 3001, you will see radioactive in there, but in the definition of solid wastes, you will see an inclusion for source byproduct and special nuclear material. So if you boil that all down, we are talking about accelerator produced radioactive materials and naturally occurring radioactive materials, and those are the ones with which we are having an ongoing discussion with the NRC.

So that this question, I guess the specific answer is we are investigating what regulations they may have for low level radioactive wastes of the kind I mentioned, that is, naturally occurring and accelerator produced, and we will move on from there.

Q This was a question earlier, specifically to radioactive materials. Are other Government agencies, such as, NRC, Transportation Branch, Division of Waste Management and Transportation, actively involved in these rule making?

A I don't know if that branch is, but yes, we are meeting with NRC.

Q In light of the clear danger to the public of fish and waste products, would you support a requirement that the state and local authorities be notified as to

route and rate of passage of such materials, to make sure that a quick and positive response can be made?

A From our point of view again, these would not fall in the category that I was discussing earlier of basically accelerator produced naturally occurring radiations. Those would, in terms of wastes, still be under NRC jurisdiction.

I have four questions here. Four questions related to spills. Let me -- I don't think we can answer these well because we are not the spill program EPA, but -- well --

Q Will there be two lists of hazardous substances: one under Section 311, of the Water Pollution Control Act, and another under RCRA?

A When I raced through a moment ago all the sections that have hazardous in various air and water acts in EPA, what I wanted to communicate was, we are, as part of our rulemaking, trying to look at those other lists, and to the extent possible, to incorporate them, use the results of other parts of EPA in our efforts, because if you read our law carefully, we too, must have lists.

So, it is possible that we will have two lists and, as I mentioned at other public meetings, you must --

you should not assume when you read the word "lists" that that means substance. It is possible to have a list of practices, or wastes containing substances, or wastes containing substances in certain concentrations. All those things could be on lists. And not be assumed that what we traditionally know as hazardous substance lists are the final product under RCRA.

Q What good does a spill report do to protect the environment? What do the EPA, DOT, or U. S. Coast Guard do with these reports after they are received?

A From our point of view, the reporting on the spill will help us revise and make regulations better. That is, if we determine some problem with a certain kind of package for wastes or container, or if we determine there wasn't sufficient information on a manifest, for example, to provide the kind of response needed in an emergency, that would lead us to revise the regulations. So our need of the reports in the future, would be used for that.

Alan, did you want to comment on what you use your reports for?

MR. ROBERTS: I assume somebody's been parking them in a filing cabinet someplace.

It depends on what kind of report you are

talking about. The immediate report quite often is received and quite often nothing is done. That's the only way I can make a candid reply.

Quite often, the basic information received in the immediate reporting, we immediately dispatch, either somebody from our Washington staff or one of the mobile field offices, to the scene promptly to initiate investigation. The one thing that we have not done in DOT, aside from the involvement of the Coast Guard and their relationship with EPA, and I am not really qualified to comment on that, they have not engaged in any form of mitigation activity at the scene, at least, up to this time. And they have not exercised any type of jurisdiction. DOT is here, and we're in control, and you are going to do as we say.

And we do it mainly to, as was indicated, the reporting system is to form a -- be a mechanism for highlighting the efficacy of the regulations to determine where we should allocate our resources or concentrate our resources, in terms of field investigation or establishing priorities, to develop trends, obtain the necessary specifics required by the Hazardous Materials Transportation Act, with which to compile our annual report to Congress, and things of that nature.

A number of occasions where I was personally involved, an effort was undertaken to either trace down what occurred following the initial event. For example, I spent hours one time tracking down a spill in a semi trailer to see what was going to decontaminate the trailer. I tracked the trailer throughout four states and four stops, and found that nothing was done, then did certain other things to convince the carrier's management and other parties to get busy and recover certain materials that were in the vehicle and to exercise proper decontamination procedures.

I would say in all honesty, though, we do not have the capability to do this on a full time basis for all wastes reported to us. As I indicated, we have, over a period of five years received approximately 44,000 incident reports. I would be totally dishonest to imply that we have dealt with each one specifically in any proper fashion. It would be a dishonest statement and incorrect.

MR. KOVALICK: I have two more and then I am through with my stack.

BY MR. KOVALICK:

Q In the event of an accident or spill during unloading, that is, at a hazardous waste disposal site,

should not this accident be reported to EPA if it occurs on the hazardous waste disposal site?

A Our response is that we are contemplating having a contingency plan requirement in our disposal site regulations, which are not the subject of today's meeting, and they will deal with the problem of what happens when there are spillage and problems at the disposal site.

This person goes on to recommend detailed information on shipping papers with the truckload, because shipping officers are closed at night when an accident can occur. "It's not practical to wait until the next day to get information from the generator." This detailed information may be always readily available from large corporations, but definitely not available from small generators or waste disposal trucking operators. Hazardous wastes are more complex and variable then hazardous materials.

Q Finally, in Illinois, is a private carrier hauling dirty solvent, that is, a flammable liquid, required to register with EPA if the material goes to a refinery and not otherwise disposed of in a landfill?

I have the answer here to.

A The State EPA says no. The Federal EPA says yes. All DOT regulations are followed in transporting

via tank wagon.

Well, this person is laced with assumptions. One is, that we are assuming that dirty solvents are hazardous wastes, and of course, that is a subject for future rulemaking. If it were, the results would, assuming that there is some special treatment for things going to recovery, that is material recovery versus disposal, which is also not settled.

Q And finally, in the State of Illinois, would it be authorized for EPA to take over, the notification portion, that is the 3010 regulation that I made a brief mention of this afternoon, then the Illinois EPA regulation would apply in the State regarding the Federal notification system.

A We do not authorize the Illinois notification system, if it included non-notification, unless we felt it compared with ours favorably, and that would be case-by-case or state-by-state examination.

So, again the question has its own answers and it's laced with several uncertainties regarding regulations?

Now back to Alan.

MR. ROBERTS: All right.

BY MR. ROBERTS:

Q Since training in hazardous materials is required by the law, why can't the training requirements embodied in HM-103/112 be expanded to include environmental and health related materials?

A Why can't it? There is no good reason why it can't. If a material not presently under our regulation is classed as a hazardous material under some new regulation, automatically, the various regulations in the beginning of the operative parts that pertain to the words "instruct this personnel," or words to that effect, in terms of the duties of that personnel, that relate to handling of hazardous material would be automatically in force and effect. It would almost be automatically required.

Now, if it expands the training requirements to cover more things than they cover right now, that's a different story. It would be similar to the system that was done, accomplished a couple of years ago, for example, in the FAA, where the Air Carrier Industry had to submit written instructional plans, written training programs to the FAA for their acceptance. Another way of doing it.

Q What position does DOT take on hazardous wastes deposits and/or labeling systems presently in effect or

proposed by various states?

A If EPA develops a labeling system, well, a tanker -- is that tanker? Yes, tanker, I guess it is. I guess that means cargo, tank motor vehicle -- or drum have three labels, DOT, EPA and State.

Well, first of all, I will have to be very frank and admit I am not fully acquainted with what the states are doing in this area. And apparently their imposing, labeling or placarding requirements are distinctly different from those of DOT.

As you are aware, we are going through a transition period on placards for the first time and we are aware of the fact that some of the states have written into their local statutes law, ordinances or requirements that were consistent with the former DOT regulations involving the retaining of motor vehicle placards, and that there may be some problems in existence there in terms of possible consistency in pre-emptive action in the future.

A As a personal comment, I don't think that I would consider the three way split of labeling and placarding requirements to be very desirable. I don't think that anybody up here suggested that such a thing would be desirable. I think the line of questions would

make it evident in terms of Mr. Schaffer's comments about the methodology being employed in terms of special tagging of discharge openings of cargo tanks and tank cars, as presently required under the pesticide registration regulations of EPA.

I don't think you will find that many of us are desirable of doing much more in any of these areas than we absolutely have to to accomplish the statutory mandates.

(Remarks off the record.)

Q We don't know if we can deal with this now. It says, "If there's time." I doubt it.

Could you explain how DOT Rule 49 applies to the paper and pulp industry; specifically, is craft pulp considered a hazardous material upon transportation? Are we required to label unused chemicals that are sent back to the manufacturer? Any information would be helpful to us.

A I think maybe you ought to see me afterwards and we'd better put you in touch with the appropriate people where you may be able to get more specific information on your responsibilities under the existing Act. You're not addressing this question as to what is at hand here today, but what exists today. I'm sorry,

what is under consideration here today as related to what has been required for some time. Is that correct?

(Person nods.)

MR. ROBERTS: I'd be delighted to help you out on this but I don't think --

Assuming DOT establishes a new classification for environmentally hazardous material, and promulgates regulations governing transportation of those materials, then would not the pre-emption clause of the DOT --

(Remarks had off the record.)

MR. ROBERTS: (Continuing) Let Mr. Crockett answer that one.

MR. KOVALICK: Mr. Crockett.

BY MR. CROCKETT:

A Yes, it is possible. You have to remember when you draft regulations, even with an express clause, which the Hazardous Materials Act has, the manner in which you draft them may influence how effective they are in terms of pre-empting the state requirements. It is possible to draft the regulations presuming the states are going to continue to do certain things, and it would be possible to draft one that would knock the states out of the game entirely on a particular subject area.

Now we have procedures to provide opinions,

anybody that's interested that's caught in one of the situations where they feel the state requirement is inconsistent with what we're telling them to do, there's a way to go about filing a, basically, an application for a ruling on the matter, and if you have a specific problem in that area you might want to look at Part 107 of our regulations.

But the short answer to this is it depends on how you draft the regulations, the capabilities there, whether it justifies it or not is another matter.

MR. KOVALICK: Is that the bottom of your stack.

MR. CROCKETT: I wanted to make one other comment on the subject of intrastate, if I could, which may not have come through and is a factor, by the way, in considering whether you advocate DOT changing the regulations or EPA adopting its own, and that is, that under the EPA statutory mandate, the regulations that we are adopting are -- or we would adopt -- are national standards for transporters and they are, as I mentioned earlier, the minimum floor for each state. That is, they can have no regulations less stringent than that. So, in effect, any state that would be, say, authoriz-d by U. S. EPA to take over the whole hazardous waste program will have intrastate regulations as least as stringent as the

national standards. And that contraposes, and if EPA were just to adopt by reference U. S. DOT regulations, the same logic could apply. Before we could authorize a state, they would have to have regulations we adopt by reference, therefore, we are making waste materials DOT regulations effective intrastate. So, either way you cut it, waste materials moving intrastate can be affected by the transportation standards whether they are adopted by reference or whether they are generated independently or by EPA.

MR. KOVALICK: Well, on behalf of EPA and DOT, we'd like to thank you. Do we have any questions from the floor from you hearty souls that have stuck it out all day?

We found this most useful. It has served our purpose, and obviously we expected a little smaller crowd then we received. So, if you have other comments, as I said, you may mail it into our offices and they will be in the publication of the record if they're received by November 9th.

Thank you very much. We would like to adjourn our public meeting.

(Whereupon an adjournment was taken at 5:45 p.m. on the same day.)

STATE OF ILLINOIS)
) SS:
COUNTY OF C O O K)

I, Pauline James, do hereby certify that the foregoing is a true, accurate and complete transcript of the proceedings had at a Joint Public Meeting on the Development of Regulations for the Transportation of Hazardous Waste, sponsored by the Environmental Protection Agency, Office of Solid Waste, and the Department of Transportation, Materials Transportation Bureau, Office of Hazardous Materials Operations, held in the East Ballroom A, at the Ramada O'Hare Inn, Higgins and Mannheim Road, Des Plaines, Illinois, on the 26th day of October, 1977.

Pauline James

Pauline James
Notary Public
Cook County, Illinois.

STATEMENT OF ARTHUR J. SCHULTZ, JR., PRESIDENT
STEEL SHIPPING CONTAINER INSTITUTE
FOR THE INCLUSION IN THE OFFICIAL RECORD OF THE
EPA/DOT PUBLIC MEETING
"TO DISCUSS THE DEVELOPMENT OF REGULATIONS
FOR THE TRANSPORTATION OF HAZARDOUS WASTES"

RAMADA O'HARE INN, DES PLAINES, IL., OCT. 26, 1977

Mr. Chairman, my remarks will be brief. It was not my intention to make a statement today, but in view of the panel's question concerning "Why is there a shortage of reconditioned drums" and the answer by Mr. Hershson, that it is caused by the use of light gage drums - I will give the panel the view of the Steel Shipping Container Institute on this issue.

First, I respect the opinion of my good friend Mr. Hershson but I cannot agree with him on this matter.

Second, to my knowledge there are no official statistics available to indicate, in fact, that there is a shortage of reconditioned drums!

Third, if, however, there is such a shortage, we in SSCI believe that such a shortage is a result of too few new drums manufactured in 1974, 1975 during the last recession, and only an average of 30-35 million new drums manufactured each year during the past few years. There may be other reasons.

Now for a comment concerning energy saving and the recycling of steel drums. Comprehensive tests of all/20 gage 55 gallon drums prove beyond a doubt that the cost saving, lightweight container is eminently reconditionable by standard procedures.

The rigorous tests, which showed an excellent success rate, involved repeated truck shipment of filled all/20 gage, 55 gallon drums as well as repeated trips through the normal reconditioning process.

Chosen at random for testing the tighthead drums were first filled with water by the seven different manufacturers in the East and Midwest who produced them, then shipped by truck an average of 2,300 miles, with some traveling as far as 2,500 miles The carriers were not aware of the program, and as a result, the drums were subjected to normal carrier handling without any special treatment.

After unloading, emptying and inspecting, the drums were processed through the standard tighthead reconditioning line, including cleaning and dedenting, and inspection by outside observers. They were then refilled, reloaded and trucked to Myers Oakland, Cal., plant for unloading, emptying, inspecting, refilling, reloading and shipment back to Los Angeles.

The drums made a total of six round trips of 850 miles each between the plants, filled each way. There were six complete reconditionings at the Los Angeles plant, each observed and recorded in detail.

After the first trip, all of the drums were chained to see if this operation had any impact upon the drums. Result: All drums were successfully chained without adverse effect.

The Myers report also stated, as a general opinion, that any normally equipped reconditioner could duplicate this performance. As a consensus, it is now believed that the all/20 gage 55 gallon drum is eminently capable of at least six trips and reconditionings in its useful life as a shipping container, a determination contrary to claims that the all/20 gage is not reconditionable.

The exceptional durability of the all/20 drums may be surprising to those unfamiliar with the extensive design, development and testing program conducted by the Steel Shipping Container Institute. During a two year program, drum bottom designs were tested extensively to enhance resistance to flex fatigue which was the ordinary cause of failure in drums after multiple, long haul trips. Then, on extensive, multi-company two year program of shipments under special permits from the trucking industry demonstrated highly satisfactory performance, and caused industry, with ICC sanction, to authorize regular carriage of liquid filled all/20 gage drums.

The incentive for this exceptional effort was to achieve savings in steel usage and in transportation cost at no sacrifice of transportation safety. Because the all/20 weighs approximately four pounds less than the 20/18 and 12 pounds less than the all/18, it reduces freight costs to provide an important economic benefit. For the same reason, it also conserves the steel supply: One ton of steel will produce fifty all/20 55 gallon drums as opposed to forty-five 20/18 gage and only thirty-seven all/18 drums.

I greatly appreciate having this opportunity to comment in this manner. In support of the remarks regarding the Myers' tests I attach a copy of their report to SSCI.

/ek
11/8/77

REPORT BY JOHN CUTT, MYERS DRUM CO. AT THE ANNUAL MEETING
APRIL 18, 1977

REPORT ON ALL/20 GAUGE DRUM

During the General Meeting at Los Angeles in January 1977, it was decided that Steel Shipping Container Institute had to refute NABADA's charges with respect to the reconditionability of the all/20 gauge drum, if possible. If not possible and the NABADA charges were correct, then it was necessary that S.S.C.I. recognize that fact in order to resolve their allegations once and for all.

It was agreed that those companies who were then manufacturing the all/20 gauge drum would ship samples of their all/20 gauge drum to the Myers reconditioning facility in Los Angeles.

All participants (initially five and later increased to seven) were requested to ship their drums filled with water via truck; carefully documenting the distance shipped and the weight of each drum. None of the drums in the test program were shipped less than 2,100 miles, with some traveling as far as 2,500 miles. The carriers were not aware of the program, and as a result, the drums were subjected to normal carrier handling without any special instructions issued as to their handling.

The drums were unloaded at Los Angeles, inspected for physical damage and emptied of their contents at this point. A full written report was prepared on each company's shipment for the record and for their information. The drums were then sequestered until all shipments had been received.

The program established was to test the drums under actual field conditions to prove or disprove NABADA's allegations. All drums were to be tested as follows:

1. Shipped to Myers as previously described.

2. Unloaded, emptied, inspected and reconditioned.

3. After the initial reconditioning trip, the drums were filled once again with water and shipped via Myers truck to its Northern California plant; where they were unloaded and then reloaded for a return truck trip to Los Angeles, a total round trip distance of 850 miles.

4. Upon receipt at Los Angeles, the drums were unloaded, inspected with a full written report and reconditioned once more.

5. This process was repeated a total of six (6) times with accurate records maintained of the condition and reconditionability of the drums in this program.

Except for some minor reduction in the dedenter air pressure, the drums were handled in the exact same manner as our other production. Let me repeat, with that one exception, the drums were processed through the normal reconditioning procedures.

A representative sample (one drum) was taken from each manufacturing shipment and the chime cut to measure the gauge of the steel used by each manufacturer. This was done for the purpose of refuting any later charges that the drums tested might have been of a thicker gauge. The drums used in this program measured .033 to .035, well within the 20 gauge decimal range.

The initial reconditioning trip was purposely delayed until the S.S.C.I. General Meeting that was held in Los Angeles in January. At that time, a number of the submitting company representatives were on hand to view this trip through the reconditioning facility. After the first trip, all of the drums were chained to see if the chaining operation had any impact upon the drums. May I report to you, at this time, that all drums were successfully chained without any adverse effect.

The initial test pack from each participating company was for six drums with one drum used for gauge verification. The remaining five drums were loaded and unloaded on trucks a total of fourteen (14) times each, including the first shipment from the manufacturing plant. The drums had traveled an average distance of just over 7,000 miles and had been reconditioned six (6) times each, except where failures did occur.

The twenty five (25) drums used in this testing program were successfully reconditioned a total of 133 times out of a possible 150 scheduled, for a success factor of 89%. No failures occurred prior to the third trip, with one failure occurring at the end of the sixth trip; two at the end of the fifth trip and two at the end of the fourth trip. Bear in mind that the failures, while not usable for tighthead use, could be converted to non-regulated full open top (FOT) usage. In other words, the rejected all/20 gauge drums were not scrapped but could be converted to other uses.

One last point, we believe that the parameters established for this test accurately represent the best field simulated conditions yet devised for a testing program of this nature. The point proved is that the all/20 gauge drum is reconditionable and refutes completely NABADA's charges. These results have been carefully recorded and documented and each company's results, with supporting pictures, have been distributed. Continued testing will take place. Two other manufacturers have requested that we test their drums under similar conditions; which we will do.

Bear in mind that most of the drums are still in good, usable condition and in all likelihood could be reconditioned two, three or even four additional times.

State of Kansas . . . ROBERT F BENNETT, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

DWIGHT F METZLER, Secretary

Topeka, Kansas 66620

October 21, 1977

Mrs. Geraldine Myer
Public Participation Officer
Office of Solid Waste
WH 462
U. S. Environmental Protection Agency
Washington, D. C. 20460

Dear Mrs. Myer.

This letter is to comment on questions raised in the Federal Register, Thursday, September 29, 1977, page 51626.

1. The E.P.A should take the lead in writing the regulations pertaining to R.C.R.A. A good approach to take would be involving the D.O.T. *only when the waste being transported is a hazardous material.* The scope of D.O.T. involvement is covered quite well in (49-CRF Parts 171-177) regulations. The E.P.A. should write a user guide to these regulations so haulers of hazardous waste can find needed information pertaining to them.

2. The D.O.T. should specifically treat hazardous waste separate from hazardous materials. This would ultimately separate the haulers into two types; those that haul waste and those that haul materials. This is a very important idea that must not be overlooked. There is an ever present danger of mixing toxic materials that have been left in a tank truck with material to be used in a process. These trace toxics such as PCB's can enter into a product without ever being detected.

3. The E.P.A. should develop a separate manifest document so that the information on the manifest can easily be read in case of a spill. It would take too much time for someone who is not familiar with the D.O.T forms (such as a local police officer) to separate out the needed hazardous waste information.

4. The D.O.T. should have full control over anything that has to do with trucks or carriers. With regards to labels, the D.O.T. should develop new ones as the E P.A develops their list of hazardous wastes.

5. The registration of waste haulers is one of the most important ideas that was overlooked in R.C.R.A. If these haulers are not registered, there is no way to regulate them. Companies will find it cheaper to find someone that will dump their waste out in the country. This is especially true with small volumes of waste.

6. With regard to notification of spills, the hauler should only have to report to the lowest level of government which regulates him. After it is reported, that agency could report to the rest with minimum delay. The easier you make it to report a spill, the more likely it will be reported.

9. Yes, D.O.T. should modify its regulations to keep hazardous materials separate from hazardous products.

Sincerely yours,

Division of Environment

Jon W. Hughes

Jon W. Hughes, Environmental Engineer
Solid Waste Management Section
Bureau of Environmental Sanitation

JP

Monmouth County Environmental Council
MONMOUTH COUNTY PLANNING BOARD
ONE LAFAYETTE PLACE
FREEHOLD, NEW JERSEY 07728

201-431-7460

October 18, 1977

Mrs. Geraldine Wyer
Public Participation Officer
Office of Solid Waste, WH-462
U.S. Environmental Protection Agency
Washington, DC 20460

RE: Notice of October 26 public hearing concerning EPA/DOT regulation of transportation of hazardous wastes

Dear Ms. Wyer:

Please find enclosed the statement of the Monmouth County Environmental Council on the hazardous waste regulations proposed by the State Department of Environmental Protection in the October 6 issue of the New Jersey Register. Although we regret that we will not be able to consider the particular questions raised by the Federal EPA and DOT as an official body before the period of comment ending November 9, we would appreciate it if you would incorporate the enclosed letter as part of the public record.

Sincerely,

David Morris, Jr.
Assistant Environmental Planner

DM,Jr.:agc
Enclosure

"THIS IS 100% RECYCLED PAPER"

October 17, 1977

Ms. Beatrice Tylutki
Director, Solid Waste Administration
New Jersey Department of Environmental Protection
P.O. Box 1390
Trenton, New Jersey 08625

Dear Ms. Tylutki:

The Monmouth County Environmental Council supports the proposed regulations of the DEP which would require the completion of special manifest forms by the producers, transporters, and disposers of hazardous wastes. The Council shares the Department's concern regarding the effects of illegally dumped materials and believes that the "cradle to grave control" provided in the proposed rules would go a long way in halting dangerous disposal practices.

We would appreciate it if you would incorporate our views into your record of public comment.

Sincerely,

David W. Morris, Jr.
Assistant Environmental Planner

DWM,Jr.:age

VELSICOL CHEMICAL CORPORATION

341 EAST OHIO STREET • CHICAGO ILLINOIS 60611 • 312-670-4500

November 8,1977

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Solid Waste
Hazardous Waste Materials Division
401 M St. SW.
Washington D.C. 20460

DEPARTMENT OF TRANSPORTATION
Room 6500, Trans Point Building
2100 Second Street, SW.
Washington, D.C. 20590

Gentlemen:

Reference joint public meeting, EPA/DOT, October 26,1977, and notice thereof, *Federal Register*, Volume 42, No. 189, Thursday, September 29,1977.

Response to above reference, all parts thereof, is hereby submitted by Velsicol Chemical Corporation.

Velsicol Chemical Corporation, a Corporation of the State of Delaware, located and doing business at 341 East Ohio Street, Chicago, Illinois 60611, is a party of real interest, in that Velsicol Chemical Corporation is engaged in the manufacture of chemical compounds and thus has occasion to generate and arrange disposition of hazardous waste.

Sincerely,

J.S. Avren
Director of Distribution

JSA:ak
enclosures

RESPONSE TO SUPPLEMENTAL ADVANCE NOTICE OF PROPOSED RULE MAKING AND NOTICE OF MEETING FRL 797-6

Response to Discussion Topic 1.

Regulation concerning the transportation of all hazardous material (waste or otherwise) is the regulatory province of DOT. Title 49 USC mandates this responsibility to DOT and provides the framework within which hazards can be defined and hazardous materials classified. Transportation of many hazardous wastes, due to their corrosive, poisonous, flammable, or other previously established hazardous criteria, are already controlled by DOT, Therefore, the question of control of transportation of hazardous wastes is open only to the extent that certain hazards not currently recognized and defined in 49 USC are, or may be, present in certain wastes being transported. Since Title 49 USC defines all presently known and recognized acute hazards, the question is one of recognizing an regulating materials (waste or otherwise) transportation of which poses a hazard of a delayed nature, such as carcinogens, mutagens, sterilants, delayed neurotoxicants etc. These materials have three basic characteristics in common:

a. Improperly handled, they pose a very real threat to the human environment.

b. They do not pose an acute or immediately detectable threat to health and safety.

c. They are not currently eligible for classification as hazardous materials under any DOT category.

Therefore what appears to be called for is another classification of hazardous materials. This classification should embrace all hazards of the type described above. DOT should prescribe a generic hazardous material designation, such as ORM-E, if it is desired to preserve the ORM (Other Regulated Material) format begun by DOT to handle less acute hazards, or "ENVIRONMENTAL HAZARD" with an appropriate label and placard design. DOT should also list the categories of hazard belonging in this group and define each. Utilizing this list, EPA, OSHA, or any other competent entity could then report to DOT any and all materials falling within this category, as well as prescribing the tests for determination of eligibility of materials for inclusion in this list. In the case of EPA, hazardous wastes would be included in this category However, having established this new hazardous category, it would be incumbent upon all shippers of materials falling therein to comply with the labelling and placarding requirements, whether or not the intended disposition of the material involved was as waste.

Response to Discussion Topic 2.

Title 49 USC makes no provision for designating the ultimate disposition possibilities of materials falling within its purview. It is not within the mandate of DOT to prescribe or distinguish erd uses of the hazardous materials which it regulates.

Response to Discussion Topic 3.

There is no conflict between the RCRA manifest and DOT. DOT requires the shipper and the transporter to fulfill certain clerical requirements in conjunction with the bill of lading of a shipment of hazardous materials. DOT's function, should the new category of hazardous material be established per response to Discussion Topic 1 above, would be appropriate bill of lading notation. The RCRA manifest is a separate document from the bill of lading. See enclosure I for a manifest procedure presently in use.

Response to Discussion Topic 4.

Current DOT requirements for labelling, marking, and placarding, of all currently recognized hazardous materials are sufficient. Having established the new category referred to in response to Discussion Topic 1 above, DOT should then proceed to develop the labels and placards for this new category. Compatibility with current design should be at the discretion of DOT.

Response to Discussion Topic 5.

Registration requirements for transporters of hazardous wastes, once the new category is established, would be fully congruent with HMTA requirements. As such, no new registration requirements should be developed.

Response to Discussion Topic 6.

Since under the recommended new hazardous materials category, DOT would be the regulatory agency involved, accident and spill reporting procedures would be synonymous with current DOT reporting practices. However, in view of the recognized interest of EPA in this category of hazardous material DOT should have, as part of the procedures peculiar to this new category, the obligation of reporting all such incidents involving this class of material to EPA. Where the material involved is "waste," provision of RCRA would be satisfied: where it is not, it is still of interest to EPA.

Response to Discussion Topic 7 & 8.

Spill and training procedures and obligations, having been established in conjunction with ongoing practice and procedure, would be synonymous with those extant on existing classifications of hazardous materials. The question of special procedures (given that each and every spill incident entails its own special procedure) is therefore considered moot and redundant as regards special or additional regulation, other than the establishment of a new hazardous materials class.

Response to Discussion Topic 9.

Quoting from enclosed response to a previous advance notice of proposed rule making (FRL 710-4), "There should be a regulation requiring that any mixture of chemicals intended for transportation must be fully reacted prior to such transport. The term "fully reacted" should be defined as follows:

Fully Reacted- reduced to its final form, with no gas generation, exothermy, or exothermic potential, including delayed reaction."

Response to Discussion Topic 10.

It is requested that review of our previous response to another notice of proposed rule making, copy attached as enclosure II, be undertaken with a view towards its pertinence and application to the instant notice. Also, for information only, is the Chicago Tribune's report on the joint EPA/DOT Hearing (enclosure III).

VELSICOL CHEMICAL CORPORATION

CORPORATE STANDARD PROCEDURE

HAZARDOUS WASTE MANIFEST SYSTEM		Number: 90.21 Date Effective: 9/1/77 Supersedes:
Prepared by: R. B. Bayr	Approved by: V. J. Baarman	Page 1 of 7
Reference:		Distribution List: A, B, C, D, E

A. PURPOSE

This procedure defines the responsibilities and steps to be taken for the issuance or use of the Hazardous Waste Manifest (HWM) in states where such a system is not presently in use.

B. SCOPE

The HWM is a multi-part form. Each section of the form must be completed in order to assure Velsicol Chemical Corporation that its hazardous waste is disposed of properly. This system will be required under the "Resource Conservation & Recovery Act" (RCRA) of 1976. VCC will adopt this program of self-compliance commencing the effective date shown above.

C. LOCATIONS

All Velsicol Chemical Corporation facilities or subcontractors.

D. GENERAL

This procedure offers guidelines for the proper personnel to follow relative to the initiation and completion of the HWM form whenever off-plant disposal of liquid and solid waste is necessary. All

hazardous waste shipments will be accompanied by a hazardous waste manifest. In states where an HWM system exists, the state provided manifest will be used in compliance with that state's regulations. Where no manifest system has been adopted by state agencies, the following HWM will be used.

E. FORM

Velsicol form 96.40-250, Exhibit A, titled "Hazardous Waste Manifest" can be obtained from the Corporate printshop (mailing address 4010).

The HWM is a four page form (Form #96.40-250) with three (3) sections, titled, I-Generator of Waste, II-Hauler, and III-Waste Disposer. The pages are distributed as follows:

White page- To be returned to generator along with invoice after waste has been disposed. NOTE: No invoice will be paid without the white copy being received by the generating facility.

Canary Page (Light Yellow)- Disposer's copy for their files.

