

T R A N S C R I P T

REGIONAL PUBLIC MEETINGS ON THE  
RESOURCE CONSERVATION AND RECOVERY ACT of 1976  
February 23 and 24, 1977, Atlanta, Ga.

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U.S. ENVIRONMENTAL PROTECTION AGENCY

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An environmental protection publication (SW-15p) in the solid waste management series.

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THE  
ENVIRONMENTAL PROTECTION AGENCY MEETING  
TRANSCRIPT

on  
THE RESOURCE CONSERVATION AND RECOVERY ACT OF 1976

P.L. 94-580

SHERATON-BILTMORE HOTEL

Atlanta, Georgia

Wednesday, February 23, 1977

6:30P.M. - 12:00A.M.

James H. Scarbrough, Moderator

This is to certify that the attached proceedings were held as herein appears, and that this is the original transcript thereof for the file of the Environmental Protection Agency.

Maryl Ann Hacking  
Reporter  
WHITE'S PROFESSIONAL SECRETARIAL  
SERVICE



#### THE PROCEEDING

Moderator: I would ask you, as our notice stated, when we ask for public comments to limit your comments to no more than five minutes. Please, when you approach the mike, we have a court recorder here taking this down, please give your name. If it's a little bit difficult like mines is, Scarbrough, spell it for them, it won't take long and then who you are representing. If you're just representing yourself, that's fine, but let them know who it is so we can get it correct on the record. I will keep the record open for written comments or written statements until March 11th. First, we will have presentations from staff people in our EPA Office of Solid Waste. At the end of their presentation, we will take public comments, discussions, questions, whatever you have on that particular item. At the appointed time, as shown in the agenda, that discussion will be terminated and we will go on to the next agenda item. At the end... the last item on the agenda is state program development, at the end of that we'll take comments, questions, whatever you want to say about any portion of the Act, at that time. We have microphones, we have asked that you please move to the microphone when you get ready to speak. If there's someone there, fall in behind them, wait your turn, and I'll try to ask you to speak on a first come first serve basis. We are making copies of the transcript. Each person that filled out one of those forms as you came in here or brought with you to fill-out

and turn in as you leave, well, you will get a copy of the transcript in the mail. It will probably take us six or eight weeks or so to get that thing reproduced and mailed back out, but you will get that. If you know other people who are interested in it, and they want a copy, please have them contact our office, our Regional Office here in Atlanta. We'll be happy to send them a copy, we'll have plenty of them. I think... if you don't know our address, it's 345 Courtland Street, Atlanta 30308, and a telephone call will do just as well, it's (404) 881-3016. You see on your agenda, a welcome by Mr. Jack Ravan, Regional Administrator of Region IV, he's unable to be with us tonight. We have with us, Mr. Asa Foster, he's the Director of the Hazardous Material Division, and he'll welcome you from out of town to Atlanta.

Speaker Asa B. Foster: Thank you, Jim. I think you're slipping. Some of you were at the meeting last week that we had on Toxic Substances, and I didn't allow any smoking in the room. So, I think it's good that we are segregated. There's a lot of things happening in EPA and many of you are aware. We're talking about one of the exciting things tonight, this new Act that we have. And we also have the Toxic Substances Act which we had a public meeting on last week, and.... President Carter has nominated as the new Administrator, Douglas Costell; the new Deputy Administrator, Barbara Blum. I'd like to tell you a little bit about these people, so that you... just for your information. Douglas Costell has been a member of the transition team under President Carter's leader-

ship there. From July of '75 until 1977, the first of the year, he was the Assistant Director for Natural Resources and Commerce in the Congressional Budget Office. From about March '73 until July 1975, he was Commissioner of the Connecticut Department of Environmental Protection, and for about a year and a half prior to that he was Deputy Commissioner for the Connecticut Department of Environmental Protection. He has a lot of experience. He has a long list of other experience that I won't go into, but the point I wanted to make is that he has a lot of experience in environmental protection. I'm not sure exactly of the way the Connecticut department is organized, I think it's very similar to many of our states here in Region IV in that you have your air and water and solid waste all wrapped up in one organization. Barbara Blum is from here in Atlanta. She's a native of Kansas. She has been a very active individual in consumer affairs; been very effective in working with the legislature, various legislative bodies. She's been a very active environmentalist. I saw some of my friends here that use to... I use to be acquainted with who was in the water program and I remember that Barbara was very active along the Chattahoochee River. So, we have the new leadership coming into EPA, we have the new legislation we're charged with the responsibility of administering, and, I look forward to a lot of exciting things happening. Tonight, we want to give you some information about the new Act. Public Law 94-580 which you have a copy of. The Act states that public participation in the development, revision, implementation and portions of

any regulation, guidelines, information or program under the Act shall be provided for. It shall be encouraged and assisted by the Administrator and the states. That's what we're here tonight for is to give you some information and get your feed-back. I think that this is becoming more and more recognized. I think particularly by the Congress as the thing that we should do, and that we must do. I think you will find that Congress intend<sup>ed</sup> for land disposal to be regulated and a lot of our value resources, re-used. This new Act will have far-reaching influence on the social and economic issues, ranging from the attitudes of the individual citizen and consumer to how we extract, manufacture and market products to such complex issues as depletion allowances and international trade policies. We at EPA intend to take public information and public participation that's required for this Act, seriously. We want your input. I realize that tonight you will be receiving a lot of information; you may not be able to provide us with your comments; you may wish to send them in later to Mr. Scarbrough and I would ask that you would do that. Many of you are from out-of-town and I want to welcome you to Atlanta. I used to be very close friends with the Commissioners of Public Works who has resigned. I understand Mr. Scarbrough knows some of the people down there at City Hall, and I've asked him that if any of you get a parking ticket or anything, to go with you down to City Hall and get his friend and go over with you to traffic court and hold your hand while you pay your ticket. So, we can do that service for your....



Question: (Unidentified SPeaker) What happens if you get mugged, Asa?

Speaker Foster: Pardon?

Question: (Same Speaker) What happens if you get mugged?

Speaker Foster: If you get mugged, I don't know, don't come to me.... (Laughter) But it's good to have you here tonight and if you decide tonight that you want to come back in the morning, we'll have a sort of a re-run in the morning, and I'm sure that all the speakers will be a little better imbursed with their subject and you might get a little better treat in the morning. So, if you want to come back tomorrow, you're certainly welcomed to do that and to participate at that time...

Question: (Unidentified speaker) How long will the discussion last in the morning?

Speaker Foster: I believe it's scheduled until about noon...

Moderator: We'll have to get out of this room at about 1:00P.M.  
No later than 1:00P.M.

Speaker Foster: Thank you.

Moderator: Thank you, Asa. Since I didn't introduce myself in the beginning, my name is Jim Scarbrough and I'm with the Solid

Waste Program in the Regional Office, here. What I'd like to do now is that I'll run over briefly a summary of some of the things that are in the Act. Then, we'll get into our presentations, which will be quite short, because we are not here to tell you; we're here for you to tell us, and please keep that in mind. We want to hear from you. We did hand out, out there on the table as you came in, copies of the Resource Conservation and Recovery Act (RCRA). If you look over in front of that, Congress has given us some words of wisdom there that they had in mind in drafting this Act and passing it and offering it up to the President for signature to make it Law. Looking there closely you will see that the objectives of this Act are the protection of public health; protect the environment; conserve valuable material resources and conserve energy resources. You say, well, it sounds real good, you know, if everybody would be for that. I don't think there's anybody here that wouldn't be for that. But then you get into the question of how shall we do that. How will you do it. How will government; how will state government, federal government, local government, industry. How will we do that. And, in their wisdom they did write down some things for us as to how they think it should be done and that's our charge to carry out their purposes and their intent as they have written in this Law. They said that what we should do is give technical and financial assistance to state and local government, manpower development. And this

Law will prohibit future open dumping. It will require us to convert or close existing open-dumps. It will require us to regulate hazardous waste. It requires EPA as an agency to publish guidelines for solid waste management. It requires us to do certain things in research and development. It requires us to do demonstration projects. Those of you that are familiar with our program in the past know that we have been active in this area, but it requires us to go even further, to demonstrate resource recovery on a larger scale and indeed on a smaller scale, and on a scale that small communities can use. It mandates that the federal, state and local government and industry partnership in material and energy recovery be carried out to it's fullest extent. Those of you that have gas for your heat in your house in the last month or so have come to realize that's not something that we can consider casually. It may not always be here. We may have to seek other sources. Here is a source that has potential. This is what Congress told us even before the gas shortage. It requires public participation, and this is very important as expressed by the Act. Now, basically, this Act as I read it sitting in the Regional Office, has two main thrusts in it. The first being Sub-Title C which is the hazardous waste regulatory program and as I read it, it seems to me that it's intended by Congress for this regulatory program to be run by the state government. Whether or not you agree really doesn't matter. But, if you would read Section 3006 under Sub-Title C, I think you'll see where I get that sort of thinking from. The other

thrust is state and local planning, that's found in Sub-Title D, along with that goes the prohibition of open dumping and all disposal, except hazardous waste disposal, being required at a resource recovery facility, center or land-fill or disposed of in an otherwise environmentally sound manner. In addition to that, in supporting that as part of the foundation is relatively small compared to some of our other grant programs. A relatively small rural assistance grant program with an authorization there of some twenty-five million dollars a year, nation-wide. And, if you read closely there you will find that this grant assistance is intended for towns of less than five-thousand population and counties with a population of less than ten-thousand or less than twenty people per square mile. Now, if you look a little further you will see a landmark piece of legislation in Sub-Title F. And, it has to do with federal facilities, and it basically says that if you have a land-fill on your federal property, whoever you may be, U. S. Army or the Marine Corp, or the U. S. Forestry Service Department, it really doesn't make any difference, but it says that you have to get a state permit. And, it doesn't say that you go over and ask them what is required for a state permit, you do it without the paperwork, you have to do the whole thing. Generally speaking, that basically covers this Act and I'd like to leave you with that short summary and get right on into the public participation part. With us tonight, we have as I said earlier, staff people from the Office of Solid Waste and if you read the Act, you will see that this is

the Office that's charged with carrying out this Act by the Congress. We have with us first of all to speak to training, public information, public participation scheduled Mr. Thomas Williams. Tom is unable to be with us, he has the flu and substituting ably for him is <sup>G</sup>Terri Wyer, on my right. And, <sup>G</sup>Terri will give us the presentation there. It's going to be five minutes or so and upon conclusion of that, we want you to please speak to us about what you think about public participation, training, public information. And then, at the appropriate time, we'll ask that you cease the public discussion on that part and we'll go on to the next part, hazardous waste. <sup>G</sup>Terri.

Speaker <sup>G</sup>Terri Wyer: Thank you, Jim.

The RCRA contains an unusually complete array of provisions which could bring about a high degree of public understanding and participation. Taken together, these various provisions make it clear that the Congress understood that it is impossible for the public to participate, meaningfully, unless the government first produces valid, scientific, and technical data and then produces and publishes the information in such a way that everyone may have real access to it. Only in this way can the public really have a reasonable chance of influencing the social, economic and political changes which the Law will bring about. I have some slides here, I'd like to show... can you dim the lights, Jim? (Pause)

Moderator: Yes. (Pause)

Speaker Wyer: Now, this is fine. In Section 8003, the Administrator of EPA is required to develop, collect, evaluate and coordinate information on nine key elements which are crucial to the Act's purposes. The Administrator is not only to implement a program for the rapid dissemination of this information, but he's also to develop and implement educational programs to promote citizen understanding. This makes it quite clear that the information called for is not to be developed for the exclusive use of those, who, for one reason or another may be considered experts in the field. Moreover, the Administrator is asked to coordinate his actions and to cooperate to the maximum extent possible, with state and local authorities and to establish and maintain a central reference library for virtually all the kinds of information involved in the solid wastes management for the use of state and local governments, industry and the public. Just who is the public? To ensure that the public participation process does not become lop-sided, we felt it was necessary to identify major categories of interest groups who represent the public at large. Under RCRA we regard these to include consumer, environmental and neighborhood groups; trade, manufacturing and labor representatives; public health, scientific and professional societies; and, governmental and university associations. This spectrum of categories of representative groups will be altered and supplemented as necessary, if in the course of implementing the Act it appears desirable to do so. Section 7004A of RCRA states that any person may petition the Administrator for the promulgation, amend-

ment or repeal of any regulation under this Act. Section 7004B calls for full public participation in the development, revision and/or enforcement of any regulation, guidelines, information or program under this Act. Secondly, it states that the Administrator in cooperation with the states shall develop and publish minimum guidelines for public participation and such processes. Section 7002A states that any person may commence civil action on his own behalf against any other person, including the United States, who is alleged to be in violation of this Act or against the Administrator if there is an alleged failure by him to perform any act or duty under the Act. What are some of the available public participation techniques? The many techniques which can be used to involve the public in government actions fall into three major categories. One, to ensure that appropriate public meetings, hearings, conferences and workshops and so forth are held throughout the Country, and that they are planned and held in accordance with the unfolding of the Act's key provisions. Two, the use of advisory committees and review groups which may meet periodically, but which will also be called upon to review and comment upon major programs, regulations and plans no matter when these occur and no matter whether a specific meeting is convened or not. The third public participation technique is the development of educational programs so that the public has an opportunity to become aware of the significance of the technical data base and the issues which emerge from it. Effective public educational programs depends on the

use of all appropriate communication tools and media. These include publications, slides, films, exhibits and other graphics; media programs, including public service television and radio announcements and releases to daily and professional press and public education projects carried out by service and civic organizations with EPA technical and financial assistance. What does the Law say about manpower development? Section 7007A and B authorizes the Administrator of EPA to make grants and/or contracts with any eligible organization for training persons for occupations involving the management, supervision, design, operational or maintenance of the solid waste disposal and resource recovery equipment and facilities, or to train instructors. Eligible organizations means the state, or any state agency, a municipality or educational institution capable of effectively carrying out a project. Section 7007C states that the Administrator shall make a complete investigation and study to determine the need for additional trained state and local personnel to carry out plans assisted under this Act and to determine means of using existing training programs to training such personnel and to determine the extent and nature of obstacles to employment and occupational advancement in the solid waste disposal and resource recovery field. The Administrator is required to report the results of such investigation and study to the President and Congress. In view of the manpower limitation, and many time-mandated provisions of the Act, it is not likely that the training activity or the manpower



training will be begun during this fiscal year. That concludes my presentation. I'll try to answer your questions if you have any on what I have said.

Moderator: Thank you, <sup>G</sup>erri. I'd like to open the floor up now for comments and questions. Whatever you have aimed toward training, public information, and public participation, those portions of the Act. If you would like to speak, you will please move to the microphone. There's a little switch right here that I discovered, turns that thing on, makes it work. So you will need to turn them on when you get up there. I think they're all turned off, now.

Question: (Unidentified Speaker) Jack, do you want us to make individual presentations on each section, or just wait and make a presentation at the end?....

Moderator: If you have a general presentation that doesn't apply itself with the assemblance to a particular portion of the agenda as we have it laid out, if you'd like to wait until the end, then we'll take general presentations on anything you want to give us. (Pause) Here's one right here, Moses, or that one back there.

Question: In regards to the.... Excuse me, I'm Moses McCall from the State of Georgia. In regards to the public participation

portions of the Act. I think the efforts thus far have been pretty good and I would commend EPA on that part of the implementation of the Act. I have to get in my gig, you know. No longer are we seeing the faceless or nameless bureaucrats up on the Potomac. There was a publication last Thursday in the Federal Register of individuals who are working on specific guidelines, regulations, etc. in conjunction with the implementation of the Act. I would urge that we have timely dissemination of any guidelines, regulations, etc. which might come out of EPA to the various interested parties. And, I would also urge that these things be dated so that we can keep up with what came out when, that's caused us some problems in the past. We have gotten some un-dated ones which didn't make a lot of sense. In terms of training, there's no specific authorization for training, but I would urge that as we build up state programs and as EPA builds up the federal program there's going to definitely be a need for training authorization or training professional personnel in solid waste management. I hope this will be considered.

Speaker Wyer: Notice, we are... as a matter of fact, we're detailing from the Atlanta Regional Office, here... coming here, and ~~an~~<sup>he</sup> will be coming in next Monday, To help us try and determine what the manpower development needs are. And, ~~he~~<sup>we</sup> will be here for a period of two months, and hopefully, during that time we may come up with some actual efforts.

Question: (Same Speaker) Good. Thank you.

Moderator: Thank you, Moses. Do we have anybody else who would like to make a statement, ask a question? (Pause) I ask you not to throw rotten oranges or anything like that. Okay, with that, we'll move on. We have with us from the Hazardous Waste Division, Walt Kovalick. Walt's the Chief of the Guidelines Branch of the Hazardous Waste Division, the Office of Solid Waste in Washington. Walt, you want to use that mike over there?

Speaker Walter W. Kovalick: Several of us are going to work from down here to try and make it a little easier for you to confront us with questions, if that's the right word. Ah-  
 Gerri was telling you about the process of involving all of you and those who live in many of the other regions that we're carrying on public meetings in. We're in the process of developing guidelines, regulations and information. Not only as Asa said are we doing a repeat performance in the morning, we're simo-casting because there's a similar meeting going on right now in New York City, in our Region II. So, I hope it's clear that this is the first step among many steps to let you all know exactly what we're doing in the process of developing this Law. I'm to talk to you about Sub-Title C, which is the 3000 series of the Law, and it's the regulatory portion. I'd like to make a few philosophical points and then move in quickly to summarize the sections, and then still leave enough time to dis-

cuss them as we go along. You may want to stop me when I do get through with the individual sections. Anyway, the first part you should note if you had a chance to look at that section is that Section 3001 is the keystone for the entire Sub-Title C, that is where EPA is asked to define what is a hazardous waste. And that particular section then creates the umbrella, or as it's sometimes termed, the net which will be thrown out over what we call hazardous waste and then either through state programs and/or if necessary, a federal program, those wastes will be controlled from cradle to grave using <sup>the</sup> regulations and standards that are contained in the rest of the 3001 series. And, I'll be talking about those, individually. So, the work that we do and the input that we get on the definitional section are very critical to the way the rest of the sections operate and the way it is implemented. The second broad point I wanted to make is that Sub-Title C contains a set of national standards, a set of national minimum standards for generators of waste. National minimum standards for those people who transport wastes... hazardous waste, we're talking about, those that are defined earlier on in the Sub-Title. And then, national standards for those who operate storage, treatment and disposal facilities. Meaning not just land disposal, but we're talking about generation facilities for hazardous wastes, chemical treatment facilities, biological treatment and other kinds of land application other than just burial. So, it's a very broad gauge coverage of minimum national standards. The third broad

overview point is that it is the intent of Congress, certainly in the history of the legislation, it is our implementation intent that the states take over this program and operate it. And we're making every possible effort, as I will explain in a moment, in the development of the state guidelines section, to see that that happens. So, this is to be after the model of the ~~State~~<sup>SAFE</sup> Drinking Water Act which EPA also administers that, if the states wish to, they shall take over the program, as opposed to some of our earlier environmental models where it wasn't at all clear that EPA was in any hurry to turn over the programs. The last point I wanted to make was that the Law, as we understand, it would not allow us to go back at old disposal problems except in the case of there being an imminent hazard from that situation. In other words, wastes that are already disposed of, the standards that I am going to be discussing would not allow us to go back at them other than for imminent hazard purposes. So, we're starting fresh with the development of the regulations. Let me now run through the sections to give you a little more specifics and then I'll, hopefully, have more than enough time for questions. Ah - why don't we use the slides. As I just mentioned, the definition is the critical starting point. You'll see eighteen months repeated each time I show you a slide, there are seven or eight of these. And so, all of the work that we're doing which commenced October 21st when the Act passed, through ~~the~~ April of '78 are aimed at turning out the best possible product, that is, in terms of regulations that we can all live with and still pro-

vide the kind of environmental protection that this problem needs. Section 3001 calls on us to do three things. One is to identify criteria which Congress gave us, some suggestions or criteria that might be used to identify hazardous waste. Now, the first thing we have to do is chose the criteria. Things like flammability, corrosivity, explosivity, toxicity, both chronic and accute, bio-concentration, and a variety of factors that you might not normally consider in your thinking about what defines a hazardous waste. I also call your attention to the definition of solid waste in the Law, which includes semi-solids; liquids; sludges; and, slurries. So Congress, in its wisdom, has re-defined solids as a semi-solid; liquid; sludges; and, slurries, slush, ah- whatever. So, we're talking about those things that have qualities in terms of criteria that's used to be identified as hazardous. Then, using those criteria, we then identify hazardous waste, that's Part B of that section. To carry my example of flammability one step further, we would... assuming we chose flammability, we'd have to pick a standardized test which are... in that particular case, there are several available which are generally agreed upon by government and industry as effective tests for flammability. And, it would be a matter of choosing a flash-point to use in that standard test. So, choosing the flash-point would be choosing the criteria; and, running the standardized test would be applying the criteria of flammability to identifying the waste. The third thing we have to do in this section is issue a list and there are a variety of options for issuing a list. It could be a list of things- list of wastes, excuse me, that flunked the list. In other words, those things that

failed these standardized tests that we were just discussing under identification. That's been one approach. Another approach could be a list of things that we do not have the technology or where-with-all now to devise a reasonably priced test and yet we all agree... meaning industry, government, labor, environmental groups, that we have a significant<sup>t</sup> problem. For example, waste contaminated with PCBs might well be considered to be in consensus as a hazardous waste and yet it's not easy to devise a simple, economic test for waste contaminated with PCBs, and therefore, they might be listed on the list just because they are important, but not because they meet any flammability, corrosivity or other toxicity requirement. They happen to be a problem because they bio-accumulate, to which there is no simple test. Another idea for a list has been the possibility of a list of industrial outputs, in terms of waste outputs, that might be a concern. For example, if there were a consensus that those who are in the business of manufacturing asbestos brake linings had waste that because of the asbestos contents were of concern, then waste from that industry category might be on the list. So, all I'm trying to explain is that we have not reached any decisions on what the list should be, but to offer you some of the perspectives on how diverse the list could be. Most of you, when you think of the lists that are familiar with some of our environmental programs, probably think of the Section 311 Water Pollution Spill List, and that's a simple list of substances which you know whether or not you've spilled, and therefore, know whether

or not you need to comply with the regulation. But, we're talking about... not about substances when we talk about hazardous waste, but mixtures, green slimes, and slurries (~~this word was indistinguishable~~) that are not easily identified. So, you can see that this is quite a bit more complex, and as I pointed out at the beginning, the definition is then what governs the rest of the regulations. There are three sets of national standards that I mentioned, the first, that I'll run through quickly. For generators, there are only three subjects that we are instructed to write regulations on. We cannot write regulations that affect the way you generate waste. That is the process that you use to generate waste. We can only write regulations on... for record-keeping and reporting requirements regarding the hazardous wastes that we defined earlier; or, on labelling of containers; or... and/or, I should say, on hazardous waste manifest systems, which is a term that Congress included. It, basically, is a paper system that tracks those industrial wastes that leave a facility until their ultimate point of disposal, so that hopefully, the state government is knowledgeable that the waste did indeed arrive at the disposal facility and was properly disposed at a permitted disposal facility. So, it's kind of a tie that makes sure that the waste that was generated which fall under this category reach their ultimate destination. The second national standard relates to transporters. There is no limitation there on the... there are some suggestions for regulation, including record-keeping, labelling and compliance



with this same manifest system. That is, the transportor would maintain copies with him as he delivers the waste to the disposal facility or wherever he's taking it, that is permitted. You notice that we are aware, as I'm sure those of you who are here, that are in the transportation business know that the Department of Transportation is in the transportation regulation business. We have begun our discussions with the Office of Hazardous Material Operations and we've expressed our desire to try to make these regulations as compatible as we possibly can. As a matter of fact, identical, hopefully, given they have a transportation protection mandate and we have an environmental protection mandate. The last set of national standards that I mentioned applies to those that own and operate facilities. Again, I don't mean just land disposal sites, I mean incinerators, chemicals fixation-type processes, biological treatment facilities and others. These again would be standards affecting record-keeping; reporting; and the manifest system which I mentioned earlier; monitoring; the right to inspect maintenance and operational and contingency plans in case of accident. But, there's a broad group of items that could be covered in the national standards affecting facility operators. Now, these particular facilities, the ones that we call hazardous waste treatment facilities have one more set of requirements. That is, they must obtain a permit. None of the other contingencies... not the transportors and not the generators, they do not have to get a permit. But, the hazardous waste facility operators

do have to have a permit. So, when we discuss the permit program under Section 3005, it only affects those who are in the business of treating, storing and disposing of waste. Now, if you are a generator of waste and you also operate a storage treatment or a disposal facility, then you would need a permit, also. The idea of permits... this is not a permit program for truckers, this is not a permit program to generate waste. This is a permit program for those who treat, store and dispose of waste. Ah- you see there basically that a permit is required and Congress has wisely included a provision for interim permits for those of you who were involved with obtaining water pollution permits are aware that we had quite a work over-load and quite a frenzy in trying to issue those permits and this Law provides for those firms who need a permit... who were in business on the 21st of October in 1976, which is when the Law was signed, and who have notified EPA or the state, which I will explain in a moment and who have applied for a permit, who have done those three things, if you're in that category, you have a permit. In other words, this is a load-leveling, work-leveling opportunity for us at EPA <sup>and</sup> in the regions who will be issuing the permits or the states to take the most important permits, first. So that you will not be operating without a permit during this time that EPA is cranking up, or the states, to issue permits. Section 3006, I'll just cover momentarily, is the section where we devise guidelines for what an authorized state program is and this is the part of the Law where we are

working with state governments to try and design a compatible program. The Law does include three requirements which we will have to design with these guidelines. One is the state programs be equivalent to the federal programs....

Question: <sup>MOSE McCALL</sup> ~~(Unidentified Speaker)~~ Substantially.

Speaker Kovalick: Substantially equivalent. That they be consistent with other state programs. Some of you may be aware that Ohio recently published a study that they shipped waste... industry in Ohio shipped waste to thirteen other states. So, there's quite a commerce in hazardous waste between and among states. And finally, that there be adequate enforcement of the provision that relate to Sub-Title C. There is also a provision for interim authorization, so that states can meet this full-authorization over a period of time and that's also included in the Section. One of the sections- skipping to 3010, that is least noticed, but I think has one of the evident set of ramifications, as we read it in that it affects those who generate, those who transport, those who store, treat and dispose of hazardous waste. this is a notification section where within three months after the hazardous waste that I discussed earlier are defined. Each of these entities will have to notify the state in which they're located, or EPA. It says EPA ~~there~~; it should be state or EPA, that they are in fact in this business, handling hazardous waste. So, this is a way... ah- a registration, if you will, so that there is an

awareness of where the generators, transportors and storers, treaters and disposals<sup>US</sup> of waste are located. It also, as you recall, provides a way for us to do this load-leveling or work-leveling on how many permits we've processed. If you've notified EPA under this section, if you were in business in October and if you've applied for a permit, then you have a permit until official action is taken on your permit. So, this is the section that provides us with a cushion, and also provides the operators with a cushion so that they are not outside the Law. That last significant section is one related to assistance to states and there are provisions for grant funds to support state hazardous waste programs, both to develop them and for their implementation. There's an allocated formula that's based on the nature of the problem. It has a three factors in it, and this, of course, is a function of the actual appropriation when we get down to the last analysis. But, there is a separate authorization here for state hazardous waste programs. That's what I wanted to cover and very briefly, it's a lot of information to run through very quickly. And, if you've had a chance to look at the fact sheets or glance through the Law, perhaps you have some initial questions or comments.

Moderator: Thank you, Walt. If you'd like to speak, just move to the mike and we'll get to you just right after the other. Yes sir?

Question: <sup>D. HART ENTERPRISES SYSTEMS, INC.</sup> John Goins. The question I have with this hazardous waste, what about heavy metals, etc. that might be found in domestic sewage, would that be covered?

Speaker Kovalick: It's... it's possible. We intend to run, you know, these standardized tests which we're trying to development over time on a variety of wastes. And, as you know... probably better than I, there are a number of communities where well over ninety percent of waste water treatment plants are municipally-owned and industrially-owned, in some cases, well over ninety percent are from industrial sources. So, it's not possible that such slush<sup>dye</sup>... some such slush<sup>dyes</sup> could be hazardous waste. But, we're just starting out.

Question: Moses McCall from Georgia. Ah- the question I have, Walt, is granted I know you'll be listing the wastes specified under Clean Air and the Federal Water Pollution Control Act as hazardous, but do you envision a strict listing of the other wastes as hazardous, or a decisionry approach to determine which wastes are hazardous?

Speaker Kovalick: I'm not sure about the first part. One of the early drafts to this legislation as you probably know better than I, did have that requirement, that we count those things that are called hazardous in the Clean Air Act, asbestos, berillium mercury and vinyl chloride, and the things that are identified as hazardous in the Water Act. But that's not in there, statutorially. So, we'll see if they meet ~~the~~ 'tre' approach, the so-called decisionry approach, meaning that you run some of the least expensive and therefore the easiest tests, first. Like those for physical properties, corrosivity, explosivity and so forth, and then, move on to

the more difficult tests to see which wastes might, ~~quote,~~  
 "flunk the tests." I think it's fair to point out, I'm talking  
 as if this is all industrial program, that ideological wastes  
 may well and might well be called hazardous wastes. Which  
 means that we're affecting hospitals, clinics, veterinarianian  
 plants and so forth, as well as some radioactive wastes --  
 Those that are not regulated by the Nuclear Regulatory  
 Commission or <sup>ERDA</sup>~~URPA~~, the low-level kind, radiant in a watch  
 and the ah- those kinds of wastes that are a result of that  
 process. So, we expect that all of them will be affected  
 by some kind of decision approach. And, hopefully, the  
 least expensive tests will be the ones you do first. Flash  
 tests, something like that, and moving on to the more com-  
 plicated tests, so that the cost is minimized. We intend  
 to ask, in the Federal Register, for comments as to who  
 should bear that cost, I might add. Whether it's obvious  
 to you or not as to whether the generator of wastes should  
 bear the cost for running the tests on his wastes. And, we  
 will be asking that question for comments.

Moderator: I'd like to ask- we do have some people here  
 from some of our states programs, Mo<sup>SE</sup>, as well as some others  
 and I'd like to ask you, how do you think this standard that  
 we've developed with your help, do you think that will affect  
 whether or not the states take over the program? I'd like  
 to hear some of you on that.

Question: <sup>BEN DRUSE</sup> (~~Unidentified Speaker~~) Jim, I could probably answer that very briefly....

Moderator: Would you move to the mike, please, and give your name. We're not asking for a commitment, all we're asking for is participation.

Question: I understand. My name is Ben Druse from Florida. <sup>DEPT. of ENV. PROT.</sup>  
I believe that the answer to your question depends entirely on the nature of the guidelines that you produced as to whether or not we can live with it and whether or not you are pre-empting some of the existing programs that we already have. So, I believe that we can't answer that particular question at this point in time. While I'm up here I might ask Walter, what kind of rampart are you establishing with NPDES and the Water Quality boys when you get into industrial wastes and discharge permit aspects?

Speaker Kovalick: Well, we've got the suggestions, as a matter of fact that all of those infamous guidelines and documents that was developed over the past few years for controlling waste water discharge. There is a lot of information there about the contents of the sludges that you create. So, that was brought up as a very good point as a way to get data about things that might well be considered hazardous, the heavy metals, to the point that this gentleman brought up over here....

Question: (Unidentified Speaker) That's a good point.

Speaker Kovalick: I know you're from a state... and several states in this Region have a fairly large agricultural production, hopefully, if it rains, and there is the question of whether pesticide-related wastes, specifically pesticide containers which some argue are never empty. That is if you turn a five gallon pail or drum upside-down it is never really empty unless it is appropriately rinsed. So, I hope that as we think about what is a hazardous waste, we not ignore the farm community and the fact that some of those kinds of wastes can be even worse than some of the ones that we might normally throw into the hazardous waste pot to begin with.

Question: (Mr. Druse) Well, we're wrestling with that particular problem in <sup>Dade</sup>~~Dade~~ County right at the moment. Hope we come up with some answers pretty soon. Thank you.

Moderator: Yes sir?

Question: Tom Tiesler from Tennessee. I'd like just to respond to that. I'd like to respond a little bit later to some of the other- I guess, a general overview. I'd say yes it's going to make a difference to the states whether they take the program or not. Depending on the ways, particularly if the states don't have an input in determining what is a hazardous waste. If, in fact, the states are



given a program that they don't feel like they could live with or implement, that's so strict or so ridiculous guidelines, I know in Tennessee that probably they would say well let's let the Feds have it. So, I think that it is very important that the states have an input into formulating how the hazardous wastes are determined and how the list is made up. So, I would say yes for Tennessee, anyway.

Speaker Kovalick: I wanted to- when I said this is the first step I wanted to maybe elaborate to speak to Tom's point. We are planning some seventy-five or eighty smaller versions of this meeting along individual sections of the Law. Seven or eight sections on seven or eight meetings around the Country on 3001 and likewise through the other sections. And, we intend to see that the Regions, of course- our regional offices will be participating and organizing these meetings and one of the necessary participants in such meetings, of course, are the states. So, I- that's one way in which we intend to be out discussing where we are at the moment in defining hazardous wastes, as well as, the other regulations. These are six states who are working with us now, primarily on the states guideline portions of the Law. But, you should feel free, if you are representing a state to contact us direct. As Moses noted, all the names and addresses and phone numbers of people working on the regulation was in the Federal Register last Thursday. Or, through the regional

office right here in Atlanta to find out what's going on. We've tried an experimental program in the last week to have a weekly phone call with our regional offices to try and brief them as best we can on where we are on any given section. So, they should be quite knowledgeable on how we're doing.

Moderator: Yes sir, go right ahead.

Question: I'm Jack McMillan, <sup>Miss. STATE BOARD of HEALTH</sup> from Jackson, Mississippi.

In response to Jim's question about the determining whether the states will take on the responsibility, two factors that we have looked at. Are these guidelines and regulations going to be designed to where it would be economically feasible for us to afford this type of program? I can look at some of the guidelines and management of the land-fill operations where it's disposal<sup>ed</sup> of by land. It would be totally out of the ability of state and local governments to finance such systems. And, another thing that's very important of mine~~s~~, is the federal government going to continue to support the financing of the state program? The Law calls for two years of authorizations here and it would call for a new Act to support our program from hereon. Possibly, if the money runs out, we could turn it back over to EPA to operate. There's a couple of questions that I want to ask in regards to the liabilities of the management of the wastes. Have you given any thought in

this area of the transfer of ownership from the generator to the transportor to disposal or treatment facility, and by the fact of transferring ownership does this release the liability of those individuals that had ownership before hand?

Speaker Kovalick: Yes, that's a good question. Our experience to-date in those- there are a couple of states that some of you may know, where this program and the basic frame-work that I've outlined is already in operation. And, the manifest system that I've mentioned goes a long way towards so-called transferring the liability. However, we also are aware of experiences whereas a person is affected by a bad disposal practice, the Courts have seen fit to go way back all the way in the chain through the transportor back to the generator. So, I think any generator who feels that he's going to be able to write-off his liability permanently, forever, he's being perhaps a little <sup>out</sup> ~~naïve~~. On the other hand, if the permit system is well-run for that facility and if that facility has being doing everything possible, hopefully under state permit, to meet the requirements, it would be very difficult, I think, for a reasonable man, which is what we count on judges to be, to go back in the chain at the generator because the facility was meeting the basic requirements.

Question: (Same Speaker) Ah- you're talking about in time to come in the management of this waste will there be any special care or guidelines written for disposal or treatment facilities?