Pink Page- Hauler's copy for their files.

Goldenrod Page (Dark Yellow) - To be retained by the generator of waste after the hauler has signed Section II- d at time of pick-up. This copy will be kept on file by the Purchasing Department, and matched with the white copy that the disposer must return to the generating facility certifying that shipment had been properly disposed.

F. RESPONSIBILITIES

1. Purchasing Department at Location Generating Waste

   a. Maintain inventory of HWM forms

b. Maintain record and/or file of each shipment.

c. Complete forms and insure that all shipments of hazardous waste is accompanied by a manifest in cooperation with department generating waste. Use Schedule A as reference.

d. Release invoice for payment only upon receipt of the completed original (White) copy showing that the waste has been disposed of legally or as specified on the HWM form.

e. Maintain the white on file on the plant at least 3 years. The goldenrod HWM may be distroyed at the present time. (Future EPA or state regulations will require this copy be sent to them .

2. Department Generating Waste (Plant Manager or Area Superintendent)

a. Request shipment of hazardous waste to disposal site.

b. Provide information necessary to complete manifest to the Purchasing Department.

c. Delegate authorized agent to to sign HWM form after loading.

d. Authorized agent oversees loading of waste.

e. Authorized agent signs HWM under Section I along with hauler representative (II-H) as to accuracy of information furnished.

f. Return goldenrod copy to the Purchasing Department.

G. COMPLETING FORM 96-40-250

Generator of Waste: The Purchasing Department of the generator or Originator of the hazardous waste will complete the HWM with the following information:

Manifest Number: To be distributed by the Purchasing Department. Explanation of coding is in Appendix B. Use Table A as reference.

SIC Code: Definition in Appendix B.

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Section I - Generator of Waste

Line Number	Description
I/A	NAME- Name of facility generating or desiring disposal
I/B, C	ADDRESS- Address of location or originator of waste
I/D	TELEPHONE NUMBER - Area Code/telephone number of location described in Lines I/A, B, C. Local emergency number that can be called in the event of an accident or transfer of information is required.
I/E	TELEPHONE NUMBER OF CHEMTREC.
I/F	DESCRIPTION OF WASTE (Refer to Schedule A for information).

NAME: Name of waste as described in Schedule A.

COMPOSITION: If different from Schedule A, designate-

METHOD OF DISPOSAL

HAZARDOUS PROPERTIES

FLASH POINT

PHYSICAL STATE AT 70° F

pH

SPECIFIC GRAVITY

SPECIAL HANDLING INSTRUCTION: If adverse effects may be encountered or special precautions should be taken by hauler or disposer, it must be so designated here.

DOT CLASSIFICATION: As described in Schedule A, Title 49, Department of Transportation. For more information, contact the Traffic Department.

QUANTITY: Fill in proper amount of waste according to unit shown.

SAMPLE RETAINED: Indicate whether or not a sample of the waste was retained for future reference if necessary, and the laboratory's sample identification number assigned to it for future reference. Retain sample three (3) months.

II/A, B, C — NAME AND ADDRESS OF HAULER: Name and business address of contracted company that has been choosen to transport the hazardous waste from the site shown in I/A, B, C to the disposal site indicated in III/A, B, C.

II/D — TELEPHONE NUMBER: Business location shown in II/A, B, C, or an emergency telephone number that can be called if necessary.

III/A, B, C — WASTE DISPOSER: Name and address of disposal site where hazardous waste will be disposed or destroyed. If an alternate site or method has been choosen, it is the disposer's responsibility to indicate so.

Section II- Hauler

The hauler will complete Lines II/ E, F, G and H at time of pick-up. Lines II/I and J are to be completed at time of off loading.

Section III- Disposer

Disposer is to complete Line III/F and G at the time waste if off loaded at the disposal site. Lines III/H, I and J are to be filled in after the waste has been disposed. The white copy, along with the invoice, will be returned to the originating Purchasing Department.

APPENDIX B

DEFINITION OF TERMS

GENERATOR - Person (s) or manufacturing location requesting the disposal of hazardous waste.

S. I. C. CODE - Standard Industrial Classification Code assigned by the Federal EPA

HAULER - Person (s) or company delegated by either the generator or disposer, to transport the hazardous waste to the disposers site.

AUTHORIZED AGENT - Generator facility - to be designated by location plant manager.

METHOD OF DISPOSAL - Incineration, secure landfull, recovery, chemical fixation or polimerization, reprocessing

HAZARDOUS PROPERTIES - Consult with Director of Distribution

Toxic

Flammable

Water Reactive

Corrosive

Air Reactive

Irritant

FLASH POINT - cc - closed cup

APPENDIX B

DEFINITION OF TERMS

MANIFEST NUMBER - YYXXXX

YY- First two digits of the locations account (General Ledger Control and Responsibility Area) code. See Table A.

XXXX- Sequencial manifest number (0001-9999)

TABLE A

Plant	Accounting Prefix (YY)	SIC Code
Bayport	State of Texas manifest system used	
Beaumont	State of Texas manifest system used	
Chattanooga	55	2870
El Dorado	63	2819
Glendale	54	2870
Marshall	51	2870
Memphis	53	2870
St. Louis	61	2819

HAZARDOUS WASTE MANIFEST

Manifest No _____

SIC CODE _____

I GENERATOR OF WASTE

(A) Name VELSICOL CHEMICAL CORPORATION

(B) Address _____

(C) City _____ State _____ Zip Code _____

(D) Telephone Number _____ - _____ - _____

(E) Emergency Telephone Number 800 - 424 - 9300 (Chemtrec)

(F) Description of Waste

Name _____

Composition

Chemical	Wt % Range

Method of Disposal _____

Hazardous Properties None Toxic Flammable Water Reactive Corrosive Air Reactive Irritant Other: _____

Flash Point (CC, °F): 100 100 - 140 140 None

Physical State (@ 70°F): Solid Liquid Semi-Solid Other: _____

pH: <1 2 3 5 7 9 11 >11

Specific Gravity 0.8 0.9 1.0 1.1 1.2 1.3 _____

Special Handling Instructions _____

DOT Classification _____ Type of Container _____

Quantity _____ #, _____ Cu Ft., _____ Pallets, _____ Gals., _____ Drums, Other: _____

Sample Retained YES NO I.D. Number _____

I hereby certify that the above described hazardous/toxic wastes are properly classified, described, packaged, marked and labeled and are in proper condition for transportation complying with all DOT REGS.

Authorized Agent _____ Title _____
Name (Print)

_____ Date _____
Signature

II HAULER

(A) Name _____

(B) Business Address _____

(C) City _____ State _____ Zip Code _____

(D) Telephone Number _____ - _____ - _____

(E) Waste Hauler Permit Number (If Applicable) _____ State _____

(F) Vehicle Identification Number _____

(G) Vehicle Loaded Wt. _____ #

Vehicle Empty Wt. _____ #

Net Wt. _____ #

(H) Pick Up _____ Date _____ Time _____ AM / PM
(Authorized Signature of Hauler)

I hereby certify that the above described waste was accepted for transportation at the producer's site and delivered to and off loaded at the hazardous waste facility, both as listed hereupon

(I) Off Load _____ Date _____ Time _____ AM / PM
(Authorized Signature of Hauler)

(J) Comments _____

III WASTE DISPOSER (To Be Completed By Disposer)

(A) Name _____

(B) Address of Site _____

(C) City _____ State _____ Zip Code _____

(D) Telephone Number _____ - _____ - _____ Emergency Number _____ - _____ - _____

(E) Permit Number _____ State _____

(F) Quantity Off Loaded At Site _____

(G) I hereby certify that the above described waste was delivered to this facility that this facility is authorized and permitted to receive and dispose of such waste

Authorized Agent _____ Title _____
Name (Print)

_____ Date _____
Signature

(H) Method of Disposal _____

(I) Disposal Date _____

(J) Sample Retained YES NO I.D. Number _____

I hereby certify that the final disposition was as shown

Authorized Agent _____ Title _____
Name (Print)

_____ Date _____
Signature

WHITE—TO BE RETURNED WITH INVOICE PINK—HAULER'S COPY CANARY—DISPOSER'S COPY GOLD—GENERATOR'S COPY

95 43 - 259

VELSICOL CHEMICAL CORPORATION

341 EAST OHIO STREET • CHICAGO, ILLINOIS 60611 • 312-670-4500

June 28, 1977

Mr. Alan Corson
Hazardous Waste Management Div. (AW-465)
OFFICE OF SOLID WASTE
ENVIRONMENTAL PROTECTION AGENCY
401 M Street, SW
Washington, DC 20460

Dear Sir:

Reference advance notice of proposed rule making, FRL 710-4.

Response to above reference, and all parts thereof, is hereby submitted by Velsicol Chemical Corporation.

Velsicol Chemical Corporation, a Corporation of the State of Delaware, located and doing business at 341 East Ohio Street, Chicago, Illinois, 60611, is a party of real interest, in that Velsicol Chemical Corporation is engaged in the manufacture of chemical compounds and thus have occasion to generate and arrange disposition of hazardous wastes.

Therefore, full consideration of the recommendations, views, and opinions contained in the enclosed submission is respectfully requested.

Sincerely,

J. S. Avren
Director of Distribution

JSA:ah
enclosure

RESPONSE TO ADVANCE NOTICE OF PROPOSED RULE MAKING, FRL 710-4

References:

1) *Advance notice of proposed rule making*, FRL 710-4, Federal Register vol. 42, #84.

2) Sub-title C Resource Recovery Act, Public Law 94-580.

RESPONSE TO SECTION 3001

It is our opinion that much of the information being considered in sections 3001 (a) and (b) of reference (1) above as mandated by rederence (2) above, is covered in various sections of Title 49, CFR. Such coverage pertains to parts (1), (2), (3), (4), and (7) in their entirety. With regard to those *matters of import not covered by Title 49, attention is respectfully invited* to the following:

Part (5). There should be a regulation requiring that any mixture of chemicals intended for transportation must be fully reacted prior to such transport. The term "fully reacted" should be defined as follows:

> Fully Reacted - reduced to its final form, with no gas generation, exotherm, or exothermic potential, including delayed reaction.

It is recommended that Section 3001 not concern itself with neutralization, since it is entirely possible to properly dispose of waste material, regardless of its reaction potential. This pertains to conditions at the site of disposal, rather than to the nature of the chemical itself, and does not appear to fall within the purview of Section 3001 (a) and (b) of reference (2) above.

Part (6). This section pertains to administration of the disposal site which is not considered an appropriate subject for attention in this particular section in view of the basic tenor of Section 3001 (a) and (b) of reference (2) above.

Part (8). This is considered the most vital aspect of this section. There should be a cross-referenced list of hazardous wastes and hazardous waste receivers. These lists should comprehensively interrelate to one another, as follows:

1) Hazardous Waste Generators.

   a) Definition. A hazardous waste generator is any person who generates a hazardous material as defined by Title 49, CFR ultimate disposition of which is disposal as waste. This shall apply whether or not disposal takes place at the site of the generator, except that hazardous wastes disposed of at the generating site by destruction shall not be considered in this part.

   b) Administration. Each generator of hazardous wastes shall report generation of such wastes to the Office of Solid Waste, EPA. Each generator shall have 60 days from the date of enactment of this regulation to report generation. Full disclosure of the identity of all hazardous wastes generated or intended to be generated shall be required.

2) List of Receivers. Each person engaged in the business of treatment storage, and disposal of hazardous wastes shall have 60 days from enactment of this part in which to register as a receiver of hazardous wastes. Each person intending to engage in such business on or after the date of enactment of this regulation shall apply for and receive such registration prior to the commencement of operations. Upon publication in the Federal Register of the list described below, such person shall report to the Office of Solid Waste by list number all materials in which he engages or holds himself out to engage in process of treatment, storage, or disposal. This shall include all generators of hazardous wastes, who dispose of such waste themselves, except that those wastes disposed of by destruction at the generating site need not be reported, provided that the residue of such destruction is nonhazardous.

3) List of Hazardous Wastes. The Office of Solid Waste, EPA, should establish and maintain a list of Hazardous Wastes by chemical name. Terms such as "bottoms", "residue", "waste", "extract", or "distillate" of other compounds shall not be considered adequate description. Therefore, the production process or industry shall not be considered in compilation of this list. The list will be maintained in alphabetical order, by name of compound. Where the compound has an alternate name, cross-referencing shall

be made to such name. The list shall include all materials produced as wastes, whether or not such material is capable of utilization in any other capacity.

Administration. The list shall be initialized from the first reporting by hazardous waste generators, as described in (1) above.

It must be made clear within the title or explanation of the list that any material meeting hazardous material criteria under Title 49, CFR whose ultimate disposition as described in part (1) hereof is as hazardous waste, is to be added to the list if it does not already appear. Each hazardous waste shall be assigned specific numerical identification within the list. Where a listed material is produced by five percent or more of all generators, the Office of Solid Waste shall petition the Director of the Office of Hazardous Materials Operations, D.O.T., for the inclusion of the material in 49 USC 172.101. Two reports should be created, titled "Generator's Report of Additional Hazardous Waste" and "Receiver's Report of Additional Hazardous Waste", accomodating additional operations subsequent to initial reporting and registration, for inclusion in records, for reporting new handling of materials already on the list, or for reporting new substances for addition to the list, by previously reporting generators and/or receivers, except that no person engaged in the business of treatment, storage, or disposal of others' waste shall be permitted to generate any hazardous waste.

Interaction of Lists. There should be a cross-referenced codification of both lists, such that it will be possible for the administrator or administrators of hazardous waste programs and the public to readily identify and interrelate receivers to their activities. Receivers of others' wastes should be prohibited from eligibility as generators.

END OF RESPONSE TO SECTION 3001

RESPONSE TO SECTION 3002

Where the generator of a hazardous waste, upon recommendation of the agency, upon its own motion, or in conjunction with the agency, ascertains, recognizes, or demonstrates to the satisfaction of the agency that the development of facilities for the disposal of hazardous wastes by the generator would be in the public interest, the Administrator should make available grants equal to some significant percentage of the total cost of the installation of such facility. To this end, both the percentage and an appropriation should be stipulated in these regulations.

Concerning this section, we note that option (1), Section 3002, reference (1) above, would result in an undue and self-defeating clerical burden on the agency by virtue of the volume of paper to be handled. Such volume would have a tendency to preclude adequate identification of the very situations which the regulation is being promulgated to handle. Concerning option (2), the quarterly report is superior to the daily report by virtue of its lesser volume; however, the submission of quarterly reports is of likewise questionable significance. Therefore, we note the following:

(1) *Options (1) and (2) above, while administratively sufficient to meet* record keeping and reporting requirements, are not considered operationally viable.

(2) If manifest forms are adequate in and of themselves, the generator should certainly provide the transporter with a manifest listing each hazardous waste. Hazardous waste receivers should be required to return copies of the manifest to the generator from the receiving location. Generators, transporters, and receivers of hazardous wastes should retain copies of the manifest for three years. However, no agency should avoid regulatory responsibility by conceiving of such responsibility as a clerical filing task. These manifests would serve as records of the activities of generators, transporters, and receivers of hazardous wastes. As such, they would be subject to *census, survey, inspection, and other* active examination by appropriate agencies as lies within the mandate of those agencies and their active administration of their mandates. Examples of such agency activity might be a survey of the volume and movement of specific hazardous wastes; geographical sampling of certain receivers; comprehensive sampling of certain industries, etc. Bearing in mind that the requirement for record keeping, as stipulated above, would be absolute as regards generators, transporters, and receivers, such files would already be maintained by law (in triplicate), and available by law to appropriate agencies. Therefore, any requirement for automatic submission of manifests or compilations of manifests is a duplication of effort. Therefore, it is recommended that options (1) and (2) be adopted with respect to their requirement for maintenance of records by generators, transporters, and receivers, but that inspection and survey procedures of the agency replace any daily, quarterly, or other periodic automatic

submission by generators, transporters, and receivers.

3) Enclosed please find recommendation as to an adequate form of manifest.

4) It is believed that if these regulations are adequate in final form, there is no need to deviate from the standards created thereby. Here again, part (4) continues with matters presently fully regulated by Title 49, CFR and administered by D.O.T., and O.H.M.O. thereof.

END OF RESPONSE TO SECTION 3002

RESPONSE TO SECTION 3003

It is our opinion that Section 3003 overlaps in large part, as the section itself recognizes, ICC, D.O.T, and other existing regulations. With the exception of the requirement for maintenance of manifest records as covered in Section 3002 and additions to 49 CFR 172.101, as described in response to Section 3001 or additions at the discretion of the agency, there is no need for other direct action by the Office of Solid Waste in the transportation area. Therefore, it is suggested that Section 3003 confine itself to inter-agency coordination. Note also the redundancy of Section 3002 (1) and Section 3003 (1) of Reference (2).

END OF RESPONSE TO SECTION 3003

RESPONSE TO SECTION 3004

(1) EPA has established air pollution standards which are of general application and have been adopted and expanded upon various corresponding state agencies. This regulatory framework appears adequate for the purpose of controlling air pollution by hazardous waste receivers and by generators in disposal of their own hazardous wastes. The only additional control over receivers of hazardous wastes should again be a prohibition against generating of hazardous wastes by receivers.

(2) All land fill sites for disposal of hazardous wastes are devoted to that purpose. This simply means that the location has been given over to waste disposal as an industry and has therefore been designated as a recipient of impurities. So long as such pollution is contained (a) beneath the surface and (b) within the confines of the geographical location designated for purpose of disposal of hazardous wastes, both the disposal activity and its effects should be considered under acceptable control. Leachates, run offs, ground water contamination, and any other form of hazardous emission from within the site referred to above to any territorial entity exterior to the site referred to above would render such receiving site a generator of hazardous waste and as such in violation of the regulations. It is to be understood as falling within the spirit and intent of these regulations that a receiver of hazardous waste is the termination point of such hazard and that such termination point can in no wise be construed or allowed to become itself a generator of further hazard.

(3) The question of regulation pertaining to industrial accidents is considered the proper functional area of the Labor Department, and OSHA thereof, except that nothing in these regulations shall preclude recommendation to OSHA by EPA concerning peculiar safety hazards associated with waste disposal.

(4) and (5) Receivers of hazardous wastes must be required to be located at sites which are self-contained with regard to the operations in which they engage. No geological setting which (a) has the unavoidable potential of pollution to any part of the surrounding area, (b) has not been subject to appropriate precautions which would render the site unable to contaminate the surrounding area, (c) is likely to become a source of pollution to the surrounding areas, (d) is not intended to operate as a disposal site for an indefinite period, (e) is not stable year round with regard to its surface and or sub-surface character when impacted by any ambient climactic condition, (f) is located in the path of any known federal, state, or local development or construction, actual or approved (except as such federal, state, or local construction or development pertains to the disposal, treatment, or storage of hazardous wastes), (g) contains no known natural fuel resources, (h) is not, at time of lease or sale at a fixed price being subjected to an offer for lease or purchase by an entity other than a receiver of hazardous waste, (i) is intended to be owned by an entity not having or maintaining a fiscal responsibility sufficient to restore the site of its original condition upon cessation of operations for any reason within one year of initial activity, or (k) has not been subjected to a proper determination by the agency that all the foregoing provisions have been

complied with and evidence thereof made a matter of record with the agency, shall be approved for operation as a waste storage, treatment, or disposal site.

(6) Within 60 days of enactment of this regulations, all receivers of hazardous wastes should be required to submit an operating plan. This operating plan, to be retained as a matter of record, will consist of the following sections:

(a) Description of overall operating concept.
(b) Description of employee training and operator certification programs.
(c) Evidence of fiscal responsibility to include the following:

I Quarterly financial statement.
II Public liability insurance.
III Closure bond, guaranteeing site restoration upon closure of the facility within one year of operation.
IV List of records to be maintained.

(7) Radioactive wastes, like all other wastes, must be disposed in such manner as to preclude generation of further hazard following disposal. Noise level at any facility not operated on federal premises is considered the province of local ordinance.

(8) Submission of an operating plan, as required in (6) above, and proper review by the agency of the operating plan, including the answering of any and all questions concerning acceptable practice is considered part of approval procedure for commencement of operations, or for continuation of operations of hazardous waste receivers.

END OF RESPONSE TO SECTION 3004

RESPONSE TO SECTION 3005

(1) The following persons shall be required to obtain permits for treatment, storage, or disposal of hazardous waste:

(a) All receivers of hazardous wastes.

(b) All generators of hazardous wastes who dispose of such wastes on premises not integral to, or adjacent to, the generating site.

There shall be no exemptions to this permit regulation. All person registered under Section 3001 hereof as a receiver of hazardous wastes shall be required to obtain a permit. Failure to obtain a permit under conditions stipulated herein shall be cause for cessation of such receiving and disposal activities. Enforcement of such permits could be rendered practical by assignment of priorities to the permit process. These priorities are recommended as follows:

(a) Existing facilities concerning which complaint has been received by the agency.

(b) New facilities.

(c) Existing facilities.

It is understood that, due to the extensive number and variety of existing facilities for the storage, treatment, and disposal of hazardous wastes, issuance of a permit for such facility can be delayed at the convenience of the agency and without interference in the ongoing operation of such existing facility. Existing facilities and operators thereof shall be notified in advance of the date on which the agency intends to determine their eligibility for granting of a permit under this regulation.

(2) The information developed in Section 3004 (6) above and the site considerations in Section 3004 (5) above shall be determining criteria in evaluation of a permit application. No detailed engineering plan should be submitted, except that a valid plot plan shall be submitted, defining the site. Utilizing this approach, and given the technical and economic expenditure involved in arriving at this point, the reviewing official is essentially concerned with a checking procedure.

(3) Given the stringent requirements with which a receiver of hazardous waste must comply in order to obtain the permit, the fee therefor could take into account all expense factors incurred by the government in the checking procedure.

(4) In order to comply with site eligibility requirements as stated in Section 3004 (4) and (5) above, the question is considered moot.

(5) There should be only one permit issued for the facility. Such permit should require annual reporting. A form should be designed and required to be submitted for this purpose. This form should be of such character as to require definitive description of any change in operation since issuance of initial permit, or last renewal. Renewals should take place every five years.

(6) There should be three separate substantive and procedural aspects of the program, covering:

(a) Land fill operations.

(b) Incinerator operations.

(c) All other operations.

No differentiation should be made between different volumes of wastes. It must be recognized that, while a hazard may be compounded by the volume of a hazardous material, it is the material itself that is the first deciding criterion.

(7) With the exception of process trade secrets, all information concerning hazardous materials receivers should be a matter of public record.

(8) There is always a certain segment of the uninformed public which reacts to the presence or proximity of a hazardous waste disposal site, on principle. If a present or proposed hazardous waste operation is found to comply with all regulations contained herein, such compliance shall constitute a primafacie defense against injunctive process. Concerning available capacity, it is to be recognized that hazardous waste disposal, like any other industry, is subject to the rules of supply and demand. Therefore, if a regulatory climate can be created, which, while stringent, carries with it the guarantee that rigid compliance with appropriate regulation is itself a guarantee against legal strictures superimposed by lesser legal bodies, such guarantee would in and of itself, serve to encourage the creation and maintenance of proper capacity.

(9) Properly issued, the RCRA permit system, unlike any other existing permit system, is in and of itself a guarantee to the operator of treatment, storage, and/or disposal sites that continuous operation is and will be permitted. As such, it should not be integrated with any other permit system, except insofar as such other permit system shall have as part of its issuance criteria those strictures and requirements contained in these regulations. Where issuance of a permit other than RCRA permit has such structure or requirement, and such structure or requirement and the enforcement thereof can be verified by the agency, such verification can be used in lieu of direct determination of compliance. This will serve to avoid redundancy and to expedite permit issuance.

(10) The priority system described in Section 3005 (1) above should be superimposed upon enactment of these regulations.

(11) Any expansion of an existing facility which involves (a) installation of new machinery, (b) procedural modification involving an expansion of handling capacity, (c) acquisition of additional adjacent property, (d) new construction, shall require application for permit modification.

END OF RESPONSE TO SECTION 3005

RESPONSE TO SECTION 3006

(1) Nothing in these regulations shall relieve the states of the responsibility for enforcement of any part hereof.

(2) No state program shall exempt the operator of a facility for the treatment, storage, or disposal of hazardous wastes from compliance herewith.

(3) The agency should examine each state law pertaining to matters falling within the purview of this regulation, for determination as to completeness, reasonableness, administration, and enforcement

(4) Nothing in this regulation shall prohibit states from application for full program authorization at any time following its enactment. Such applications shall be acted upon in order of receipt, except that no such application shall be considered valid unless accompanied by a copy the state law being represented by the state as the vehicle of compliance. The agency should have six months from date of enactment of these regulations prior to commencement of state authorization processes.

(5) In order for the state law to have valid application, the investigation processes, physical, administrative, and procedural contained therein should be verified by the agency. This can take form of records auditing, field investigation, and review of administrative process. No state will be authorized, or can continue authorization, which (a) does not have regulations which are substantially the same as these regulations, (b) does not maintain complete records of hazardous waste disposal activities within its borders, (c) is not in the opinion of the agency adequately staffed to cope with the task of enforcing these regulations, (d) is not actively engaged in enforcement of these regulations, (e) is found to be engaged in perfunctory or nonproficient enforcement of these regulations, (f) prohibits or attempts to prohibit disposal of hazardous wastes where such disposal, including prior transportation thereof, is in full compliance with existing federal regulations, (g) imposes or attempts to impose restrictions against disposal of hazardous waste which are in excess of these regulations.

It is to be understood within the spirit and intent of these regulations that, although compliance herewith and enforcement of such compliance are stringent, such compliance and enforcement are the guarantee of an adequate and comprehensive solution to the problem of hazardous waste disposal.

END OF RESPONSE TO SECTION 3006

Manifest No. _____

I. GENERATOR INFO EPA ID# _____

(A) Name _____

(B) Address _____

(C) City _____ State _____ Zip Code _____

(D) Telephone Number _____

(E) Emergency Telephone Number _____

(F) Description of Waste

Area _____

Chemical	Wt % Range

Composition

Proposed Method of Disposal _____

Hazardous Properties Pure Toxic Flammable Water Reactive Corrosive Air Reactive Irritant Other: _____

Flash Point (°C, °F). <100 100 - 140 >140 None

Physical State (70°F) Solid Liquid Semi-Solid Other _____

pH <1 2 3 5 7 9 11 >11

Specific Gravity: 0.8 0.9 1.0 1.1 1.2 1.3

Special Handling Instructions _____

DOT Classification _____

Quantity _____ #, _____ Cubic, _____ Pallets, _____ Drums, _____ Other _____

Shipping Interval Yes No If Yes, Number _____

I hereby certify that the above described hazardous/toxic wastes are properly classified, described, packaged, marked and labeled and are in proper condition for transportation complying with all DOT rules.

Authorized Agent _____ Title _____
Name (Print)

_____ Date _____
Signature

II. TRANSPORTER

(A) Name _____

(B) Business Address _____

(C) City _____ State _____ Zip Code _____

(D) Telephone Number _____

(E) Waste Water Permit Number (If Applicable) _____ State _____

(F) Vehicle Identification Number _____

(G) Pick Up Date _____ Time _____ AM PM

(H) Off Load Date _____ Time _____ AM PM

(I) Vehicle Load Wt. _____ #
Vehicle Tare Wt. _____ #
NET WT. _____ #

(J) Pick Up _____
Authorized Signature of Driver

I hereby certify that the above described waste were made ready for transportation at the producer's site and delivered to and off loaded at the hazardous waste facility, both as listed hereupon

(K) Off Load _____
Authorized Signature of Driver

(L) Comments _____

III. WASTE TREATMENT (To be Completed by Treatment Facility)

(A) Name _____

(B) Address _____

(C) City _____ State _____ Zip Code _____

(D) Telephone Number _____ Permit No. Number _____

(E) Date _____ Time _____

(F) Quantity of Waste Received _____

(G) I hereby certify that the above described waste was delivered to this facility, that this facility is authorized and permitted to treat the waste described on this manifest.

Authorized Agent _____ Title _____
Name

_____ Date _____
Signature

(H) Method of Treatment _____

(I) Disposition _____

(J) Treatment Residuals Yes No If Yes, Where _____

Hereby certify that the above described waste was delivered to this facility.

Authorized Agent _____ Title _____
Name

_____ Date _____

COPIES:

1. Disposal Facility Copy
2. Generator Copy
3. Hauler Copy
4. To Be Returned to Generator
5. Regulatory Agency

PROCEDURE

Generator fills in section I, A through F,
section II, A through G,
section III, A through D

Hauler fills in section II, M through L

Disposer fills in section III, E through J

CHICAGO TRIBUNE'S REPORT ON MEETING OF OCT. 26, 1977

Rules chaotic on transporting risky chemicals, U.S. told

By Sue Treimar

HUNDREDS MORE of the hazardous chemicals trucked across the nation are expected to be regulated by next year

And if they must be controlled, the transport industries would prefer to see them regulated by the U S Department of Transportation, not by the U S Environmental Protection Agency

That was the unofficial word officials from both agencies said they got Wednesday from more than 200 representatives of the trucking, railroad, and chemical industry at a day-long public hearing in Rosemont

THE HEARING, called jointly by the EPA and members of the Office of Hazardous Material Operations in the Department of Transportation, was set to assess the shipping and chemical industries' reaction to existing regulations of the Resource Conservation and Recovery Act of 1976 and to new rules the EPA hopes to draft by the end of this year governing the transport of hazardous materials

Those new rules, yet to be formally worked out, are expected to widen the number of substances being regulated by the federal government. The rules will be officially submitted next spring and aren't likely to go into effect before late next year

About 30 000 materials considered to be hazardous are now regulated by the Department of Transportation Rules being drawn up by the EPA would add hundreds, perhaps thousands, more by widening the definition of hazardous substances

SHIPPING OFFICIALS Wednesday, however, testified that they find the existing rules vague and contradictory, because regulations are administered in some cases by the EPA — which has the authority to control hazardous wastes — and also by the transportation department — which is empowered to watch over the transport of hazardous materials

Under authority granted in the Resource Recovery Act, the EPA is required to write standards for producers, shippers, transporters, and receivers of hazardous wastes, defined as solid wastes that can cause or increase the likelihood of serious, incapacitating or health-threatening illness.

These standards are tacked on to rules outlined under the Hazardous Materials Transportation Act of 1974, which requires the Department of Transportation to designate and regulate materials when it finds that their transport can pose a health threat [Some of the industry spokesmen expressed confusion over what is defined as hazardous waste, and what is defined as hazardous material]

"AS PRINCIPAL spokesman for the railroad industry, I urge the Department of Transportation and EPA to work toward the goal of developing a single set of regulations and eliminating the conflicting, overlapping, and contradictory regulations," urged Robert Graziano, director of the division of safety and chief inspector of safety and special services for the Bureau of Explosives, Association of American Railroads, based in Washington, D C

Asked whether the departments should throw out conflicting regulations and devise a new set of rules, Graziano said "Let's not reinvent the wheel "

"Differing rules would produce nothing more than the same kind of chaos," he said

GRAZIANO AND representatives from four related industries told the five-member federal panel that the transport industry has already learned to deal with rules set by the Department of Transportation on hazardous materials transport and therefore that department, not the EPA, should be called upon to enforce the broader regulations being proposed by the EPA

The hearing was the only one set for the public, industry, and state and local government representatives to comment on existing and proposed rules The two departments will now sit down to work out problems in existing rules and apply their solutions to the proposed regulations.

Panel members said they were surprised by the large turnout and added that they believe industry opinion indicated that the transportation department, not the EPA, should enforce any new rules

"IF [THE SHIPPERS and chemical companies] must be regulated, they'd like to be regulated by the Department of Transportation," said Alan I. Roberts, director of the Office of Hazardous Material Operations He added, however, that the new responsibilities could "put a strain on our resources "

He said he has "no idea" how many new chemicals are expected to be added to the list of materials now regulated by the transportation department

STATEMENT OF MORRIS HERSHSON, PRESIDENT
NATIONAL BARREL & DRUM ASSOCIATION
BEFORE THE ENVIRONMENTAL PROTECTION AGENCY
REGARDING STORAGE & DISPOSAL OF HAZARDOUS
WASTE. RAMADA INN, ROSSLYN, VIRGINIA, OCT. 11, 1977

This statement is submitted on behalf of the National Barrel and Drum Association of 1028 Connecticut Avenue NW, Washington D.C. 20036, which represents the steel drum reconditioning industry in the United States. The 55-gallon steel drum is the primary package for the petroleum, chemicals, paint, adhesives and other industries. About 20 million of these drums are manufactured annually of 18-gauge and 20/18-gauge steel. Approximately 45 to 50 million of them are reconditioned annually and put back into commercial reuse.

A study made by economists at the University of Illinois (copy of which is attached) has proved that if all newly manufactured drums were made of the heavier 18-gauge steel, rather than thinner steel which produces short-lived or throwaway drums, enough energy could be saved annually to light the city of San Francisco for one month. This means a savings of over one million tons of steel each year as well as the millions of tons of iron ore, coal, coke and other metals which go into the manufacture of this steel.

The reason for this explanatory preface is to highlight the importance of the reconditioned steel drum in the Nation's efforts to conserve energy and natural resources. But there is an additional area in which our industry serves to further the objectives of the EPA. All so-called "empty" drums received by reconditioners contain residue of their previous contents -- oil, paint, chemicals, etc. -- sometimes as much as 3 gallons. This is industrial and

often hazardous waste. Although we have no choice but to collect and dispose of it, we are nevertheless performing an important and necessary environmental function. The EPA should therefore recognize our industry as a strong ally and optimize its usefulness in this area.

A major obstacle to the health of the reconditioning industry is the increased production of light-gauge, short-lived or throwaway drums, which cannot be returned to commercial reuse. This has already caused a national shortage of used drums. It calls for the adoption of measures to discourage this waste of energy and natural resources, measures which would, at the same time, encourage the purchase and reuse of the all-18-gauge drum.

Empty, used drums are also used today by many generators of hazardous waste for the storage and disposition of such materials. Such use of an unreconditioned, untested drum is illegal under DOT Regulations for the transportation of hazardous materials, which require either new or reconditioned specification drums for this purpose. Furthermore, dangerous conditions may be created at the landfills, or other disposition areas, because the wastes being poured into a drum may not be compatible with the residue of other hazardous materials, and fires or explosions may result.

If drums are to be used for the disposition of hazardous wastes, they should be new, or reconditioned and tested.

In addition to the necessity for waste generators to be made aware of this requirement through appropriate educational and enforcement activities, we recommend two additional projects for the EPA's consideration, in order to further Congressional intent. The Act requires a study of the appropriateness of incentives and disincentives to promote resource conservation, and of restrictions on the manufacture or use of the product, and of disposal charges.

1. The first research project should be an intensive and exhaustive study into the possibility of incineration, chemical degradation, or other means of reducing waste materials to the lowest possible volume. We understand that some efforts have already been initiated but we believe that this problem is of such vast importance and consequence that far greater efforts should be made. We also feel that the results of all such research to date, both private and public, should be collected, analyzed and distributed

2. We believe a second research project should be undertaken to seek the optimum package for the transportation and burial of hazardous wastes. Perhaps the answer is an extremely light-gauge steel drum -- 26, 28, even 30 gauge, with some lining, suitable for a single short trip from generator to landfill; perhaps fibre, or plastic, or some cheap material not presently being used in the packaging field. We recommend a multi-industry task force to consider this problem, to include such organizations as the Manufacturing Chemists' Association, the National Paint & Coatings Association, the Society of Adhesives Manufacturers, the Fibre Drum Association, the Steel Shipping Container Institute, the National Barrel & Drum Association, and others keenly interested and involved in the packaging, transport and disposition of industrial wastes of all kinds.

With EPA and industry working together, we believe solutions can be found that are environmentally acceptable and economically feasible.

# # # # # # #

Encl.: Energy Study by Drs. Laurel & John Prussing, Univ. of Illinois.

THE ENERGY REQUIREMENTS OF STEEL DRUM MANUFACTURING AND RECONDITIONING

by

Laurel Lunt Prussing

and

John E. Prussing

Urbana, Illinois February 14,1974

ABSTRACT

This study estimates and compares the energy requirements of reusable and single-use steel drums. Single-use drums require twice as much energy per fill as heavier drums which can be reconditioned. This is because the greatest energy requirement in the steel drum system is for the manufacture of steel. It takes roughly ten times as much energy to manufacture a drum as to recondition a drum.

A shift from the current mix of reusable and single-use drums to an all 18 gage drum system with an average of eight reconditionings per drum (9 fills) would create energy savings of 17,043 billion BTU per year, which is 23% of the total energy requirement of the present system and enough energy to provide electric power for one month to a city the size of San Francisco.

Further energy savings could be realized if the number of reconditionings of reusable drums could be increased.

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JOHN E. PRUSSING

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INTRODUCTION

This study was commissioned by the National Barrel and Drum Association to determine the energy requirements of reconditioning steel drums versus discarding or recycling drums by scrapping and remelting. The steel drum reconditioning industry has long promoted its product as a more economical alternative to single-use or limited reuse drums. However, as in other types of packaging, there has been a trend toward throw-away steel drums.

In 1973 fuel shortages caused Americans to realize that nature's riches are not infinite. The United States may be returning to an earlier ethic of resource conservation. It is appropriate to examine the role of the steel drum reconditioner in such conservation.

The method used in this report is based on Bruce Hannon's classic study of the energy requirements of reusable versus recyclable beverage containers.[1] Professor Hannon has been of invaluable help in this analysis of the steel drum industry.

ESTIMATES OF THE ENERGY REQUIREMENTS FOR STEEL DRUMS

Energy use can be studied at many levels, for most industries are interrelated. This report is based on a model which abstracts

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1 Bruce Hannon, "System Energy and Recycling: A Study of the Beverage Industry", Document No. 23, Center for Advanced Computation, University of Illinois at Urbana-Champaign, January 5, 1972, revised March 17, 1973.

from that maze of interrelationships and selects the most significant energy requirements of the steel drum system.

This study traces the energy needs of steel drums from raw materials procurement through steel making, drum manufacturing and reconditioning and all transportation links between these activities. The flow chart on page 3 shows the steel drum system and the processes for which energy use was estimated. Activities enclosed by broken lines on the chart were not included in the energy estimates. The energy requirements of fillers and industrial users, for example, dwarf the portion that might properly be allocated to the use of steel drums within the industry.

Although there are other industries besides steel from which drum manufacturers purchase inputs (e.g., paints) sheet steel comprises 95% by weight of all such inputs. Similarly an insignificant fraction is omitted by not including chemical and paint purchases by reconditioners.

Table I on page 4 gives the energy required at each stage of the flow chart for three types of steel drums, the durable 18 gage drum, the lighter weight 20/18 gage drum and the single-use 22 gage drum.* Although the 18 gage drum is heavier and requires more steel and more transport energy at each stage, its ability to withstand many reconditionings eventually reduces its total energy requirements considerably below the 20/18 gage reusable drum and the 22 gage single-use drum.

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*Note: the finished weights of these drums are 46 lb., 38 lb. and 28 lb., respectively. Each requires an additional 25% of steel from the steel mill to allow for fabrication scrap.

FLOWCHART

STEEL DRUM RECONDITIONING SYSTEM

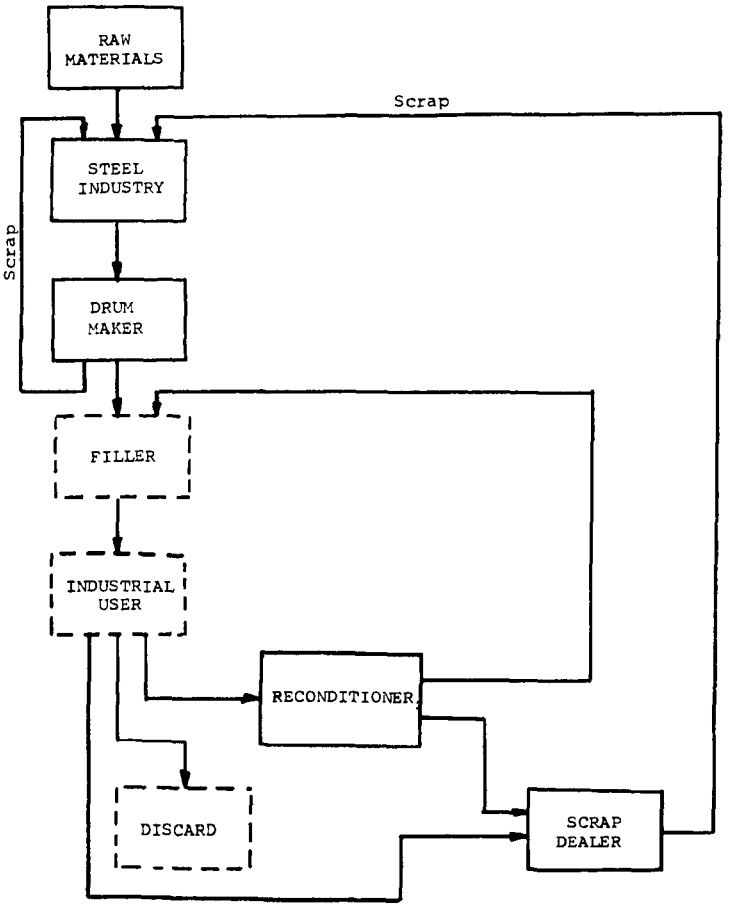


TABLE I

ESTIMATED ENERGY REQUIREMENTS FOR THE MANUFACTURE, TRANSPORT, AND RECONDITIONING OF STEEL DRUMS

Process	Energy Requirement (1,000 BTU/drum)		
	18 gage drum (46 lb.)	20/18 gage drum (38 lb.)	22 gage (28 lb.)
Mining of ores[1]	100.1	82.7	60.9
Transport of ore[2]	27.0	22.3	16.5
Manufacture of steel[3]	1,322.5	1,092.5	805.0
Transport of steel to drum manufacturer[4]	10.9	9.0	6.7
Manufacture of drums[5]	113.0	113.0	113.0
Transport of scrap from drum manufacturer to steel industry[6]	2.7	2.3	1.7
Transport to filler[7]	7.2	6.0	4.4
Transport of filled drums to industry[8]	108.7	107.0	104.8
Transport of used drums:[9]			
a) to reconditioner	2.0	1.7	----
b) to scrap dealer	1.4	1.2	0.9
c) for discard	1.4	1.2	0.9
Reconditioning of drums[10]	147.6	147.6	----
Transport of reconditioned drums to filler[11]	2.5	2.1	----
Scrap yard[12]	0.9	0.9	0.6
Transport of scrap to steel industry[13]	5.9	4.9	3.6

Notes on following page

Notes for Table I (complete list of references on p.12)

1. Hannon, Table 3: 1,740 BTU/lb. of finished steel

2. Ibid., 470 BTU/lb. of finished steel

3. Ibid., 23,000 BTU/lb. of finished steel

4. Ibid., 190 BTU/lb. of finished steel to transport steel to drum manufacturers an average of 392 miles. Includes weighted average of rail and truck transport at 640 BTU per ton-mile and 2,400 BTU per ton-mile respectively (Hannon, p. 12)

5. Census of Manufactures, MC67(S)-4, Table 4, "purchased electricity" converted to thermal energy at 1 kwh= 11,620 BTU; "kilowatt hour eqivalents of purchased fuel" converted to thermal energy at 1 kwh=3,412 BTU (Hannon, p. 12). Allocation of fuel requirements for steel drums in SIC 3491, "Metal Barrels, Drums and Pails" computed from the value of steel drums as a percent of the value of the industry's total output in 1967 (reference 3). This share--65%--is virtually identical to the physical measure of drum output versus total output in terms of the surface area of the steel processed.

6. 25% of the transport energy used from steel industry to drum industry

7. Average distances and mode of transport from reference 4

8. Share of drum output to each filler from reference 5, distance and transport mode from reference 4

9. Reconditioner receipts: 85% local by truck 10 miles; 14% by truck 100 miles; 1% by rail 250 miles. Energy of local truck shipments: 4 miles per gallon diesel fuel; 138,000 BTU per gallon. Energy to scrap dealer and discard: 10 miles by truck; 4 miles per gallon diesel fuel; 240 drums per truck. Energy reduced for lighter drums by weight.

10. Reconditioning energy: natural gas (1 therm= 10^5 BTU), purchased electricity as in note 5 above

11. Reconditioned drums shipped an estimated 25% further than reconditioner drum receipts

12. Gasoline consumption of scrap dealer less energy for 10 mile haul from local sources (note 9 above)

13. Based on average shipping distance of a midwest scrap dealer: 400 miles by rail

The manufacture of a steel drum begins with the mining and transport of ores to the steel industry. Sheet steel from the mill is then shipped to the drum manufacturer. The steel required to make a drum includes an extra 25% allowance for each pound of finished drum to account for scrap incurred in the drum manufacturing process. This scrap is returned as an input to the steel industry.

Steel requirements and transportation energy are estimated in proportion to the weight of each of the three types of drums. Drum manufacturing energy, however, was estimated as equal for all three, since surface area rather than weight seemed a more reasonable measure of the energy used in the fabricating of drums from sheet steel.

The transport energy required to ship drums to fillers was estimated from a weighted average of the proportion of drums shipped by rail and by truck. Slightly more than half of new drums are shipped by truck and the rest are shipped by rail. Rail shipment takes about one fourth as much energy per ton-mile as truck shipment (640 BTU per ton-mile, versus 2,400 BTU per ton-mile according to Hannon's estimates).

The energy required to ship filled drums to industrial users was computed as a weighted average based on the type of filler (chemicals, SIC 281; paints, SIC 2851; and petroleum products, SIC 291), the average distance to customers from each filler by rail and by truck, and the proportion of each filler's output shipped by rail and by truck.

Once drums are emptied by industrial users they can be reconditioned, scrapped, or discarded. (In this model we have included in "discard" drums which may find a useful purpose such as highway markers or even stoves and shower stalls in Alaska; in short, drums which are no longer used to ship the output of fillers.) The energy required to ship used drums to any of these alternatives is relatively small.

Information on the energy used to recondition drums was supplied by a reconditioner who prefers to remain anonymous. Reconditioning energy was assumed to be the same for both types of reusable drums since the energy is needed to clean and repair drum surfaces.

The energy requirements to ship reconditioned drums to fillers and to compress drums for scrap and to ship the scrap to steel mills are negligible compared with other requirements of the drum system.

Table II on page 8 sums the appropriate energies from Table I and indicates the savings made possible by reconditioning a drum rather than manufacturing a new one. For the 18 gage drum reconditioning energy is one tenth as much as manufacturing energy.

Table III on page 9 indicates the total amount of energy which would be required for each type of drum to provide 100 million fills, the estimated annual number of fills of steel drums in the United States. The energy ratios at the bottom of the table show that an all single-use drum system would

TABLE II

ENERGY REQUIREMENTS:

MANUFACTURE AND DELIVERY OF NEW DRUM TO FILLER;

RECONDITIONING AND DELIVERY OF USED DRUM TO FILLER

(1,000 BTU/drum)

	18 gage	20/18 gage	22 gage
New drum[1]	1583	1328	1008
Reconditioned drum[2]	152	151	----

1 Table I down to and including transport to filler

2 Table I, transport to reconditioner, reconditioning energy, and transport to filler

TABLE III

COMPARISON OF THE CUMULATIVE ENERGY REQUIRED
FOR 100 MILLION FILLS OF
REUSABLE AND SINGLE-USE STEEL DRUMS

Reusable		Single-use
18 gage	20/18 gage	22 gage
56,489 bil. BTU	77,735 bil. BTU	111,400 bil. BTU
(9 fills per drum; 8 reconditionings)	(4 fills per drum; 3 reconditionings)	(new drum for each fill)

ENERGY RATIO

$$\frac{\text{20/18 gage drum}}{\text{18 gage drum}} = 1.4 \qquad \frac{\text{22 gage drum}}{\text{18 gage drum}} \doteq 2.0$$

require twice as much energy as an all 18 gage system. A complete 20/18 gage system would require 40% more energy than an all 18 gage system.

Table III is based on a systems analysis in which all flows of material on the flow chart have been estimated. The equation and an explanation of the variables upon which Table III is based are given in the Technical Appendix.

Table III is based on the reconditioning industry's conservative estimates of eight reconditionings per 18 gage drum (9 fills) and three reconditionings per 20/18 gage drum (4 fills). Lighter weight drums which can be reconditioned have an initial advantage over heavier drums until the number of reconditionings of the heavier drum exceeds that for the lighter drum. (Single-use drums are at a disadvantage after the first reconditioning of an 18 gage drum.) Lighter weight drums are less durable and generally cannot be reconditioned more than three times. The 18 gage drums, however, could be reconditioned up to 16 times with little problem. Any increase in the number of reconditionings will lower the energy requirements of the steel drum system.

CONCLUSION

The estimated energy requirements of the current mix of reusable and single-use steel drums in the United States is 73,532 billion BTU per year. If the system were converted to all 18 gage drums with an average of eight reconditionings (9 fills per drum) an estimated 17,043 billion BTU per year

could be saved. This is enough to provide the equivalent in electrical energy for a city the size of San Francisco for one month.[2]

If the return rate of 18 gage drums were increased so that the average number of reconditionings was raised to 15 (16 fills per drum) then the United States could save an estimated 29,707 billion BTU per year, the equivalent of 238 million gallons of gasoline, by converting to an all 18 gage drum system. This would raise the ratio of energy requirements of the 22 gage single-use drum to energy required for the 18 gage (16 use) drum to 2.5.[3]

Clearly efforts to increase the use of 18 gage drums and the rate of return of such drums (by such means as deposits) would conserve energy. Conversely, a trend to use more light weight drums or to reduce the return rate of drums would further burden American energy resources.

---

2 See Hannon, op. cit., p. 23.

3 If no losses occurred in the 18 gage system (no discards and no drum failures) the ratio would reach a maximum of 4.2. This is because as the number of reconditionings increases, the average energy approaches the reconditioning energy, since the energy required to manufacture the drum becomes a smaller and smaller fraction of the cumulative energy used. Mathematically, in equation A-4 of the Technical Appendix the average energy for the 18 gage drum approaches a lower limit of 265.5×10^3 BTU per fill as the number of fills becomes infinite. The average energy for the 22 gage drum is 1113.5×10^3 BTU per fill.

References

1. Hannon, Bruce, "System Energy and Recycling: A Study of the Beverage Industry", Center for Advanced Computation, University of Illinois, CAC Document No. 23, revised March 17, 1973.

2. U.S. Bureau of the Census, Census of Manufactures, 1967, Special Series: Fuel and Electric Energy Consumed, MC67(S)-4, U.S. Government Printing Office, Washington, D.C., 1971.

3. U.S. Department of Commerce, "U.S. Industrial Outlook, 1974, Metal Shipping Drums and Pails".

4. U.S. Bureau of the Census, Census of Transportation, 1967, Vol. III, Commodity Transportation Survey, Part 3, Commodity Groups, U.S. Government Printing Office, Washington, D.C., 1970.

5. U.S. Department of Commerce, "Current Industrial Reports: Steel Shipping Drums and Pails, Summary for 1967", M34K(67)-13.

APPENDIX A

Technical Appendix

The system analysis of the steel drum reconditioning system is based on the flowchart of the system. On the next page the flowchart is shown with the energy variables of the system labelled. These variables denote the amount of energy required by a process, such as E_{DR} (the amount of energy required to make a drum) or the amount of energy required for transportation, such as $E_{ST,DR}$ (the energy required to transport the steel for a drum from the steel industry to the drum maker). On the page following the flowchart a symbol list is given which defines each of the symbols appearing on the flowchart.

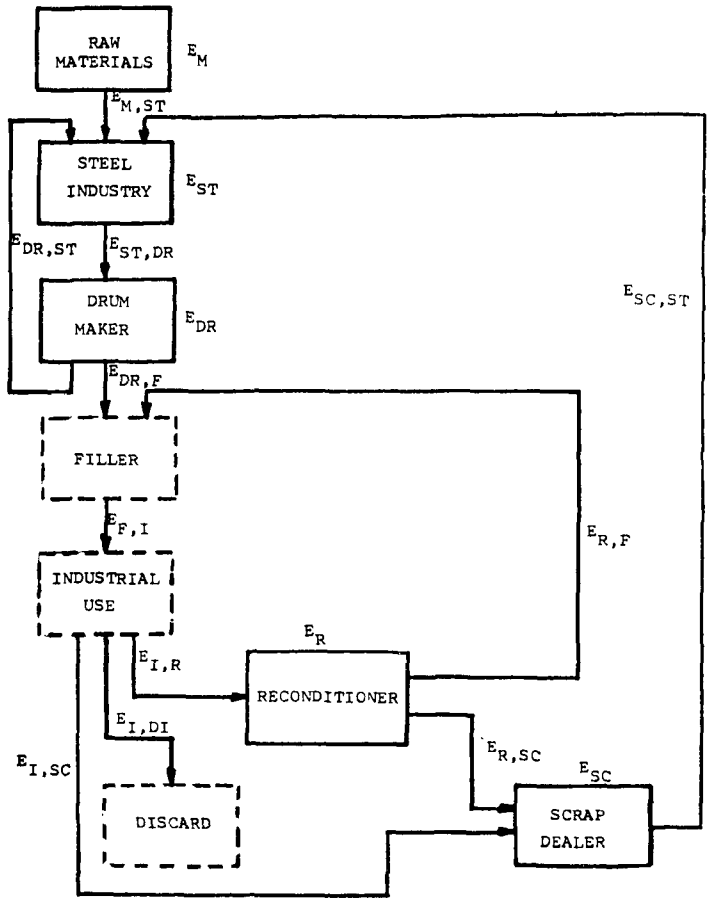
The total energy required to mine raw materials, make a new drum, fill it and deliver it to the industrial user is called E^* , and is equal to:

$$E^* = E_M + E_{M,ST} + E_{ST} + E_{ST,DR} + E_{DR,ST} + E_{DR} + E_{DR,F} + E_{F,I} \qquad \text{(A-1)}$$

Next, an equation is derived, based on the flowchart, which describes the total energy requirement for the complete reconditioning system. The total energy

FLOWCHART

STEEL DRUM RECONDITIONING SYSTEM



LIST OF SYMBOLS FOR FLOWCHART

Energy Requirements

E_M = Mining of ores

$E_{M,ST}$ = Transport of ore

E_{ST} = Manufacture of steel

$E_{ST,DR}$ = Transport of steel to drum manufacturer

E_{DR} = Manufacture of drums

$E_{DR,ST}$ = Transport of scrap from drum manufacturer to steel industry

$E_{DR,F}$ = Transport to filler

$E_{F,I}$ = Transport of filled drums to industry

$E_{I,R}$ = Transport of used drums to reconditioner

$E_{I,DI}$ = Transport of used drums to discard

$E_{I,SC}$ = Transport of used drums to scrap dealer

E_R = Reconditioning of drums

$E_{R,F}$ = Transport of reconditioned drums to filler

$E_{R,SC}$ = Transport of reconditioned drums to scrap dealer (equal to $E_{I,SC}$)

E_{SC} = Scrap yard

$E_{SC,ST}$ = Transport of scrap to steel industry

requirement, E, is expressed in terms of N, the number of reconditionings of a drum. By changing the value of N in the equation, one can calculate the energy requirement for any number of reconditionings.

The general equation for the energy requirement for N *reconditionings* (N + 1 *fills*) is:

$$E = E^* + N \Big\{ f_1 (E_{I,SC} + E_{SC} + E_{SC,ST}) + f_2 E_{I,DI} + f_3 \Big[E_{I,R} + E_R + f_4 (E_{R,F} + E_{F,I}) + f_5 (E_{R,SC} + E_{SC} + E_{SC,ST}) \Big] + (1 - f_3 f_4) E^* \Big\} \qquad \text{(A-2)}$$

where

f_1 = fraction of drums from industrial user to scrap

f_2 = " " " " " " " discard

f_3 = " " " " " " " reconditioner

(Note that these fractions must sum to one. $f_1 + f_2 + f_3 = 1$)

f_4 = fraction of drums from reconditioner to filler

f_5 = " " " " " " scrap

($f_4 + f_5 = 1$)

Numerical values for these fractions are given on the following page. The values for the energy variables are given in Table I of the report.

Numerical values for the fractions f_i :

	18 GAGE	20/18 GAGE
f_3	1.03 N/(N+1)	1.05 N/(N+1)
f_4	0.97	0.95
f_5	0.03	0.05

Note: f_3 is determined from $f_3 f_4$, which is the return rate for the reconditioning loop, equal to $1 - 1/(N+1) = N/(N+1)$.

While expressions for the fractions f_1 and f_2 (the fractions of the drums from the industrial user which go to scrap and discard) can be determined, the terms in Eqn. (A-2) in which they appear have very small coefficients. These negligibly small terms are ignored in obtaining the simplified equations which appear later in the appendix.

Assuming f_1 and f_2 are equal, expressions for them are: $f_1 = f_2 = \frac{1 - 0.03N}{2(N+1)}$ for the 18 gage drum, and $f_1 = f_2 = \frac{1 - 0.05N}{2(N+1)}$ for the 20/18 gage drum.

Once the total energy requirement E for a given number of reconditionings N is calculated for a given weight drum, the average energy requirement per fill can be calculated by dividing E by the number of fills, N+1. This average energy per fill, E_{av} , is the number which decreases as the number of reconditionings of a drum increases. The total energy used, E, increases each reconditioning, but less than for new drums.

$$E_{av} = E / (N+1) \quad = \text{average energy per drum per fill.} \qquad (A\text{-}3)$$

The magnitudes of the energy variables in the energy equation are given in Table I as follows: (in 1000 BTU's per drum)

	18 gage	20/18 gage	22 gage
E^*	1692.1	1434.8	1113.5
$E_{I,SC} + E_{SC} + E_{SC,ST}$	8.2	7.0	5.1
$E_{I,DI}$	1.4	1.2	0.9
$E_{I,R} + E_R$	149.6	149.3	-----
$E_{R,F} + E_{F,I}$	111.2	109.1	105.3
$E_{R,SC} + E_{SC} + E_{SC,ST}$	8.2	7.0	4.2

SIMPLIFIED EQUATIONS for the cumulative energy per drum (E) for an arbitrary number of reconditionings (N):

Equation (A-2), after substitution of the values of the energy variables, can be simplified. Some of the terms in the equation are negligibly small and can be ignored. The simplified equations are as follows:

<u>18 GAGE DRUM</u>

$$E = \left[1692.1\ (2N+1) + 265.5\ N^2\right] / (N+1) \qquad \text{(A-4)}$$

<u>20/18 GAGE DRUM</u> (maximum of 3 reconditionings)

for $N \leq 3$: $E = \left[1434.8\ (2N+1) + 266.0\ N^2\right] / (N+1)$ (A-5)

$3 < N \leq 7$: $E = E(3) + E(N-4)$

$7 < N \leq 11$: $E = E(7) + E(N-8)$

etc.....

<u>22 GAGE DRUM</u> Since $f_3 = 0$, Eqn. (A-2) reduces to

$$E = (N+1)\ E^* \qquad \text{(A-6)}$$

(Thus for this weight drum the average energy per drum per fill is just E^*)

COMPUTER PROGRAM

A small computer program was written to calculate the cumulative and average energy requirements per drum for the reconditioning system. A listing of the program appears below.

```
      DIMENSION E(50)
      NR=0
      NC=4
CC     NC IS THE MAX. NO. OF FILLS FOR 20/18 DRUM......
      KMOD=0
      DO 100 K=1,16
      NF=NR+1
      NZ=NF+NR
      NSQ=NR*NR
      E18=(1692.1*NZ+265.5*NSQ)/NF
      E22=1113.5*NF
      AV18=E18/NF
      IF(NF.GT.NC) GO TO 10
      E2018=(1434.8*NZ+266.*NSQ)/NF
      AV20=E2018/NF
      E(NF)=E2018
      GO TO 99
   10 IF(MOD(NF,NC).EQ.1) KMOD=KMOD+1
      E2018=E(KMOD*NC)+E(NF-KMOD*NC)
      E(NF)=E2018
      AV20=E2018/NF
   99 WRITE(6,98) NF,NR,E22,E2018,E18,AV20,AV18
   98 FORMAT(1X,2I5,5F11.1)
  100 NR=NR+1
   97 STOP
      END
```

On the following page a list of symbols and their explanation is given. The equations programmed are the simplified equations from the preceding page.

COMPUTER PROGRAM SYMBOLS

NR = number of reconditionings

NC = maximum number of fills for the 20/18 gage drum.