Speaker Kovalick: Yes, I breezed by that one. on the bottom lines on that one slide, which had too many words on them, was regulations regarding ownership and continuance of operation. We spent some time studying that in-house. Some of you may be aware that Oregon has a requirement that the land on which such facilities be built be deep into the state and a fund be set-up during the life of the operation of the site where contributions are made with each load of waste. So that in the end when the operation is closed in twenty or thirty years, there is a fund whose interest can pay for the monitoring and so-called long-term care of that facility. So we definitely have an instruction in the Law to figure out a way to address that problem. I'm just- I tossed out the Oregon model because that's one that's working now, and you could inquire of them about it. I mean, if you read one of the permits for an Oregon facility, it has the requirement that the land be DEEDED <sup>to the State</sup> (~~this word was indistinguishable~~) and that there be a fee for every load that comes in to the facility.

Question: (Same Speaker) One other question, I know that some of you must be charged with the writing of the regulations or charting on working papers. Do you have any working papers that have been developed and would be available to the states <sup>for</sup> for study at this point?

Speaker Kovalick: As you heard from President Carter's Press Conference this morning, we're all going to have to start sign-

ing our regulations. So not only are we busy writing them, but we have to figure out how many thousands signatures we can get on the bottom. We are going to have available, in mid-March, using the Federal Register which is the daily newspaper of the federal government, a list of questions that we have come up with based on thinking about each of these seven or so sections that I've discussed this morning. So, the notice that Moses McCall mentioned last Thursday is listed the names and addresses so you'll know who to get in touch with; Who the person is who would sign such a regulation when we get all done. But the material that we're trying to get out in March is not a proposal. We are many, many months, like August and September, from proposing a set of regulations. And, I think that's what's different about implementing this Law from our Air and Water Acts. We are <sup>out</sup>~~not~~ gathering information at this point, and the notice that I'm commenting about, hopefully, we'll make in the Federal Register in mid-March may contain as many as five or six dozen questions that we have, such as the one on what makes sense for long-term care and continuity, that the gentleman just raised. So, that's where we are at the moment, and ah- that should be out very shortly. And then, starting after we get the data back from asking those questions we would start having the kinds of drafts that Moses McCall referred to that should be circulated. And, we intend to use an advisory committee system, which represents a variety of interest groups. We intend to use one of the major interests groups that the Association of State and Territorial

Solid Waste Management Officials, which is a long name, but ah- they circulate drafts between and among the states, too. So, we hope to use a variety of review groups, as well as the kind... the eighty meetings or the seventy meetings that I was discussing earlier to try and get input on what we might write.

Question: I'm Jerry <sup>E</sup>~~P~~arkins from the North Carolina Solid Waste Program. I would have to echo pretty much what the other States have indicated as far as the ah- meeting the federal requirements. In addition to that, I want to say that- you know, if the requirements were more than our legislature would be willing to go along with, or more than we could afford on a mass basis in terms of a grant, then we too would probably say okay, you asked for it. I do have a specific question for Walt. No doubt, in terms of special waste handling and handling of hazardous waste, private-enterprise will play a major part. Besides meeting our water quality and air quality standards, will there be other requirements that will qualify the different categories of treatment and disposers? In other words, if a facility claims to be a de-toxifying facility, will it be eligible? Ah- considerations that will help qualify him so that we will know the difference between a jack-leg and one that will be certified by EPA.

Speaker Kovalick: If you're... I think you're asking me whether the.... Let me take an example, I will try this.

As some of you may know, the Air Pollution regulations that exists at the national-level for incinerators only cover two subjects, at the moment, particulate matter and sulfur-oxides. Well, the kinds of incinerators that burn the kinds of waste we're talking about, exotic, organic compounds, those two regulations would not provide sufficient control and so one of the issues we're trying to wrestle with in EPA, generally, meaning the air programs and the solid waste offices. How do we deal with the problem of burning exotic, organic compounds where public health is not being protected in this so-called de-toxication or destruction facility. So the answer to your question is yes, we're going to have to be more wide-ranging. Now, I don't know whether there's going to be admission standards or ambient standards or technology base standards, or the Law says, performance standards. So, we're trying to understand better what flexibility that provides. When you're burning some of these very toxic organic compounds, I know I would, and I'm sure you would if you lived next door, want to be assured that there were more requirements being laid on that incinerator than just particulate matter and sulfur-oxide.

Question: (Same Speaker) Thank you.

Moderator: Do we have anyone from industry that would like to address that problem for us? About whether or not they

think that the states should, in fact, take over the hazardous waste regulatory program... about the consulting community?

Yes sir?

Question: Elmer Cleveland, EPA here in Atlanta, Georgia.

Walt, I'd like to ask you a question, if you've been into discussions on when does a hazardous material, or a by-product through the process of using hazardous material become a waste? Lots of this stuff is stored for maybe later use. What's ah- what's your feelings on that?

Speaker Kovalick: You're one of us, aren't you Elmer! And you're asking all the easy questions! Well, I don't know, is the answer to your question. If you think about the Law and the word storage ~~permits~~, which is one of the requirements for ~~storage~~ permits, the question that, when is a waste, a waste, becomes very important. We do not have a position on that, we're going to be asking for a lot of input because at a meeting we had to discuss ~~that got into~~ <sup>that</sup> point, the chemical industry pointed out... ~~someone pointed out that the~~ <sup>it was</sup> ~~chemical industry~~ has a large group of intermediate chemicals that they often produce as a so-called by-product of whatever the main product is, and oftentimes they store that by-product for, as you pointed out, future use. Then you run across the problem that if you call that by-product a raw material, <sup>and</sup> ~~but~~ <sup>then</sup> that raw material <sup>T</sup> is affecting ground water, or is evapor-



ating into the air and <sup>and</sup> affecting the environment, it would seem that this Law would want us to be regulating it. And so, there's that one extreme where it's difficult to draw a line, and then we are aware of a huge mountain of asbestos <sup>tailings</sup> that have resulted from <sup>the</sup> manufacturing process in Pennsylvania, ~~they~~ <sup>IT'S</sup> are sitting on the land, children are playing in it and tumbling in it, or were. And those kinds of wastes we want to be sure are in the permitted program. So, trying to draw this line in the grey area between by-product and true waste is quite obviously very hard. We haven't yet, as a matter of fact, we've just started, but I think it's important for those of you who might not have thought about that to do so, because if you are in industry it makes a difference. I think it's fairly simple that ASBESTOS WASTES (this word was indistinguishable) ~~people~~ <sup>HAZARDOUS ARENA</sup> are in this ~~area~~ and it gets harder in radioactive; but when we move into chemicals, ~~that is~~ it gets a lot more complicated.

Question: BILL STICKLAND (~~Speakers name was not~~  
~~audible~~). I'm with the North Carolina Solid Waste Management Program. Two comments I'd like to make and one is this. First, I'd like to congratulate the writer of the Act for putting public health back where it belongs in Solid Waste Management. For the last ten years or so we have gotten totally away from the public health aspect of solid waste management. And I see again here we're coming back. I think this is a step in the right direction. Another thing that I think is most important,

and I think it should be brought out again, that you're not going to put out just a list of hazardous material. Because we can take most of the heavy metals, or most anything else, it depends upon the quantity you have and the strength you have to make it hatch. And I think this is ah- very important. If you say to industry they may have a platinum sludge that has less heavy metals in it than our sludges coming from our municipal treatment systems, yet, we look much harder on industry as they have the platinum sludge, than we would look on the great quantities of waste. So, I am hoping that you'll take into consideration the small operator that may generate a few hundred pounds a month and it may be, ah- not put him in the same category just because he has a certain amount of heavy metals in it, as you would the generator that generates great quantities of it.

Speaker Kovalick: I'm glad you also brought that point out for... as a thought piece, for those who are here. The question of whether there should be some exemptions under the generator, storage... generator, transporter and storage treatment disposal regs has been raised a number of times. You might be surprised to know that <sup>at</sup> our December public meeting in Washington, a representative of the waste oil re-refining industry offered testimony that he was absolutely certain that waste used lubricating oils ought to be a hazardous waste and that was his testimony. As you may know, that's

collective of every gas station in the C~~o~~untry. So, obviously, there has to be some kind of equitable line drawn around what are facilities that would be affected by this Law and those that are not, based on the public health criteria that you pointed out is in the Law. So, it could be very far-reaching and that's why we're out here trying to meet these goals.

Moderator: We have time for one more, if anyone would care to comment. If not, the next topic we'll look into is land disposal. We have with us to give you a short presentation on that, Mr. Truitt DeGeare. Also of the Washington Office of Solid Waste. Truitt's the Chief of the Land Protection Branch in ~~Assistance~~ <sup>the Systems</sup> Management Division. Truitt.

Speaker Truitt DeGeare: I'm going to speak ~~to~~ <sup>on</sup> the activities for land disposal of non-hazardous solid waste as discussed by the Law, RCRA in Section 1008 and Sub-Title D. Can you hear me in the back? Thank you. RCRA contains important new definitions. A requirement for the Administrator of EPA to promulgate regulations containing criteria for determining which facility shall be classified as sanitary land-fills and which shall be classified as open-dumps. The requirements that the Administrator publish an inventory of all of the disposal facilities in the United States which are open-dumps, and a requirement that the Administrator publish suggested guidelines including a description of levels of performance to protect ground-waters from leakage. The implications and

requirements for state and local governments will be discussed later under state and local program development provisions. RCRA defines open-dump and sanitary land-fill as the only two types of solid waste disposal facilities. They will be distinguished by the criteria to be promulgated under Section 4004. RCRA adds clarity by defining disposal and solid waste. These are relatively broad definitions in specifying the activities which encompass in the terms solid waste disposal. Disposal is defined to mean the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water. So that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into waters. Solid waste means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility and other discarded material, and that being solid, liquid, semi-solid or contain gaseous material resulting from industrial, commercial, mining and agricultural operations and from community activities. That does not include solid or dissolved material in domestic sewage or solid and dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under the Federal Water Pollution Control Act or particular nuclear materials as defined by the Atomic Energy Act. As I said earlier, the statutory definitions of sanitary land-fills and open-dumps refer to Section 4004 of the Law. That section is called

Criteria for Sanitary Land-Fills. Sanitary land-fills required for all disposals. This section requires the Administrator to promulgate regulations containing criteria for determining which facility shall be classified as open-dumps and which shall be classified as sanitary land-fill. At minimum, the criteria shall provide for the facility may be classified as a sanitary land-fill and not an open-dump only if there is no reasonable probability of adverse effect on health or the environment from disposal of waste at the facility. An important aspect of the implementation of this Law then is further interpretation of what constitutes no reasonable probability and what constitutes adverse effects on health and the environment. Development of this criteria will be particularly difficult for ground-water protection, because of technological uncertainties and the general lack of ground-water protection policies. The regulation containing these criteria is due by October 21st of this year, after consultation with the states, notice, and public hearings. We've considered that it's appropriate for the criteria to be performance rather than operations-oriented. The intent of promulgation of this criteria is not to provide for a federal regulatory system for sanitary land-fills, but to establish criteria for use by the state solid waste management programs. Section 4004B requires each state plan to prohibit the establishment of open-dumps, and to contain a requirement that all solid waste within the state be disposed of in sanitary land-fills unless it is utilized for resource recovery. And finally, Section 4004C indicates that the state prohibition on open-dumping shall

take affect six months after the date of promulgation of the criteria or on the date of approval of the state plan whichever is later. Not later than one year after promulgation of the criteria for sanitary land-fills and open-dumps, the Administrator shall publish an inventory of all disposal facilities in the United States which are open-dumps. Section 4005 also prohibits open-dumping when useable alternatives are available. If such alternatives are not available, the state plan shall establish a timetable or schedule for compliance, which specifies remedial measures including an enforceable sequence of actions or operations leading to compliance with the prohibition on open-dumping within a reasonable timetable not to exceed five years from the date of publication of the inventory. If the state plan is not being undertaken, the citizen suit provision of Section 7002 provides recourse to a grieved party. Section 1008, Solid Waste Management Information and Guidelines, requires the Administrator to publish in one year, guidelines which provides a technical and economic description of the level of performance that can be obtained by various available solid waste management practices. Areas to be addressed by the guidelines include methods and degrees of control that provide a minimum for protection of public health and welfare, protection of the quality of ground-water and surface-waters from leakage, protection of the quality of surface water from run-off through compliance with absolute limitations under the Federal Water Pollution Control Act, protection of ambient air quality through compliance with new source performance

standards of air quality implementation plans under the Clean Air Act, disease infection control, safety and esthetics. Guidelines are viewed as being intended as descriptive rather than prescriptive and to suggest alternatives for dealing with concerns raised in the criteria being promulgated under Section 4004. Section 1008C from this guidelines provision requires minimum criteria to be used by the state to define open-dumping of solid waste as prohibited under Sub-Title D. The response to Section 1008 which calls for guidelines on a variety of unspecified subject areas, the Agency intends, first, to up-date our current land-disposal guidelines and initiate slush disposal guidelines. We will also be carrying out a process for determining which other guidelines shall be developed and what priority sequence. With regards to implementing that program, we are soliciting your input to guide us in what you see as the most important areas for development of these guidelines.

Moderator: Thank you <sup>C</sup>Truitt. Do we have any comments?

*Bill STEICKLAND*

Question: (Note: ~~Two people speaking at the time the questioner was giving his name, therefore, name was indistinguishable~~).  
...from North Carolina, again. Have you taken into consideration demolition, construction, land disposal or tree and landscaping waste?

Speaker DeGeare: We haven't yet. We haven't really acted on either the criteria or the guidelines. That's a reasonable

concern. One alternative with regards to the guidelines activity is to get a separate guidelines dealing with various types of waste. For example, one guidelines would deal with land disposal of municipal waste water treatment plant, sludges, another could deal with demolition waste or tree and brush clearing waste.

Question: (Same Speaker) One of the definitions that I saw in the pamphlet was that if it was not a sanitary land-fill, it was a dump. Do you anticipate different types of guidelines for a sanitary land-fill that receives the participial waste from the municipalities from the different places, and a different set of regulations for a site that was just receiving tree and landscaping or demolition waste. Do you anticipate the two?

Speaker DeGeare: With regards to the guidelines, that is under consideration, and if you have feelings as to whether that should be the way we go, then we would like to hear suggestions. With regards to the criteria, the Law does provide for various classification of disposal sites and sanitary land-fills. That is an alternative that we could build it.

Question: (Same Speaker) One other comment. I think that the potential for problems lies very much in these two definitions. I've heard the definition of sanitary land-fills from some people that were supposed to know. They say that a cigarette-butt if it drops to the ground it's a dump. We've got to look at this, and I'm sure this is going to be most difficult to set-up a set



of regulations from California to North Carolina, and I do plead with you to take the local people into consideration when you look at this criteria.

Speaker DeGeare: So you would suggest differing criteria based on the types of wastes being disposed of?

Question: (Same Speaker) I certainly would. I do not think that we can possibly.... For instance, you have a municipality that goes into the area of reconstruction when you're tearing down twenty blocks and getting demolition waste, or you have land-clearance if you are clearing fifty lots. I see no reason for daily cover, I see no reason for taking up the type of land-fill space that we would acquire for <sup>MUNICIPAL</sup> ~~participal~~ waste and filling it up with this type of waste that we could use marginal land-owned, and not take up our good, planned sanitary land-fill. So, I do think there's a place for the two sets of guidelines. Not necessarily daily cover on the tree and landscaping waste, but a cover enough to prevent fire, to... this type of thing. I do think it's very much <sup>a</sup> place for two sets of regulations.

Speaker DeGeare: Okay. Thank you. This is one of several areas of concern that we have had already in trying to consider what we should look to in terms of a criteria. And that is, what types of wastes would be covered by a criteria and in what form the criteria would be. Would they be specific for different types of wastes, or should we try a broader, general

criteria that would be applicable to all types of wastes. Just to, maybe give you a little more food for thought.

Question: Moses McCall from Georgia. I strongly reiterate what Bill just said. I think there's definitely going to have to be some sort of classification system, so that we can, you know- handle these wastes according to the type of waste we're dealing with. And, I also think that if EPA approaches the subject of open-dump as being something where there's absolutely zero discharge, that's completely unrealistic. Because we're going to have to assess the fact that there is going to be discharge, either into the ground-water, you know, to a minimal extent or whatever. But, there is going to have to be maximum flexibility that we can apply at the state and local-level, if we're going to be able to live with the Act.

Moderator: Thank you. Do we have anyone here from a municipal or other local government? We'd like very much to hear their feelings on that particular question that Mr. Strickland just addressed. Yes sir.

Question: <sup>D. Taylor.</sup> John ~~Hailer~~ from the Solid Waste Management, State of Georgia. I'm speaking now for local representatives who've called today and so I'll pass this on to you. This is from Don Hackney in Savannah and he expressed somewhat of the same opinion that's already been expressed, except, I think, he goes a little further. And his comments involved making the

requirements at least general enough that they could be adopted to varying areas of, not only the Country, but of the state. For instance, he would prefer that we not set a definite standard as to the depth of ground-water below the lowest depth of trench or filling. In other words, say five feet because solids leak out of Georgia, over Florida, it's impossible for some of these areas to meet this. So, I think his general comment was that we adopt standards which are general enough, or which could be varying for different areas of the Country, rather than adopting one strict standard for the whole Country. The comment I wanted to make is, at least in Region IV, I think you're familiar, in our work plan you've indicated that we're to address pits, ponds and lagoons. My question is will these be defined as a sanitary land-fill or open-dump or another method of disposal? I'm not sure exactly where they fit into the Law.

Moderator: What we're trying to do here, John, is to seek your advise on that particular question. If you have a feeling on that, we'll certainly be glad to hear it.

Question: (Same Speaker) Well, I think our concern, number one, is that they've completely been left out of all previous regulations. At least in Georgia pits, ponds and lagoons fall into what we call no-man's land. Water quality claims them when they want to. We claim them when we want to. And when

neither one of us want them we just claim that it's the other one's responsibility. So, to do an inventory of this would require a tremendous amount of effort, above, say an inventory of municipal waste sites which we could give you tomorrow to go into pits, ponds and lagoons, this is ah- enough to hold the ball-game which we have absolutely no information on. Water Quality, I'm sure would have more than we would. So it may take a cooperative effort between the water and land programs.