NF = number of fills

E18 = Cumulative energy requirement in 1000 BTU's per drum for 18 gage drum

E2018 = Cumulative energy requirement for 20/18 gage drum

E22 = Cumulative energy requirement for 22 gage drum

AV18 = average energy per drum per fill for 18 gage drum

AV20 = average energy per drum per fill for 20/18 gage drum

TABLE A-1

OUTPUT OF COMPUTER PROGRAM

Number of fills (N+1)	Number of reconditionings (N)	Cumulative energy 22 gage drum	Cumulative energy 20/18 gage	Cumulative energy 18 gage drum	Average energy per drum per fill (20/18 gage)	Average energy per drum per fill (18 gage)
1	0	1113.5	1434.8	1692.1	1434.8	1692.1
2	1	2227.0	2285.2	2670.9	1142.6	1335.4
3	2	3340.5	2746.0	3174.2	915.3	1058.1
4	3	4454.0	3109.4	3558.5	777.3	889.6
5	4	5567.5	4544.2	3895.4	908.8	779.1
6	5	6681.0	5394.6	4208.4	899.1	701.4
7	6	7794.5	5855.4	4507.9	836.5	644.0
8	7	8908.0	6218.8	4798.9	777.3	599.9
9	8	10021.5	7653.6	5084.2	850.4	564.9
10	9	11135.0	8504.0	5365.5	850.4	536.6
11	10	12248.5	8964.8	5644.0	815.0	513.1
12	11	13362.0	9328.2	5920.3	777.3	493.4
13	12	14475.5	10763.0	6195.0	827.9	476.5
14	13	15589.0	11613.4	6468.3	829.5	462.0

Note: The average energy per drum per fill for the 22 gage drum is 1113.5 regardless of the value of N.

ALL NUMBERS SHOWN ARE IN UNITS OF 1000 BTU's per drum.

GENERAL ELECTRIC

NUCLEAR ENERGY

SYSTEMS DIVISION

GENERAL ELECTRIC COMPANY, 175 CURTNER AVE., SAN JOSE, CALIFORNIA 95125

Environmental Protection Agency and
Office of Hazardous Materials,
Department of Transportation

My name is Frederick D. Flowers and I am Senior Specialist - Technical Traffic & Hazardous Material, Nuclear Energy Operation of the General Electric Company. My office address is 175 Curtner Avenue, San Jose, California 95125.

My purpose in appearing here today is to present comments on proposed rules for the Development of regulations for the Transportation of Hazardous Waste on behalf of the General Electric Company, with Corporate offices in Fairfield, Connecticut 06430.

The General Electric Company, as a shipper and transporter of hazardous waste, make the following comments in response to discussion topics set forth in Federal Register Docket 77-28591, September 29, 1977.

DISCUSSION TOPICS

1. We believe that the Department of Transportation (DOT) should be the prime federal regulatory agency to develop regulations for hazardous waste transportation. Our position is predicated on the years of experience and outstanding record in the control of hazardous material and the thousands of materials already regulated by the DOT, which should not be overlapped by Environmental Protection Agency (EPA) regulations.

   The current approach to be taken on hazardous waste is to allow present DOT regulations to apply for those items already regulated as hazardous material. The EPA could incorporate these materials by reference to DOT regulations.

Those materials designated by Resource Conservation and Recovery Act (RCRA) as hazardous waste and not presently regulated by the DOT should be combined into several major categories by the EPA. These designated items would be turned over to the DOT and made a part of DOT regulation under categories of "EPA Hazardous Waste Materials".

The EPA would designate the type of containers required and would specify the DOT Specification Container when necessary. The EPA and DOT should jointly determine and develop new labels and placards compatible with current DOT designs for this material and describe how it should be shown on shipping papers. After a while these factors would be incorporated within DOT regulations. The EPA would incorporate these materials by reference to DOT regulation.

2. The DOT should not modify its definition of hazardous material but would however specifically address the transportation of hazardous waste (not presently covered by DOT - but considered hazardous by EPA)as indicated above.

3. The DOT should modify its shipping paper requirements to meet the needs of the EPA. There is already shipping paper regulations in existence, which could be modified to meet RCRA requirement for a manifest. Present DOT form could be used if additional EPA Certificate is not required. Should EPA Certificate be required use present form and make additional forms available for use if only EPA materials are being shipped to avoid Duplicate Certifications.

4. Current DOT regulations for labeling,marking and placarding are sufficient for handling hazardous waste materials presently regulated by DOT. For those materials not presently regulated by DOT we recommend the procedure as previously outlined under discussion topic No. 1.

5. One big question in our mind is - Why does the RCRA require notification of hazardous wastes transportation when the DOT does not require such notification? If regulations for shipment of hazardous waste are incorporated within DOT requirements these shipments could be handled in the same manner as other hazardous materials presently regulated by DOT.

   Along the same vein, registration requirements need not be developed if hazardous waste is handled the same as hazardous material under present DOT regulations.

6. Notification for any spill of EPA designated hazardous waste material should be directed to the DOT not the EPA. The DOT presently has in existence requirements to be notified in case of accidents or spills of hazardous material associated with transportation and to receive a report of the incident. This is a long standing procedure which could easily incorporate any information required by EPA in regard to spills.

   The DOT could advise EPA or other appropriate agencies as required if EPA designated the material as hazardous and it is shown as such within DOT regulations.

7. EPA should develop requirements for handling any spilled material considered hazardous by EPA. Such requirements should be incorporated within EPA regulations and these requirements could be incorporated by reference within DOT regulations.

8. Training programs should be conducted by EPA on a voluntary basis if so desired. EPA regulations, however, should include sufficient information to provide guidance to all associated parties in regard to emergency response and clean up of hazardous waste and reference to such information could be incorporated within DOT regulations. If found to be necessary, training programs could be made a requirement at a later date.

9. This Statement needs more definitive explanation regarding "incompatible wastes". Does incompatible waste mean hazardous as far as DOT is concerned? If so, then DOT regulations already exist stipulating specific segregation of hazardous materials.

   If the term further applies to waste materials which EPA considers environmentally incompatible then this fact should be conveyed to the DOT and specific requirements incorporated into DOT regulation to address this situation.

We appreciate the opportunity to participate in this public meeting and compliment the EPA and DOT for their forsightedness in coordinating regulatory requirements for the transportation of hazardous waste thus eliminating duplicate requirements for compliance by shippers and transporters.

Respectfully submitted

(Signed) Frederick D. Flowers

Frederick D. Flowers

Presented: October 26, 1977

Allied Chemical

Allied Chemical Corporation
P.O. Box 1057R
Morristown, New Jersey 07960

RECEIVED
NOV 08 1977

November 3, 1977

Docket Section
Office of Solid Waste
Hazardous Waste Materials Division
U.S. Environmental Protection Agency
401 M St. SW
Washington, D.C. 20460

Re: Supplemental Advanced Notice of Proposed Rulemaking
40 CFR Part 250, Standard Applicable to Hazardous
Waste Transporters

Gentlemen:

The following is submitted in response to the Notice of Joint Public Meeting held by the Environmental Protection Agency and the Department of Transportation, Office of Hazardous Materials on October 26, 1977, for inclusion in the minutes of the meeting.

Our comments are, of course, only a preliminary response to the discussion topics posed. These comments are not numbered in sequence but are given the number of the discussion topics for ease of comparison. No response is made at this time to Item 9 of the notice. We will wish to add to these as these issues develop.

1. We believe that the existing Department of Transportation ("DOT") hazardous materials definition and classification system should not be changed as this system is established. The DOT has had the responsibility of formulating and enforcing regulations for transportation of hazardous materials, including waste materials, since 1967. Change at this time would only result in disruption. The DOT's success to date in regulating the transport of materials (like spent acids or waste solvents) and the reliance of industry upon their regulatory format under the Hazardous Materials Transportation Act ("HMTA"), argues for a simple, workable addition to this format in conformity with the Resource Conservation and Recovery Act ("RCRA") rather than multi-level responsibilities and wholesale changes in transportation practices.

The notice states that EPA is required by the RCRA to identify hazardous wastes which include a category of materials not covered by existing DOT regulations that are bioaccumulative, infectious, carcinogens, having the potential for genetic change, and toxic short of the current DOT definition.

Such materials may not fall under DOT's purview because EPA used the term "hazardous" as it applied to environmental concerns which are not normally associated with transportation.

We suggest to resolve these somewhat divergent concerns and to stay within the requirements of Sections 1006 and 3003(b) that EPA and DOT institute a joint effort (perhaps through a joint committee) to develop a new DOT hazardous materials classification for those materials which are defined as "hazardous" wastes for the purposes of the RCRA and which do not come within the existing DOT hazardous materials categories. Then for such category of hazardous wastes, labels and placards compatible with current DOT designs would be established. These new labels and/or placards would be used only on waste containers when no existing DOT hazardous materials classification applies.

We believe this format is in keeping with the intent of the two relevant acts, would provide effective control; and be the least complicated to administer and live with.

2. We see no administrative reason nor environmental justification for distinguishing between wastes and other materials, except based upon their intrinsic character (as we stated in 1 above). In addition, multiplication of DOT categories is likely to be inefficient and confusing to all concerned.

3. The development of manifest requirements pursuant to Section 3002 of the RCRA is intended to serve as inventory control standards. Using the already complicated DOT shipping paper forms for this purpose, we believe, would cause disruption of transportation services without any commensurate benefit. Instead, the existing DOT requirements should be continued and a manifest meeting RCRA requirements should be attached to these shipping papers during transport.

4. The DOT requirements are generally sufficient as discussed in 1 above.

5. It is not clear, as is suggested in Item 5, that the RCRA mandates pre-notification of transportation. What the act says is that standards for transporters shall include requirements for:

> "(1) record keeping concerning such hazardous waste transported, and their source and delivery points."

Realistically, adding a notification procedure to the record keeping will only impede disposal of regulated materials and impose huge burdens on the agencies involved with no clear benefit. If it is felt that the agency must undertake this clerical burden, receipt of copies of the shipping papers and manifest could be required.

There seems to be no special benefit to be gained by requiring any special registration of transporters, other than imposed already by DOT.

6. If necessary, existing DOT regulations concerning notification of accidents and clean up of spills of hazardous materials in transit should be expanded to deal with these materials. EPA could, if desired, obtain incident reports from the DOT or provide for contact with the Emergency Response Center.

7. A joint EPA/DOT Advisory Committee should review current DOT spill containment and clean up provisions and supplement these as necessary.

In closing, the most efficient approach to implementing the hazardous waste transport aspect of the RCRA would be, in our view, to utilize and expand the existing DOT's procedures.

Very truly yours,

Willard F. Potter
Environmental Consultant
Corporate Environmental Services

WFP:ep

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RECEIVED OCT 31 1977

October 27, 1977

U.S. Environmental Protection Agency
Office of Solid Wastes
Hazardous Materials Division
Docket Section, Room 2111
401 M Street, S. W.
Washington, D. C. 20460

and

Department of Transportation
Room 6500 Transpoint Building
2100 Second Street, S. W.
Washington, D. C. 20590

Re: (FRL 797-6), Federal Register,
Vol. 42, No. 189, September 29, 1977

Dear Sirs:

The American Waterways Operators, Inc. represents the barge and towing industry and serves as its national spokesman on regulatory matters affecting shallow water transportation. We are, of course, keenly aware of the need for safety in transportation and the protection of the environment, and maintain close liaison with the Environmental Protection Agency, the DOT office of Hazardous Materials Operations, and the U.S. Coast Guard.

Our members do not transport hazardous waste on a regular basis. However, there are occasions when industrial wastes are moved by barges on the inland rivers. We are, therefore, interested in the proposed rules being developed by EPA for transportation of hazardous wastes and would like to submit the following comments relating to the ten discussion topics outlined in Federal Register Notice of September 29, 1977, which will be taken up at the Joint Public Meeting between EPA and the Office of Hazardous Materials, DOT, on October 26, 1977. The comments are numbered to coincide with the numbered discussion topics.

1. One of the difficulties facing industry, generally, is the overlapping jurisdictions on transportation of hazardous materials currently exercised by EPA, DOT, and OSHA. We recognize that environmental impacts affect many industries and EPA has considerations other than transportation. However, based on past experience on the transportation of petro-chemical products by water, we feel that those hazardous materials problems which are peculiar to transportation should be under the scrutiny of the DOT and would, therefore, urge that DOT be the lead agency. A separate set of EPA regulations for the transportation of waste hazardous materials would be an extension of current DOT rules and would only serve to further complicate things for shippers as well as carriers. The technical input for such regulations can be effected by EPA-DOT coordination as has been done in the case of oil pollution prevention regulations.

2. If DOT does modify its definition of hazardous materials to include all hazardous wastes, it would be beneficial to both shippers and carriers to

treat wastes specifically rather than incorporating them into the hazardous materials or substances rules. Separate treatment will assist industry in identifying the rules and more readily interpret requirements. A second existing difficulty is the complexity of current rules.

3. We believe DOT should modify its rules for shipping manifests rather than the development of a separate set of EPA rules.

4. We will refrain from commenting on labeling, packaging, placarding, etc., since our movements are primarily in bulk. The proper manifesting of the materials to be moved, as suggested in Item 3 above, will suffice for bulk movements. Other identifying requirements are specified by the U.S. Coast Guard as they deem necessary under the rules in Title 46 CFR.

5. Normally, any cargoes moved in bulk by water, are moved only in certificated vessels if the cargo is either liquid petroleum or chemicals. We assume that transportation of hazardous wastes in dry form may be a possibility and that some form of registration or certification might be needed to insure the integrity of the cargo and the prevention of spills. This is a matter that should be determined by EPA and DOT/U.S. Coast Guard, with industry participation.

6. The notification of a hazardous waste spill should be directed to the U.S. Coast Guard National Emergency Response Center. Again, we would point out that the more simple and direct the requirements, the easier it is for carriers to comply. Multiple reporting requirements just add to the confusion factor. Filing reports to only one agency for further distribution as necessary will be appreciated by all carriers.

7. Regulations for the handling of a spill of hazardous waste materials can be the result of joint efforts by EPA and DOT. Our concern is more toward participation in the formulation of the rules and the enforcement of the regulations. We would prefer to deal with one enforcement agency and would like to see DOT as the enforcement body.

8. The National Contingency Plan for the cleanup of oil and hazardous substances is an effective doctrine and provides good guidance and information to those who are in the cleanup arena. It can be easily expanded to accommodate the cleanup of hazardous wastes. Training programs over and above what are currently in effect would seem to be superfluous and unnecessary.

9. DOT should look into the need for modification of its loading and stowage requirements as they might be affected by the incompatibility of mixed cargoes, resulting from hazardous waste shipments.

10. The only other comments we have are to re-emphasize the need for clarity in writing the rules, the need for assignment of jurisdiction to one agency whenever practicable, and last but not least, a need for industry participation in the early formulation of the rules. Technical and operational input provided by industry will eliminate much confusion and result in better compliance with regulations, and safer transportation of hazardous wastes.

Cordially,

Harold D. Muth
Vice President - Government Relations

HDM·gv

BASF Wyandotte Corporation

BASF

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P.O. Box 181
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201/263-0200

November 2, 1977

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U. S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Materials Division
Docket Section, Room 2111
401 M Street, SW
Washington, D. C. 20460

U. S. Department of Transportation
Office of Hazardous Materials Operations
Room 6500
Trans Point Building
2100 Second Street, SW
Washington, D. C. 20590

Subject: Development of Regulations for the Transportation of Hazardous Waste

Gentlemen:

BASF Wyandotte Corporation (hereinafter referred to as BWC) desires to respond to the invitation for comments on the above referenced subject appearing on page 51625, Federal Register, Vol. 42, No. 189 - Thursday, September 29, 1977.

BWC is a major supplier of organic and inorganic industrial chemicals, organic intermediates, foam chemicals, dyestuffs and pigments, textile, paper and leather auxiliaries, agricultural protection chemicals, cleaning and sanitizing chemicals and magnetic recording media. Net sales in 1976 were $710 million and Corporate Planning and Development project this figure to reach $1 billion by 1980.

As a potential generator of what may be defined as Hazardous Waste, BWC wishes to offer our views to the Discussion Topics, in the sequence they appear on page 51626 of the aforementioned Federal Register volume.

1. Any regulations for the transportation of hazardous waste must be promulgated by DOT and published in 49 CFR, with EPA jointly involved only in establishing criteria for defining an environmentally hazardous waste. We feel there is no need for DOT to modify its current definitions for hazardous material; however, an additional definition should be established jointly by DOT and EPA for identification of environmentally hazardous wastes that are not otherwise regulated in parts 100 to 199 of 49 CFR. EPA would incorporate these requirements by reference.

2. Where hazardous wastes are not currently regulated by DOT, then 172.101 of 49 CFR should be amended to include a new proper shipping name of "Environmentally Hazardous Waste" with a hazard class of "ORM-E". It is felt that a hazardous waste not regulated under existing regulations would not possess a significant potential hazard to humans from acute exposure during transportation, but would have the potential to be a threat to humans or the environment over a long term period at a disposal facility. Accordingly, we believe that the suggested proper shipping name and hazard class is adequate for the purpose of alerting transporters and emergency personnel of the potential hazardous nature of the material in the event of a transportation incident.

3. For any environmentally hazardous waste, not currently regulated by DOT, existing shipping paper requirements can accomodate the RCRA manifest. Under no circumstances should

a separate shipping document be required. In addition, we are of the opinion that the chemical names which constitute the waste, should not appear on the shipping paper. Because of their chemical mixtures the description could become lengthy and tend to clutter a shipping paper as well as provide meaningless information to transporters or emergency personnel. So that technical expertise can be provided in the event of spillage or accident, the telephone number of the generator or a central number such as that of CHEMTREC should be required on the shipping papers.

4. For those hazardous wastes not currently regulated by DOT, it is felt that labeling and placarding requirements are not necessary for the reasons stated in comment number 2. The containers could be marked "ORM-E" similar to the requirements in effect today for other "ORM" materials. Inasmuch as shipping papers will accompany a shipment, notification to emergency personnel can be accomplished by this method.

5. We do not feel that transporters of hazardous wastes should be further registered, thereby causing an overlap of jurisdiction. The Interstate Commerce Commission now requires that all common and contract carriers be registered.

6. As DOT currently provides the mechanism for notification of an accident or spill involving hazardous materials in transportation, we feel that this could be broadened to include all

hazardous waste spills, with notification directed to DOT only. Accordingly, all incident reports should be filed with DOT, as, all hazardous waste transportation would be regulated by DOT. With this provision the transporter would be responsible for notifying DOT only, and DOT would assume responsibility for alerting any other Federal or State agency that should be notified. This method of reporting will relieve the transporter of unnecessary burden and reduce the possibility of error that could arise if the transporter were required to notify more than one agency.

7. Since DOT regulations will include all hazardous wastes, as we have suggested in comment number 1, and a spilled material has been cleaned up now becomes a hazardous waste, we feel DOT regulations will provide the means for such contingencies.

8. Existing DOT regulations now require training to be conducted by shippers and transporters of hazardous material. We feel there are too many variables involved in the transportation of hazardous waste that training of Emergency Response personnel would provide little benefit. Again, the best source of information on handling and cleanup is the generator who could supply technical expertise.

9. DOT current loading and stowage requirements could be modified to accomodate the mixing and stowage of incompatible wastes.

10. We firmly believe that the best source for any regulation governing the transportation of hazardous waste must rest with DOT, thereby utilizing existing regulation and controls in an effort to provide compatibility therewith. EPA should provide technical expertise in the area of hazardous waste and could petition DOT for changes or additions to the regulations. To allow all parties a reasonable means for compliance with transportation regulations, it is important that DOT and EPA provide one set of regulations which will eliminate conflicting, overlapping and contradicting requirements. To this end, we suggest the DOT Docket HM-145 be progressed.

Respectfully submitted,

BASF Wyandotte Corporation

by: Eugene H. DeVoid

Eugene H. DeVoid
Transportation Regulations Manager

COMPRESSED GAS ASSOCIATION, INC
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RECEIVED
NOV 14 1977

November 7, 1977

U.S. Department of Transportation
Room 6500 Trans Point Building
2100 Second Street, SW
Washington, DC 20590

U. S. Environmental Protection Agency
Office of Solid Waste
Hazardous Materials Section
Room 2111, Docket Section
401 M Street, SW
Washington, DC 20460

SUBJECT: FRL 797-6
40 CFR Part 250
Development of Regulations for the Transportation of Hazardous Waste

Gentlemen:

The Compressed Gas Association, Inc. is a non-profit company membership organization solely supported by membership dues, representing 250 companies including producers and shippers of compressed, liquefied and cryogenic gases and manufacturers of containers and related equipment and services utilized by the various compressed gas industries. CGA represents many different compressed gas industries many of which compete in completely different marketing areas. However, they all have commonality in that all compressed gases are handled in pressurized equipment, the standards for which should be reasonably uniform, and to this end CGA has worked consistently throughout its existence.

The following comments are offered following review of the proposed rulemaking as published in the FEDERAL REGISTER for September 29, 1977 and referenced document therein:

1. DOT should have exclusive jurisdiction over the transportation of hazardous wastes. Existing regulations of DOT already govern the transportation of materials which pose acute hazards during transportation whether they be waste or virgin materials. It is unnecessary to impose any additional requirements on materials which are already regulated by DOT. If additional regulations are necessary for particular types of materials which pose less than acture hazards during transportation, the EPA should petition DOT through the established rule making procedure to have DOT amend their regulations to include wastes which EPA believes pose a hazard during transportation. Those wastes not currently covered by DOT hazardous materials definitions, but which are bioaccumulative, toxic, etc., should be included under a new classification for "hazardous wastes" such as ORM-E. The regulations relating to such waste materials should provide for notice to carriers and disposers of the nature of materials and reporting procedures to DOT in the event of a spill. EPA should then incorporate the DOT regulations by reference, i.e. Title 49CFR.

-continued-

BROCK PHILLEY [illegible] • A. L. MOSSMAN FIRST VICE PRESIDENT • LANE HOFFMAN SECOND VICE PRESIDENT • EDWIN A. OLSEN [illegible]

2. Fundamentally, any definitions and/or regulations developed must draw a distinction between materials which pose acute hazards during transportation and those which pose long-range hazards if spilled or disposed of in an incorrect manner. Current regulations on acute hazards are adequate. These regulations should only apply to hazardous wastes being transported to disposal sites. Regulations developed by DOT for transportation of materials posing long-range hazards must be addressed to the need to notify carriers and disposers of the nature of the material. DOT should define hazardous wastes in 49CFR171.8.

3. Since many of the individual states already have or are adopting their own unique manifest forms, the EPA should require certain standardized information that could be included on all state forms. Current DOT requirements for shipping papers are designed to alert emergency personnel and responders to acute hazards which are present immediately after the spill or accident. Additional information on long-range hazards would tend to dilute the acute hazard information, which must be shown on shipping papers. This information would be shown on a combined bill of lading/hazardous waste manifest form or on a separate hazardous waste manifest attached to the bill of lading. The above mentioned manifest form should not be related to the transportation of hazardous wastes. This manifest should alert carriers and disposers of waste materials that the materials pose long-range hazards and precautions which must be taken in the event of a spill or in disposal of the material. This manifest should be a separate document. The shipper should have the option to use either format.

4. DOT labeling, marking and placarding requirements are sufficient for hazardous wastes that meet present DOT hazardous materials definitions. Specific labels and placards along the lines of DOT labels and placards are not necessary for other hazardous wastes (such as bioaccumulative, etc.) as these present no acute transportation hazard. These would only be confused with or dilute the affect of the present DOT labeling and placarding system. Further, RCRA does not require such labeling.

   DOT should develop a waste label in cooperation with EPA to include such information as a) identification, b) means of disposal, c) destination, d) control number, and e) nature of hazard. This would be used on smaller than bulk shipments and could also be used (minus the nature of hazard statement) for non-hazardous wastes at the individual generator's discretion.

5. RCRA requires notification of the transportation of hazardous wastes through the manifest system and subsequent reporting. Additional carrier registration requirements would only duplicate existing requirements and present an additional paperwork burden with no apparent benefit.

-continued-

6. After DOT and EPA have defined hazardous wastes, incident reports for all hazardous spills in transportation should continue to be sent to DOT. If the material poses a long-range threat that requires special clean-up precautions, the DOT should notify EPA of the spill. In the event of a spill, the actual clean-up operation should be under the jurisdiction of EPA. With the development of adequate regulations, as mentioned above, further transportation of spilled material as a hazardous waste would fall under the jurisdiction of the DOT.

7. Formal training programs should not be required. The shipper should stand ready to assist and advise emergency response personnel in clean-up operations. Emergency response personnel should be instructed to contact CHEMTREC and/or the shipper in the event of a spill for immediate response information and subsequent clean-up actions.

8. For hazardous wastes that meet present DOT definitions, the loading and storage chart is sufficient. For the new class of hazardous wastes, there should be no applicable loading or storage restrictions.

Thank you for this opportunity to present comment for consideration.

Very truly yours,

J. C. Crawford

JCC/cam
cc: Transportation Committee

STEPHEN J KOONCE
ACTING COUNTY ENGINEER

COUNTY OF LOS ANGELES

DEPARTMENT OF COUNTY ENGINEER
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ASST CHIEF DEPUTY
RICHARD T REID
ADMINISTRATIVE DEPUTY

November 3, 1977

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Mr. Thomas C. Jorling
U.S. Environmental Protection Agency
Washington, D.C.

Dear Mr. Jorling:

DEVELOPMENT OF REGULATIONS FOR THE
TRANSPORTATION OF HAZARDOUS WASTES

As the local agency responsible for solid waste management planning and industrial waste disposal for portions of Los Angeles County, we are very much interested in the development of regulations for the transportation of hazardous wastes. Unfortunately, we were unable to attend the October 26, 1977, public meeting. However, we do wish to submit the following comments for inclusion in the record of the meeting.

There is a need, not specifically discussed in the meeting notice, for greater interface with federal, state and local agencies as to the regulations for the transport and disposal of hazardous wastes. This is important since local agencies (fire, road, maintenance, police, water pollution control, highway patrol, etc.) are the ones that will first respond to any spill or disposal problem. Reporting to a federal agency is fine for the purpose of recording, development of uniform transportation standards, and procedures and equipment standards, but such a reporting procedure does not solve the immediate short-term problem caused by an accident or spill. Where a viable existing state program exists, perhaps what is needed is state implementation of the federal program such as the current agreement between the EPA and the California State Water Resources Control Board for the implementation of the NPDES program for water pollution control.

Specific comments on the discussion topics follow:

1. A single definition that is all encompassing is preferred. This would suggest DOT modification of its existing definition with EPA adoption by reference. Efforts to reduce the number of definitions should be encouraged to reduce confusion.

2. It would seem appropriate that wastes be identified as such. However, a waste substance in most cases requires the same precautions as the parent material and should be regulated as such.

3. The federal effort to develop a shipping manifest should be interfaced with the existing California Waste Haulers manifest. If present DOT manifests for hazardous materials can be adopted to wastes without introducing confusion, this should be encouraged.

4. It would not be helpful to develop a separate set of labeling and placarding requirements. Modify present DOT requirements if necessary.

5. Should be interfaced with existing state requirements in California.

6. To make a distinction between a material and waste seems inappropriate here. Anything spilled becomes a waste. DOT apparently already has a reporting procedure and this should be expanded where the spill is involved in transport. Local and state agencies will most probably be involved in clean-up and disposal and their notification should be required.

7. See comments on Topic 6 above.

8. Training of shippers should be encouraged and this program should also be extended to local agencies that will most probably be involved in clean-up and disposal of spilled materials.

9. Regulations should incorporate recognition of incompatible wastes such as those which are in the California Hazardous Waste Management regulation administered by the California Department of Health.

10. Existing state programs should be incorporated into the federal program rather than duplicate effort. Of course, state programs would have to meet at least the minimum federal standards. Problems involving hazardous materials are best solved as rapidly as possible by qualified persons or agencies close to the scene.

Thank you for the opportunity to comment on the development of these regulations. Please do not hesitate to call if we may be of further assistance.

Very truly yours,

Stephen J. Koonce
ACTING COUNTY ENGINEER

SJK:spb 8

cc: California Department of Health

DEERE & COMPANY

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November 4, 1977

U.S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Management Division
Docket Section, Room 211
401 M Street S. W.
Washington, D. C. 20460

Gentlemen:

Resource Conservation and Recovery Act
Section 3003

The following comments address the questions raised in the September 29, 1977 Federal Register notice of a public meeting held October 26 at the Ramada O'Hare Inn, Des Plaines, Illinois. The comments are presented in the same order as listed in the Federal Register. It is requested that these comments be included as part of the record for the public meeting.

1. The EPA should provide the DOT with a list of hazardous wastes. The DOT should incorporate the hazardous wastes into Title 49 of the Code of Federal Regulations. Industrial shipping and receiving personnel routinely deal with DOT requirements. Their unfamiliarity with EPA structure and procedures would create untold problems in implementing any overlapping EPA rules. EPA should not issue a separate set of regulations to fill in the gaps in the DOT coverage.

2. Hazardous wastes of such toxicity that a rupture or spill could immediately endanger the public health should be handled in the same manner as new materials. Hazardous wastes such as acids, bases, plating waste, paint waste and sludges should be subject to special exemptions. These wastes are usually in the containers only for transport and thus for a relatively short period of time.

3. The DOT shipping paper manifest system is already functional. The simple inclusion of the additional EPA hazardous wastes into Subsection 172.101 of Title 49 would result in a workable manifest system. EPA should not attempt to add more paperwork to the transportation network. The generator and hauler must retain records of hazardous material shipments. With the addition of a few pieces of information to the existing DOT forms, such records should be adequate to assure the hazardous wastes reach approved sites.

4. DOT should develop the necessary labels and placards for hazardous waste transportation.

5. Existing registration requirements will be adequate.

6. Hazardous material spills and hazardous waste spills during transportation should be reported to DOT. Hazardous material spills and hazardous waste spills during loading and unloading should be directed to EPA. DOT and EPA should then arrange communications for incidents requiring the knowledge of both parties. The rules of both parties should clearly state this distinction.

7. Each spill will be a unique incident. A lengthy set of rules is worthless in an emergency situation. Both the EPA and the DOT must rely on police and fire departments to make emergency decisions. Once the emergency nature of the incident has passed, the EPA or state environmental rules should be applied with a liberal amount of reason and common sense. DOT should not be involved in hazardous materials spill cleanup or hazardous waste spill cleanup once the appropriate environmental agencies have been notified.

8. Few people in the transportation industry have the specialized education or training necessary to handle hazardous materials or hazardous waste spills. Hazardous spill containment and cleanup are difficult for trained environmental specialists. It is doubtful that any training program developed by DOT or EPA could be relied on for safe emergency response and clean up of spills. Training for transportation personnel should be oriented to what can happen and who should be contacted to make emergency and cleanup decisions.

9. No opinion.

10. The DOT should streamline the classification of hazardous waste. It is presently very difficult to determine the class and container requirements for a hazardous waste once a chemical analysis is in hand. No one should be expected to conduct the exhaustive testing of waste materials that chemical manufacturers provide for new products. The normal process variations also cause fluctuations in waste concentrations. It must be recognized that a complete chemical analysis cannot be conducted on each container of waste. The DOT and the EPA must accept this variation and should design their waste shipping requirements around no more than five waste classes which encompass most of the hazardous wastes generated by all industrial and commercial activities.

    In addition, some type of assistance must be provided to help generators locate container manufacturers. Many generators do not package materials of this kind and it is difficult to locate manufacturers that can produce containers meeting the required specifications. If possible, a list of such suppliers should be made available.

The DOT and EPA should also review the economic impact of any rules developed for hazardous waste disposal. It is very likely that the rules will impact small industries shipping small quantities of wastes much more severely than it would affect the large industry shipping tank car quantities. The cost associated with obtaining special waste analyses, special disposal permits, purchasing less than carload lots of new containers, transporting less than carload lots of wastes, labelling each container, providing placards, preparing shipping papers and maintaining records will be large. These costs will be one more factor in the demise of small businesses even though their waste volumes and potential threat to the environment as a whole may be small.

Thank you for providing the opportunity to comment on the proposed regulations.

Yours truly,

Michael E. McGuire

Michael E. McGuire
Environmental Control

/jv

c. W. J. Abel, Deere & Co.
B. E. Harthoorn, J. D. Waterloo Tractor Works
N. N. Sacks, Deere & Co.

STATE OF CALIFORNIA—BUSINESS AND TRANSPORTATION AGENCY EDMUND G BROWN JR, Governor

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
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October 28, 1977

File No.: 60.A1801.A2030

RECEIVED NOV 08 1977

U.S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Materials Division
Docket Section, Room 2111
401 M Street SW
Washington, D.C. 20590

Gentlemen:

We welcome the opportunity to comment on proposed action to be taken by the Environmental Protection Agency (EPA) and the Office of Hazardous Materials Operations (OHMO) as outlined in the September 29, 1977, Federal Register. Particularly gratifying is that inputs from the several states concerning hazardous wastes are being solicited during the early stages of regulation development.

We have an interest in hazardous waste and hazardous materials by virtue of having adopted U.S. Department of Transportation regulations for application to the highway transportation of hazardous materials (except LPG and flammable liquids in bulk, and radioactive materials). Further, our Patrol members frequently become involved as they may be the first to arrive at an accident or spill scene.

Our experience with hazardous wastes goes back almost four years and we believe that because of the cooperation between ourselves and State Department of Health we were successful in resolving inconsistencies regarding waste management. This all occurred when waste transportation reached a volume of over 400,000 tons annually in this State.

In light of our experience we offer these comments concerning topics to be considered (in order of listing in the Federal Register):

1. We would not presume to indicate a preference for either EPA or DOT in developing hazardous waste regulations. However, the Hazardous Materials Transportation Act of 1974 assigns

broad authority and responsibilities to DOT in this area. The Resource Conservation and Recovery Act of 1976 (RCRA) appears to require coordination between EPA and DOT but does not preempt the latter; therefore, it appears that the point is moot.

As we see it, existing transportation regulations, proven and refined over the past 70 years could serve as a framework and be expanded to cover materials posing minimal acute hazards in event of accidents or spills. Since this is in the transportation area, and acknowledging OHMO's experience and responsiveness to industry and State needs, we suggest that the only areas where transportation and environmental control regulations coincide be limited to the shipper (generator) level, or possibly in event of spills.

2. Whether definitions in existing regulations should be modified, or how, is a matter of OHMO to decide. Perhaps the approach used for requirements applying to the transportation of etiologic agents and radioactive materials, where other federal agencies are involved, could be considered.

3. Comparison of projected RCRA and existing DOT shipping paper requirements simply cannot be made: These are designed for entirely different purposes. In this, we would demur at any dilution of existing shipping paper format and availability requirements.

   Moreover, we presently require the DOT-prescribed shipping paper for wastes defined as hazardous materials, i.e., a second document is required. Simply stated, the hazardous waste manifest in use in this State does not adequately communicate information required by public safety personnel in event of spills and accidents.

4. Present DOT hazardous materials communications requirements are adequate for wastes defined as hazardous. Doubtlessly, some requirements for identifying other wastes may be necessary.

Here it is necessary to first consider the many different aspects of waste transportation. Transporters range from the one-truck operator to multistate rail and highway carriers; distances vary from across town to across the nation.

We believe that a transportation oriented agency could best evaluate communications needs. Whether the need really exists should be determined. If so, how best to provide some clear indication of what is required would follow.

5. The matter of registration of waste transporters is a matter of little concern to us. However, we question the need to restrict occasional shipments of wastes in small quantities to "registered" transporters.

6. A few years ago at the behest of EPA we arranged internal reporting procedures for spills. Basically, this involves telephone notification to the California Office of Emergency Services (OES) of any highway spill that might cause pollution of surface or underground water. OES upon receipt of this information relays it to interested federal and State agencies (California Department of Fish and Game, regional water quality control agencies, public health agencies, etc.).

   In addition, we require hazardous materials incident reports from highway carriers. This entails duplicate reporting in the case of interstate carriers. Our reason for requiring additional reporting is to permit monitoring container failures and spills overall, and particularly those involving nonfederally regulated carriers. The situation is unique, we suppose, but incident reports by carriers are valuable in detecting trends on gross violations of packaging and other requirements; details are not readily available from OHMO.

   It is evident that a multiplicity of reporting requirements now exists. So, rather than establishing another tier of reporting requirements, federal agencies involved might seek to simplify reporting

and provide easier retrieval of needed data. Above all, reporting of incidents should not be unduly confusing or burdensome. We can only assume that the more painless the reporting procedure the better the compliance achieved.

7. In the area of spills, EPA in conjunction with State agencies could provide valuable assistance. Relaxation of existing requirements for packaging, shipping papers, labels, placards, and loading under DOT specified conditions could facilitate cleanup and disposal of spilled materials. As it is, few private salvage and disposal concerns can comply with all the niceties of the transportation regulations under hectic conditions prevalent at spill scenes.

8. We assume that OHMO will address the training problem as soon as more pressing problems are out of the way.

9. As to loading and stowage requirements, we assume that OHMO will provide timely guidelines, if it thinks such is necessary.

10. We suggest the following be considered by OHMO:

    a. Prompt regulation development to cover hazardous and other materials being transported as wastes. The problem is not one downstream several years; it is here. Additionally, the exemption procedure is too cumbersome to apply to waste packaging requirements.

    b. Relaxation of sanctions concerning over-classification of wastes known to be hazardous. It is not always possible to precisely classify waste mixtures.

    c. Development of single-trip packaging, including overpacks, for <u>wastes only</u> (hazardous and otherwise).

d. Relaxation of prohibition against use of openhead reconditioned drums for wastes known to be poisons B.

The recommendations and comments we have made are meant to be helpful. No one knows the extent of hazardous materials transportation, much less the extent of waste transportation. Moreover, with constraints imposed by HMTA it is difficult to address the safety and practical problems posed by the proliferation of waste hauling in and between states. Federal action would be of assistance to State agencies and to transporters alike; otherwise we may be faced with patchwork State and federal requirements that do not promote transportation safety, but further confuse the issue.

Very truly yours,

DONALD L. GIBSON
Deputy Chief
Commander
Enforcement Services Division

cc: State Department of Health
Vector Control & Waste
Management Section
714 P Street
Sacramento, CA 95814

STATE OF WASHINGTON
Dixy Lee Ray
Governor

DEPARTMENT OF ECOLOGY
Olympia, Washington 98504 206/753 2800

RECEIVED

November 3, 1977

Mr. Thomas C. Jorling
Assistant Administrator for
Water and Hazardous Materials
Environmental Protection Agency
Hazardous Waste Management Division
401 M Street S.W.
Washington D.C. 20460

Dear Mr. Jorling:

We appreciate the opportunity to review the material pertaining to the development of regulations for the transportation of hazardous waste - subject to your meeting of October 26, 1977. We would like to offer the following comments on discussion topics regarding development of regulations for the transportation of hazardous waste:

(1) Since all "hazardous wastes" are in fact "hazardous materials" the simplest approach would be for the Department of Transportation to take the lead in developing regulations for hazardous waste transportation. These substances can be encompassed in the DOT-HMTA as a subclass e.g., flammable-waste; explosive-waste; poison A or poison B-waste, etc. and if classification gaps exist they can be filled as appropriate. EPA can then incorporate the DOT regulations by reference.

(2) If DOT does modify its definition to include hazardous wastes they can treat them the same as hazardous materials except perhaps to limit them per the hazardous waste manifest - i.e., specific destination as a limit. The manifest being a specific document generated for hazardous wastes. With reference to definition here as in #1 it is important that special attention be given to correlation and coordination between DOT and EPA/RCRA definitions.

(3) (See No. 2 above) The hazardous waste manifest is a specific document for hazardous waste handling and should be part of the hazardous waste regulation. It can be treated as a supplemental document by DOT in the case of hazardous waste transportation. If this requires DOT modification of its shipping paper requirements, it should be done.

(4) The current DOT requirements for labelling, marking and placarding can be sufficient if properly augmented within an appropriate "hazardous waste" manifest. If additional labels or placards are indicated (by gaps, etc.) they can be developed as appropriate in conformity with DOT designs.

(5) If DOT is the lead agency on transportation of hazardous materials and wastes - registration is already part of HMTA for transporters and RCRA registration would be superfluous. Notification would still be able to be required per RCRA.

(6) Notification and reports concerning accidents ~~or spills~~ of hazardous materials and/or wastes should be directed to all concerned agencies particularly if emergency and/or cleanup procedures are involved. In the case of a state agency involved in the hazardous waste program they must receive notification and the other agencies may also be notified if they desire.

(7) When the spilled material becomes a "hazardous waste" it is encompassed in the PL 94-580 regulation to be developed by EPA with reference to the DOT regulations pertaining to the applicable occurrence.

(8) Are training programs necessary relative to emergency response and cleanup of hazardous wastes? Yes.

If so to what extent should they be required? To the same extent required for hazardous materials.

(9) Yes. The question of mixing and storage of incompatible wastes is a significant problem and will have to be addressed specifically in the transportation requirements no matter who generates the requirements.

Sincerely,

John Conroy
Solid Waste Management Division
Office of Land Programs

JC:kb

Department of Energy
Washington, D.C 20545

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Docket Section, Room 2111
Hazardous Waste Materials Division
Office of Solid Waste
U. S. Environmental Protection Agency
401 M Street, S.W.
Washington, D. C. 20460

Docket Section, Room 6500
Office of Hazardous Materials Operations
Materials Transport Bureau
U. S. Department of Transportation
2100 Second St., S.W.
Washington, D. C. 20590

Gentlemen:

This is in response to your request for comments on the development of regulations for the transportation of hazardous waste, FRL 797-6, Federal Register 42, 189, pp 51625-51626.

We find it encouraging to learn that EPA intends to maximize the coordination of its regulations under the RCRA with the DOT hazardous materials regulations. A single set of Federal regulations covering transportation safety is more desirable than multiple, and sometimes overlapping and conflicting, regulations. We support the development of a uniform and simple regulatory scheme for the transportation of hazardous waste.

In developing these regulations, we believe it important to recognize that as far as public safety is concerned, it matters not whether the end use of the hazardous material being transported is a useful product or a waste to be disposed of -- it must be transported safely. A hazardous material; whether it is a waste or a commodity is immaterial. We recognize that some of the wastes which the Congress considered in enacting the RCRA are outside the kinds of hazardous materials now defined and regulated by the DOT, and that the DOT already has the statutory authority to include them under its jurisdictional blanket.

Given these considerations, we have the following responses to your specific questions:

1. Lead agency. We would prefer that DOT expand its regulations to include the necessary provisions for the transportation of hazardous wastes. EPA would then refer to the DOT regulations, rather than establishing a new and separate regulatory scheme for these wastes. The two agencies might consider a Memorandum of Understanding, as now exists between DOT, DOE, and NRC for regulation of nuclear shipments. You might also consider a provision similar to that in 18 U.S.C. 834(b), whereby before adopting any regulations relating to hazardous wastes, the DOT would seek the advice and consultance of the EPA.

2. Definition of wastes. For consistency and simplicity, the hazardous wastes could fall under the existing DOT definitions, and be regulated based on the nature of their hazard rather than the nature of their end use.

3. Shipping Papers. We have looked at the multiplicity and complexity of the existing shipping paper requirements which are required of carriers for safety, economic, and operational purposes. We believe it would be counter-productive to add to this burden with yet another set of documents. It appears to us that the existing hazardous materials manifest, required by DOT, already appears suitable, and, with only slight modification, would meet the RCRA requirements.

4. Labels and Placards. The existing DOT system for labeling and placarding has been derived only after long and arduous efforts on the part of both DOT and the regulated industry. We would be very concerned if a new scheme were to be introduced at this time -- the new DOT requirements are just now being implemented by shippers and carriers. If there is a need for new labels and placards, DOT should develop them to be totally consistent with the existing DOT system.

5. Registration. Whatever requirements are imposed by the DOT for other hazardous materials would appear to be equally applicable to hazardous wastes. In any case, it would not seem necessary to set up special notification or registration just for wastes.

6. Accidents. The DOT hazardous materials incident reporting system seems well suited to handle reports of incidents of hazardous waste transport accidents. EPA and DOT could work out informal arrangements for communications on accidents involving wastes.

7. Spills. Once the accident occurs, transportation usually stops. It would seem appropriate for EPA to establish guidelines for cleaning up spills, recognizing the need to coordinate this activity with other Federal actions and responsibilities for handling of spills. DOT could limit its after-incident actions to investigation of cause, which is right in line with DOT's usual role in hazardous materials accidents.

8. Training Programs. The training of personnel who might be involved in hazardous waste transportation spills should be handled just as it is done now for spills of other hazardous materials. DOT and EPA would provide guidance and assistance to the State and local authorities and other responsible persons.

9. Loading and Storage. DOT regulations for mixed or incompatible loading should apply to hazardous wastes just as for other hazardous materials.

Thank you for the opportunity to provide these comments.

Sincerely,

William A. Brobst, Chief
Transportation Branch
Division of Environmental
Control Technology

ROBERT W. STRAUB
GOVERNOR

Department of Environmental Quality

1234 S W MORRISON STREET, PORTLAND OREGON 97205 Telephone (503) 229-5913

November 1, 1977

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U. S. Environmental Protection Agency
Office of Solid Waste, Hazardous
Waste Materials Division
Docket Section, Room 2111
401 "M" Street, S. W.
Washington, D. C. 20460

Gentlemen:

The Oregon Department of Environmental Quality is presently involved in the drafting of regulations for a hazardous waste manifest system. Many of the same questions arose here, the resolutions of which may be applicable on the federal level as well.

The Resource Conservation and Recovery Act only requires consistency between the regulations of the Environmental Protection Agency (EPA) and Department of Transportation (DOT). Recommendations may be made to the DOT but nothing else is mandated. And, as presented in the Federal Register September 29, 1977, the questions do not venture beyond the minimum of interagency coordination, providing basically only two options: either vesting all authority over hazardous waste in one of the two federal agencies; or, distributing that authority in a manner that, to a transporter, could only appear utterly random.

If we may discard the latter, because of the obvious drawbacks of fragmentally written, administered, and revised regulations, the decision is simplified to determining which agency should have authority over the transportation of hazardous waste.

There are three points favoring DOT authority over the transport of hazardous waste: (1) avoiding duplication of effort; (2) single-agency authority over transporters; and, (3) intrinsic similarities of hazardous wastes and other hazardous materials

First, in administering a program to regulate the transportation of hazardous waste, the EPA would likely develop an organization and methods very similar in nature to the organization and methods already being used by the DOT to regulate the transportation of hazardous materials. A records division, surveillance and investigation division, emergency response division, and all the support services would occur both in the DOT and the EPA.

DEQ-1

Second, transporters, already under the jurisdiction of the DOT, would also have to report to the EPA. This not only complicates transporter activities, it also complicates the EPA. Each extension of EPA authority into new areas puts added burdens on the organization which, to some, now appears overextended. Some discretion must therefore be evinced.

Third, the distinctions between hazardous material and hazardous waste from an environmental perspective are negligible. Both are similarly hazardous; it is their economic value that distinguishes them. One represents value, the other liability. Some different regulations may have to be drafted to prevent "losses" of hazardous wastes, but the EPA cannot claim inherent authority over one and not the other. Therefore, it is an "all or none" proposition for the EPA and, since the DOT cannot relinquish authority over hazardous materials transportation, the EPA should allow the DOT similar authority over wastes.

The above points do not say, however, that the EPA should yield all authority over the transport of hazardous waste to the DOT. If, for reasons of environmental protection, specific regulations become necessary, they could be presented to the DOT for that agency's review, revision, negotiation with the EPA, and ultimate ratification and administration. A Memorandum of Understanding could be drafted between the agencies which would give either agency the right to open negotiations for review, and that revisions could not occur without agreement between the agencies.

In Oregon, the Legislature held that, before any regulations could be enacted concerning transporters of hazardous waste, the Department and the Public Utility Commissioner, the agency enforcing DOT regulations in Oregon, must consult on the matter.

Out of this mandate came a Memorandum of Understanding between the two state agencies delegating statutory authority over the transportation of hazardous waste to the PUC, the necessary rules being drafted jointly with the Department. Such an approach we believe would be effective on the national level as well.

Since regulations best followed are those best administered, the ultimate savings in hours, dollars, environmental damage, and perhaps even lives, should more than compensate for any initial difficulty in implementing a joint-agency program.

Sincerely,

Fred Bromfeld

Fred S. Bromfeld, Supervisor
Hazardous Waste Section
Solid Waste Division

GB/kz
cc Mr. Toby Hegdahl, EPA - Seattle
Ms. Terry Grasso, National Governor's Association
Mr. Jay Snow, NGC Hazardous Waste Task Force

STATE OF
WASHINGTON

Dixy Lee Ray
Governor

DEPARTMENT OF TRANSPORTATION
Highway Administration Building, Olympia, Washington 98504 206/753 6005

October 21, 1977

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U.S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Materials Division
Docket Section, Room 2111
401 M Street S.W.
Washington D.C. 20460

Refer: Development of Regulations for the Transportation of Hazardous Waste

Gentlemen:

Our comments on the proposed rules contained in the Federal Register dated September 29, 1977:

1. The DOT should modify its definition of hazardous materials to include all hazardous waste.

   E.P.A. should incorporate DOT regulations by reference in order to cover all hazardous materials.

2. All hazardous waste should be treated the same as hazardous materials that are bioaccumulative, toxic, infectious, carcinogenic, etc.

3. No comment.

4. The DOT should develop the labels and placards for hazardous waste that are compatible with current DOT design.

5. No comment.

6. All reports should be filed with DOT even when spilled hazardous waste are not covered by DOT regulations.

7. The DOT should develop the regulations for handling the spilled hazardous materials.

8 & 9. No comments.

10. (a) The common denominator for these proposed rules is transportation; therefore the DOT should be the responsible agency.

(b) There should be less red tape if a single agency is charged with the regulation of hazardous materials when related to transportation.

(c) With one set of regulations there will be a better opportunity to get compliance from industry.

Very truly yours,

W. A. BULLEY
Secretary of Transportation

WAB:vw

cc: Henrik E. Stafseth
Executive Director AASHTO

FORM LG-1878

E. I. DU PONT DE NEMOURS & COMPANY
INCORPORATED
WILMINGTON, DELAWARE 19898

LEGAL DEPARTMENT

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November 7, 1977

File: COM-653
COM-646-HM-145

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

U.S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Management Division
Docket Section
Room 2111
401 M St. SW.
Washington, D.C. 20460

Department of Transportation
Room 6500
Trans Point Building
2100 Second Street SW
Washington, D.C. 20590

Re: FRL 797-6
Development of Regulations for the
Transportation of Hazardous Waste

Gentlemen:

Enclosed please find three (3) copies of comments and views of E. I. du Pont de Nemours and Company concerning the above-entitled proceeding.

Very truly yours,

W. R. BECK, STAFF ASSISTANT
COMMERCE COUNSEL'S OFFICE

WRB/dss

Enclosures

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

BEFORE THE
ENVIRONMENTAL PROTECTION AGENCY AND
OFFICE OF HAZARDOUS MATERIALS OPERATIONS
DEPARTMENT OF TRANSPORTATION

FRL 797-6

DEVELOPMENT OF REGULATIONS FOR THE
TRANSPORTATION OF HAZARDOUS WASTE

COMMENTS OF
E. I. DU PONT DE NEMOURS & COMPANY

Pursuant to the supplemental Advance Notice of Proposed Rulemaking, the Environmental Protection Agency (EPA) and Office of Hazardous Materials Operations (OHMO) of Department of Transportation (DOT) desires to determine whether current DOT regulations under the Hazardous Materials Transportation Act (HMTA) of 1974 may have potential to be expanded to partially meet the mandates of the Resource Conservation and Recovery Act (RCRA) of 1976. A purpose of this consideration would be to maximize the coordination of RCRA regulatory requirements with existing DOT hazardous materials regulations for the benefit of all parties.

E. I. du Pont de Nemours & Company (Du Pont) supports, in general, any effort to prevent duplication of

administrative regulations (EPA and DOT) and to preclude any regulations that may be promulgated which would detract from current DOT transportation hazard classifications and regulations. Statement similar to the above was submitted by Du Pont in comments under Docket No. HM-145, Environmental and Health Effects Materials. Du Pont has consistently taken the position that DOT is the logical regulatory agency to promulgate regulations involving transportation of hazardous materials. EPA in comments made under FRL-710-4 "Hazardous Waste Guidelines and Regulations" Federal Register- May 2, 1977, Section 3003 stated that "The agency is considering adopting the DOT requirements with regard to marking, placarding, packaging ..... to provide a base for Section 3003 standards". The EPA and DOT are to be commended for taking concerted steps toward promulgation of regulations for hazardous waste transportation that will not be a confusing overlap of requirements which in turn would serve, we believe, to detract from the intent of hazardous materials transportation regulations.

RCRA's principal objective is to insure that hazardous waste is properly disposed of, basically through a system of transferring the waste from the generator to the "permitted" disposal facility. Section 3003(a) requires

EPA to promulgate regulations applicable to transporters to insure that this important step does occur, with the necessary recordkeeping, manifest system compliance, labeling and delivery to the designated disposal site. Requirements for the actual handling of materials considered to be hazardous in transportation have, for many years, been fully and adequately covered by the Hazardous Materials Transportation Act (HMTA) and DOT regulations. Congress obviously recognized this in that RCRA requires, under Section 3003(b), that EPA regulations be consistent with HMTA/DOT requirements and simply authorizes EPA to make recommendations to DOT for additional coverage.

RCRA necessarily required a broader definition of hazardous, including environmental concerns, because waste material may be deposited in disposal sites for an eternity. However, RCRA nowhere suggests that a more stringent definition of "hazardous" than expressed in HMTA be required for the relatively brief period that such wastes are being transported to the disposal site. Any other construction leads to the anomalous conclusion apparently reached by several participants in the October 26, 1977 Chicago EPA/DOT Joint Public Meeting, considering whether EPA or DOT should expand the HMTA/DOT definition of "hazardous material" to include RCRA

"hazardous wastes". Such an expansion would result in considerably more stringent transportation requirements being placed, for example, a small quantity of waste material considered to be "hazardous" under RCRA, than on a large quantity of virgin material, having the same or possibly greater environmental hazards if spilled, yet not classified as a hazardous material under HMTA/DOT.

Section 3003 does not contemplate EPA interference with DOT's handling of the transportation of hazardous materials. House Commerce Committee Report No. 94-1491, dated September 8, 1976, on H.R. 14496, which contained Section 3003 in essentially the form ultimately signed into law, stated that

> "It is not the committee's intent to interfere with the transportation of the waste but rather to provide a system through which the movement of the waste can be traced. Too often trucks bearing hazardous waste have been unloaded along the roadside or at a nearby landfill."

EPA regulation under Section 3003 must simply insure that RCRA's ultimate safe disposal objective is not thwarted during the transfer to the disposal site.

EPA/OHMO in order to determine potential regulatory requirements requested that comments as referenced in 40 CFR Part 250, Federal Register Vol. 42 51625-September 29, 1977 be directed to certain "Discussion

Topics". Comments are as follows, keyed to the ten (10) "Discussion Topics" listed:

1) The DOT should be the agency responsible for developing all regulations for transportation of hazardous materials, virgin or waste. Development of regulations should be approached on the present basis of designating as hazardous those materials which by testing and expertise fall into existing DOT definitions of corrosive, flammable, poison, etc. (49 CFR 173). Du Pont sees no need to differentiate between hazardous materials and hazardous wastes insofar as hazard classifications and proper shipping names are concerned. Du Pont believes that hazardous wastes should continue to be shipped as classified under 49 CFR 172.101.
DOT definition of hazardous materials should continue to be based on those materials which when introduced in commerce pose an immediate and unreasonable risk to health and safety or property and are based on acute hazards as opposed

to chronic/long term effects. Wastes which are bioaccumulative, contain carcinogens, etc., have not been established as posing hazards in transportation. Inclusion of such materials in DOT regulations should be weighed very carefully based upon realistic scientific and toxicological data. DOT has recognized some of EPA's concerns for carcinogens, environmental accumulative materials, etc., under Docket No. HM-145 - Environmental and Health Effects Materials Vol. 41 FR 53824-December 9, 1976. Responses to HM-145 should be carefully examined by both agencies as background source information relative to transportation of hazardous waste. Any regulations that may be adopted should be required to show unreasonable risk under foreseeable exposure conditions which may occur in transportation. Du Pont believes that EPA should incorporate DOT regulations by reference since separate EPA regulations to

supplement "gaps" in DOT regulations (hazardous wastes vs. all hazardous materials) would be unwieldy and confusing to shippers and carriers.

2) Du Pont believes that if DOT were to modify its definition of hazardous materials to include all hazardous wastes, then DOT regulations should specifically treat them the same as hazardous materials that are bioaccumulative, toxic, infectious, carcinogenic, etc. However, for transportation purposes, consideration of long-term chronic effects is not believed to be realistic or meaningful since the period of time in which a material is in transportation is relatively short. This point was discussed to some extent in Du Pont response to Docket No. HM-145.

3) In order to fulfill requirements of Sections 3002 and 3003 of the RCRA, Du Pont believes it is logical for DOT to require a separate manifest to accompany bills of lading thereby assuring that the hazardous waste is

transported to a permitted hazardous waste management facility. A separate EPA document requirement would be an unnecessary burden on shippers and carriers alike.

4) Current DOT requirements for labeling, marking and placarding are sufficient for handling and identification of hazardous wastes in transportation. For those wastes which are not subject to current DOT regulations, DOT rather than EPA should develop labels and placards "compatible" with current DOT design. A separate EPA label, marking and placarding system would lead to confusion for all shippers and transportation agencies concerned with physical distribution of hazardous materials.

5) There appears to be no need for registration requirements applicable to transporters of hazardous wastes even though registration is authorized under HMTA. Current DOT regulations are

adequate for shipment of hazardous materials including hazardous wastes.

6) DOT regulation (49 CFR 171.16) requires detailed hazardous materials incident reports by carriers for each incident that occurs during the course of transportation (including loading, unloading or temporary storage) in which, as a direct result of the hazardous materials, any of the circumstances set forth in Section 171.15(a) occurs or there has been an unintentional release of hazardous materials from a package (including a tank).

When EPA promulgates 40 CFR Parts 116, 117, 118, 119 reporting of spills to EPA will be required. In addition, the USCG has regulations (33 CFR Part 153) which make reporting of hazardous spills (other than oil) mandatory when EPA promulgates 40 CFR Parts 116-119. Here it would appear that there is duplication of effort in reporting and notification requirements which we believe would lead

to confusion.

It is suggested that DOT, through the U.S. Coast Guard National Emergency Response Center, receive all notifications and written reports of accidents or spills occurring during transportation. Intergovernmental response and follow-up could be coordinated through that single agency.

7) Need for additional regulations is questionable in view of specific laws and regulations under PL 92-500 which make owners and/or operators responsible for proper cleanup or mitigation of spills or discharges resulting from accidents during transportation.

8) Emergency response is currently well handled under the auspices of MCA's CHEMTREC Center in Washington, D.C. and through its participants from the Chemical and Transportation Industries. Many shippers and carriers have excellent emergency response and cleanup programs. The chemical transportation and related

industries undoubtedly will continue to participate and increase their dedication to the areas of response to emergencies in the event of transportation mishaps.

9) Loading, stowage and transportation of hazardous wastes (including materials which may be mixed during collection for transportation) is not a new situation. It does not appear necessary, therefore, for DOT to modify its loading and stowage requirements to address the mixing and stowage of incompatible wastes. Experience in collection and movement of waste materials has been good under existing DOT regulations.

10) Many wastes, although environmentally hazardous, are not hazardous in transportation. This has allowed a certain degree of flexibility in the selection of packaging and method and type of transportation. Attempts to modify hazardous waste regulations without considering the method of disposal

employed could create problems by not permitting use of the most effective disposal methods, e.g., waste packaged in fiber drums can be incinerated (container and contents) whereas if packaged in metal drums, it would be buried which may not be the most environmentally sound method of disposal.

In general, every effort should be made to authorize DOT to regulate those areas specific to transportation and make "gray" areas as limited as possible. Both agencies (DOT and EPA) should strive to preclude overlap.

Du Pont appreciates the opportunity to respond to this Advance Notice of Proposed Rulemaking.

Respectfully submitted,

Don A. Boyd

William R. Rubbert

Date: November 7, 1977

Due: November 9, 1977

EXXON CHEMICAL COMPANY U.S.A.