Moderator: If I understood you correctly, you are suggesting that they should, in fact, be included?

Question: (Same Speaker) Certainly. I think they should be included in one or the other programs. Either air or land or water, because, right now they sort of wonder around from one program to another and really don't have a home. So, I would certainly recommend that they be included. But I'm not sure whether the definition of sanitary land-fill will be broad enough to include a pit, pond or lagoon.

Question: (Unidentified Speaker) John brought up a good point about pits, ponds and lagoons. They should be included, but where is the quest. Right now the Safe Drinking Water Act and the proposed sub-service injection regs are proposing to cover them. And in the proposed regs they do require that an inventory be made by the state within twelve months of the potential affect

on ground-water. So, if they're going to be covered there, then they sure as hell ought to be left alone in this Act. You know, let's cover them in one place, but let's don't overlap. But, I think EPA in this respect needs to get its Act together and decide where they want to cover it and how they want to do it and not impose on the state that you do an inventory under the guise of the Safe Drinking Water Act and then turn right around and within twelve months have to include an inventory under RCRA.

Speaker DeGeare: The states that are being certified under the Safe Drinking Water Act and they not all are, are being charged to do a survey, not an inventory of pits, ponds and lagoons. It is my understanding that the regulations proposed to-date under the Safe Drinking Water Act will not apply to pits, ponds and lagoons. But, directly to underground injections in a facility where the depth is greater than the surface diameter of the injection point. The emphasis I put at the beginning of my discussion on the broad new definition of solid waste and disposal was intentional in that disposal by a statutory definition in term does include almost any placement of a waste material on or into the land. We are striving to avoid duplication. But we too recognize that pits, ponds and lagoons have, for too long a time, fallen into a no-mans land in terms of control, ~~and also in terms of a no mans land if you want to try to use drinking water to~~ \_\_\_\_\_ (this word was indistinguishable) ~~in the vicinity of such a facility.~~ So we have

great concern for those. And ah- as to whether they would be sanitary land-fills or open-dumps, I feel that pits, ponds and lagoons could then be operated in a manner which will not provide an adverse effect on the environment or public health. And, depending on how we define what an adverse effect is, they could then be acceptable disposal methods, i.e. a sanitary land-fill or an unacceptable method, i.e. a dump, and open-dump, and thereby be prohibited.

Speaker Kovalick: I just wanted to add to that that we are proceeding at the moment, that those pits, ponds and lagoons that receive a hazardous waste will require permit under Section 3005. I Must point out that RCRA has a broader coverage than the drinking water act in that, we're concerned about the facility, regardless of whether it is located near drinking water sources. So ah- if a hazardous waste in oppose to a non-hazardous waste is involved, and if it goes to what we are calling, pits, ponds and lagoons which may either end up to be a storage or disposal facility, we don't know which, it will be covered in a regulatory manner under this Sub-Title C, as opposed to a survey as ~~is~~<sup>s</sup> standards now in drinking water regulations.

Moderator: Yes sir, go right ahead.

Question: <sup>RICHARD</sup> Steve Simmons from the Resource Recovery Council in Florida. I'm also a local government-official. I would point out, maybe the Florida experience will help you on this. I don't

that it will, but our experience on this trash problem, we've adopted strict guidelines that said that all of this would go into a land-fill. After a number of hearings in the \_\_\_\_\_ (this word was indistinguishable) support, and a number of other support, we have had to amend our guidelines. Put a separate set of regulations for the building materials and the waste, the yard waste, because certainly in Florida we have a great deal of yard waste in tropical Florida. That's a bigger problem for us in South Florida than it is in garbage. And, I would say to you that I think this will be an area that I would encourage you to look into and I certainly encourage the flexibility, because even in Florida we have found that our state's... in our state, we have great diversity on what are table problems from North to South, and I'm sure as you go around the Country, you'll find many differences. And we would ask that you take those into consideration when developing your guidelines.

Question: (Unidentified Speaker) I have a question for- on the hazardous waste. Is there any method that you've set-up to work with the Food and Drug Administration as far as some of these waste materials that have been attempted to be used, like some which have been banned by Food and Drug, that are presently discharged to pits, ponds and lagoons?

Speaker Kovalick: You're obviously thinking of some specific example that I'm....

Question: (Same Speaker) About the paper industry.

Speaker Kovalick: Oh. Well, let me just say that we've asked representatives of Food and Drug and the other federal agencies to sit with us on our working group, where we are devising the various regulations on various sections. So, they'll be represented along with ~~financial~~ <sup>NATIONAL</sup> Institute of Environmental Health Statistics. So, we're going to try and get at that issue.

Question: (Same Speaker) Thank you.

Moderator: Yes sir, go right ahead. I'd like to say that if there's someone else that wants to speak, if you'll just move right on to the microphone, it'll save us time waiting for you to get there.

Question: Clark Gregory, Solid Waste Researcher. I'm having trouble finding the provision for land application of the waste, besides open-dump or sanitary land-fill. Such as land application of process refuse for soil improvement. Now, does that exclude in this Act?

(GEORGIA CONSERVANCY)

Speaker DeGeare: It's ah.... Another closely related concern we have is for the land surrounding the municipal waste-water treatment plants. Our concern is this, you put it on the land which dispose of waste material for solid waste disposal. The Law provides for sanitary landfills and open-dumps. The latter



are prohibited. Therefore the criteria must address the land-spreading process of solid waste or municipal waste-water treatment plant sludge. Therefore, an acceptable means of spreading that on land would have to not pose an adverse effect on the environment or public health. So, the criteria is going to have to deal with that, somehow....

Question: (Same Speaker) I hope not....

Speaker DeGeare: I hope it will be done very appropriately.

Question: (Same Speaker) I hope you'll do it in the reasonable manner, and not be too strict on what you call, hazardous and ah- discouraging folks from doing this very beneficial process.

Question: (Unidentified Speaker) Truett, I've got one question I wanted to ask in relation to monitoring the movement of leakage into the ground-water tables. Your regulations are going to require that all facilities be monitored, or are you going to leave that criteria up to the local agency that is controlling solid waste programs within a state?

Speaker DeGeare: There are appropriate periods of concern with regards of monitoring. One is guidelines. For example, our guidelines could or could not specify where the river is suggested monitoring programs. So, that's one area of concern. At this point in time, and I don't know where we're going to

be going. We'd like your feelings on that. We could deal with that in the guidelines. With regards to the criteria which are going to be the basis for the inventory, and therefore, the basis for determining<sup>ing</sup> which sites will be closed down. There has to be some means of evaluating the sites. So, if we have ground-water, there has to be some means of determining whether the criteria are being met. That would require some kind of monitoring. We haven't, thus far, dealt with that, and if you have suggestions on that we would appreciate it.

Question: (Same Speaker) The second intent of this criteria that would be applicable to different area of the United States. What would apply to desert area of the mid-west wouldn't apply to the more humid areas of the southeast, or the northeast, either one. There - plenty ways... the geological situations are much different to different areas. I've often wondered how you could apply criteria to the State of Mississippi and to Arizona that would fit both situations.

Speaker DeGeare: One means, and this is just ah- thought I have had, and it doesn't- doesn't in any way relate to what we are doing or will be doing, because we haven't decided on it, is to ah- suggest criteria that are rather broadened in regards to ground-water protection. That is, the criteria might say the site will not impair the present or planned future use of ground-water resources. Then, that

bends the issue of someone having to determine, one, what the current use of this ground-water resource is, and what the planned future would be, as opposed to another alternative which would be to specify a sampling technique and a sampling point to determine what is, really, a way to the disposal site. If you have suggestions on which type of approach or something in-between, you would like to see or you think would be more acceptable, please let us know.

Moderator: Do we have anyone else who would like to speak to land disposal before we move on? (Pause) The next item we have on the agenda is resource conservation and recovery and overall technical assistance. We have with us from our Office of Solid Waste Staff in Washington, Tom Canfield. Tom is the Chief of the Waste <sup>Re-</sup>~~Pro~~duction and Guidelines Branch in the Resource Recovery Division of our Office of Solid Waste. Tom.

Speaker Thomas Canfield: I think we are gathered here, tonight,... I think we are gathered here, tonight, to talk about the RCRA, and so far we haven't talked about resource conservation, or resource recovery, at all. And, this is the name of the Act we're talking about, and I will admit to being very bias. But I think, and my perspective is that it was Congress' first priority in this Act. The predecessor Act, and this was called The Resource Recovery Act, and Congress titled this one, The Resource Conservation and Recovery Act. Basically, I feel that

resource conservation and resource recovery are a little harder for people, Congress to set a legislative policy. It's a lot easier for Congress and EPA to deal with a regulatory program. And, Congress did establish a regulatory program for all of land disposal, with a very specific concern about the sub-set of waste called hazardous waste. And, I really think that in the long-term, Congress is still looking for a switch in our... a change in the way we generate and dispose of waste, and will be looking much harder in the future toward resource recovery and resource conservation. The land disposal program, the tougher standards that we're having for all land disposal are going to mean that the cheap options are going to be closed, and that we will be encouraging, just because of that economic incentive, we will be encouraging resource recovery in the future. Before I go into the slides I'd like to talk a little bit about what EPA does now, or has done in resource recovery and resource conservation. And our efforts have been on focusing on reducing waste and re-cycling waste, which result in less waste to be disposed of. We think this means in turn, less pressure to find new, bigger land disposal sites in marginal areas, marginal means environmental areas, that tend to create ground-water hazards. So resource conservation and recovery do have a charge to public health and environmental protection. But there's three things that we've been doing in EPA that this Act really, basically emphasizes. The first one is that EPA try to get aid to states and cities to help them implement resource recovery systems. We evaluate and promote technology of resource recovery systems. We focus on evaluation of

what we call high technology or black-box technology, if you will, and low technology or almost no technology systems such as source-separation of waste. These are separated waste at the household that are then re-cycled as materials. And the third thing that we've been doing is that we focus on waste reduction and the target that the things we've been doing most on is beverage container guidelines that we have applied to federal facilities which requires a deposit on beverage containers sold at federal facilities. We've conducted general studies on waste generation and in trends on waste generation. So, I'd like to go through the Act and try to tie-in sections of the Act a little more specifically to these three general areas that we've concentrated on. (Pause) First of all, the resource conservation and resource recovery provisions are tied in a number of sections. It's not a nice, neat sub-title as we've seen in the hazardous waste, that's seen pretty much in the land disposal area. It's included in the guideline section. EPA can write guidelines. These guidelines can include resource recovery and resource conservation. The area that emphasizes Aid, the first major area is in Section 2003, which calls for resource recovery and conservation panels. I'll dwell on that a little bit later. Sub-Title D does include the fact that EPA may- must give guidance to states on resource recovery and resource conservation programs; it also allows money to go to local communities for resource recovery and resource conservation services. There are a number of information dissemination and evaluation sections that allow us to do evaluations of technology and resource

systems. I'd first like to focus on Section 2003, the Resource Recovery and Conservation Panels. The important thing here is that the title says it's resource recovery and resource conservation panels, but the language clearly indicates that it cuts across all portions of the Act, including hazardous waste and solid waste... of the solid waste management problems. Basically, it's the types of things that we... to give you a sense of the types of things that we've done before in the resource recovery area, for instance, we have really worked with cities on financial, marketing kinds of problems. And, I'll go into that a little bit more. But, the point here is that this is... the panels, we do not envision, are meant to compete with normal city consultants, the normal ways cities contract with consultants. The panels are to be made up of a number of different groups that give to get aid to cities. This is a little more detailed. The team... the Law says the teams are going to include technical, marketing, financial and institutional kinds of skills. These are primarily the way we have in the past described the aid we've given to cities on resource recovery, and the Act calls for teams composed of EPA people, private consultants and <sup>peer</sup> ~~peer~~-matching, meaning one-on-one relationships with a county official, for instance, who has a particular... he has already faced this problem, with another county official who is facing a similar problem, now. And the aid is to go from EPA or from the panels to state and local governments upon request. The Act mandates that twenty percent of the authorization, of the general authorization of this Act be devoted to resource

recovery and conservation panels. Sub-Title D I mentioned before does mandate that EPA give guidance to states to have programs in resource recovery and resource conservation. It also requires efforts by states to help develop and implement local plans. Section 4008 allows EPA to give financial aid to states and local agencies for resource recovery and a broad range of services including resource conservation services for implementation programs. Section 6002 is the specific section devoted to resource recovery and resource conservation. This section primarily makes mandatory a guideline that EPA has already published. We've already issued a non-mandatory guideline for procurement by the federal government for the maximum amount of re-cycled material. This section makes that mandatory after input from the National Bureau of Standards, within two years. EPA had already issued another guideline for the federal government to encourage energy recovery systems. It requires that certain size facilities must consider energy recovery or materials recovery resource recovery systems. This section of the Law requires that agencies of a certain size consider waste-to-energy systems. This also applies to people who contract or sell to the government. The third guideline that we have issued that does fall under this section, also basically, is a guideline that EPA had written to... for the federal government in requiring source-separation of waste for office buildings, separation of high grade office paper and a few cases in military bases where there were residences on those bases, separation of news-print... newspapers for recovery.

The biggest point about this section is that we really feel that it's... the federal government procurement is really a lever for state action, for municipal cities, to follow up on this if it's really going to have an impact on resource recovery. The next big section or portion of the Law that focuses on resource recovery is a group of studies in Section 8002. This section requires eleven special studies. Eight are listed here, and these studies... the ones that we kind of think are probably the most important, right now, maybe I'd better give a better explanation of them. The priority study is a study to determine priorities for research and development on resource recovery. The small-scale, low technology study is to give more emphasis on the kind of technology of resource recovery that could be applicable to small communities. The words, front-end separation means a study of the source-separation by the house-holder of waste and the relationship of source-separation of waste to large-scale energy and materials recovery. We have conducted studies that conclude that basically source-separations are compatible with large-scale recovery systems. But this is another study of that same topic. The resource recovery facility study really is to estimate economic impediments to large-scale recovery systems. The major... a major study that we're going to focus on in that section is a study calls for a resource conservation committee. This is a cabinet-level committee, consisting of EPA and six other- heads of six other agencies, chaired by EPA, and it lists a wide-range of incentives that we are to



make, compose a study and report to Congress in two years. We're supposed to issue six-month reports every six months. Congress has considered incentives for resource conservation and re-cycling in the past. And they're asking here for a major study to examine all the ones that they have considered, and others they have not really looked into, I guess, and to make recommendations to them. Our plans now are to focus really on post-consumer municipal solid waste, but we have not finalized those plans. And we will probably focus on the kinds of incentives that Congress has considered in most recent past. Such as, a dollar per ton, cash or tax subsidy for each ton of material re-cycled, and investment tax credit or acceleration of depreciation for middle equipment used for re-cycling, a product charge which is specifically mentioned in the Act for detail evaluation. We will probably use the depletion allowance allowed for certain virgin materials and secondary materials do not have the same sort of benefits. Certain virgin materials have special capital gains treatments that secondary materials do not have. We'll probably again review things like freight-retreatment for virgin and secondary materials. So, in summary, those are the major topics in this Law that address resource recovery and resource conservation and technical assistance, fairly broadly. So, I'd like to take questions from you and like to ask you some questions to get your input as to what we should be doing in this area.

Moderator: I'm going to ask you to give us your views now on what you think we should do as far as resource conservation, resource recovery, resource recovery and conservation panels.

Question: My name is A. S. Chip<sup>ly</sup>, from Alabama Solid Waste. I don't stand here having any answers. But specifically, I wanted to talk to Canfield. I think he remarked that the resource recovery was of primary importance. I don't think it is, not because I don't think resource recovery is important, in fact, I think resource recovery is inevitable. But, I think it will be brought about by economics, by economic squeezes from two directions. As natural resources become more scarce their price will go up. Therefore, it will be more attractive. As land disposals becomes more expensive, the costs will go up and there will be a squeeze from that direction which will take the resource recovery to a greater extent. I think there will always be a generation of waste and there will always be a need for land disposal. And, as these two price squeezes come about, our resource recovery will come about, automatically. And, this is a system that can be fitted in, anywhere along the line as it becomes economically feasible, without interfering with... it will reduce the waste-stream and that will be its effort. I think we need to consider, first, the basics of which wastes are being generated that are hazardous. We have to consider what we do, finally, with them. While I'm here, I think EPA is caught in a squeeze, itself, in the definition of solid waste, which includes liquids and slur<sup>ies</sup>. This forces them in the position of making broad definitions. The definition that a dump is anything that's not a sanitary land-fill is too broad. But, you can't narrow it down too much without getting into the areas of that Mississippi was talk-

ing about and others. Because, the geographic location is going to make a whole lot of difference in what is an acceptable sanitary land-fill and which is not.

Moderator: Thank you very much. Just step right, if you will.

Question: Mr. Canfield, Dan Marks, <sup>(Miami Paper Mills)</sup> I represent a company that's in the business of operating bailing plants, we own paper mills and box plants. Our primary concern is, we feel that our industry, in general, has reached a point where we see some stability in secondary material prices developing. We feel we're in a position to offer cities certain assurances that have precluded the re-cycling of material. Mainly guarantees to take certain quantities of materials; guarantees on minimum pricing and so forth. And, it's been our experience that it's very confusing to cities when we come and approach them to the availability of the central source-separation method for recovering, whether it's newspaper, or corrugated or high-grade office paper. They seem to have difficulty in understanding what laws apply, and who has jurisdiction and so forth. So, my point being, how can you make it simple for our industry to go to a city. How do they know if they're in compliance with the county and how does the county know if they are in compliance with the state, and the state in compliance with the EPA? That's question number one, and the second part is, we're concerned that source-separation- you said something that alleviated some of our concern and that is that source-separation

is compatible with this resource recovery. We've heard that, but we also see instances where the materials that we depend on for our finished products or industry, have been included in the solid waste stream and defined out of use by ourselves to be used for energy recovery. So, those are my two points.