P. O. Box 3272 Houston Texas 77001

DISTRIBUTION DEPARTMENT
J. G. WAINWRIGHT
Manager

EXXON CHEMICALS

November 4, 1977

Supplemental Advanced Notice of Proposed Rule Making for the Transportation of Hazardous Wastes
File: 04-02-01 (C+1)

Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Materials Division
Docket Section, Room 2111
401 M Street, S.W.
Washington, D. C. 20460

Department of Transportation
Room 6500, Transpoint Building
2100 Second Street, S.W.
Washington, D. C. 20590

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Gentlemen:

Exxon Chemical Company U.S.A. has reviewed the discussion topics related to the development of regulations for the transportation of hazardous wastes. The discussion topics were published in the September 29, 1977, Federal Register. Our comments are attached with the item numbers corresponding to the discussion topic numbers as published in the Register.

Briefly, it is our belief that the EPA should set the criteria for defining hazardous wastes and that the DOT should promulgate all regulations which relate to the loading, transport, and unloading of hazardous wastes. We would urge the Agencies to establish a Memorandum of Understanding based on this principle.

We hope our comments will be helpful to you in resolving these important issues.

J. G. Wainwright

JGW/EMT/nm

EXXON CHEMICAL COMPANY U.S.A.

COMMENTS ON DISCUSSION TOPICS FOR THE DEVELOPMENT OF REGULATIONS FOR THE TRANSPORTATION OF HAZARDOUS WASTES

SUPPLEMENTAL ADVANCED NOTICE OF PROPOSED RULE MAKING

1. EPA should be the lead agency in setting the criteria for defining Hazardous Wastes. DOT should be the lead agency in developing the regulations for hazardous waste transportation.

   DOT should modify its definitions of hazardous materials to include all hazardous wastes. We would suggest an "EHW" (Environmentally Hazardous Waste) classification for this purpose.

2. DOT's regulations should specifically address the transportation of hazardous wastes for those hazardous wastes which are not hazardous under current DOT hazardous materials definitions. Where hazardous wastes meet current DOT definitions of hazardous materials, current DOT regulations should take precedence.

3. Based on EPA needs under Section 3002 of RCRA, the DOT should modify its shipping paper requirements to fulfill the needs of the manifest requirement. In any event, the requirements should not mandate a separate document. Use of the economic document or use of a separate document to fulfill the manifest requirements should be an option left open to the generator.

4. For those wastes which are hazardous under current DOT criteria, we believe the current labeling, marking, and placarding requirements are sufficient since the manifest requirements will cover hazard-type information in detail.

   Where wastes are not hazardous by current DOT definition, but are hazardous by RCRA criteria, a single label or placard should be authorized by DOT to identify these materials. Labels should be used on small containers and placards on bulk containers, consistent with present DOT practices.

5. HMTA registration authority was not intended for hazardous waste transport

purposes and should not be used for transporters of hazardous wastes. Notification to EPA under RCRA should be adequate.

6. Various agencies of the federal government presently require spill reporting and have implemented, or are authorized to implement, response centers. We believe these agencies should form a single reporting and response center capable of handling all agencies' needs rather than each individual agency requiring separate reporting. This would be more efficient from the standpoint of both the agencies and the regulated.

   If this is not possible consistent with the timing needs for reporting then, under the concepts outlined above, reports should be filed with the DOT's Office of Hazardous Materials Operations.

7. Under the law and the concepts outlined above, the regulations developed would automatically apply to spilled materials which meet the criteria for hazardous wastes. As we see it, the only added regulation development needed would be to allow the exempt movement of hazardous wastes, generated as the result of a spill, from the spill site to an initial holding location.

8. We believe the subject of emergency response is being addressed in the DOT's OHMO docket HM-126 as it applies to present DOT hazardous materials. Under the concepts outlined above, emergency response systems and training requirements for hazardous wastes should be developed by the DOT under that docket.

9. We do not believe it necessary for the DOT to modify its loading and stowage requirements to address the mixing and stowage of incompatible wastes. The DOT regulations in this area are rightfully pointed at preventing releases of hazardous materials. Concern for the prevention of mixing of hazardous wastes is primarily a concern of chemical reactivity of different wastes. The regulations should place the burden of not mixing chemically-reactive wastes on the generator, transporter, and disposer without attempting to apply rules to specific materials or classes of wastes.

10. Various development documents have indicated that the EPA is considering,

in addition to the nine areas discussed above, packaging and manifest certification requirements. Under the concepts as set forth above, we believe that packaging requirements, where necessary, should be developed by the DOT. The manifest certification requirement should be identical to the current DOT requirement, without modification.

We believe that the EPA and the DOT should establish and publish a Memorandum of Understanding relative to the regulation of hazardous wastes which embody the above concepts of agency responsibility.

[6560–01]

[40 CFR Part 250]

[FRL 797-6]

DEVELOPMENT OF REGULATIONS FOR THE TRANSPORTATION OF HAZARDOUS WASTE

Joint Public Meeting

AGENCY Environmental Protection Agency and Office of Hazardous Materials, Department of Transportation

ACTION Supplemental advanced notice of proposed rulemaking, notice of meeting

SUMMARY The Environmental Protection Agency announces a joint meeting with the Office of Hazardous Materials Operations/DOT to determine whether current DOT regulations under the Hazardous Materials Transportation Act of 1974 may have the potential to be expanded to partially meet the mandates of the Resource Conservation and Recovery Act of 1976 [1] The purpose of this meeting is to maximize the coordination of the RCRA regulatory requirements with existing DOT rules for the benefit of all parties

DATES The meeting will be held on October 26, 1977 Comments must be received on or before November 9, 1977

ADDRESSES Send comments to U S Environmental Protection Agency Office of Solid Waste, Hazardous Waste Materials Division, Docket Section, Room 2111, 401 M St SW, Washington, D C 20460, and Department of Transportation, Room 6500, Trans Point Building, 2100 Second Street SW, Washington, D C 20590

The meeting will be held at the Ramada O'Hare Inn, Mannheim and Higgins Road Des Plaines, Ill, 312–827–5131

SUPPLEMENTARY INFORMATION

The Resource Conservation and Recovery Act of 1976 (RCRA) mandates a comprehensive Federal-State-local approach to all aspects of waste management, including resource conservation and recovery, land disposal of municipal and industrial wastes, and authorizes a new regulatory program for hazardous wastes

The Environmental Protection Agency (EPA) under Subtitle C—Hazardous Waste Management—is required to write standards for generators, shippers, transporters, and receivers of hazardous waste In addition EPA is required to develop criteria and a list to define what are hazardous wastes

During the analysis of the RCRA requirements it became apparent that current Department of Transportation (DOT) regulations under the Hazardous Materials Transportation Act of 1974 (HMTA) may have the potential to be expanded to partially meet the mandate of RCRA EPA would like to maximize the coordination of the RCRA regulatory requirements with existing DOT rules for the benefit of all parties.

The Act requires that regulations developed under Subtitle C of RCRA be consistent with the requirements of HMTA and the regulations thereunder In addition, it authorizes the EPA to make recommendations to DOT respecting regulations for hazardous wastes under HMTA and for the addition of materials to be covered by that Act.

Authority for the regulation of hazardous waste transportation is contained in both HMTA and RCRA The HMTA is concerned with the protection of public safety, health and property during the loading, transportation, storage incident to transportation, and unloading of hazardous materials HMTA requires the Secretary of Transportation to designate materials as hazardous upon finding that the transportation of a particular quantity and form of material in commerce may pose an unreasonable risk to health and safety or property The materials designated as hazardous may include, but are not limited to explosives, radioactive materials etiologic agents flammable liquids or solids, combustible liquids or solids poisons, oxidizing or corrosive materials, and compressed gases

Under Subtitle C, RCRA is concerned with the protection of the public health and the environment from improper hazardous waste management during transportation, treatment, storage or disposal Hazardous waste as defined by RCRA is a solid waste or combination of solid wastes which because of its quantity, concentration or physical chemical or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or pose a substantial present or potential hazard to human health or the environment when improperly treated stored transported or disposed of In turn RCRA defines "solid" waste to include solid liquid semisolid or contained gaseous material resulting from industrial, commercial, mining, and with some exception, agricultural operations and from community activities The Administrator shall take into account, when designating hazardous wastes, toxicity, persistence and degradability in nature, potential for accumulation in tissue, and other related factors such as flammability, corrosiveness and other hazardous characteristics

For the transportation of hazardous wastes under RCRA Section 3002 requires the Administrator to develop standards for generators/shippers of hazardous wastes concerning labeling practices for any containers used for storage, transport, or disposal that will identify accurately such wastes, use of appropriate containers, and use of a manifest system to assure that all hazardous waste generated is designated for treatment, storage or disposal to a permitted hazardous waste management facility. The manifest as defined by the Act means the form used for identifying the quantity, composition, and the origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of disposal, treatment, or storage Section 3003 requires the Administrator to develop standards for transporters of hazardous waste concerning recordkeeping, transportation of hazardous wastes only if properly labeled, compliance with the manifest system and transportation of all the hazardous wastes to the designated permitted facility In addition the Administrator is considering the development of standards for the acceptance of hazardous waste for transport loading and stowage of hazardous wastes notification in the event of a spill and spill reporting marking and placarding of vehicles, and notification of the transportation of hazardous wastes

Many of the standards being considered under RCRA for transportation are currently required under HMTA Specifically, definition of a hazardous material (waste), labeling, placarding packaging, manifest (shipping document) spill notification and reporting, and loading and stowage In addition, HMTA has provisions for the development of standards concerning recordkeeping and registration

In December of 1976 the Department of Transportation evidenced concern for the development of regulations for hazardous waste transporters HM-145 Environmental and Health Effects Materials Advance Notice of Proposed Rulemaking published December 9 1976 in the FEDERAL REGISTER presented several questions concerning hazardous wastes "with regard to hazardous wastes what classification system may be used to clearly identify mixtures as opposed to single compound materials what packaging may be appropriate for transportation, and how existing transportation documentation can be used to cover transport of hazardous wastes from the generator (shipper) to the disposer (consignee) " Several comments were received expressing concern for the development of hazardous waste transportation regulations by both EPA and DOT.

A one-day public meeting will be held on October 26, 1977, to solicit public, industry, State and local government comment on the regulation of hazardous waste transportation by the Department of Transportation and the Environmental Protection Agency The public meeting will begin at 9 30 a m at the Ramada O'Hare Inn, Mannheim and Higgins Road Des Plaines Ill 312–827–5131 Interested members of the public, representatives of industry that ship as well as transport hazardous materials (waste) entities both public and pri-

[1] See 42 FR 22332 May 2 1977, for information on Hazardous waste guidelines and regulations

vate, that respond to transportation emergencies, State and local governments, and firms that receive hazardous wastes for storage, treatment and disposal are urged to attend and respond to any or all of the discussion topics listed below, as well as any other issues concerning the regulation of hazardous waste transportation

The meeting is open to the public and will be conducted by a panel from the U S Environmental Protection Agency and the U S Department of Transportation

The following procedural rule will apply The Chairman of the panel is empowered to conduct the meeting in a manner that in his judgment will facilitate the orderly conduct of business, to schedule presentations by participants, and to exclude material which is irrelevant, extraneous, or repetitious The time allotment for oral statements shall be at the discretion of the Chairman, but shall not ordinarily exceed 15 minutes With the permission of any person offering a statement, questions may be asked by members of the panel At the discretion of the Chairman, a procedure may be made available for presentation of pertinent questions from other persons or participants Individuals with prepared statements are requested to bring at least one copy for the record Persons unable to attend, but wishing to comment on the Discussion Topics are invited to send written comments to the address below by November 9, 1977

A transcript of the meetings will be made and a copy of the transcript, together with copies of all documents presented at the meeting, and all written submissions will constitute the record of the meeting A copy of the record of the meeting will be available for public inspection by December 16, 1977, at the U S Environmental Protection Agency, Office of Solid Waste, Hazardous Waste Management Division, Docket Section, Room 2111, 401 M Street S W, Washington, D C 20460 and at the Department of Transportation Room 6500, Trans Point Building 2100 Second Street, S W, Washington, D C 20590

Anyone desiring additional information on the meeting or wishing to be placed on the program to present a statement is requested to contact Mrs Geraldine Wyer, Public Participation Officer, Office of Solid Waste, WH-462, U.S Environmental Protection Agency, Washington, D C 20460 Phone 202-755-9157 before October 21, 1977

DISCUSSION TOPICS

1 Regulations being developed by the Environmental Protection Agency and existing regulations of the Department of Transportation impact the transportation of hazardous wastes Which Agency should take the lead in developing the regulations for hazardous waste transportation? What approach should be taken? Should DOT modify its definition of hazardous materials to include all hazardous wastes? (We note which are bioaccumulative toxic above current DOT definition levels, infectious carcinogenic or having potential for genetic change are likely to be identified under RCRA as hazardous wastes and are not currently covered by the DOT Hazardous Materials Regulations) Should EPA then incorporate DOT regulations by reference or should EPA consider a separate set of regulations to supplement the gaps in DOT regulatory coverage in that EPA regulations would cover only wastes which are hazardous, not all hazardous materials?

2 If DOT does modify its definition of hazardous materials to include all hazardous wastes, should DOT regulations specifically address the transportation of hazardous wastes or treat them the same as hazardous materials that are bioaccumulative, toxic, infectious, carcinogenic, etc ?

3 Section 3002 of RCRA requires the development of a manifest (shipping paper) to assure that the hazardous waste is designated to a permitted hazardous waste management facility and that all the hazardous waste is delivered to that facility Should DOT modify its shipping paper requirements to fulfill the needs of the RCRA manifest or should EPA develop requirements to supplement existing shipping paper requirements (including the possibility of a separate document)?

4 Are the current DOT requirements for labeling marking and placarding sufficient for handling of hazardous waste in transportation? For those hazardous wastes which will not fall under DOT purview, should EPA develop labels and placards of separate design or should DOT develop the labels and placards for these hazardous wastes that are compatible with current DOT design?

5 HMTA authorizes the registration of anyone transporting hazardous materials, RCRA requires notification of the transportation of hazardous wastes. ? Should registration requirements be developed for transporters of hazardous wastes?

6 In the event of an accident or a spill of a hazardous material during loading, transportation or unloading DOT requires notification of the incident and the filing of a report For the spill of hazardous waste, EPA is also considering similar requirements Should notification of spills be directed to EPA, DOT (Office of Hazardous Material Operations), or the U S Coast Guard National Emergency Response Center? Should EPA and DOT receive incident reports (DOT for hazardous materials and EPA for hazardous wastes) or should all reports be filed with DOT (even when spilled hazardous wastes are not covered by DOT regulations)?

7 In the event of a spill the material cleaned up may become a hazardous waste Should DOT or EPA develop the regulations for handling the spilled hazardous material?

8 HMTA authorizes DOT to require training to be conducted by shippers and transporters of hazardous materials Are training programs necessary relative to emergency response and cleanup of hazardous wastes specifically? If so to what extent should they be required?

9 Since hazardous wastes are mixtures or may be mixed during collection for transportation is it necessary for DOT to modify its loading and stowage requirement to address the mixing and stowage of incompatible wastes?

10 Any other comments relevant to the development of regulations for transportation of hazardous wastes by the Department of Transportation and the Environmental Protection Agency are welcome

Dated September 22, 1977

THOMAS C JORLING,
Assistant Administrator for Water and Hazardous Materials

ALAN I ROBERTS,
Director, Office of Hazardous Material Operations

[FR Doc 77-28591 Filed 9-28-77,8 45 am]

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Ford Motor Company
Environmental and Safety
Engineering Staff

One Parklane Boulevard
Dearborn, Michigan 48126

U.S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Management Division
Docket Section
Room 2111
401 M. Street, S.W.
Washington, D. C. 20460

October 27, 1977

Subject: Hazardous Waste Transportation Regulations

Enclosed are comments submitted in response to 42 FR 51625 (September 29, 1977) which solicited comments from interested parties regarding the subject regulations. Kindly include these comments with those which you received during your meeting in Chicago, Illinois on October 26, 1977.

Yours very truly,

A. B. M. Houston, Manager
Compliance and Liaison Department
Stationary Source Environmental Control

Enclosure

cc Department of Transportation
Washington, D.C.

FORD MOTOR COMPANY
COMMENTS ON THE DEVELOPMENT OF REGULATIONS
FOR THE TRANSPORTATION OF HAZARDOUS WASTE

The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Transportation (DOT) should make every effort to develop a uniform set of hazardous waste transportation regulations which avoid duplications and ambiguities. These regulations should be consistent with existing regulations governing the movement of hazardous materials of a similar nature. Separate regulations can only lead to uncertainty and confusion among manufacturers, waste transporters, and waste receptors. A hazardous waste is only a special type of hazardous material, and should be treated as a hazardous material.

The information required by DOT for shipping papers is very similar to that which will be required by EPA for the hazardous waste manifest. A hazardous waste shipper should be able to satisfy the requirements of both EPA and DOT by using a single form. Use of separate shipping documents can be avoided, if EPA and DOT develop common requirements for shipping papers/manifests. It is unlikely that DOT would need to radically change its existing requirements for hazardous material shipping papers. However, a few minor modifications may be necessary.

Existing DOT container specifications and labeling requirements for hazardous materials should be the basis for similar requirements for hazardous wastes. For most hazard categories the existing DOT requirements may be extended to include hazardous wastes. Any new container specifications or label requirements which may be necessary should be developed jointly by EPA and DOT and based on DOT's experience with the existing regulations.

Spill notifications for any hazardous material, substance, or waste should be directed to a single agency which would act as a clearinghouse and notify other agencies as necessary. To require a carrier to notify several federal agencies or even select the appropriate federal agency from a list of agencies is an excessive burden at a time when he may be under stress as a result of the spill. Similarly, reports of spills should be filed with a single federal agency and distributed to other agencies as appropriate. DOT would appear to be an appropriate agency to act as the clearinghouse for spill notifications as well as spill reports.

Many states have already implemented hazardous and/or liquid waste transporter registration systems Those states which do not now have hazardous waste transporter registration systems should be encouraged to adopt and implement a system. This strategy is suggested by the Resource Conservation and Recovery Act of 1976 which encourages states to implement their own hazardous waste management programs. Furthermore, it is unlikely that EPA or DOT will have adequate resources to effectively enforce a registration system.

The BFGoodrich Chemical Division with its offices located at 6100 Oak Tree Boulevard in Cleveland, Ohio 44131 has eleven manufacturing plants that generate various quantities and types of hazardous wastes which are presently regulated by the U. S. Department of Transportation. Due to the nature of the chemicals that are utilized as raw materials and the types of chemicals/products that are produced, the development of regulations for the transportation of hazardous waste materials will have a significant impact upon the BFGoodrich Chemical Division. Therefore, the following comments are offered in response to the solicitation for comments published jointly by both the DOT and the EPA in the Federal Register Vol. 42, No. 189 Thursday September 29, 1977 edition.

The comments provided below address each of the questions raised in the Federal Register in their listed numerical sequence as shown in the Federal Register, and the BFGoodrich Chemical Division would welcome the opportunity to answer any questions which may arise in regard to these comments.

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1. A. Which agency should take the lead in developing the regulations for hazardous waste transportation?

If there are waste materials which can be identified to cause a hazard during transportation other than those wastes which are presently regulated by the Department of Transportation, it should be the responsibility of the Department of Transportation to take the lead in developing the regulations applicable to the materials. The Department of Transportation has the expertise to identify the types of hazards that may occur during transportation, and has a system of regulations which could be easily adopted to regulating hazardous items other than those already regulated.

For an agency such as the Environmental Protection Agency to adopt regulations concerning the transportation of hazardous wastes independently of the Department of Transportation, the agency, in order to develop appropriate levels of regulation for these additional items would first have to study each mode of transportation and the various circumstances and transportation conditions attendant to each of the modes before proposing any regulations. There is no worthwhile reason for the EPA to develop an expertise in transportation and duplicate the efforts of the Department of Transportation, especially since Congress in Public Law 94-580 in Section 3003 paragraph (b) has provided for the possibility of the EPA coordinating with the DOT in developing transportation regulations applicable to hazardous wastes. Furthermore, Public Law 93-633 allows the Secretary of Transportation to declare an item hazardous when during transportation "a particular quantity and form of material in commerce may pose an unreasonable risk to health and safety or property." Without a doubt the Department of Transportation has the expertise to determine the degree of hazard that can be posed by any substance during transportation and the Environmental Protection Agency should defer to that expertise.

The benefits of the EPA deferring to the DOT in matters of transportation would be twofold in nature. First, the cost for administering the transportation of hazardous wastes would be minimized as the EPA would not have to assume the burden of developing an expertise in transportation. Secondly, the generators and transporters of hazardous wastes would have only one agency regulating the transportation of hazardous wastes and thus their compliance with the regulations concerning the transportation of these items would be facilitated.

1. B. What approach should be taken? Should DOT modify its definition of hazardous materials to include all hazardous wastes? (wastes which are bioaccumulative, toxic above current DOT definition levels, infectious, carcinogens, or having potential for genetic change are likely to be identified under RCRA as hazardous wastes and are not currently covered by the DOT hazardous materials regulations). Should EPA then incorporate DOT regulations by reference or should EPA consider a separate set of regulations to supplement the gaps in DOT regulatory coverage, in that EPA regulations would cover only wastes which are hazardous, not all hazardous materials?

The above questions raise the general topic of the methodology that should be used to regulate hazardous wastes during transportation. This topic should most appropriately be addressed on the following basis·

1. The EPA should provide definitions for hazardous wastes as required under the Resource Recovery and Conservation Act of 1976.

2. The EPA should then request the DOT to determine the hazard that these materials pose during transportation, and request the DOT to develop regulations covering the degree of hazard associated with the transportation of these materials.

3. The DOT in assessing the transportation hazards associated with the hazardous wastes as defined by the EPA, and in developing the regulations applicable to the transportation of these materials should draw upon both its own expertise and the expertise of the shippers and carriers of the items.

By using the above methodology the following benefits would be derived:

1. By having the EPA provide the definitions of hazardous wastes the DOT would not be burdened with the responsibility of attempting to define what is a hazardous waste under RCRA, and the DOT thereby will be relieved of having to develop an expertise in matters not related to transportation.

2. Conversely, the EPA will not have to develop an expertise in transportation in order to determine the degree of hazard posed by the hazardous wastes (as defined under RCRA) during transportation.

3. Hazardous wastes will be regulated on the basis of the hazard they pose during transportation rather than because they may be hazardous during packaging, handling, or disposal, and the EPA can implement separate regulations to control the other aspects of hazardous waste disposal. This would provide the proper degree of regulation during transportation of the items, but without imposing unnecessary burdens on the shippers and carriers of hazardous wastes.

In developing regulations for the transportation of hazardous wastes under RCRA, the DOT and EPA should use the following factors as premises for the development of reasonable regulations.

1. Under Subtitle A of the Resource Conservation and Recovery Act of 1976 in section 1003 the objectives of the act are listed. A part of section 1003 reads as follows:

"The objectives of this act are to promote the protection of health and the environment and to conserve valuable material and energy resources by - ..."

(4) regulating the treatment, storage, transportation, and disposal of hazardous wastes which have adverse effects on health and the environment;

The DOT and EPA must work within the boundaries of this objective. In other words transportation regulations must be promulgated to "promote the protection of health and the environment". If a particular proposed regulation will not promote the protection of health and the environment it should not be adopted. An example of the importance of this premise is illustrated below.

Presently the DOT regulates as a hazardous material various types of flammable liquids. For the purpose of this example we shall assume that a particular waste material has a flash point of 125°F based on a tag closed cup test, and that it does not meet any other DOT hazardous material definition and/or any other EPA definition of a hazardous waste.

Under the present DOT regulations this material would be classified as a combustible liquid for transportation purposes and would not be regulated under CFR 49 parts 100-189 when shipped in a package having a rated capacity of 110 gallons or less. The DOT has determined that a material meeting the above requirements can be transported safely without being subject to strict packaging, marking, labeling and shipping paper requirements.

The EPA in a preliminary draft has proposed that a material would be considered a flammable waste if a representative sample of that waste has a flash point less than 140°F. This criteria may be necessary for regulating the handling and/or disposal of the material, however, in respect to transportation since the DOT has already determined that a material with a flash point between 100°F and 140°F can be transported without the need for detailed regulations the EPA should defer to that expertise, and not impose unnecessary regulations which will not promote the protection of health or the environment .

RCRA does not mandate the EPA to regulate the transportation of everything it determines to be hazardous under the law. Rather the law mandates the EPA to regulate the transportation of hazardous wastes when a substantial present or potential hazard may be caused to human health or the environment.

This point is substantiated in the definition of a hazardous waste under subtitle A section 1004 wherein Congress defined a hazardous waste as:

> "...a solid waste, or combination of solid wastes, which because its quantity, concentration, or physical, chemical or infectious characterists may —
>
> A. cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness, or
>
> B. pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
>
> (emphasis added)

On the basis of this definition it would be difficult for the EPA to impose transportation restrictions on the material cited in the earlier example. The material does not qualify under Section A above, and cannot be judged under Section B to pose a substantial present or potential hazard to human health or the environment during transportation. Thus, although it might be appropriate for the EPA to promulgate regulations for the treatment and disposal of a material with a flash point of 125°F (which does not meet the definition of any other hazard class) it would not be appropriate for the EPA to promulgate regulations on the transportation of the material. Any such regulations would not promote the protection of health and the environment and thus could not be justified under the objectives of the RCRA.

2. Furthermore the DOT and EPA must recognize that under subtitle C of the Resource Conservation and Recovery Act of 1976 in section 3002 which addresses the standards applicable to generators of hazardous waste and in section 3003 which addresses standards applicable to transporters of hazardous waste the EPA is directed to develop regulations applicable to generators and transporters of hazardous waste "... as may be necessary to protect human health and the environment." (quoted directly from Public Law 94-580) These two sections mandate the EPA to develop those regulations which are necessary, and they do not require the EPA to develop regulations covering every aspect of packaging, labeling, transporting, identifying, and documenting every hazardous waste. The EPA is required by the law to be selective in the regulations it promulgates. The regulations must be necessary to protect human health and the environment. Thus in the example cited earlier which addressed the transportation of a hazardous waste with a flash point of 125°F, the EPA when promulgating regulations for such a material may find it necessary

to develop regulations for regulating the treatment and disposal of such a material, but can determine it to be unnecessary on the basis of information supplied by the DOT to impose further transportation regulations either directly or indirectly through the DOT. In other words the law allows the EPA to rely upon the expertise of the Department of Transportation, and if the DOT determines that it is unnecessary to regulate further the transportation of a hazardous waste as defined under RCRA the EPA can accept the DOT determination, and still be fulfilling its mandated responsibilities under RCRA. The EPA does not have to regulate every aspect of the disposal process for a hazardous waste for every hazardous waste. The EPA is not required by RCRA to impose unnecessary burdens on generators and transporters of hazardous wastes.

On the basis of the above two premises the following position can be adopted by the DOT and EPA regarding the definitions of hazardous wastes to be used by the agencies for regulating their transportation.

A. The existing DOT definitions for hazardous materials should not be altered because they have proven to be adequate for defining the presently regulated types of hazards that the DOT regulations address for transportation purposes. For instance, the DOT definition for flammable liquids limits the parameters of that hazard class in a manner that is appropriate for transportation purposes and the scope of the definition should not be expanded to accommodate an EPA definition of a hazardous waste under RCRA. Such an expansion of the definition to include items as flammable when their flash point is at or below 140°F would cause an unnecessary burden on shippers and transporters of flammable liquids, because the present DOT cut off point of 100°F for a flammable is adequate to control that hazard for transportation purposes.

B. The existing DOT definitions for hazardous materials should be supplemented with additional definitions which are operationally quantifiable for defining hazardous wastes which pose a hazard during transportation. If a presently unregulated hazardous waste which is bioaccumulative poses a hazard during transportation and that hazard has until this time not been recognized, then the EPA should provide the DOT with an operationally quantifiable definition of that hazardous waste or specifically identify it for the DOT and petition the DOT to adopt the definition as an addition to its present definitions. The DOT would of course before adopting the definition determine whether the material in fact did pose a hazard during transportation. If the material poses a hazard during transportation the DOT should adopt the definition and add to the hazardous material table in 49 CFR section 172.101 an entry which properly identifies the newly regulated item. If, however, the DOT determines that the bioaccumulative waste poses no hazard

during transportation then the EPA should accept that fact, and not promulgate any regulations to control the transportation of that material other than imposing required paperwork as mandated under the Resource Conservation and Recovery Act of 1976.

If the DOT does accept a new definition of a hazardous waste into its transportation regulations because of the hazard the material poses during transportation then the DOT should:

1. Require the EPA to provide a quantifiable operational definition i.e., a definition which specifies measurable physical characteristics for identifying whether a particular waste would qualify as hazardous under the definition.

2. Adopt the new definition(s) under a title that will not conflict with present DOT definitions i.e., under a new ORM definition or under some other non-conflicting title.

3. Only regulate the hazardous waste during transportation to the degree necessary for protecting human health and environment. In some instances simple shipping paper and placarding requirements may be sufficient where in other instances specification packaging, marking and labeling requirements may also be necessary.

C. The EPA should incorporate by reference the DOT regulations (including definitions) that are applicable to controlling the transportation of the hazardous wastes as defined by the EPA under RCRA; and on the basis of the premises stated earlier should not adopt any separate set of regulations to control the transportation of hazardous wastes when the DOT determines that it is unnecessary to further regulate a given material during transportation.

Question: 2. If DOT does modify its definition of hazardous materials to include all hazardous wastes, should DOT regulations specifically address the transportation of hazardous wastes or treat them the same as hazardous materials that are bioaccumulative, toxic, infectious, carcinogenic, etc.?

The word "modify" in this question can be interpreted in two ways. First the word modify can mean to change the scope of existing DOT definitions. Secondly, the word modify can mean the addition of new definitions to existing DOT definitions. The answer provided to question number one rejects the alternative of expanding the scope of present DOT definitions, and espouses the addition of new definitions under separate titles if necessary.

The response to question number two will be based on the concept of adding definitions to the present list of DOT hazardous material definitions.

When the DOT considers adding a new definition to its list of hazardous material definitions it must incorporate the addition in a manner that will not cause an unequal regulation of materials in commerce. In other words, if the DOT determines that a particular waste material does pose a hazard during transportation because it meets a specific set of criteria which are found to be hazardous during transportation then the DOT must incorporate a new definition into the transportation regulations which will equally regulate all materials which meet the same criteria. New definitions should reflect characteristics of materials that cause a hazardous condition to exist during transportation and new definitions should not be based on a consideration such as the ultimate destination of the material - possibly a disposal site. If a particular waste material is hazardous during transportation because it meets a certain criteria then materials other than wastes that meet the same criteria must also be judged to be hazardous during transportation.

However, the crucial questions which must be asked by both agencies before promulgating regulations to control the transportation of hazardous wastes are:

1. What criteria can be used for determining that a particular material causes a substantial hazard to human health or the environment during transportation?

2. If a hazardous condition does exist regarding human health or the environment during the transportation of a hazardous waste as defined by the EPA under RCRA, does the hazardous condition during transportation exist equally for all levels of concentration and/or physical characteristics of the hazardous wastes regulated under a given hazard definition.
   If the hazardous condition during transportation varies according to the level of concentration or according to the characteristics of the material within the definition, then the regulations which control the transportation of that material should reflect varying levels of control over the transportation based on the actual hazard the material poses to human health or the environment during transportation.

3. Can the present DOT definitions of hazardous materials be judged by the EPA to be sufficient for identifying *severely hazardous wastes during transportation? Can* the EPA adopt the present DOT definitions of hazardous materials as a starting point for identifying hazardous wastes under RCRA (especially since under DOT regulations they already do apply to waste materials) and then either add to the definitions and/or adopt new definitions to completely fulfill the mandate for *identifying hazardous wastes under RCRA? Or has the* EPA already determined that some materials which are already considered hazardous by the DOT during transportation will not be considered hazardous by the EPA for waste disposal purposes?

If the DOT definitions were used as a base for identifying hazardous wastes, it would be relatively easy to make a distinction between the wastes that must be fully regulated during transportation and wastes which would be partially regulated during transportation due to the lower hazard that they pose to human health and the environment during transportation. The EPA must fulfill its responsibility to provide for the safe transportation of all hazardous wastes, but the EPA must accomplish this task by recognizing that the situation encountered during the transportation of hazardous wastes is significantly different than the conditions encountered during the treatment and disposal of a waste material. During transportation human exposure and/or environmental exposure to the hazardous waste will be significantly less, because the material will be transported in a contained fashion, and generally exposure will only occur in an accident situation. Certainly the EPA must also strive to minimize the hazard during an accident situation, but generally speaking the threat to human health and the environment during transportation will be significantly less than during the actual disposal process wherein workers may have to be directly exposed to the material and/or the environment may have to be exposed to the material for many years *while the substance disintegrates slowly.*

To account for the substantially different circumstances during transportation as opposed to other steps during the disposal process possibly the EPA should consider adopting two sets of complimentary definitions for identifying hazardous wastes. In other words, a given hazard class would be composed of whatever criteria the EPA determines to be necessary for identifying the hazardous waste under RCRA, but within the given hazard class a distinction would be made as to which characteristics of that waste would be fully regulated (including transportation) and which wastes under the hazard class would be partially regulated as necessary during transportation.

Possibly for some wastes, such as the material cited earlier which had a flash point of 125°F and did not meet any other hazard class as specified by the DOT and/or the EPA, only the paperwork requirements mandated under RCRA would be a sufficient control during transportation.

The above discussion brings into focus the importance that both agencies, the DOT and the EPA, must assign to determining the criteria by which a material will be judged to be a substantial hazard to human health and the environment during transportation. Neither Public Law 94-580, the Resource Conservation and Recovery Act of 1976, nor Public Law 93-633 the Hazardous Material Transportation Act of 1974, allows either the EPA or the DOT to declare a material hazardous on an arbitrary basis, nor do the laws allow for the adoption of arbitrary regulations.

Under RCRA, as pointed out earlier, waste materials are to be declared hazardous under either of two conditions (Public Law 94-580 subtitle A section 1004 item 5) and then if declared hazardous are to be regulated "as may be necessary to protect human health and the environment" (Public Law 94-580 subtitle C section 3002 and 3003).

Under Public Law 93-633 a material in commerce must pose an "unreasonable risk to health and safety or property" before being declared a hazardous material (Public Law 93-633 Title I section 104), and Congress allowed the Secretary of Transportation to use discretion in establishing appropriate levels of regulations for hazardous materials in commerce by using the word "may" when describing various safety aspects of transportation

that the Secretary could regulate under the law (Public Law 93-633 Title I section 105 paragraph (a). And in fact the Secretary has regulated hazardous materials in commerce to varying degrees depending upon their physical characteristics, quantity being shipped, and type of packaging being used.

Due to the above standards that have been incorporated by Congress into both public laws it seems most appropriate for both agencies to address the topic of what criteria should be used to determine that a particular material poses a substantial and/or unreasonable risk to human health, and the environment during transportation. Possibly the agencies should solicit comments from the generators, transporters, and other government agencies regarding the development of such criteria.

Regarding the types of criteria that should be used by the agencies for determining that a hazardous condition exists to human health or the environment during the transportation of a particular item, the following ideas can be considered.

1. Transportation experience and/or data should be relied upon to provide insights into hazardous transportation conditions. For instance many of the items presently regulated by the DOT have been known to cause a dangerous situation during transportation. The concept of experience, however, must be viewed from two perspectives. Not only can transportation experience and/or data indicate hazardous conditions, but it can also substantiate non-hazardous situations. For instance, experience with the present DOT definition of a combustible liquid has shown that it is unnecessary to further regulate the transportation of such items. Therefore, although the EPA may need to incorporate into its definition of flammability characteristics which the DOT defines as a combustible liquid the EPA should not require an increase in the transportation regulations applicable to the category of items the DOT considers combustible unless such additional transportation regulations can be justified on the basis of a hazard heretofore unrecognized in the transportation of these items. It must also be recognized that experience alone cannot be used as the only factor for determining a transportation hazard, as in many instances, waiting for the experience will cause an unnecessary risk to human health and the environment.

2. Other governmental agency standards should be considered as criteria for judging hazardous conditions during transportation when they can be appropriately applied to the transportation situation. For instance, OSHA sets standards for allowable worker exposure to various chemicals, and in fact will be developing standards for the identification classification, and regulation of toxic substances posing a potential occupational carcinogenic risk. (Federal Register Vol. 42, No. 192 Tuesday, October 4, 1977) If OSHA defines a level of exposure to such materials that a worker may tolerate and/or the conditions under which the exposure may be tolerated it would not seem appropriate to require stricter standards to be made applicable to workers in the field of transportation than to workers in other fields. In other words if the workers in the field of transportation are not exposed to unreasonable levels (as defined by OSHA) of carcinogenic materials then the DOT and EPA may be able to determine that a hazardous condition does not exist during normal transportation, and that the only threat to human health and the environment would occur during an accident situation. In this case the DOT and EPA instead of fully regulating a carcinogenic waste material during transportation could instead address the potential threat to human health and the environment that may occur in the transportation accident situation. Thus the DOT and EPA may find it reasonable and sufficient to develop better communication regulations regarding emergency situations for these materials.

3. Research and statistical analysis of accidents involving presently non-regulated solid waste items in commerce can be pursued to provide an insight into the problems that occur with these materials during transportation. This will be authorized under RCRA in subtitle B section 2002.

In summary, the EPA and the DOT should be able to justify, as required by the laws which are applicable, the reasons used for declaring an item hazardous during transportation and should be able to provide an explanation as to <u>why</u> a given material is regulated to a particular degree.

Question: 3. Section 3002 of RCRA requires the development of a manifest (shipping paper) to assure that the hazardous waste is designated to a permitted hazardous waste management facility and that all the hazardous waste is delivered to that facility. Should DOT modify its shipping paper requirements to fulfill the needs of the RCRA manifest or should EPA develop requirements to supplement existing shipping paper requirements (including the possibility of a separate document)?

The EPA and DOT should adopt regulations which will allow the generators of hazardous wastes to choose between two options for complying with the manifest requirements under RCRA. The DOT should modify its shipping paper requirements to allow a generator of a hazardous waste to use one shipping paper for complying with both the DOT and the EPA requirements, and the EPA should allow for both the use of one shipping paper to fulfill the needs of RCRA or the use of separate shipping papers. This comment is based on the fact that some hazardous waste shipments will be able to be adequately handled on a single shipping paper due to the simplicity of the chemical composition of the hazardous waste and/or the fact that merely one hazardous waste is being tendered for shipment, whereas in other instances, due to either the chemical complexity of the waste and/or due to the number of wastes being tendered for shipment, possibly a two document approach would be better suited for reducing any confusion associated with the shipment.

Question: 4. Are the current DOT requirements for labeling, marking and placarding sufficient for handling of hazardous waste in transportation? For those hazardous wastes which will not fall under DOT purview, should EPA develop labels and placards of separate design or should DOT develop the labels and placards for these hazardous wastes that are compatible with current DOT design?

The current DOT requirements for labeling, marking, and placarding are sufficient for handling the presently regulated hazardous waste materials under the DOT regulations. If through a joint effort of the DOT and the EPA new hazardous definitions are added to DOT regulations or if further information is deemed necessary during transportation to avoid hazardous situations to human health or the environment then the current DOT regulations should be modified to require whatever additional information is necessary, but the regulatory control over a material which poses a hazard during transportation should remain with the Department of Transportation.

Question: 5. HMTA authorized the registration of anyone transporting hazardous materials; [RCRA requires notification of the transportation of hazardous wastes.] Should registration requirements be developed for transporters of hazardous wastes?

Hazardous wastes that meet the current DOT hazardous material definitions are presently being transported by many carriers, and the DOT has not found it necessary to have these transporters register themselves with the Department of Transportation. Unless some special reason is uncovered that will cause the registration of transporters to yield an improvement in the protection afforded to human health and the environment during transportation, registration of hazardous waste transporters should not be required.

Question: 6. In the event of an accident or a spill of a hazardous material during loading, transportation, or unloading, DOT requires notification of the incident and the filing of a report. *For the spill* of hazardous waste, EPA is also considering similar requirements. Should notification of spills be directed to EPA, DOT (Office of Hazardous Material Operations), or the U. S. Coast Guard National Emergency Response Center? Should EPA and *DOT receive incident reports (DOT for hazardous* materials and EPA for hazardous wastes), or should all reports be filed with DOT (even when spilled hazardous wastes are not covered by DOT regulation)?

The DOT incident reporting system can easily be adopted to include any EPA requirements for reporting spills of hazardous wastes. It seems logical and appropriate to utilize a reporting system for incidents already in effect rather than develop an overlapping reporting procedure which will cause an unnecessary burden of additional paperwork. Since the EPA will probably require all hazardous wastes to be regulated during transportation at least in so far as a manifest (shipping paper) will be required, it seems that it would be most expeditious to have all incident reports filed with the DOT, and have the DOT in turn provide the EPA with any data and/or copies of reports the agency may need for its purposes.

Question: 7. In the event of a spill, the material cleaned up may become a hazardous waste. Should DOT or EPA develop the regulations for handling the spilled hazardous material?

The EPA has the expertise to determine the proper handling of hazardous waste materials therefore it seems appropriate for the EPA to develop the regulations for the clean up and handling of hazardous waste material, and it would seem reasonable for the DOT to adopt the EPA clean up and handling procedures for the spilled hazardous wastes as appropriate for transportation situations.

Question: 8. HMTA authorizes DOT to require training to be conducted by shippers and transporters of hazardous materials. Are training programs necessary relative to emergency response and clean up of hazardous wastes specifically? If so, to what extent should they be required?

This question as it is stated seems to be directed neither toward generators nor transporters of hazardous wastes, but rather toward those agencies such as local fire departments, and police units that would respond to an emergency situation. It seems these agencies would best be suited for commenting on whether they need training programs relative to emergency response and clean up of hazardous waste incidents.

Question: 9. Since hazardous wastes are mixtures or may be mixed during collection for transportation, is it necessary for DOT to modify its loading and stowage requirement to address the mixing and stowage of incompatible wastes?

It would be reasonable for the DOT to modify its loading and storage chart if newly identified hazardous wastes are found to cause a hazard during transportation when loaded or stored in close proximity to other hazardous materials. Regarding the bulk transport of hazardous wastes it would also be reasonable for the DOT to adopt guidelines prohibiting the unsafe mixing of the items during collection.

The BFGoodrich Chemical Division fully supports the need to recognize all hazardous conditions associated with transportation which will jeopardize human health and the environment including the need for identifying previously unrecognized hazardous transportation situations, and fully supports the development and promulgation of regulations which will improve protection against these hazards during transportation, but BFGoodrich Chemical Division fully opposes unnecessary, duplicative, overlapping, conflicting, arbitrary, and unjustified regulations which will not improve the safety to human health and/or the environment.

The BFGoodrich Chemical Division applauds the efforts of the DOT and the EPA to work jointly in developing appropriate regulations for controlling the transportation of hazardous wastes, and urges the agencies to establish a solid foundation on which to base any new transportation regulations for controlling the transportation of these items. The work the agencies perform in this regard will set a precedent for future rule making considerations, and a solid foundation of premises on which to base the regulations can simplify and facilitate future work in the area of regulating the transportation of hazardous materials.

Respectfully submitted by:

T. H. Smith
Director of Distribution

James P. Jackura
Transportation Regulation
Specialist

/lb
11/8/77

The Goodyear Tire & Rubber Company

Akron, Ohio 44316

VICE PRESIDENT

November 7, 1977

U.S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Materials Division
Docket Section, Room 2111
401 M Street, S W
Washington, D C 20460

RECEIVED
NOV 09 1977

U.S. Department of Transportation
Room 6500
Trans Point Building
2100 Second Street S W
Washington, D C 20590

Subject: Development of Regulations for the Transportation of Hazardous Waste

Gentlemen:

The Goodyear Tire & Rubber Company hereby submits comments on the subject notice published in the Federal Register, Volume 42, No 189, September 29, 1977. This notice requested comments on the proposed coordination by The Environmental Protection Agency of its regulatory requirements on the transportation of hazardous waste under the Resource Conservation and Recovery Act, with existing Department of Transportation (DOT) regulations on the transportation of hazardous materials.

Goodyear submits that there should be only one set of regulations on the transportation of hazardous materials and waste in order to prevent the unnecessary burden on interstate commerce that will result from having two separate sets of regulations developed by the Department of Transportation and the Environmental Protection Agency. Goodyear supports the proposal to allow the Department of Transportation to promulgate the regulations on the transportation of hazardous waste utilizing technical assistance from the Environmental Protection Agency.

The existing Department of Transportation regulations on the transportation of hazardous materials are sufficiently capable of being amended to include any items determined by the Environmental Protection Agency to be a hazardous waste. The current

Department of Transportation regulations on shipping documents, markings, labels, and placards are sufficient to cover the transportation of hazardous waste materials. In the event of a spill of hazardous waste, notification should only be required to be submitted to the Department of Transportation, who will then notify any other interested governmental agency.

Goodyear respectfully requests that the Environmental Protection Agency and the Department of Transportation consider the issue of reusing approved DOT containers for shipping waste materials instead of a requirement to use costly new or reconditioned containers for waste disposal. Unlike interstate shipments of hazardous materials, the majority of hazardous waste will be transported a relatively short distance to a disposal site, and therefore can be adequately handled by the reuse of approved DOT containers as provided in the existing regulations.

In summary, Goodyear supports the proposal to develop only one set of regulations on the transportation of hazardous materials and waste by amending the existing Department of Transportation regulations on the transportation of hazardous materials to include hazardous waste.

Sincerely,

J F Hutchinson

Vice President

J F Hutchinson
eg

MISSOURI PACIFIC RAILROAD CO.
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TEL AREA CODE 314

E E DENT
SUPERINTENDENT MOTIVE POWER
622-2448

R C HIXSON
SUPERINTENDENT OF CARS
622-2447

M F HENGEL
MECHANICAL ENGINEER
622-2755

J G GERMAN
VICE PRESIDENT—ENGINEERING
622-2483

D M TUTKO
CHIEF MECHANICAL OFFICER
622-2944

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NOV 11 1977

October 25, 1977.11

U. S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Management Division
Docket Section
Room 2111, 401 M Street, S. W.
Washington, DC 20460

Gentlemen:

The Federal Register, Vol. 42, No. 189, dated Thursday, September 29, 1977 provided notice of the public meeting to be held on October 26, 1977 in connection with the development of regulations for trasportation of hazardous waste. In accordance with the provisions of this notice, we are submitting the following written comments on the discussion topics.

Item 1

It is most important that the Environmental Protection Agency and the Department of Transportation coordinate their requirements to prevent duplication of efforts, and, overlapping and conflicting regulations. To prevent this, the Department of Transportation should modify its definition of hazardous materials to include hazardous waste.

Item 2

Hazardous waste should be treated the same as hazardous materials and in accordance with the degree of risk involved. The shipping document rules would remain the same but would provide for desirable changes in train placement.

Item 3

The Department of Transportation should modify its definition of hazardous materials to include hazardous waste and any requirements for shipping papers would be changed accordingly. The Law presently requires the railroads to deliver shipments to the consignee and the shipper would be required to submit quarterly or annual reports listing the hazardous waste shipments.

Item 4

The present Department of Transportation labeling and placarding system is adaptable for handling hazardous waste in transportation.

Item 5

The shipper should be required to register both shipments of hazardous materials and waste, and, provide the maintenance records of shipments along with the necessary reports.

Item 6

A modification in the Department of Transportation definition of hazardous material (to include hazardous waste) would eliminate the necessity to notify multiple agencies and the current emergency response number would be adequate. This would also eliminate the need for filing incident reports to various agencies.

Item 7

The railroads have adequately demonstrated their ability to transport and pick up hazardous material in the event of a spill and there would be no need for additional regulations if hazardous waste is included in hazardous material.

Item 8

The railroads presently have instructions (copy of the Missouri Pacific's "Emergency Handling of Hazardous Materials in Railroad Cars" attached) and procedures such as emergency response systems that are adequate for this purpose and additional regulations are not required.

Item 9

Yes.

Item 10

The key to this proposal is centered around the word "hazard" and the substance should be treated in accordance with the amount of risk involved. Also, as a practical approach, this matter needs to be placed in the proper perspective regardless if called a material or a waste.

Sincerely,

J. G. Kern

NATIONAL AGRICULTURAL CHEMICALS ASSOCIATION
THE MADISON BUILDING
1155 Fifteenth Street, N.W., Washington, D.C. 20005
202 • 296-1585 Cable NAGRCHEM

Dr. Jack D. Early
President

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NOV 09 1977

November 9, 1977

U.S. Environmental Protection Agency
Office of Solid Waste, Hazardous Waste
Materials Division
Docket Section, Room 2111
401 M Street, S. W.
Washington, D. C. 20460

Department of Transportation
Room 6500, Trans Point Building
2100 Second Street, S. W.
Washington, D. C. 20590

Gentlemen:

SUBJECT: Development of Regulations for the Transportation of Hazardous Waste (FRL 797-6)

The National Agricultural Chemicals Association (NACA) respectfully submits herein our views and comments on the ten Discussion Topics contained in your supplemental advanced notice of proposed rule-making concerning the Development of Regulations for the Transportation of Hazardous Waste under the Resource Conservation and Recovery Act (RCRA) of 1976, promulgated jointly in the Federal Register of September 29, 1977, by the Environmental Protection Agency (EPA) and Department of Transportation (DOT) (under Docket No. HM-145-A).

The National Agricultural Chemicals Association is a non-profit trade association representing manufacturers and formulators who produce and sell virtually all of the pest control chemicals and most of the formulated pesticide chemicals used for agricultural protection in the United States. As a substantial number of products manufactured and offered for transportation by our Association member companies are regulated under regulations promulgated by both the EPA and DOT, NACA has a vital interest in the development of new regulations which will have an effect on the pesticide industry, including the dealers, distributors and customers of our industry's products. Our views on the ten Discussion Topics which were listed in the notice are as follows:

1. The Department of Transportation (DOT) is now and must continue to be the sole agency empowered by law to regulate safety in transportation. We feel this authority should be broadened to encompass the transportation of all hazardous waste materials. We recognize that the Hazardous Materials Transportation Act provides open-ended secretarial discretion in designating substances to be designated "hazardous" in transportation. We further recognize that regulations promulgated by several other federal agencies, primarily the EPA, may have a potential to infringe upon DOT's

statutory charge to regulate safety in transportation. However, the Secretary, DOT, has full authority to propose and enact regulations which would eliminate information gaps and coordinate regulations of the several federal agencies in such cases.

In this regard, we feel present DOT definitions for the identification of the various hazard classes are adequate for the classification of much of the material now being transported as hazardous waste. We recommend only the inclusion of two new proper shipping names under Column (2) of Section 172.101, preceded by an asterisk in Column (1); i.e., "Waste Material, Solid or Dry, N.O.S." and "Waste Material, Liquid, N.O.S." Entries should provide for all appropriate hazard classes and packagings therefore. Wastes which are bioaccumulative, infectious, or which are toxic above current DOT definition levels should, however, be recognized within the scope of DOT's Hazardous Materials Regulations.

The existing list of hazardous materials descriptions and proper shipping names presently specified in 49 CFR 172.101 should not be diluted by the addition of several hundred additional common or chemical names of materials which do not possess a significant potential hazard to humans from acute exposure incident to transportation. Rather, a listing of specific waste materials which are so designated by the EPA under RCRA and which are not presently designated in 49 CFR 172.101 as hazardous materials should be included under a separate section of Part 172. Those materials which are presently listed in Section 172.101 and which also appear on such a list of hazardous wastes, or which are identified by OSHA, could be further identified by symbol reference in Column (1). Suspected carcinogenic, mutagenic, teratogenic, or tumorogenic agents should not be included in such a list. A general proper shipping name, classification and definition should also be included for waste materials which do not currently meet specific DOT hazard definitions.

When the above is accomplished, the EPA should then incorporate DOT regulations by reference.

2. If DOT definitions are amended to include hazardous wastes which are presently not recognized within the scope of DOT's Hazardous Materials Regulations, regulations should be imposed only for communication or reporting in the event of a transportation incident. Specific requirements for packaging (other than that which is now provided in 49 CFR 173.24(a)), marking, placarding,

and labeling requirements should not be required for materials in 49 CFR unless such materials are specifically defined therein as hazardous during transportation.

3. To meet the requirements of Section 3002 of RCRA which require a manifest to assure that hazardous waste is designated to a permitted hazardous waste management facility, we feel the existing DOT shipping paper requirements can be modified to accommodate the RCRA requirement without the necessity of preparing additional documentation. Such modification could take the form of a simple certification, stamped or preprinted on a shipping paper, that a specific volume, weight or as otherwise appropriate, of material meeting the definition of hazardous waste was delivered to a proper facility (to be designated) and was, in fact, received at such facility at a time and date specified. Copies of such shipping papers should then be retained by both the waste management facility, carrier and shipper for a fixed period of time, in consonance with DOT and EPA regulations. We suggest that DOT and EPA eliminate duplicative documentation wherever possible.

4. Hazardous waste materials which are presently defined under DOT regulations can be readily transported under existing DOT classifications and packaging specifications prescribed in 49 CFR. Currently required labeling, marking and packaging for such materials are certainly adequate now. For waste materials which are not presently covered by existing DOT hazard classes, but for which a new DOT definition should be promulgated, no labeling, placarding or marking should be required. Identification and certification on shipping papers should be adequate to ensure safety in transportation.

5. We do not feel transporters of hazardous wastes should be required to be registered. Compliance with the requirements of 49 CFR with regard to hazardous materials transportation should suffice.

6. Provisions for the reporting of accidents and spills of hazardous materials, including waste materials now meeting DOT definitions of the various hazard classes, are reportable to DOT. As all carriers are familiar with current reporting requirements for accidents and unintentional releases of hazardous materials, any spill of hazardous waste during transportation should also be reported directly to the DOT in the same manner presently prescribed in 49 CFR. Incidents or spills should not have to be reported to more than one federal agency. DOT should then be the agency solely responsible to coordinate with all other affected agencies.

7. In the event of a spill, the material cleaned up, which may become a hazardous material, would certainly have to be further transported to a waste management facility. Again, DOT regulations promulgated in 49 CFR should cover such contingencies.

8. Existing DOT regulations now require training to be conducted by shippers and transporters of hazardous materials. We definitely feel such training programs must include provisions for emergency response to and clean-up of hazardous wastes. Such training should be sufficiently detailed and comprehensive enough to ensure complete safety, both in the clean-up itself and in the proper handling and containment of the wastes during transportation to the disposal facility.

9. Present DOT regulations relating to the compatibility of loading and storing hazardous materials should be sufficient to encompass hazardous wastes.

10. We definitely feel close cooperation and coordination between the DOT and EPA must be maintained to ensure each agency's area of concern does not overstep its legislated limits. Where definitions and criteria are included in the regulations of the various federal agencies, they should all be in concert; today they are not.

We appreciate the opportunity to offer the above comments and hope they will be of assistance to you in the development of further rulemaking.

Very truly yours,

Jack D. Early

JDE:etb

cc: NACA Board of Directors
NACA Transportation and Distribution Committee

PALM BEACH COUNTY
SOLID WASTE AUTHORITY

208 Clematis Street
Suite 505
West Palm Beach, FL 33401

Phone (305) 659-7828

RECEIVED
OCT 31 1977

October 26, 1977

U. S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Management Division
Docket Section, Room 2111
401 M Street, S.W.
Washington, D.C. 20460

ATTENTION: Mr. Alan I. Roberts, Director, Office of Hazardous Materials Operations

SUBJECT: DEVELOPMENT OF REGULATIONS FOR THE TRANSPORTATION OF HAZARDOUS WASTES - MANIFEST

Dear Mr. Roberts:

I have many reservations about the handling and final disposition of hazardous or potentially hazardous wastes. However, my comments will be restricted just to two areas.

MANIFEST SYSTEM

The cradle to grave concept is a good one providing that it accomplishes the intended goal. My concern is for those toxic materials that are produced as a processing agent for further manufacturing uses which alter the original agent, although still toxic, to some form other than the original material. It would appear that at this point the original manifest will follow the small amount of residual remaining to be disposed of while another manifest will have to begin with the newly evolved toxic material.

If this is to be the practice I think that it may become extremely cumbersome from an administrative, regulatory and enforcement perspective.

RESTRICTING HAZARDOUS WASTE PLANNING CONTROL AT STATE LEVEL

I do not disagree with this approach except to the extent that it provides no incentives for coordination with the local government level. My concern applies to those areas where industrial development has been and is restricted to light manufacturing such as electronics, metal plating and small chemical plants with employment ranges from 50 - 500. These businesses may produce a hazardous material as a by-product in extremely small quantities, which, from an economic perspective, will not allow long haul costs for proper disposal.

Closer coordination between EPA, State and local government on this matter may lead to the beneficial and economical development of regional storage or neutralization facilities for small quantities of locally produced hazardous wastes.

I think that you will find that local government is just as concerned with the economic viability of small industry as it is with environmental protection and the regulation of these industries.

Thank you for the opportunity to submit my comments on this subject.

Sincerely yours,

Timothy F. Hunt, Jr.
Executive Director

TFH:ms

October 26, 1977

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OCT 31 1977

U.S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Materials Division
Docket Section
Room 2111
401 M Street, S.W.
Washington, D.C. 20460

Department of Transportation
Room 6500
Trans Point Building
2100 Second Street, S.W.
Washington, D.C. 20590

Dear Sirs:

This is in response to invitations published in the Federal Register, Volume 42, No. 189 inviting comments regarding the minimization of the coordination of the mandates of the Resource Conservation and Recovery Act of 1976 (RCRA) with the Office of Hazardous Materials of the Department of Transportation.

As I understand it, Section 104 of the Hazardous Materials Act of 1974 (P.L. 93-633, 88 Statute 2156) authorizes the Secretary of Transportation to designate as a hazardous material any material the transportation of which in a particular quantity and form may pose an unreasonable risk to health and safety or property.

I realize that one of the functions of the current series of meetings is to define what are hazardous wastes and what regulatory programs are needed in their handling. But as a shipper, we feel that as the Hazardous Materials Regulations have developed, there appear to be numerous areas where uniformity between these regulations and the regulations of various other government authorities seem lacking. This is especially so when assigning the definition of product and requirements for labeling as specified by the Hazardous Materials Act, Solid Waste Act, Hazardous Substance Labeling Act, and OSHA as they all have variations. The Hazardous Material Transportation Act makes it illegal to overlabel and, therefore, further complicates the situation from that aspect.

In dealing, for example, with irritants, the Consumer Product Safety Commission has a rather clear cut definition and test procedure by which products are evaluated. The Hazardous Materials Transportation Act has only a vague definition and no test procedure. It omits some very strong skin irritants, required for transportation, yet we must label them as an irritant for the CPSC. Our overlabeling would seem in violation of the Hazardous Materials Act.

As I understand it, OSHA is also currently working to specify what labels will be required on Hazardous Materials, some of which will probably be solid wastes.

It seems to us that certainly coordination between these efforts by EPA and DOT are in order. Moreover, it would seem to me that the Department of Transportation should act as an overall coordinator between all the agencies to prevent conflicts and insure uniformity as much as possible. Perhaps a current "audit" of present requirements might be in order as a step in that direction.

Yours very truly,

George E. Lilley

George E. Lilley
General Transportation Manager

GEL/ala

cc: Mr. J. E. Bartley, Executive Vice President, NITL

Mr. E. Sigeti, Chairman, Special Environmental and Related Regulatory Matters, NITL

SHELL OIL COMPANY
TWO SHELL PLAZA
P O BOX 2099
HOUSTON, TEXAS 77001

November 7, 1977

RECEIVED
NOV 11 1977

Director
Office Of Hazardous Materials Operations
U. S. Department of Transportation
Room 6500 - Trans Point Building
2100 Second Street, S.W.
Washington, DC 20590

Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Materials Division
Docket Section
Room 2111
401 "M" Street, S. W.
Washington, DC 20460

Dear Sirs:

The Shell Oil Company respectfully submits this response to the Environmental Protection Agency and the Office of Hazardous Materials Operations, Department of Transportation's announcement in the Federal Register on Thursday, September 29, 1977. This response pertains to the Development of Regulations for the Transportation of Hazardous Waste. Comments are to be received by the EPA and DOT on or before November 9, 1977.

Shell Oil Company (Shell), a Delaware Corporation, is engaged in the production, refining and manufacturing of petroleum, petroleum products and chemicals. Shell, also, is a nationwide marketer and distributor of these materials, as well as an importer and exporter of them. In the course of these operations, waste materials accumulate. Some of the wastes are hazardous, and when transported, they are subject to the Department of Transportation's Hazardous Materials Regulations published in Title 49 Code of Federal Regulations Parts 100-189. These hazardous waste materials subject to 49 CFR as well as some other wastes will become subject to the regulatory standards that are developed under the mandate of the Resource Conservation and Recovery Act of 1976. Therefore, Shell has a vital interest in any regulations developed that will affect the shipping, receiving and transporting of waste materials.