Speaker Canfield: I don't know if I can respond to your second point, but your first point. We'll... I guess I can try to respond to both. Your first point is if a city is having problems trying to understand the legal problems of dealing with you, our kinds of panels and the kind of aid we try to give is to try to overcome those kinds of problems. I don't specifically know, I'm trying to follow....

Question: (Same Speaker) Let's say we want a city to engage in newspaper source-separation of newspaper. The cities express concern that they... that in the long run they may be in violation with the county's desire for some sort of resource recovery where they would depend on that newspaper for a fuel supplement. There's that kind of ambiguity. Are you following what I'm saying?

Speaker Canfield: Yes. I'm not familiar with any county laws or saying that one cannot re-cycle waste because the county or state wants to re-cycle in a different manner.

Question: (Same Speaker) There are those instances, but this may not be the forum to discuss that. But, secondly, the concept I'd like you to address yourself to expand on the source-separation not being in conflict with the resource recovery, I mean the Act.

Speaker Canfield: Well basically, I think we've conducted a number of studies, a number of people, independent people that conducted studies. <sup>The</sup> A National Center for Resource Recovery has conducted studies that basically says if you pull out all the newsprint. you can, you are lowering, in terms of energy recovery, the BTU value of that waste by a relatively small amount. And, a resource recovery facility <sup>could be</sup> ~~in the~~ economical by drawing from a larger radius of cities. Many of the times they are not regional systems in the first place. They can easily draw from a larger radius of waste. So, we don't think they seriously hurt the economics of a large-scale resource' recovery system; do not render that unviable.

Question: (Same Speaker) Thank you.

Moderator:. Ah- can I say one thing about that. It seems to me that the practical thing to do in a situation like that would be to advise these city people to sit down with the county people, state people and us, if necessary, or needed and discuss whose turf is where, and see what the conflicts are, if any, and if there isn't any, then certainly there wouldn't be any problem.

But, I don't really see how you're going to run into a conflict there with newsprint and those things that you want to point out. Source-separation, a lot of people that I've dealt with are certainly in favor of it's use in the waste stream.

Speaker Canfield: There is at least one facility that I'm aware of in Massachusetts that is not run by a municipality, but never-the-less receives waste from somewhere between twelve and sixteen municipalities in which the contract for that waste includes any material normally found in the waste stream. Which means that those communities that choose to have a newspaper collection program, separate from the delivery of materials to this plant, that that material recovered by the municipalities is the property of the contractor with the plant. So, regardless of the value of the materials over the years, the municipality cannot get the benefit of the revenues coming out of that waste stream.

Question: My name is John P. Lynch, I'm Vice President of Garden State Paper Company. And, as the world's largest recycler of used news into fresh newsprint, my purpose in speaking here today is to talk on conservation and recovery is to underline the value of paper as an important resource. I'd like to preface the comments that I'm making by saying that Garden State Paper, a subsidiary of Media General in Richmond, Virginia, has recycling mills in Garfield, New Jersey

Pomona, California and a joint-venture mill with Field Enterprises in Alsip, Illinois. These three mills consumed more than a half-million tons of used newspaper in 1976. We recently completed construction of a joint venture mill with the Mexican government. The mill, located two-hundred and fifty miles north of Mexico City, has an initial capacity of sixty-one thousand metric tons which is expected to be doubled in the near future. Much of the paper stock raw material for this mill comes from the southwestern United States. We have selected this public meeting of the EPA to make our statement because we are considering construction of a paper recycle mill in the State of Georgia. Our company has given continuous support to recovery and recycling of all resources in the solid waste stream, but today I would like to focus specifically on paper. In the months ahead, the municipalities, the counties, and the states that comprise Region IV will be facing decisions on how to manage the paper in the solid waste stream. An option they will be faced with is burning refuse for energy. An argument has been made that burning paper fraction of the waste stream for energy constitutes an efficient and beneficial utilization of that portion of the waste stream. We would like to emphasize that where a visible market exists for used paper, burning is not the best use of that waste in terms of energy or in terms of most productive utilization. When paper is recycled there is an offsetting energy consideration. According to an article in the Harvard Business Review that quotes the National Association of Recycling Industries, "the use of recycled fibres rather than virgin pulp in paper manu-

facturing results in energy savings ranging from sixty to seventy percent." In effect, burning old newspapers for energy is a gross waste of energy. To say it in a slightly different way, it takes the BTU value of two-tons of paper to make one-ton of virgin paper. Pre-sorting can make available considerable quantities of used newspapers and corrugated boxes for recycling, there will still remain in the solid waste stream a high percentage of paper that is contaminated and not commercially recoverable. The paper and boxes that have been separated at the household, office and business levels and not get into the waste stream will be available to the paper industries in the area. According to your own estimated figures, the elimination of this portion from the waste would affect the BTU value of the garbage by five percent or less. And, I don't really think the tolerance of these systems even accounts that. In addition, these recovered fibres can be used several times in the recycling process. And they will still be available for burning in the end as they eventually find their way into the contaminated, unrecoverable portion of solid waste. Therefore, we urge that in considering how to handle used news and corrugated, that the following steps be taken to develop guidelines for the most efficient use of this portion of the waste stream: First, that on municipal, county or state levels, surveys be made to determine what markets exist or could exist for used newspaper and corrugated as well as other recyclables. Second, that industries wishing to purchase these recyclable materials be given priority to do so. And thirdly, that in order to assure



the continuous and expected flow described above, that these industries be asked guarantee that they will purchase the recyclable materials specified for a reasonable number of years, at prices which will be to the advantage of cities or other sources to provide them for recycling. Finally, municipalities should reserve the right to exclude from contracts for the operation of Refuse Derived Fuel Systems (RDF) recyclable materials, such as newspapers and corrugated, recoverable through household and commercial source separation programs. We urge that proposed guidelines for identifying regions and for state solid waste management planning emphasize that materials recycling is a national objective which must be reflected to the maximum practical extent in State and local government plans. To accomplish national objectives for materials recovery for recycling into useful products demands that government at all levels must join with industry in a common effort to remove existing impediments to the achievement of these objectives. And we at Garden State certainly stand ready to help in anyway we can.

Moderator: Thank you. Next, go right ahead.

Question: I'm Jack McMillan with the Board of Health in Mississippi. I wanted to know if these funds are now available for technical assistance to local governments?

Speaker Canfield: We have not formally established the panels. We do give aid on resource recovery, we give aid on all aspects of solid waste management. We, specifically, have focused in resource recovery. We do have direct aid that we can give. We have contractors available to work with cities on a number of these problems, now.

Question: (Same Speaker) Are these panels from the national level or local level?

Speaker Canfield: These are not panels, that ah- we do not have panels. We established these before the Act. We're in the process of establishing before the Act. We have finalized contracts with three consultants, consortiums to give aid to local cities and to states. We have really not formalized the panel concept, yet. The panel is to include not just consultants, not just federal employees, but federal, state, local people giving aid to others.

Question: (Same Speaker) Those consultants you have under contract, can they turn-around and solicit the business of the municipality....

Speaker Canfield: No....

Question: (Same Speaker) ...that they are advising?

Speaker Canfield: No.

Moderator: If you have additional comments on resource recovery and conservation panel, after the gentlemen stepping to the mike now, I would ask you to hold that until the end, so we can move along. Yes sir, go right ahead.

Question: My name is John <sup>CONLEY,</sup> ~~Comer~~ and I'm from the City of Athens, Alabama. We're a city of about sixteen thousand. We collect our own garbage and trash. We also have a county system where it's collected by private contractor. We're interested in the Resource Recovery Act, we which we could implement it in the City of Athens in our accounting. But, we see a lot of difficulty in the collection of these items, the separation and collection of these items. The City probably can do this, but the county or private contractor, I don't see how we can do it unless they can meet the economic cost. Do you have any plans along this line?

Speaker Canfield: Your question deals with separating waste, separate collection of waste is that what you're...

Question: (Same Speaker) That's true. I know that if you go out on one shot, and you collect everything from the same household, if they haven't separated, how are you going to separate it when you get to your land-fill? Unless you have

a separate collection for your paper; separate collection for your glass; a separate collection for your cans and so on?

Speaker Canfield: Well, I think we do have information and guidance that does help make economic decisions as to how you should operate your collection system to separate those materials. I do know some of the people in the audience, for instance, I'm sure Garden State does give aid to places trying to figure out the best, most economical way to separate out newsprint for example. So, I think there is a lot of information that we do have that I can make available to you that may help you.

Question: (Same Speaker) Thank you, sir.

Moderator: The next item on this agenda is state program development and again we have Mr. Truitt DeGeare.

Speaker Truitt DeGeare: Back by popular demand. If you care to stand up for just a second, then sit back down. I've been getting to stand up. I really appreciate it, what you might feel. (Pause) Okay, let's not enjoy ourselves too much. We'd better get on with this program. We'll have more enjoyment, later. (Pause) Okay. Let's try to get on with ah-another part of of Sub-Title D of RCRA is that it talks about state and local program development. The RCRA recognizes that

the dominate role in solid waste management lies with state and local governments. The state may play a key role in eliminating open-dumps and also the regulating of the hazardous waste program. The governor, in consultation with local-elected officials can structure a mechanism for preparing and implementing solid waste management plans that build on an existing efforts at the state and local levels. At the federal level, the Administrator shall publish guidelines for identification of regions, state plans and state hazardous waste programs. Section 4002A of RCRA gives the Administrator six months to publish guidelines for the identification of those areas which have common solid waste problems and who are appropriate municipal planning regional solid waste service. This activity is a kick-off of a three-step process involving eighteen months according to the schedule contained within the Law. Within six months after the publication of guidelines, the governor of each state, after consultation with local elected-officials shall promulgate regulations identifying the boundaries of each area within the state which as a result of urban concentration, geographic conditions, markets and other factors is appropriate for carrying out regional solid waste management. The state then has another six months to jointly with appropriate elected-officials of general purpose units of local government, identify an agency to develop the state plan and identify one or more agencies to implement the plan and identify which solid waste functions will, under the plan, be planned for and carried out by state, by regional or local authority or a combination of regional or local or state

authorities. Existing, multi-functional agencies have an authority for solid waste planning and management shall be designated to plan and implement. Where feasible, agencies designated under Section 208 of the Federal Water Pollution Control Act shall be considered for designation. So, in summary, there are three-steps, the first is EPA promulgation of guidelines for identification of planning areas and regions. Secondly, governors with local governments, identify the planning areas and thirdly, governors and local governments identify the roles of the various agencies. Section 4002B requires the Administrator, after consultation with appropriate federal, state and local authorities to promulgate regulations containing guidelines to assist in the development and implementation of state solid waste plans. This is by April of 1978. Minimum requirements for approval of states plans include identification of the responsibilities and implementing the state plan, distribution of federal funds to the authorities responsible for development and implementation of the plan, and the means for coordinating regional planning and implementation under the plan, the prohibition of the establishment of new open-dumps within the state, and the requirement that all solid wastes, including solid waste originating in other states, but not including hazardous wastes, shall be utilized for resource recovery or disposed of at sanitary land-fills; provisions for the closing or up-grading of all existing open-dumps within the state, and provisions for the establishment of such state regulatory powers as may

be necessary to implement the plan; provisions that no local government within the state shall be prohibited under state or local law from entering into long-term contracts for the supply of solid wastes to resource recovery facilities; provisions for such resource conservation or recovery of the disposal of solid wastes in sanitary land-fill or any combination of practices that may be necessary for use or disposal of solid wastes in a manner that is environmentally sound. RCRA authorizes assistance to state and local governments in a number of places... both Sub-Title C and Sub-Title D. Within Sub-Title D, Section 4008A(1) authorizes thirty million dollars for 1978; forty million for 1979. For grants to states to be distributed to state, local, regional and interstate authorities carrying out planning and implementation of the state plan, as discussed earlier. This money is distributed on a population basis among the states, except that each state receives at least one-half of one-percent of the total appropriated. Section 4008A(2) authorizes fifteen million dollars each for fiscal years 1978 and 1979 for states, counties, municipalities and inter-municipal agencies, and state and local public solid waste management authorities for implementation of the programs to provide solid waste management, resource recovery and resource conservation services and hazardous waste management. This assistance shall include assistance for facility planning and feasibility studies, expert consultation, survey and analysis of market needs, marketing of recovered resources, technology assessments, legal expense, construction

feasibility study, source-separation projects, and physical or economic investigations or studies. But, such assistance shall not include any other elements of construction or land acquisitions or interest in land or any subsidies for the price of recovered resources. Agencies assisted under this sub-section shall consider existing solid waste management and hazardous waste management services and facilities, as well as facilities proposed for construction. There is a provision for assistance to special communities, for '78 and '79, two and a half million dollars for specific communities to identify. One community is allowed per state and one project per state, and the project must be consistent with the approved state plan. There's special concern in RCRA for rural communities, so financial assistance has been authorized, twenty-five million dollars per year for FY '78 and '79. These are grants to states for subsequent distribution within the states in order to help rural communities meet the Section 4005 dump closing requirements. Construction is allowed, but land acquisition is not allowed with these funds. They are tight criteria and relatively complex allotment formula. And the community must be fairly well isolated and unable to avail themselves to other systems on a regional basis. The assistance and funds that I've talked about they were all discussed in terms of what was authorized in the Act, and at this point, that has no relationship to available funds and the amount to be made available in the future, we're unable to see at this time. So, I wish to stop now with the comment that I don't think



you should be stopping any on-going efforts that you have underway, or contemplating simply to await some federal funds to help you.

Moderator: We welcome comments now. We welcome comments now, go right ahead.

Question: I'm Mike Mc<sup>ANELLY</sup>~~Connelley~~ with the Central Midland Planning Council in Columbia, South Carolina. With respect to the Central Midland region, the resource recovery and conservation recovery act do provide opportunities for one continued progress in the development and use of both collection and disposal practices within the region. And second, for achieving a greater role for resource recovery in the region. Almost four years ago, in June of 1973, a solid waste management plan<sup>N</sup> for the central Midland Region was completed. And, I'd<sup>like</sup> to parenthetically comment that this was using flood-funding which was available at the time, and the plan was adopted by twenty-one local governments working, jointly, through the regional planning council. The plan includes an analysis of the projected solid waste generation through 1995 for solid waste districts within each of the four counties within the region. It ~~includes~~ an evaluation of current solid waste practices, laws, or<sup>d</sup>finances, and a profile of solid waste management goals and objectives, feasible alternatives for collection, and disposal equipment processes and services were examined, and plans and recommendations were developed for each of the four counties and for the region, as a whole. It's noticeable that this plan does not

address the potential for resource recovery recycling at any depth. But, rather deferred this to a later time when it would be more economically and technically feasible. Since the completion and adoption of the regional solid waste management plan major steps have been taken by local governments to implement it. Much improvement has resulted in the collection and disposal elements of solid waste management within the region. There are many problems that remain, but a pattern of local action and inner-governmental coordination has been established. An organizational frame-work exist for effective regional planning, and coordinated local implementation of solid waste collection and disposal efforts. In developing the regulations and guidelines for the Resource Conservation and Recovery Act, these previous investments and actions of many local governments should be recognized and substantial flexibility retaining to allow state and regional planning and implementation to build upon the past efforts. The new planning regulations and guidelines should also provide opportunities for areas which are fairly advanced in the disposal practices to place major emphasis on the collection and the resource recovery elements of a regional and local program. I might add just a couple of other comments based on what's already transpired tonight and I guess they relate back more to public participation presented earlier. It's been stated that there are many more meetings of this nature planned to secure input, and I would recommend that if at all possible, these meetings be held on a state-basis. If you are serious about trying to get input from the people at

the working level, it's very difficult for them to get to a meeting of this nature. And second, that I think the issue papers that was available at the door is very valuable and provides a lot of useful information. But, it needs to be distributed in advance, so that people have time to react to that. I thank you for the opportunity to comment.

Moderator: Thank you very much. You'll have to step right up. We'll move right along.

Question: My name is Richard Simmons. I am City Manager of West Palm Beach, Florida. But, today I am speaking on behalf of the State of Florida Resource Recovery Council. In 1974 I was appointed by Governor Rubin Askew to serve as Chairman of the C~~o~~uncil. Many of the things the previous speaker said, I think would apply state-wide to the state. So, I'm going to skip through some of this and give you my written report. I would say that it's an entirely comprehensive plan, the adopted guidelines, the designated area plan for resource recovery. I think we're ahead on a lot of this stuff that it's been done. But I would like to commend specifically on portions of the Law. Public Law 94-580 authorizes a preventative medicine, not voluminous prescriptions for everything that ails us. So let your guidelines be simple guidelines, not detailed specifications. Specifically the guidelines for identification of planning regions mandated in Section 4002A, and due almost immediately, should not be written so narrowly, originally, that Florida and many other states

would have to redo something that has already been done. Several states now have four or five years of solid waste planning experience. During the past two years, Florida has accomplished the objectives of this Section and used the same guiding criteria contained therein to do so. Similarly, in the guidelines for state plans, Section 40<sup>2</sup> all eleven of the guiding criteria in sub-sections have been considered in Florida. Likewise, we believe the Florida program also meets the minimum requirements in Section 4003 for approval of state plans. Although the judgement will be yours to make, of course. Likewise, we believe Chapter 17-7, Part II of Florida Administrative Code adopted by the Florida Environmental Regulation COmmission in '76 accomplishes the objectives of 4006. You can appreciate the time consumed by public hearings and meetings, members of the staff and council have already participated in close to seventy-five public meetings and numerous hearings. The Department of Environmental Regulations invested eighteen months of extensive staff time to carry out it's responsibilities under Florida law. You will find this eager to cooperative process. In connection with points two and three above, Section 401 makes it absolutely clear that the objectives are of Sub-Title D States Solid Waste Plans are to assist, and this is underlined. And I emphasize assist. Section 4001 states further that these objectives are to be accomplished through federal technical and financial assistance to a state. Assistance, not

regulation. And, Section 4001 concludes by stating that the federal guidelines are to foster cooperation among federal, state and local governments and private industry. Cooperation, not regulation. We in Florida accept the regulatory provisions of the Act where the Congressional intent is clearly regulatory, such as Sub-Title C Hazardous Waste Management. But, we oppose any attempt to encumber the several guidelines in Sub-Title D with regulatory intent or language when such is not authorized. We have similar concerns about the various solid waste information guidelines required in Section 1008. Clearly these guidelines are supposed to provide positive, helpful guidance, not regulations. We suggest that this information be presented in a format that is brief, readable and practical. I have no comment on Sub-Title C, since hazardous waste management is appropriately under the jurisdiction of the Department of Environmental Regulation. We see a potential problem in Section 4004 when later this year EPA must define sanitary landfills versus open-dumps. We believe the intent of this Section is to close, up-grade and ban open-dumps through state regulation and enforcement, not federal regulation of local <sup>A</sup>sanitary landfills. True, one man's sanitary land-fill has often been someone else's open-dump, so we endorse the need for standardization. But we also stress the vast differences in geological and hydrological conditions from place to place and the danger of undermining state regulatory programs that are already in place. The special studies for glass recovery and for small scale technology authorized in Section 8002 are urgently needed and I encourage you to schedule and complete them as

soon as possible. The model codes as authorized in Section 8003D are also badly needed, much more so than some of the other items. For example, our staff ran a search through EPA's Solid Waste Information Retrieval System on the title to ownership of solid waste, and legal precedents for its use in local ordinances and contracts. The search did not yield anything we could use. In fact, we have found research on legal and institutional issues in resource recovery is lagging behind the word on economic and technical evaluations. EPA has new and broader authority for technical assistance under Public Law 94-580. We believe that any private firm retained by EPA to render assistance to state and local governments should be ineligible for follow on contractual work with the recipients of the federal assistance. Appropriate state agencies and officials should receive proper and advance notice of EPA assistance activities within the state. The resource recovery teams authorized in Section 2003 should be assembled and assigned in a manner that will avoid both actual and potential conflicts of interest. Federal financial assistance is also authorized in this Act. In good government fashion all the monies authorized under the Act are tied to planning requirements. However, it appears that for many states and local governments... it appears that for many states and local government completion of the various requirements will come well before the federal funds. If the earliest availability of funds is Fiscal of 1978, widespread distribution of those funds appears to be unlikely before 1979. As I mentioned

earlier, if our proposed amendments are passed, Florida local governments will be required to submit their plans in 1979. In short, a concentrated effort must be made to obtain ample appropriations and rapid distribution of funds or else reimbursement should be allowed for planning expenditures already made. And I would underline this because many of the states, as the man who just spoke pointed out they have done a lot and I think you ought to take this into consideration, giving them those funds back. In conclusion, we wholeheartedly- we concur wholeheartedly with the view of Sheldon Meyers, Director of EPA's Office of Solid Waste, that the Law does not provide all the answers to complex issues, but instead, establishes a pattern for interaction and assumption of roles by all the key parties involved in solid waste management and resource recovery. You have a difficult job to do. But your tasks are no more difficult than those placed upon the state and local governments. We must work together. And you may be assured of our interest and cooperation.

Moderator: Thank you very much. Ah- step right up.

Question: Tom Tiesler with the State of Tennessee. I saw the inside of something that the last speaker just said in talking about the states role, and I think that it's clearly the intent of the Act that the states have input into the Act and that they be responsible for implementing parts of the Act. I think every speaker here tonight has said that that's the intent of the Law. Yet, when I go back and talk to my people

that are involved in the Safe Drinking Water Act or Water Quality Control Act, federal Act, I tell them, I say, I've been talking to the EPA's Solid Waste people and they're listening and they're going to take the states input, they sort of just look at each other and smile and say that guy's going to learn before it's all over with. (Laughter) But, you know, I'm just a babe in the woods, I guess. But, I think if you are sincere about the states taking the program and the states implementing it, the only way that we can do that is that the states are on the front-end of drafting the guidelines and the regulations. And I think it's good that after they've been drafted, the states can comment on them, but I have a feeling in human nature that sometimes if someone has drafted a regulation, and I'm the same way, and I've written it down and back and forth with my own people, you've sort of got your mind made up. I think it would be better if at all possible to let the states get involved on the front-end in putting the regs together. If they've been sitting there during the discussions, because, afterall \_\_\_\_\_ (this word was indistinguishable) say during the last thirty years or so, I think most states have been in regulatory solid waste business, has the experience, and they know what the local problems are, they know a lot of the regulatory problems are, they know a lot of the regulatory problems. Some of the states have been involved with grants programs, some of them are very much into resource recovery, some have on-going



hazardous waste programs. I think the EPA ought to take the benefit of the states. I sincerely believe after talking with my boss back in Tennessee that the guidelines written that the states cannot live with, that they don't feel like they can handle, that they'll turn around and say, here in EPA, you all handle it. I don't think that's what we want. I think it can be prevented if the states can sincerely have an input in directing the regs.

Moderator: Thank you, Tom. Anybody else, step right up. In the meantime ah- go right ahead.

Question: I'm Bob Lloyd with the Appalachian Council Governments in Greenville, South Carolina. The gentleman who just spoke mentioned something about existing agencies, multi-functional regional agencies that are authorized by state law to undertake solid waste planning, and I think that he left out a phrase there that's related to appointment by the governor. One of the problems that we see in South Carolina in terms of the states involved in establishing which agency will do the planning and which areas will be involved. It seems to us that there is a very heavy emphasis on decision-making by the state, and I think the point that the gentleman from Tennessee just made with regards to state input into EPA can be very well taken as far as local input into the states. I'd like to see, if at all possible, for the EPA guidelines to emphasize the fact that once areas are design-

ated as solid waste areas for planning that the input from local officials be done within those areas, and that the agencies that might be designated for planning purposes would be much more acceptable to the local officials within a given area, than might otherwise be the case. I think the point has been made several times here that there are substantial variation among areas within states. This is something that would be of great concern to us, as I'm sure it would be to the gentleman from Columbia, South Carolina, because we are two different regions and our responsibilities and problems are somewhat different. Also, the level of activity is somewhat different. I think this would be useful for EPA to consider.

Moderator: Thank you very much. Go right ahead.

Question: I'm Ben Druse from Florida. I propose what that gentleman from South Carolina just mentioned. This problem of designating areas to do regional planning presents a lot of problems, not only in Florida, but in other states, because the degree of expertise that's available in various areas of the state goes from zero to a hundred-percent. And ah- what's our governor going to do, he'll look to us for advise, of course. But, when you have perhaps a dozen planning areas and only about a half or two-thirds of them have the expertise to even start a solid waste management plant, where do we go with those other districts? You got

an answer on that, Truitt?

Speaker DeGeare: No.

Question: (Same Speaker) Well, I'll phrase it another way. What options does a governor have in the light of that kind of a circumstance?

Speaker DeGeare: Just off the top of my head, and that's where I'm coming from right now is... one option would be to designate the state agency to plan that particular area, or to restructure the area so that some of the skills available and expertise in adjoining areas could be used in the area that doesn't have that capability. In other words, we identify the boundaries so that you do have a planning instrument that will stand on its own feet.

Question: (Same Speaker) Then you get into a problem of staffing, again, this gets to be the nitty-gritty part of it, whose going to do it? But, I know that's not something that you can answer at the moment, but I wish you'd give it serious thought, because it's going to be a problem for not only our governor, but the governor of Louisiana and all the rest of them. Another thing, it's a little confusing in the Law as to what the actual base for a state to put in to submit their state plan. It says a hundred and eighty days after the date of the enactment of this section. Now, where does that one-hundred and eighty days start from? October 21

of '76? But, then that's the publishing of the guidelines, then how long does the state have after the guidelines have been published to submit their plan? That isn't clear to me in the Law. I haven't been able to verify it. (Laughter) While you're looking that up, let's address a question to the young lady in information. Do you happen to plan a reader's digest of the Law that could be used for desssiminating information to local communities so that they get a little feel of it before we start talking to them?

Speaker Wyer: I've been told that the information <sup>as it is</sup> ~~is~~ produced by our three divisions and given into our Information Office, we will get it published and send it out.

Question: (Same Speaker) Well, I wouldn't think in terms of the guidelines that you're going to be publishing. I'm thinking of a boiled-down of the significant factors that the local communities are going to be faced with when they try to implement the provisions of the Law.

Moderator: Excuse me Ben, do you think that's what we should do? That's why we're here, to find out....

Question: (Same Speaker) I, ah- well, that's a suggestion, at this point.

Moderator: You recommend that we do that?

Question: (Same Speaker) I certainly do, because you can hold meetings all over this state, and you're lucky to get... oh- suppose we held meeting in Florida we'd get a hundred at each meeting, we're lucky. That way we're talking about six-hundred people, and we've got eight and a half million down there. That's the problem. If we could have a mass-mailing through the proper people, city and county officials, planning councils, and so on.

Question: ~~(Unidentified Speaker)~~ <sup>Mose McCall</sup> Ben, the National League of Cities, is right now, planning to do mass-mailing on anything that is made available. I was meeting with them this morning and of course that would come out of Washington, and I assume would come to people like the Georgia Municipal Association or perhaps, directly to the cities. Jim, how would they normally work that?

Moderator: They usually send it to us, then we would send it out to each of the cities.

Question: (Ben Druse) There's got to be something, Mose, that's going to be easily understood. Not the detail that you or I....

Question: (Unidentified Speaker) Hell, if it comes out of Washington, nobody's going to understand. You know that.  
(Laughter)

Speaker DeGeare: Ben, I couldn't find a date. I don't think I understand that thing numerous times I've....

Question: (Ben Druse) I've read it three or four times, I can't find it. Does anybody in the audience have a feel for when the states are suppose to submit a plan? (Pause) It's not in the Act, you can't find it there.

Speaker DeGeare: I'd like to mention that ah- in January's edition of Waste Age Magazines ~~(name of magazine was indistinguishable)~~ there was a... what I thought was a pretty decent synopsis of the Law.

Question: (Same Speaker) You mean the boil-down?

Speaker DeGeare: Yeah, the boil-down, it was written by Eric ~~Kiesler~~ <sup>ERSTON</sup> and to me it made sense, it was reasonable. So you might want to get a copy of that if you want.

Question: (Same Speaker) Maybe we can plagiarize it..

Moderator: Walt, perhaps you can influence ah- ~~Jerry~~ <sup>by</sup> here to have our information people to get a reprint of that, if it will serve a purpose and there's no point in doing it again. Go right ahead, Ron.

Question: I'm Ron Cooper from the State of Tennessee. I'd like to comment and ask a question concerning the training

and man-power development. A few years ago we had an Institute of Solid Waste Management Training and EPA, in its wisdom shut this down, to the detriment, I guess of state and local people. Tonight I want to mention that an individual with the air program is going to be selected to determine the training needs of solid waste management programs. I'd like to know why the person in the air program is selected and what his qualifications are?

Moderator: I can speak to that, Ron. That is not the only thing this gentleman has got to do, as I understand it. To clarify that a little bit for you. Number two, the need is for staff people to look into this question and that leads you, immediately, to where are these staff people going to come from. And, they asked for volunteers, and this particular gentleman happened to volunteer. He just happened to be from the air program. He happened to be from Atlanta, from our Office. I do know, personally, that other people were asked to do that and didn't feel that they could leave their particular office at that particular time. When they want it done for that particular length of time and so forth. It's not that being from the air program had any significance at all, as far as I know. ~~Moses~~ you've been standing up here a long time.

Question: Moses McCall, again. This time I'm not going to be speaking for the state, I'll be speaking for the National Governors Conference, also the Association of State and Territorial Solid Waste Management officials. And I would just like

to re-emphasize, I guess, four points. One, Truitt<sup>2</sup> talked awhile ago about the authorization, and I think that the authorizations in the Act are sufficient to allow reasonable implementation. The appropriations, however, are not there. I think it's important that EPA and the current Carter Administration recognize the fact that we are going to have to have realistic appropriations, if we are going to get about the business of adequate implementation of the Act. Number two, ah- nobody has mentioned 208 tonight. So, I thought I'd have to bring that up... you did. Okay. We definitely, in this Act, don't want to get into again the bloody battle that we went through in implementation of Section 208 of 92-500. The Act says that 208 agencies shall be considered where feasible in designation of local, regional planning agencies. In some cases I think that the 208 agency is the logical choice and others probably it's not. Therefore, any guidelines coming out of EPA should definitely not make the state designate the 208 agencies as the solid waste planning agency, the option should be open. Number three. In terms of designation of local regional planning agencies, I think the latitude the governors held in this respect in consultation, of course, with the local elected-officials has got to be very broad and very flexible. You can't bind them into a small, tidy box and expect that the job is going to be a wide latitude, a lot of flexibility for the governors for the various states. And then, number four. Don't re-invent



the wheel. The point has already been made where we have adequate planning agencies established by state law, in California, for instance, where counties are designated by state statute as the local planning agencies for solid waste management. Those agencies must be allowed to stand. The guidelines that come out should not eliminate what has already been done.

Moderator: There's a book that was left out here at the registration desk, it has a Mr. Williams, if he'd like to claim it, I have it here.

Question: My name is Jeff <sup>B</sup>~~F~~lood, and I represent the South Alabama Regional Planning Commission, based in Mobile. And talking about bloody battles, we're pretty familiar with it. We're faced under a HUD 701 Program to come up with a regional land-use and housing program. We have a very active 208 program. We're in the coastal zone management program. We had the Tennessee Tom Victory Water-Way Project that's going to end up in Mobile. We've got a \_\_\_\_\_ (this word was indistinguishable) facility, and we've got the United States Army Corp of Engineers 404 Permit System. This has come on us over about the last three years. So we don't want to bother you with the battles. I have three questions. One of them is the funds going to be coming down at the air filter down to a southern agency on 208 or regional

planning commission? Is there a matching requirement on these funds, or will they be a hundred percent grant?

Answer: (Unidentified Speaker) Yes. (Laughter)

Speaker DeGeare: I don't think the Law provides for that. We've had a ninety-five percent maximum policy. But, we're open to your suggestions. I assume you might suggest a one-hundred percent grant.

Question: (Same Speaker) More, if we could get it. (Laughter) But, I'm sure, based on the experiences we've had in some of these bloody battles, if the match was higher than that, I think EPA is going to be running the program instead of the states and the sub-districts. Second item, is there any funds in the program for capital equipment? Especially in small communities, you're talking about building, planning and implementating in all these communities that our agencies represent, I imagine, a lot of these other regional planning agencies are very small communities, with budgets of fifty-thousand dollars and less. If you are going to put these requirements on them, is there going to be any kind of capital money there for capital equipment, or tie-ins with another program?

Speaker DeGeare: There's a statutory definition for the term implementation and that is pretty restricted. The exception

provided for in that definition is for the real communities' assistance program. I think it's twenty-five million a year for two years that was authorized, and that money could be available for capital equipment in that position.

Moderator: The money is authorized, I might hasten to add, that if you take the number of cities of that size and the number of counties with that sort of population nation-wide, you're going to find that even if the total amount authorized is appropriated, it's going to be spread quite thin. Which, I think, leads the states, in particular, and us along with them, into a problem of deciding who's going to get what is appropriated and who is not going to get it.

Question: (Same Speaker) Well, that's no different than the HUD Community Development distributing their grant program, or EPA or any other. I mean, I'm glad I'm not going to have to make the decision, but hopefully, you'll consider the smaller communities that ah- and you won't be placing these requirements on them. That you are going to come up with some kind of funding source so they can meet the requirements. The next question I had is, if the money does come down from these smaller agencies, is it right to assume that part of that money can be used for citizen participation programs in the planning process? Even if there is an on-going 208 program, is that correct?

Speaker DeGeare: I don't know of anything that would preclude that.

Moderator: It seems reasonable to me that you're going to have a program that is accepted by the public here, you must do that on the front-end and carry it forth. Otherwise they won't care to implement it.

Question: My name is George Elder with the Georgia Solid Waste Management Program, and I'd like to address two aspects of resource recovery economics. In the first of these, I think we need to be realistic when we talk about economics and resource recovery and solid waste management. Garbage is a liability, and we would hope that EPA would address the extent of liability that should be born and by whom. When a community has a consultant come to them and say, we can get you a six dollar profit per ton on your solid waste, how do you deal with that? I think we have to identify some of these parameters in terms of the liability and who should absorb it. The main economic issue in resource recovery seems to be the fact that there are artificial benefits for use of virgin materials. When a timber company can buy an acre of land, hold it for six months, sell the timber and gets, not only the profit, but can also claim capital losses for tax purposes, are they going to use secondary fibres? Well, no they're not. The

scrap-metal industry probably has in present capacity to provide probably twice the amount of raw material in form of scrap without adding to this additional equipment. There's no market there, because of artificial incentives to use the virgin ore. I think this has to be dealt with, if we are to get into the resource... the economic aspects of resource recovery. So, let's not promote resource recovery based on environmental considerations, and judge it by another standard, that of economics. Because I feel that it's really not acquired. Basically, I would like to ask two additional questions. Will bond guarantors back funds based on RCRA. Specifically, in states or communities where there are limitations on contracting and on bonding?

Speaker Canfield: Based on RCRA... Would you explain that question to me a little... if you have a banker or someone to guarantee....

Question: (Same Speaker) I would think that there is a statement in there that would allow communities to enter into long-term contracting, ah- for resource recovery purposes.

Speaker DeGeare: There is a requirement in one of the sections that says the states, ah- as part of their plan or part of one of the things they have to have in an acceptable plan the ability for cities to enter into long-

term contracts that certainly is a barrier that does make resource recovery more attractive to someone wanting to finance a system. So, yes, it does add to the ability of someone to finance a system. But, it's not going to guarantee it, of course. There are a whole number of factors, one we're going to look at before one would guarantee the financing of the system.

Question: (Same Speaker) Thank you.