Shell wishes to commend the Environmental Protection Agency and the Office of Hazardous Materials Operations for their joint cooperative efforts in this very important matter. It is essential that there be continued coordination between the EPA and OHMO to bring about effective regulations for waste materials and not confusing and conflicting ones that would otherwise exist.

Shell's response to the ten discussion topics in the sequence published in the Federal Register on September 29, 1977 are as follows

Topic One - Response

The transportation of hazardous wastes should be subject to the regulations of the DOT published in Title 49 Code of Federal Regulations. The DOT should take the lead with coordination from the EPA in promulgating regulations to include all hazardous wastes. Publishing regulations in 49 CFR for the transportation of certain wastes and 40 CFR for others would only lead to confusion and to conflicting and ineffective regulations. The DOT should have a regulatory mechanism fully utilizing and incorporating by reference EPA criteria and information for waste materials that are not now subject to 49 CFR. The EPA should incorporate by reference to 49 CFR for regulations for transportation of materials that are considered hazardous under RCRA.

Topic Two - Response

All waste materials that are considered hazardous under the criteria established by the EPA should be considered for transportation purposes as a hazardous material. Materials that do not now meet the acute hazard definition in 49 CFR should have those waste materials assigned another hazard class, i.e., Other Regulated Materials - Environmental (ORM-E) or Environmental Regulated Materials (ERM). To include waste materials in 49 CFR and not have them all treated as hazardous would tend to downgrade the importance of all regulations in 49 CFR. The DOT, however, should publish a separate list for those materials that are considered hazardous by the EPA and not already listed in § 172.101 of 49 CFR.

Topic Three - Response

The DOT should modify its regulations pertaining to shipping documents to include EPA manifest requirements. This modification would include the name of the consignee, consignor, route, etc., not now required on shipping documents by the DOT but are the practice to be shown on shipping papers of the shipper and carrier. Paper work should be minimized as much as possible. For simplification, it is recommended there be a single format whereon generators/shippers would be required to show the chemical composition of waste materials whenever necessary for the transporter and receiver to identify the hazards involved if they wish. No need exists for the transporter to report to generators that delivery has been accomplished. The manifest system involving the generator and receiver accounts for delivery to the proper destination.

Topic Four - Response

The DOT should develop a new label and placard to identify hazardous wastes other than those waste materials that are now considered hazardous subject to current regulations. This identification is necessary for safety of the transporter, receiver and the public. No additional marking is required on the outside of containers. However, this does not preclude the placing of non-conflicting precautionary labels on containers should the generator/shipper so wish.

Topic Five - Response

No additional registration of transporters with either the DOT or EPA is necessary. All railroads and many of the for-hire motor carriers are now registered with the ICC or State Authorities. Manifest procedures should be sufficient. Generator and receivers of waste materials have a paperwork reporting responsibility that assures the generator that the material has been delivered in accordance with the shipping paper requirement.

Topic Six - Response

The reporting of spills should be directed to one agency and with one telephone number to call except where current laws require another agency such as the U. S. Coast Guard be notified when there are spills into navigable waterways Since immediate notice of certain hazardous material incidents must now be reported to the DOT by telephone, it is recommended that the DOT receive all calls including hazardous waste incidents and that the DOT notify the EPA and other agencies if necessary. The same situation should exist with respect to filing incident reports. Current regulations in 49 CFR should be amended to include all waste materials and that the DOT furnish these written incident reports to other agencies as needed or upon request.

Topic Seven - Response

The DOT has responsibility with respect to transportation. The handling of waste materials that have been spilled should be under the guidance of the EPA. Should the EPA develop guidelines they can be incorporated into 49 CFR as reference.

Topic Eight - Response

No formal training programs specifically for emergency response to hazardous waste spills and clean-up are necessary. The EPA and DOT, CHEMTREC, Hazardous Materials Advisory Committee, Association of American Railroads, American Trucking Association and others informally through seminars have been educating those in need about emergency responses. Some industries, such

Topic Eight - Response (cont'd.)

as the railroads and many manufacturing companies have developed their own systems appropriate for the materials they are transporting or shipping. For example, Shell has its Transportation Emergency Response Procedures (STERP) and Toxicology Emergency Response Network (STERN) for responding to emergencies. Usually, the generator/shipper has the most expertise with respect to the materials they ship and in case of an incident they best would be in a position to respond to the proper handling. Most programs, including Shell's, are tied into the Manufacturing Chemists Association's CHEMTREC. It is recommended that CHEMTREC records be upgraded to include waste materials so CHEMTREC can furnish the necessary precautionary information to those at the scene of an incident until the generator or shipper is notified and responds to those at the scene of an incident. This upgrading of CHEMTREC records is an interim measure, until a Hazardous Information System is established by the DOT under Docket No. HM-126.

Topic Nine - Response

Current DOT Regulations 49 CFR contain loading and storage charts for hazardous materials in packages. If any problem exists with respect to other waste materials not now included in the charts, they should be amended accordingly. However, with respect to the loading of bulk materials in cargo tanks it is necessary that the DOT modify requirements when mixtures are involved. The generator/shipper usually is in the position to know whether the material he is shipping is compatible with other material already loaded. Therefore, regulations should be amended to require the transporter to inform each generator at time of pick up what waste materials are in the vehicle so that the generator may determine whether his material is compatible or not.

Topic Ten - Response

Many shipments involving the movement of hazardous wastes for disposal are for short distances only. Also, the containers of these waste materials are not transferred from one vehicle to another nor are they moved over a carrier's docks. It is recommended that regulations permit generators to use single trip or used containers and containers that have not been reconditioned when in the generator's opinion the container is safe and will satisfy DOT requirements for transportation of hazardous materials. Such regulations would eliminate the need for purchasing new containers when both the container and its contents are going to a disposal site. Further, where definition and criteria are included in the regulations of the various agencies they should all be in concert.

Also attached is a copy of Shell's response to DOT Docket No. HM-145 wherein it is stated there should be coordination among the Agencies in promulgating regulations and that the Federal Agency for the responsibility of regulating transportation of hazardous materials including waste materials should be the DOT.

Thank you for the opportunity of responding and offering comments on such an important matter as the transportation of hazardous waste materials.

Yours very truly,

W. D. Aronson

W. D. Aronson, Manager -
Equipment Engineering - Land
Transportation Department

Attachments

00-120
HM-145

SHELL OIL COMPANY
TWO SHELL PLAZA
P O BOX 2099
HOUSTON TEXAS 77001

May 24, 1977

Docket Section
Office of Hazardous Materials
U. S. Department of Transportation
Washington, D. C. 20590

Gentlemen

The Shell Oil Company respectfully submits this response to the Materials Transportation Bureau's request for comments to Advance Notice of Proposed Rulemaking, Docket No. HM-145, Environmental and Health Effects Materials. Docket No. HM-145 was published in the Federal Register dated December 9, 1976. The Federal Register dated March 10, 1977 extended the date for filing comments from March 14, 1977 to June 13, 1977.

Shell Oil Company (Shell), a Delaware Corporation, is engaged in the production, refining and manufacturing of petroleum, petroleum products, and chemicals. Many of these materials are subject to the DOT's Hazardous Materials Regulations and subject to or will be involved in Occupational Safety and Health Administration, Food and Drug Administration or Environmental Protection Agency regulations. Shell is a nationwide marketer and distributor of these materials as well as an importer and exporter of them. Therefore, Shell has a vital interest in regulations promulgated under Docket HM-145 that will affect the shipment of its materials.

There has been an increasing trend by Federal agencies to further regulate hazardous, environmental and health effects materials. At times, the regulations by these agencies conflict and result in confusion and misunderstanding as to their application. As to this, Shell advocated agreement among the four agencies, DOT, FDA, EPA and OSHA, in its response (copy attached) to OSHA's Advance Notice of Proposed Rulemaking on Hazardous Materials Labeling that was published in the Federal Register on January 28, 1977. It is recommended that there be coordination among the agencies in promulgating any regulations under Docket HM-145. This interface and coordination with other agencies is essential to the establishment of regulations that are reasonable and uniformly applicable.

Shell's response to the ten subjects and questions in Docket No. HM-145, shown below, follows the outline in the notice.

Question 1 - Response

Environmental and Health Effects Materials should be subject to the transportation regulations of the Department of Transportation (DOT). The areas proposed for regulation are those that are new or will be involved in regulations of certain materials by the three present agencies, i.e., Occupational Safety and Health Administration (OSHA), Food and Drug Administration (FDA), and the Environmental Protection Agency (EPA). The DOT should have a regulatory mechanism fully utilizing the information and criteria of these other agencies. The DOT need not establish any new definitions or criteria. However, the DOT should provide a recognized means for communication to the carriers, employees and the general public of the particular class of material involved and their [illegible] subject to regulation.

Question 2 - Response

The DOT should regulate transportation of human health effects materials by incorporating the criteria and materials that are available from other agencies. These materials should be identified by incorporating them into Title 49, Code of Federal Regulations. They would include but not be limited to such materials as potential carcinogens, mutagens, teratogenics, materials producing behavioral modification, etc. The OSHA, EPA and FDA should develop regulations to insure for these materials.

Square or diamond shaped pictogram type label to identify this class of material is recommended. However, the DOT should avoid any movement toward a complete label as for the purpose of identification. This new label would be used to identify human health effects materials only when the EPA, OSHA, or DOT regulations [illegible] the current DOT [illegible] DOT [illegible] involve spills of these materials. These spills would be reported immediately to the [illegible] will handle with other [illegible] as may be necessary and in a manner not requiring hurt or telephone contact to other Agencies as may be required under existing law or regulation.

Question 3 - Response

The EPA has under consideration proposed regulations in the environmental areas [illegible] Part [illegible], [illegible]. The environmental effects materials to be established in those regulations and others that may later be added by transportation [illegible] the DOT. The recommendations for [illegible] and the single telephone contact in reporting [illegible] spills are [illegible] for Question 2 above, for health effects materials. [illegible] environmental materials.

Question 4 - Response

The DOT should take cognizance of the criteria established by other Agencies under law, unless the DOT has stricter requirements, the criteria of other Agencies should be used. The DOT can take those criteria and the lists of materials issued by those Agencies and move expeditiously to incorporate them into the regulations. However, since it may not be necessary to incorporate all of the other Agency regulated materials, provisions should be made that the addition of materials of these other Agencies will be incorporated into regulations only under DOT rulemaking procedures. Further, the DOT regulations should state if the change involved is a duplication of an OSHA, EPA or FDA regulation.

Question 5 - Response

A new DOT classification for these materials is recommended. Either ORM - Environment and Health Regulated Materials, or ORM-E - Other Regulated Materials - Environment and Health Regulated, would be acceptable. A new square or diamond shaped pictogram label, as described in Question 2, would be representative of that new classification. An alpha lettering on the label distinguished from a numeral system for acute hazards (ORM-1,2) would further identify the health or environmental material.

Question 6 - Response

The recommended possible controls are an additional pictogram label and placard, and a shipping paper requirement for the identification of EPH (or ORM-E) classed materials. The present packaging requirements under § 173.24 is considered adequate control. Spills of these materials should be reported immediately to the DOT who will handle with other Agencies as may be necessary, and thereby negating any other calls required under laws or regulations. These controls would be adapted relatively easily to a new classed material.

Question 7 - Response

Hazardous wastes that qualify as hazardous under existing DOT regulations will require shipping papers, labeling description, and classification provided under those regulations. If the EPA defines other wastes to be harmful the classification of those others may be considered later. However, the same precautions that apply to other health and environmental materials should apply to these waste materials.

Question 8 - Response

The impact is very difficult to quantify. Duplication of effort by regulatory agencies and consequent inefficient use of resources should be avoided. At the same time, it is recognized that there is a need to establish appropriate controls on these materials.

Question 9 - Response

It is not appropriate to respond without knowing the substance of the proposed regulations. Further, guidelines for impact statements are provided in the National Environmental Policy Act.

Question 10 - Response

The regulation of these materials for transportation purposes should preempt any conflicting State or local regulations as provided in the Transportation Safety Act of 1974 for other hazardous materials subject to the DOT regulations.

Yours very truly,

W. D. Aronson

W. D. Aronson, Manager
Equipment Engineering - Land
Transportation Department

SHELL OIL COMPANY
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[illegible] TEXAS 77001

March 25, 1977

Docket Officer
Occupational Safety and
Health Administration
U.S. Department of Labor Building
200 Constitution Avenue, N.W.
Washington, D.C. [illegible]

Dear Sir:

This letter is in response to the advance notice of proposed rulemaking - Hazardous Materials Labeling, Federal Register, [illegible] 28, 1977.

We are responding only to Item One - whether a standard for hazardous materials labeling should be issued, be included in the Standards Completion Project, or be covered by another mechanism. We prefer the "other mechanism" route.

Industry is faced with four Federal agencies which have labeling authority over recognized and potential hazardous materials. These are the Food and Drug Administration (FDA), the Environmental Protection Agency (EPA), the Department of Transportation (DOT) and the Occupational Safety and Health Administration (OSHA). OSHA's authority is confined to protection of employees in the private sector rather than the population as a whole. This a labeling program built solely on OSHA authority would leave large numbers of people unprotected. It is equally important that care be taken to prevent proliferation of hazardous material labeling regulations by competing federal authorities.

The Materials Transportation Bureau (MTB) of the DOT has stated a hope that it is considering new or additional transportation controls for classes of materials presenting certain hazards to people and the environment. The MTB is concerned with "systems to insure adequate communication of information on the material and its hazard to persons handling the material while it is in transportation or in storage." [illegible] complement the DOT's objectives of control for the manufacturer, the vendor, formulator, and purchaser.

To avoid duplication and confusion in labeling hazardous materials, the manufacturer who intends to ship such material should be able to use labels agreed to by all federal agencies of concern. The warning label should remain fixed to the container while it is in transport and while the material is being processed by a user-employer.

We recommend that the four federal authorities (FDA, EPA, OSHA, and DOT) agree on label requirements for hazardous materials used or transported in interstate commerce. They should develop measures to assure continued integrity of the label and its warnings. If such an arrangement could be reached, conflicts, misunderstandings and costs would be saved. OSHA should consider such an approach as preferable to developing its own system.

Very truly yours,

Howard L. Kusnetz, Manager
Safety & Industrial Hygiene

SOHIO THE STANDARD OIL COMPANY MIDLAND BUILDING CLEVELAND OHIO 44115

October 27, 1977
File: 23-AA-21

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U. S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Materials Division
Docket Section
Room 2111
401 M Street, SW
Washington, D. C. 20460

Gentlemen:

The Standard Oil Company (Ohio) and its Subsidiaries are manufacturers and marketers of petroleum and chemical products in the Eastern United States. As such, its plants are generators of potentially hazardous wastes that may be shipped or transported in intra or interstate commerce.

In response to the notice for a joint public meeting published in the Federal Register, Volume 42, No. 189, Thursday, September 29, 1977, listing discussion topics The Standard Oil Company submits the following:

(1)(a) It is our opinion the Department of Transportation is the agency that should develop regulations for hazardous waste transportation. This would preclude dual or conflicting regulations. The D.O.T. presently regulates all modes and transportation of hazardous materials and the shipping public should be required to deal with only one agency; that which is best suited for and most capable of proposing, regulating and enforcing.

(b) We would question the necessity to modify definitions to regulate all wastes. For example, how many are already regulated as other hazards? What is the primary hazard? Would containment of a waste spill and clean-up differ significantly from that of a prime product? And finally, what are the alternatives?

(2) The D.O.T. should establish criteria through rulemaking to allow generator/shippers to classify their waste products as is presently done for "N.O.S." commodities.

(3) Existing shipping papers can be used with the additional information required by the E.P.A. added within the existing format.

(4) It is our opinion that current D.O.T. regulations for labeling and placarding are sufficient and should it be necessary, new labels and placards should be developed by the D.O.T. compatible with current design.

(5) If the D.O.T. becomes the regulatory agency it would have jurisdiction to require registration under the Hazardous Materials Transportation Act, should that be deemed necessary or desireable.

(6) In the event of accident or spill the D.O.T. should be notified consistent with existing regulations. We would also strongly suggest that the carriers voluntarily contact Chemtrec for advice, as is presently done when an incident involving hazardous materials occurs. Reports should be submitted to the D.O.T. who would disseminate as required.

(7) In the event of a spill of what? A prime product that may or may not be a hazard by current D.O.T. definition? If so, our answer to discussion topic #2 would also be our answer to this discussion topic.

(8) Except for additional training that might be required due to the nature of the hazardous classification, we believe that established training programs under mandate from the H.M.T.A. should be adequate.

(9) The D O.T. should only modify its loading and stowage requirements insofar as it does not presently cover classifications which may be added as a result of new rulemaking.

(10) The Standard Oil Company would like to emphasize that the D.O.T. has enforcement authority only on interstate commerce. We recognize that many states have adopted in toto the D.O.T. regulations, while others have or are in the process of proposing more strict regulations. However, the D.O.T. still would not have enforcement authority over intrastate transportation.

While we endorse D.O.T. jurisdiction, we must emphasize that each state, and individual municipality, will require incentives to enforce the regulations if they are to be effective.

Very truly yours,

C. J. Magyar
Coordinator-Transportation Regulations

GJM/dm

Air Products and Chemicals INC.
INDUSTRIAL GAS DIVISION

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7 November 1977

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NOV 11 1977

U. S. Environmental Protection Agency
Office of Solid Waste
Hazardous Waste Management Division
Docket Section Room 2111
401 "M" Street, S. W.
Washington, D. C. 20460

SUBJECT: Advanced Notice of Proposed Rulemaking 40 CFR, Part 250
Development of Regulations for the Transportation of
Hazardous Waste

Gentlemen:

Attached please find the comments of Air Products and Chemicals, Inc. in response to the Environmental Protection Agency's Advance Notice of Proposed Rulemaking for Development of Regulations for the Transportation of Hazardous Wastes published in the Federal Register, September 29, 1977.

We appreciate the opportunity to participate in this rulemaking and hope the Environmental Protection Agency and the Department of Transportation favorably consider our comments.

Very truly yours,

W. N. West
Hazardous Materials Supervisor

WNW:slp
Attachments
cc: Department of Transportation
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COMMENTS TO THE
ENVIRONMENTAL PROTECTION AGENCY
AND
DEPARTMENT OF, TRANSPORTATION

FRL 797-6

DEVELOPMENT OF REGULATIONS FOR THE
TRANSPORTATION OF HAZARDOUS WASTE

SUBMITTED BY

AIR PRODUCTS AND CHEMICALS, INC.

1. a.

Regulations being developed by the Environmental Protection Agency and existing regulations of the Department of Transportation impact the transportation of hazardous wastes. Which Agency should take the lead in developing the regulations for hazardous waste transportation?

The Department of Transportation must have exclusive jurisdiction over the transportation of hazardous materials. We feel this jurisdiction should continue to stay with that agency. Hazardous wastes are no different than the hazardous materials as defined in DOT regulations. Those regulations make no reference or distinction between virgin materials and waste hazardous materials.

1. b.

What approach should be taken?

We feel that a Memorandum of Understanding should be entered into between EPA and DOT as allowed under the Administrative Procedures Act. Such a memorandum would be published in the Federal Register similar to the agency agreement between EPA, HEW and FDA. We feel this approach would give everyone the opportunity to understand the relationship between the two agencies and give the public the opportunity to comment on that relationship. Duplication of regulations between federal agencies is not in the best interest of the general public and we are sure neither the EPA nor DOT would want such duplications.

In addition, should any of the regulations be required by EPA for the transportation of hazardous wastes, the EPA should petition the DOT through their rulemaking process to have DOT amend their regulations.

1. c.

Should DOT modify its definition of hazardous materials to include all hazardous wastes? (Wastes which are bioaccumulative, toxic above current DOT definition levels, infectious, carcinogens, or having potential for genetic change are likely to be identified under RCRA as hazardous wastes and are not currently covered by the DOT Hazardous Materials Regulations.)

In response to DOT Docket HM-145, it was suggested that a new classification of ORM-E be added to DOT regulations to cover those items that may have a detrimental effect on the environment. We think that if DOT incorporated those suggestions, the EPA requirements would be satisfied. The regulations relating to such waste materials should provide for notice to carriers and disposers of the nature of materials and reporting procedures to DOT in the event of a spill.

1. d.

Should EPA then incorporate DOT regulations by reference or should EPA consider a separate set of regulations to supplement the gaps in DOT regulatory coverage, in that EPA regulations would cover only wastes which are hazardous, not all hazardous materials?

We feel that by taking the options offered above and the EPA incorporating DOT regulations by reference, this question would be adequately answered.

2.

If DOT does modify its definition of hazardous materials to include all hazardous wastes, should DOT regulations specifically address the transportation of hazardous wastes or treat them the same as hazardous materials that are bioaccumulative, toxic, infectious, carcinogenic, etc.?

We feel that there is no need to address the transportation of hazardous wastes specifically. As was stated above, there is no distinction between waste and virgin materials in the DOT hazardous materials regulations. We also feel that there should be no regulations of hazardous wastes that are intended for recovery, recycling or use for energy value internally. Only those hazardous waste products that are intended for disposal should have any regulatory requirements. They should not be extended to include other hazardous non-waste materials.

Fundamentally, any definitions and/or regulations developed must draw a distinction between materials which pose acute hazards during transportation and those which pose long-range hazards if spilled or disposed of in an incorrect manner. Current regulations on acute hazards are adequate. Regulations developed by the DOT for long-range hazards must be separate and addressed to the specific need to notify carriers and disposers of the nature of the material.

3.

Section 3002 of RCRA requires the development of a manifest (shipping paper) to assure that the hazardous waste is designated to a permitted hazardous waste management facility and that all the hazardous waste is delivered to that facility. Should DOT modify its shipping paper requirements to fulfill the needs of the RCRA manifest or should EPA develop requirements to supplement existing shipping paper requirements (including the possibility of a separate document)?

The EPA should establish a certification procedure for approving hazardous waste management facilities, and the DOT should require, on its existing

shipping papers, to reference any EPA standardized information and the designated, certified waste management facility. We feel by having a certification procedure that could be referenced through code designation, all shipping papers would then meet the requirements of RCRA. We also note that many of the individual states have or are adopting their own manifest forms and we feel these could be pre-empted by the EPA requirements. We feel every effort should be made by EPA to take the lead in certification and standardization so that individual states would not, of necessity, have to develop their own regulatory requirements.

If for some reason, substantial amounts of analytical information are required to be on the manifest, we recognize the possibility of a need for a separate document. Additional information on long-range hazards would tend to dilute the acute hazard information, which must be shown on shipping papers.

4. a.

Are the current DOT requirements for labeling, marking and placarding sufficient for handling of hazardous waste in transportation?

Yes--With the addition of the ORM-E to the DOT regulations, we feel the labeling, marking and placarding regulations of DOT are sufficient. It is also important to note that RCRA does not require such labeling and we would not recommend additionsl labels or placards as this would only have the tendency to be confusing to emergency personnel and dilute the effectiveness of the present labeling and placarding system.

4. b.

For those hazardous wastes which will not fall under DOT purview, should EPA develop labels and placards of separate design or should DOT develop the labels and placards for these hazardous wastes that are compatible with current DOT design?

EPA should develop a waste label to include some required information. *This information would include such items as the identification of the* materials, the means of disposal, the control number and the nature of the hazard. The labeling would be used only on packaged waste materials and would be standardized so that additional information would not have to be added for each individual type of waste. We would suggest that such a label be devleoped in conjunction with DOT and published in DOT regulations. Existing placarding standards by DOT are sufficient and should not require any changes.

5.

HMTA authorizes the registration of anyone transporting hazardous materials; RCRA requires notification of the transportation of hazardous wastes. Should registration requirements be developed for transporters of hazardous wastes?

Regulations should not be required as we see no benefit to safety and extreme difficulty in compliance and enforcement.

RCRA requires notification of the transportation of hazardous wastes through the manifest system and subsequent reporting. Additional carrier registration requirements would only duplicate existing requirements and present an additional paperwork burden at no apparent benefit.

6. a.

In the event of an accident or a spill of a hazardous material during loading, transportation, or unloading, DOT requires notification of the incident and the filing of a report. For the spill of hazardous waste, EPA is also considering similar requirements. Should notification of spills be directed to EPA, DOT (Office of Hazardous Material Operations), or the U. S. Coast Guard National Emergency Response Center?

We feel that EPA should work with the existing notification system whether that be DOT of the U. S. Coast Guard, which is part of DOT.

6. b.

Should EPA and DOT receive incident reports (DOT for hazardous materials and EPA for hazardous wastes), or should all reports be filed with DOT (even when spilled hazardous wastes are not covered by DOT regulation)?

We feel that the present system of incident reporting is sufficient and that if EPA requires those reports, they be forwarded by DOT.

7.

In the event of a spill, the material cleaned up may become a hazardous waste. Should DOT or EPA develop the regulations for handling the spilled hazardous material?

We do not feel that any regulations should be developed for handling spilled hazardous materials. As you are aware, at the incident of a

spill, emergency personnel respond expeditiously to insure a fast and efficient clean-up operation with the best means they have available to them at the scene. Hampering this operation by imposing regulations that may not be known by local clean-up personnel would be detrimental to the public's safety. We therefore think that only regulations should be developed to control the disposal of these products after they are cleaned up.

With the development of adequate regulations, as mentioned above, further transportation of spilled material as a hazardous waste would fall under the jurisdiction of the DOT.

8.

HMTA authorized DOT to require training to be conducted by shippers and transporters of hazardous materials. Are training programs necessary relative to emergency response and cleanup of hazardous wastes specifically? If so, to what extent should they be required?

Formal training programs should not be required. The present DOT regulations are very clear that it is the shipper's responsibility to properly train all its people in the handling of hazardous materials. We feel such a statement is sufficient and we would think that a similar statement in EPA regulations would suffice.

Emergency response personnel should be instructed to contact Chemtrec and/or the shipper in the event of a spill for immediate response information and subsequent clean-up actions.

9.

Since hazardous wastes are mixtures or may be mixed during collection for transportation, is it necessary for DOT to modify its loading and stowage requirement to address the mixing and stowage of incompatible wastes?

Section 173.21 (a), (b), and (c) of the present DOT regulations prohibit the mixing of incompatible substances in the same container. This requirement is sufficient to prevent the mixing of incompatible wastes during collection for transportation.

For hazardous wastes that meet present DOT definitions, the loading and stowage charts are sufficient. For the new class of hazardous wastes, there should be no applicable loading or stwage restrictions.

AIR PRODUCTS & CHEMICALS, INC.

Department of Energy
Washington, D C 20545

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Hazardous Waste Materials Division
Office of Solid Waste
U. S. Environmental Protection Agency
401 M Street, S.W.
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Docket Section, Room 6500
Office of Hazardous Materials Operations
Materials Transport Bureau
U. S. Department of Transportation
2100 Second St., S.W.
Washington, D. C. 20590

Gentlemen:

This is in response to your request for comments on the development of regulations for the transportation of hazardous waste, FRL 797-6, Federal Register 42, 189, pp 51625-51626.

We find it encouraging to learn that EPA intends to maximize the coordination of its regulations under the RCRA with the DOT hazardous materials regulations. A single set of Federal regulations covering transportation safety is more desirable than multiple, and sometimes overlapping and conflicting, regulations. We support the development of a uniform and simple regulatory scheme for the transportation of hazardous waste.

In developing these regulations, we believe it important to recognize that as far as public safety is concerned, it matters not whether the end use of the hazardous material being transported is a useful product or a waste to be disposed of -- it must be transported safely. A hazardous material; whether it is a waste or a commodity is immaterial. We recognize that some of the wastes which the Congress considered in enacting the RCRA are outside the kinds of hazardous materials now defined and regulated by the DOT, and that the DOT already has the statutory authority to include them under its jurisdictional blanket.

Given these considerations, we have the following responses to your specific questions:

1. Lead agency. We would prefer that DOT expand its regulations to include the necessary provisions for the transportation of hazardous wastes. EPA would then refer to the DOT regulations, rather than establishing a new and separate regulatory scheme for these wastes. The two agencies might consider a Memorandum of Understanding, as now exists between DOT, DOE, and NRC for regulation of nuclear shipments. You might also consider a provision similar to that in 18 U.S.C. 834(b), whereby before adopting any regulations relating to hazardous wastes, the DOT would seek the advice and consultance of the EPA.

2. Definition of wastes. For consistency and simplicity, the hazardous wastes could fall under the existing DOT definitions, and be regulated based on the nature of their hazard rather than the nature of their end use.

3. Shipping Papers. We have looked at the multiplicity and complexity of the existing shipping paper requirements which are required of carriers for safety, economic, and operational purposes. We believe it would be counter-productive to add to this burden with yet another set of documents. It appears to us that the existing hazardous materials manifest, required by DOT, already appears suitable, and, with only slight modification, would meet the RCRA requirements.

4. Labels and Placards. The existing DOT system for labeling and placarding has been derived only after long and arduous efforts on the part of both DOT and the regulated industry. We would be very concerned if a new scheme were to be introduced at this time -- the new DOT requirements are just now being implemented by shippers and carriers. If there is a need for new labels and placards, DOT should develop them to be totally consistent with the existing DOT system.

5. Registration. Whatever requirements are imposed by the DOT for other hazardous materials would appear to be equally applicable to hazardous wastes. In any case, it would not seem necessary to set up special notification or registration just for wastes.

6. Accidents. The DOT hazardous materials incident reporting system seems well suited to handle reports of incidents of hazardous waste transport accidents. EPA and DOT could work out informal arrangements for communications on accidents involving wastes.

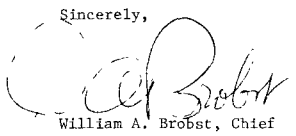
7. Spills. Once the accident occurs, transportation usually stops. It would seem appropriate for EPA to establish guidelines for cleaning up spills, recognizing the need to coordinate this activity with other Federal actions and responsibilities for handling of spills. DOT could limit its after-incident actions to investigation of cause, which is right in line with DOT's usual role in hazardous materials accidents.

8. Training Programs. The training of personnel who might be involved in hazardous waste transportation spills should be handled just as it is done now for spills of other hazardous materials. DOT and EPA would provide guidance and assistance to the State and local authorities and other responsible persons.

9. Loading and Storage. DOT regulations for mixed or incompatible loading should apply to hazardous wastes just as for other hazardous materials.

Thank you for the opportunity to provide these comments.

Sincerely,



William A. Brobst, Chief
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