Question: Bob Lloyd again, with the Appalachian Council in Greenville, South Carolina. I just want to make one response to what Mr. DeGeare said, in response to the gentleman from Florida with regards to sub-state districts that have, or do not have capability. If I can be presumptuous, I'd like to speak for some of the local officials that I work with who are very much concerned about federal mandating of certain types of multi-functional or multi-jurisdictional, I should say, regional agencies. Many of them are saying in our state and in other states, don't make us deal with any other different bodies at the regional level. And, I think this is something that ah- if at all feasible, existing sub-state districts should be honored. I think this is one thing... that where they can be honored, they should be. If they have to be the 208 agency, that's just another factor. But, there is a fairly extensive sub-

state district planning capability in about forty-five states. And, I don't think EPA should sell that thing down the river without looking very hard at it.

Question: Donny Alberts from Land-to-Sky Regional Council in Nashville, and, by-the-way, we are 208. I didn't come down here to make any statement, I just come here to find out what you're talking about in solid waste because that's one of your priorities for 208. So, I've just got some observations that I want to share. And that is, let's don't jump in head-first, especially when we can't determine the depth of a sludge and the pits and ponds and lagoons. I'd like to compliment EPA on how it had this meeting, tonight and get some replies. It shows, I think, a true understanding of the process involved in something like 208, because now EPA is being told that the states will say, you can keep your money, we don't want the program. And, you've got real strict guidelines and things that are changed over and over again. This costs time and money. So, I think what we ought to do is maybe do something probably is do something that's probably impossible in terms of the Law. And let's take it a step at a time. Let's have EPA look at the various states in the various regions of the Country, in terms of solid waste and get the information together. As far as the states are concerned, look at the various regions within your states, and don't jump into the thing head-first.

Go ahead one step at a time, because if we look at the things we're talking about tonight, a lot of them are going to be technically impossible, right now. And so, I think we need to look at it very slowly and take it... and learn from the past mistakes and some of the other programs.

Moderator: Thank you. Go right ahead, **Devon**.

Question: I'm <sup>D</sup>Devon Bogue (~~Last name was indistinguishable~~), representing the Fulton County Health Department. If you don't know how to spell my name, I'll talk with you, later. I'm glad to respond to Jim's early invitation to talk because I was afraid that the locals haven't been invited. I looked at the Act and I really couldn't see a role defined for local agencies who are concerned and who have a possible role in the program, and have the resources and capability. I think in many respects local health departments, particularly those with strong environmental programs in the sense of public health appreciate Jack's comment about the public health coming back into the solid waste picture. But, they need to be involved, because, I think we're root of the problem, and to coin a phrase, we're searching for an identity. We think that the local governments, at least I do, may have specific roles, already. Roles that could be defined within the parameters of this Act. I'm a little distressed to words used in your literature or your presentations such as



that concerning the state being handed the dominate role. I would prefer that you say the leading role or leadership role. And contend that RCRA not retract whatever it is, needs to define the role for local government intitities in planning, in resource recovery and in hazardous waste management. Some of us do have programs and interest that... to which these resources could be addressed. Right now, for instance, we are mounting an air pollution control program. We're dealing with industry from day-to-day basis, and I contend that we could be a great assistance to EPA or to a state agency, or even in a singular role, could make a lot of progress in these areas. Another area that's ah- close to my concern, and being an old solid waster that knowing that solid waste quite often is not hazardous in itself, it may be hazardous because of where it is. We deal, on a day-to-day basis, with problems in communities and urban areas where solid waste has become a hazard. Such things as abandoned automobiles in low-income neighborhoods. It's almost a resource, but it's a hazard. It requires many of the public health officials to be concerned about that waste, where it is. And we spend tax-payers' money to account for the problems that they create. Yet this Act doesn't seem to be addressed to things of this nature. If money can be provided to help buy tire-shreaders, why not help buy automobile shreaders, or help remove that car from where it is to where it can be recovered. These are the kinds of things that we face from day-to-day, as local responsible people.

And I feel that we should have a role and some mechanism established where we could participate.

Moderator: Thank you very much. We will hear comments on any portions of the Act, or anything we've said here tonight that you'd like to say.

Question: Jerry Perkins of North Carolina. I can tell the word about the new Act is getting around in our state, because of the questions I get in my office. Ah- our rural communities are interested in the rural assistance, that is authorized in the Act. Regional governments are interested in any planning monies that might be available. Our urban municipal population are interested in solidifying any innovative ideas that they have developed concerning the resource recovery and recycling that haven't had adequate resources to complete this solidification. Along with this interest comes ah- two questions. One is what role will the state play whenever their package or request for assistance is provided? And the other one is, how soon will the money be available? So, Mr. DeGeare, if you would, provide some clarification as to what is meant by dominant state role.

Speaker DeGeare: To me in reading the Law it's obvious that Congress placed the state to- that is, identified the state as the primary action point for implementation of the Act.

With regards to Sub-Title C, the states can pick-up on the action under that part of the Law, with regards to Sub-Title D, it's obvious throughout that the state has the primary role. The state is, to identify, the governor and state are mentioned so many times that it's obvious that the primary action role is with the state. They are to identify the regions for planning; they are to work with the local agencies in determining what the relative roles are going to be in the planning and implementation process. That's all discussed in Section 4006. I don't think it's a matter of the federal government coming in and dictating what's to be done. It's a matter of the Law saying that the states will get together with local and regional governments and come up with a plan to identify who is going to do what, with regards to solid waste management in the various areas of the given states. They will identify the responsibility; they will identify how the funds will be disbursed, should funds come available to that state, either directly to state agency or to the sub-state committees.

Question: (Same Speaker) Does this approach suggest a priority rating on a request or will there be any guidelines from EPA concerning criteria for developing a priority list?

Speaker DeGeare: Request for what?

Question: (Same Speaker) Request for federal assistance, whether the request came from the rural community or an urban area? In

other words, somebody has to decide who is going to get what.

Speaker DeGeare: I don't know how that decision is going to be made. As to whether funds will be made available for that particular portion of the Act as opposed to another part, I'm- ah- I'm concerned with. Once we get funds into a particular section of the Act, for example, rural communities, we can deal with the formulas for disbursement among the state. I don't think I can answer your question.

Moderator: Well, let me suggest that there was fifteen million authorized for implementation grants. I think Jerry's question is, how and who decides, assuming all that's appropriated, how would we decide, or who decides whose going to get the fifteen million dollars. That's his question, as I understand it.

Question: (Same Speaker) We're all familiar with some priority systems in the water program, and the facts that based on. If you come from a rural area or small town, you know, where does that put you? It puts you on the bottom of the totem pole, and you don't feel too good about that. Do you get what I'm saying?

Speaker DeGeare: Okay that's something we haven't dealt with, yet. Primarily because we don't see any dollars yet to deal with and we've got other things under the Law that we ah-...

Moderator: Perhaps we may need to develop some sort of guidance for you as a state solid waste agency, presuming the governor designates you to take care of this particular thing here. But, we'll be most interested to hear from you about how you think we should do that, or how do you think you ought to go about doing that. Would you want us to tell you exactly how to do it, or would you want us to tell you just to do it and give you the money? How do you feel about that?

Question: (Same Speaker) Well basically, I was searching for the intent of Congress when they passed this Act, and we'd like to take it from there. No, we wouldn't want you to dictate to us.

Speaker DeGeare: I can't recall anything in the Act that would dictate a prioritization of Congressional intent.

Moderator: Is there another comment or question or observation that anyone else would like to make?

Question: (Unidentified Speaker) One question I failed to ask, does this Act cover septic tank pumpings. Is that a hazardous waste?

Moderator: You want to speak to that, Walt?... It has to do with whether or not it meets the criteria is the answer....

Speaker Kovalick: That's the answer.

Moderator: Sorry about that. If there's not any more comments, as you know, we're going to have an identical session tomorrow. We'd be more than happy to have you come back and join us. Perhaps you would think of questions over the time between now and then, that you would like to bring up, tomorrow. If you don't care to join us tomorrow, we're most appreciative of you being here. I would ask you to clear the room, if you want to visit and talk, please do it out in the hall. I need to get this room straightened up and the equipment secured, and so forth. So, the ones of us that do have to be back here in the morning can be on our merry way. Thank you very much.

THE  
ENVIRONMENTAL PROTECTION AGENCY MEETING  
TRANSCRIPT

on

THE RESOURCE CONSERVATION AND RECOVERY ACT OF 1976  
P.L. 94-580

SHERATON-BILTMORE HOTEL

Atlanta, Georgia

Thursday, February 24, 1977

8:30A.M. - 12:00P.M.

H  
James M. Scarbrough, Moderator

This is to certify that the attached proceedings were held as herein appears, and that this is the original transcript thereof for the file of the Environmental Protection Agency.

M. Ann Hackney  
Reporter  
WHITE'S PROFESSIONAL SECRETARIAL  
SERVICE





#### THE PROCEEDING

Moderator: Good morning. If I could have your attention please, we would like to get started. My name is Jim Scarbrough. I'm with the Solid Wastes Program, the Region IV. Our office is here in town, as you know. I'd like to ask you that if you smoke, to sit on the right-hand side of the... my right, side of the room. If you don't smoke, you sit over here if you don't want to breathe someone else's smoke. We'd appreciate your cooperation. To give you a feel for how we're going to run the meeting, we'd ask you to please not make read or written statements that are over five minutes. If you have a written statement and you would like to have it entered into the record, we'd be happy to take it. We will keep the record open for written comments until March 11th, at that time, if it has not been received in my office, it will not be accepted. The transcript of this meeting and the meeting last night... last night we had an identical session, will be published. It will probably take us six to eight weeks. If you've left your name with us you will receive a copy in the mail. If you have friends or know people you think would like to get a copy, if they would contact us at the Regional Office here, our address is 345 Courtlan<sup>d</sup> Street, Atlanta 30308 or, if you prefer, you may call and the telephone number is (404) 881-3016. We'd be more than happy to send you a copy. We'll have presentations from staff people from the Office of

Solid Wastes in Washington. These will vary from five minutes to fifteen minutes long, and at the end of each presentation, we will accept questions, comments, anything other than throwing rotten fruit at us until the appointed time for the next agenda item to start. Then, at the end of the last agenda item, you may make comments on anything that you feel like, any of the topics that we've covered or other things that was covered in the Law. If you wish to speak, please move to one of the microphones, give your name. If it's hard to spell, please spell it for the court recorder so that we get it correct in the record. Please use the mike and feel free to step right up and don't feel like you have to wait until the guy that's speaking gets through. Just move right up there behind him so that we can save everybody's time and get as much done as possible in the time that we have. We also ask you to give the name of the organization that you're representing, or if you don't represent anyone other than yourself, to please let us know that. And I would ask you to speak on a first-come-first-serve basis. There are two mikes over there in the center isle and there's one up here that we can use. So, we'd ask you just to step right up and let us get it moving. We have with us this morning Mr. Alec Little to welcome you here. He's our Deputy Regional Administrator for Region IV.

Speaker - Alec Little: Thank you. Morning. It's always good... I was here at 8:30. I thought that was when it started, so it's much more encouraging to see the meeting actually starting at

9:00 o'clock. If you want to throw the fruit it's okay, I'll be leaving shortly and anytime after that will be alright. Let me say that there is one group that I know is represented here and that is... and everyone of you are members of it, and I think they call it tax-payers. And it's always encouraging to see people come out to see how their tax monies are going to be spent. Perhaps you're going to be receiving some of them in salary. I think there's got to be a lot of government officials here, there were last night, I'm sure. But I know there's a lot of citizens, as well. I'm hoping that there are a lot of people from industry because this particular Act certainly affects the industrial sector in our Country. We're glad also to see that all of the southern Baptist didn't go to Washington. I can tell that from the empty front rows up here. There are some seats all the way in the back, if any of you really want to go all that way. But, I'm hoping that you will participate fully in this program as Jim has suggested. Please ask you questions, because we need to hear those. That's exactly what this process is all about. In the past few years we've tried to have, in all of government, I think, a lot more public participation. And that means that you've got to come and ask your questions. You've got to write them down. You've got to do it in any way you can to let us know if we're doing what you want us to in the programs that have been adopted in Congress, and that we in the federal and state and other sectors administer. The program of resource recovery, which I'm glad to say, does have

that name right at the moment, and this wasn't the Solid Wastes Act of 1976, that we've progressed quite a bit just in that name, itself. I believe that if I was starting over again in this area of environmental protection that this is probably the program that I would like to go into, that has perhaps more prominence in terms of pay-off, conservation, perhaps energy creation or many other things that can be done with what we call now, a problem. I think that those of you that are here that represents programs that will be administering this should be very proud of the fact that you're in it. As I was talking to some of the people here a little bit earlier this particular program has not been one of those in the federal or state sector or local either one for that matter that's received vast amounts of resources. Yet, I think those of us that observe the environment around us and what's been happening to us, probably can observe more in terms of problems with out solid wastes than we can with either air, water or pollution, even though those two have received most of the support. And I'm not belittling those particular areas. I'm just saying that we're perhaps a little bit slow in getting this one underway. I'm personally proud that we've got these people up here this morning from Washington to hear what you have to say out here and down here in the southern country. And I hope, again, you will speak forward, ask any questions you want to. Let's fill-up that record for this particular meeting. Thank you for coming. Good to see all of you here.

Moderator: Thank you, Mr. Little. I will give you a short overview of the Act, and we will move right into the first presentation. After which we want to hear from you. Please understand that we're not here to tell you how we're going to do this or how we're going to do that with this Act, we're here to solicit your ideas of how you think we should do it. And that's what we're interested in, we want to hear from you. If you look at the Resource Conservation and Recovery Act (RCRA), Public Law 94-580 signed by President Ford in October, you'll see that Congress has outlined some objectives that they mandate us to carry out, being the Agency responsible for most of this Act. If you read in there you will see that they said the objectives are to protect health and to protect the environment and to conserve valuable material resources and to conserve energy resources. I think if you think back over the last month or six weeks you can understand how important energy resources are. The General Motors Assembly Plant here was shut-down for a week and other places of business were shut-down for a lack of the energy that they happened to be hooked-up to. So, if you think about those objectives, the Congress, in its wisdom said, well, how are we going to achieve these objectives, and they also again laid down some things for us to do to achieve these objectives. And if you look right in there you'll see that they told us to provide technical and financial assistance to state and local governments. They told us to work on manpower development. The Law stipulates that open-dumping is prohibited. It also stipu-

lates that existing open-dumps are to be converted or closed. It provides for a regulation of hazardous wastes. This is an area that's been lacking for sometime. It provides for us to publish guidelines for solid wastes management. It provides for research and development. It provides for demonstration projects, as we've done in the past. But, I point out to you that it provides for some work in low-cost demonstration projects for resource recovery that can be done in rural areas and small communities. It provides for federal, state and local governments and industry partnership in material and energy recovery and particularly it provides for public participation which is why we're all here today. Now, the first item on the agenda, the first presentation is concerned with training, public information and public participation, and if you look at the program you will see Tom Williams' name on there. Tom's not here, he has the flu and was unable to come. And representing him, quite ably, from the Technical Information and Community Branch is one of his staff-members, <sup>G</sup>Terri Wyer. <sup>G</sup>Terri.

Speaker - <sup>G</sup>Terri Wyer: Thank you, Jim. I was pleased to hear our Deputy Regional Administrator say such nice things about the Solid Wastes Program, and the EPA does intend to take the public participation mandates of this new legislation very seriously. The RCRA contains an unusually high, complete array of provisions that could bring about a high degree of

public understanding and participation. Taken together these various provisions make it clear that the Congress understood that it's impossible for the public to participate, meaningfully unless the government produces valid scientific and technical data and produces and publishes the information in such a way that everyone may have real access to it. Only in this way can the public really have a reasonable chance of influencing the social, economic and political changes which the Law will bring about. Would you turn the lights off, we have chosen a few slides that we have for you. (Pause) In Section 8003, the Administrator of EPA is required to develop, collect, evaluate and coordinate information on nine key elements which are crucial to the Act's purposes. The Administrator is not only to implement a program for the rapid dissemination of this information, but he's also to develop and implement educational programs to promote citizen understanding. This makes it quite clear that the information called for is not to be developed for the exclusive use of those who, for one reason or another, may be considered experts in the field. Moreover, the Administrator is asked to coordinate his actions and to cooperate to the maximum extent possible, with state and local authorities and to establish and maintain a central reference library for virtually all the kinds of information involved in the solid wastes management for the use of state and local governments, industry and the public. Just who is the public? To ensure that the public participation process does not become lop-sided, we felt it was necessary to identify major categories of interest groups who represent the public at large. Under RCRA we regard

these to include consumer, environmental and neighborhood groups... thank you, Walt... trade, manufacturing and labor representatives; public health, scientific and professional societies; and, governmental and university associations. This spectrum of categories of representative groups will be altered and supplemented as necessary, if in the course of implementing the Act it appears desirable to do so. Section 7004A of RCRA states that any person may petition the Administrator for the promulgation, amendment or repeal of any regulation under this Act. Section 7004B calls for full public participation in the development, revision and/or enforcement of any regulation, guideline, information or program under this Act. Secondly, it states that the Administrator in cooperation with the states shall publish minimum guidelines for public participation <sup>and</sup> ~~and~~ such processes. Section 7002A states that any person may commence civil action on his own behalf against any other person, including the United States, who is alleged to be in violation of this Act or against the Administrator if there is an alleged failure by him to perform any act or duty under the Act. What are some of the available public participation techniques? The many techniques which can be used to involve the public in government actions fall into three major categories. One, to ensure that appropriate public meetings, hearings, conferences and workshops and so forth are held throughout the Country, and that they are planned and held in accordance to the unfolding of the Act's key provisions. Two, the use of advisory committees



and review groups which may meet periodically, but which will also be called upon to review and comment upon major programs, regulations and plans no matter when these occur and no matter whether a specific meeting is 'convened or not. The third public participation technique is the development of educational programs so that the public has an opportunity to become aware of the significance of the technical data base and the issues which emerge from it. Effective public educational programs depends on the use of all appropriate communication tools and media. These include publications, slides, films, exhibits and other graphics; media programs, including public service television and radio announcements and releases to daily and professional press and public education programs carried out by service and civic organizations with EPA technical and financial assistance. The last provision... (Pause) I'm ahead of myself? Okay. The last provision I'll speak about here is on the man-power development, Section 7007A and B authorizes the Administrator of EPA to make grants and/or contracts with any eligible organization for training persons for occupations involving the management, supervision, design, operation or maintenance of solid wastes disposal and resource recovery equipment and facilities, or to train instructors. Eligible organizations means the states or any state agency, or municipality or educational institution capable of effectively carrying out the project. Section 7007C states that the Administrator shall make a complete investigation and study to

determine the need for additional trained state and local personnel to carry out plans existing under this Act, and to determine means of using existing techniques... I'm sorry, existing training programs to train such personnel, and to determine the extent and nature of obstacles to employment and occupational advancements in the Solid Wastes Disposal and Resource Recovery Field. The Administrator is required to report the results of such investigations and studies to the President and the Congress. In view of the man-power limitations and many time-mandated provisions of this new legislation, however, it's not likely that the training activity or the man-power development study will be begun during this fiscal year. However, we are planning on the- within the next couple of months working on the study to determine what needs are needed out in the states in this effort. Thank you.

Moderator: Thank you very much, <sup>6</sup>Terri. We'd be most interested to hear from you, now, as to what you think we should do with man-power training, public information, public participation. What do you feel like the need is for man-power training in our field of Solid Wastes Management? Is there a need? Anybody care to comment on that? (Pause) Yes sir, go right ahead.

Question: My name is Clyde <sup>F. FEHN</sup>Fain, State of Georgia Environmental Protection, and if we look at training efforts in solid wastes, we ah- can look back several years ago when in Cincinnati we had a group of people that were full-time in training work on

solid wastes and ah- they did very fine work. They were dissolved, and it would appear now with the increase in emphasis coming along, more technical material, technical content of hazardous wastes program, resource recovery, that it would help people in the state program a great deal if EPA was to reconstitute a training group that would... a group of professionals that would be in training for professional people in the fields of sanitary land-fills, hazardous wastes, and resource recovery technology.

Moderator: Thank you very much, anybody else. Yes sir? Just go right ahead, you don't have to wait until he gets through to get up there...

Question: My name is Larry ~~Hand~~<sup>He</sup> with the EPA Regional Office and in support of what the gentleman just said, the last year that the Cincinnati Training Institute was in Cincinnati we had workshops in Region IV in which was over six-hundred people attended in the different states and there was a need then, and I think most of the people that would speak for the states would say that there is a need for that sort of an organization now.

Moderator: Yes sir, go right ahead.

Question: My name is <sup>(BLAKE)</sup> Jerry Boyd, I'm with Sonoco Products Company. Our company uses re-cycled paper to make new paper

products. We're very interested in setting-up programs with local land-fills for separating the corrugated wastes, and also with municipalities in separating newspapers. And, we feel that there is a great need for training in areas with local governments and communities to separate these wastes from the disposals in these land-fills and we feel that the awareness of this could really contribute to preventing all this disposal in the land-fill.

Moderator: Thank you. Truitt, go right ahead.

Speaker - Truitt DeGeare: Truitt DeGeare, I'm with EPA. A couple of the specific issues that we're concerned with are- I gathered from a couple of the comments made that you think it's most appropriate for such training to be the logical federal role, is that pretty much in consensus? Is that the way we should organize that the training activities should be done at the federal level? Should it be done primarily by the states? Secondly, to who should the training be primarily directed? Should it be operational-type, should it be public education-type of training, or a diversified sort of training program? If you'd care to address those issues, we'd be happy to hear your comments.

Question: (Same Speaker) You're talking to me?

Speaker - Truitt DeGeare: Anyone.

Question: I think a professional group of training people in EPA at the national level would do several things. They would- they would conduct certain courses that people could go to, state-level people. And they could- say community people. Another function would be to develop training material that could be used by the states when they're doing training for local people. Ah- better manuals, better film stripes, audio/visual materials of various types, and that would- well- so- be somebody will help us in communicating with the public- materials for communicating with the public in the technology. Like the man was saying, a good method of separating the corrugated out from the rest of the refuge. It would be kind of a broad spectrum program. I would envision that a lot of states would do their own training, but they could do a better job with aid and support from a national training group.

Moderator: Excuse me, but may I please remind you to give your name. Now, the court recorder may not know you as well as I do.

Question: My name is Paul Wagner. I work for a consulting firm, Mayes, Sudderth and Etheredge here in Atlanta. Jim, I was going to ask you, first of all, does EPA currently have any short courses which would be useful to more-or-less bring those of us who have been eight or twelve years out of school the opportunity to get caught up on the technology of the field. The concept of resource recovery, I guess, hasn't been around forever and a lot of the equipment, the processes, the philosophies and the techniques

in resource recovery may not be as broadly known or, especially in areas of research, that those of us out of the field that's going to be in a position of implementing this program really needs to know. So, first of all, I wondered are there those kinds of courses or short courses available now through EPA, and if they're not, if this is an area we could conceivably move into?

Moderator: Yes, please do. We'll hear from the national level, then I'll tell you from Region IV.

*Truett DeGeare*

Unidentified Speaker: We don't have the type of courses that some of you are familiar with. Max Wilcomb, that use to be with our office in Cincinnati use to run the training program that's been alluded to earlier. And several of us participated in that. We really enjoyed it because it was fun and it also gave us an opportunity to meet with people, directly, as trainers, you might say, and get a feel for what the real problems are, and then to go back and try to address our research and demonstration activities to those particular areas and to provide more information to better develop future training efforts. We don't have that type of activity now. It's possible depending on what kind of funding levels we end up with and man-power resources in the future, that might be one alternative we go to in the future. We have training material available. A lot of reports, documents and some audio/visual material that are available through out Office in Washington and through the

regional offices, as well. In particular I'd like to mention a series of symposiums or seminars that our Research Office has been conducting. There was one a year ago in Rutgers, and later last year in Tucson, and then next month, around the 15th of March there will be a third in St. Louis. They aren't short courses, but they are an up-date on on-going research activities in the field of Solid Wastes Management, in particular with regards to land disposal of solid wastes. So, you might be interested in looking for the announcements on those types of symposiums.

Moderator: In addition to that, there's a couple of technology seminars in resource recovery coming up this Spring or Summer. They'll be put on by the Washington Office. I would suggest that if you're particularly interested in that, you speak to the gentleman on my right, sometime during the meeting or when it's over. Whenever he can fill you in on that, or you can call us at the Regional Office and we'll be glad to enlighten you on that. First- now, they have told you from the national picture, now I'm going to tell you some of the things we have done in Region IV. We have, in Region IV, a Southeastern Solid Wastes Management Training Committee. It consists primarily of the state directors of Solid Wastes Management in the eight states in Region IV, with my Office and staff in an advisory function. The state directors primarily run it, or some designated member of their staff. We have conducted one training course and it was held here in

Atlanta, I forget the month. It was within the last three or four months. It was in the Fall. It was primarily for training new state employees. We have discussed broadening this to other people, but we have not come to any decision as yet. And, if and when we do come to a decision to reach out and take in municipal officials, local government officials, consulting community, Paul, well we'll certainly let you know. You have to realize that we're quite limited by funding and staff time because in order to do this, it takes staff time from the state people that they would normally do on their regular day-to-day job. Yes sir, Mr. Chiply, go right ahead.

Question: I'm A. S. Chiply<sup>2</sup>, Solid Wastes in Alabama. I merely wanted to say that in the first place that I think there's a need for some centralized training set-ups as has been done in the past. And one answer to Truitt's<sup>3</sup> question as to whether this should be state or federal, I think there will always be state training or a need for state training, but I think that in the light of the need for uniformity, we need a training center that is either national or at least regional in area. And, the thing that I'd like to comment is that it's going to be awfully difficult to set-up a training session as was what was available in the past because you're going to have a time replacing Max Wilcomb<sup>4</sup>. Thank you.



Moderator: Yes sir, go right ahead.

Question: My name is Benjamin Brown with the Wayne Colony Consulting Engineers, Tallahassee, Florida. I just want to make a comment with regards to the public education aspect. We've been involved recently with several land-fills in the northern Florida area and we've found that the biggest problem that we've come up against is the public attitudes towards the... they just don't seem to understand what sanitary land-fill is. And, consequently, several of them are in Court right now, probably won't be out of Court for another two or three months before it gets settled. And ah- a lady set-up and shot her senator, taking a partition and they're all afraid their property-value is going down. If there was just some way that the public could be made aware of exactly the concept. It's not a great big open, burning dump. I think the majority of the problems would be over as far as the overall design of the site.

Moderator: Your suggestion is so noted and very appropriate. Thank you. Anyone else? Yes, go right ahead.

Speaker DeGeare: It's certainly a nation-wide problem that particular issue about public education on sanitary land-fills, and my suggestion won't solve that problem, completely. But, I'd just like for you to be aware that we have a training package called Training <sup>For</sup> ~~and~~ Sanitary <sup>Landfill</sup> ~~waste~~ Employees. It consists of

a film, series of slides- about two-hundred slides, and an instructors' manual and a students' manual. The film can be taken by itself and very readily used for public education or information on the concept of sanitary land-fill and how it operates. And, you can contact the Regional Office for access to those materials. You might, as a consultant or a state or local government representative, you might just want to look at that with the potential for using that film by itself.

Question: My name is Henry Hudson, I'm with the EPA Regional Office in Atlanta and I'd like to point out the fact that in the era that we had the Solid Wastes Training Institute, EPA at that time also supported graduate-level training, principally in the engineering department in several universities around the Country. This scholarship support produced a lot of people who did go into ~~Solid Wastes Management~~. As a result of having gone through the program, I feel that there will be a large demand for professionals in the field as we look around to implement the various provisions of the Act. I've heard a lot of people asking the question where are these people going to come from, and would like to support the idea of <sup>re</sup>~~en~~kindling the university training grant program that normally was supported by EPA.

Moderator: Thank you very much. Anyone next? Anyone else?  
(Pause) Okay. You'll note on the agenda the next item for

a short presentation and discussion from you is hazardous wastes. If you're familiar at all with the Act you know that hazardous wastes is contained in Sub-Title C. We have with us this morning, Walt Kovalick. Walt is from the Hazardous Waste Management Division, Office of Solid Waste in Washington. He's the Chief of the Guidelines Branch of the Hazardous Waste Division. Walt.

Speaker Walter W. Kovalick: Thank you, Jim. Chuck ah- Alec Little, with the introduction this morning for us was a little different from the ah- the one we did in Kansas City last week. We're not only having double-bills of these public meetings, as last night and this morning here, we're simo-casting in the sense that we had an identical meeting in New York, yesterday. And last week in Kansas City the regional- Deputy Regional Administrator said that there are three things that you need to be concerned about, if some one tells you that your check is in the mail, or your car will be ready at 4:30, or I'm from the federal government and I'm here to help you. Well, my role this morning is to discuss the regulatory portion of the new RCRA and so I can't fall into that last category arguing that I want to help. I guess I want to help us, and we are in the portion of the Act when we talk about Sub-Title C that involves environmental protection and public health protection from what is to be defined as hazardous waste. And, I'd like to start by making

a few overview points, one of which is that that definition which is in the first section, 3001 of Sub-Title C is the key section to the rest of the regulatory program that I'm going to run through this morning. That is that Section does request the Administrator of EPA, meaning the Office of Solid Waste, define what is it that should be a hazardous waste. And so, as we move on in the slide and discuss in a minute that section, I want you to realize how broad or how narrow that definition is. It governs the scope and breath and depth of the program that will be controlling those wastes. The second thing you should note when reading through that Sub-Title if you- when you have a chance if you have not already, is the fact that it has a set of national minimum standards for three different kinds of parties. One is a national set of standards for generators of hazardous wastes once those are defined. Which is in Section 3002. One is a set of national standards for transportors of hazardous wastes which is rather a unique section for EPA. It puts us in the transportation regulation business, along with the Department of Transportation. And, the third section has to do with national standards for those who own and operate storage treatment and disposal facilities. And by that I mean not just land-fills or chemical wastes land-fills, but incineration facilities and chemical fixation facilities and other kinds of facilities used to treat and dispose of hazardous wastes. So, on one hand there are the traditional national standards that come along with environmental regulatory laws

that we may be familiar with in air and water, on the other hand there is a permit program in Sub-Title C, in 3005 that affects only those facilities that store, treat or dispose of the wastes. We prefer to do that as a positive side of the Act because it isn't a permit to discharge into the environment, in a sense, but it's a permit to ensure the community by the fact that the standards apply to that facility are appropriate. That this so-called hazardous waste or chemical treatment plant is capable of performing a function for which it is designed. So, we like to view that as kind of an insurance for the public and those of us who might be living near it that it is possible to operate it in accordance with the national standards which are the more traditional regulatory approach. The third major thing that should come through to you in reading the section is that it is the intent of Congress, it is the intent of our Office and the Regions to have as many states as possible pick-up this program. The Act is written in such a way that as soon as some of these broad definitions are put into effect, which is about eighteen months from last October, hopefully, as many states as possible will apply to be authorized to run the hazardous waste program. The final point I wanted- well, two more points, one is that waste that's already disposed of, that's already in the ground would not be regulated by the regulations that we are writing except in the case if there was an imminent hazard to health. In other words, we're talking

about wastes that about eighteen months from now would be generated and they would fall into this regulatory scheme, but if they're already land disposed, unless there was some critical public health or environmental problem resulting they would not be regulated by the Law. The last thing you should ~~know is that you should~~ be aware of is that this is the first of many public sessions we're going to have. Obviously with this one we've spent a little more time explaining the way we understand the Law, but in the future we plan to discuss the implications of the Law. Especially this part, from my point of view, that affects those to be regulated. We're planning some- on the order of seventy-five or eighty meetings, not of this size, more like twenty or thirty people. We're to discuss, in-depth, certain sections of the Law and how it will affect those who generate, those who store, transport these wastes. Now, I'd like to take a moment and run through about seven slides that I have, one on each of the sections. To repeat again, 3001 requires the Administrator of EPA, in eighteen months, to define hazardous waste criteria and list hazardous wastes. And, if you look carefully at that section there are three parts. One is that we must chose the criteria that might define hazardous wastes. The Congress gives us some suggestions of kinds of factors that we should consider, like flammability, explosivity, corrosiveness, toxicity, bio-degradability and so forth. So, the first job we have is to chose those parameters as criteria that we think are important, and then using those criteria, to identify

hazardous wastes. And, finally, after we have identified them, prepare a list, which may sound simpler than we think it is, To take an example, if we chose a criteria like flammability, then our view is that we'll probably need a- some kind of standardized test so that we ~~know~~<sup>2</sup> how to apply... we, meaning the generator of the waste, know how to apply that criteria to the waste. So, it so happens for physical parameters like flammability, corrosivity, there are some fairly widely accepted industry and government standards for testing for flammability and corrosiveness, explosivity and some other kinds of physical parameters. So we would chose, say flammability of a flash-point of say a hundred degrees or a hundred and five degrees or ninety degrees and run that test on the waste and if it failed that test, then it would be defined into this management control system that we're creating through the rest of the sections of the Act. These tests then would have to be designed in such a way that if a waste passed the test or the several tests that are designed, then that waste would logically not have to go into the control systems that's defined in the rest of the Sub-Title. And, therefore, would logically be going to the sanitary land-fills as you'll hear later in our discussion of the overall Law. So, the way we're working at the moment is to try and consider criteria that might make sense for defining hazardous waste, knowing that if it does not- that is, it passes these tests, then it would be going to a normal

sanitary land-fill. The last thing it says is <sup>5</sup> issue a listing. Those of you who are familiar with the water pollution acts- act in EPA are probably familiar with Section 311 which has a spill regulation, has a listing of some three or four hundred individual substances. That is not necessarily the kind of listing that is called for here. As a matter of fact, one of the reasons we are having meetings like this and others is to consider what the listing might be. Let me give you some examples of what the list could be. It could be a list of wastes, for example, a waste containing substances. For example, if a waste containing some heavy metal that was of concern might be considered on that list. That would be one way to devise the list. So, the list might be made up of things that would flunk the test I was discussing earlier. Another approach might be to have a list of things that are of concern to us, but for which we are not technically able to devise inexpensive, reasonable tests. For example, I think it's logical to assume that some ideological biological active waste could be considered hazardous wastes. Therefore, it might be more appropriate as HEW has done previously, to just list kinds of ideological wastes or their sources, like those coming from veterinarian clinics or hospitals or other locations. So, the list may be things for which we are not technically able to devise tests, but which we are able to reach consensus on hazardous wastes. Another option



for a list is that it could be a list of categories of waste generators. It's possible... if you're familiar with the water pollution experience they had listed industry categories and we might be concerned and be able to reach consensus that waste from the asbestos brake manufacturing process would be of concern to us because of the asbestos content they have, and if we do not have a reasonable test for asbestos or an inhalation test, then it might be logical to put things on the list that represent industry categories. So, I'm only trying to explain that the language in this third part of this section is fairly wide-open. It does require us to issue a list, but the content of that list is what we're trying to understand, the variety of options that we have, and I've tried to describe three of them to you and there's probably variations on those. But, I wanted you to be thinking as broadly as possible. By now you probably realize that I've walked in here with a different definition of solid waste than you have or some of you have, and if you read that definition in the Law which <sup>e</sup>Truitt will repeat later, it includes solids, liquids, semi-solids, slurries, sludges and so forth. So, Congress has re-defined, for those of you who are physical scientists, has re-defined solids to include liquids and sludges and contain gases. So you have to be fairly Catholic in your view that solid waste and hazardous waste or a sub-set of them include things in other physical states than solids. Now, that's a lot on that one section. I will not spend that much time on each of the others, but I wanted

you to get a sense of the breadth and depth that this definition could take. The next three sections are these national standards that I mentioned earlier. The Section 3002 requires, in eighteen months, that we have national standards and regulations affecting generators of wastes. And, if you read the section carefully, there are only three subjects about which we can have national standards. These are the only three things about which we can write regulations. We can not write regulations that affect the process of manufacturing or the way the waste is generated. We can only write regulations about record-keeping and reporting practices regarding the hazardous waste, about the labeling of the containers those wastes are shipped in, and, about compliance with the so-called manifest system. The manifest system is a system that tracks waste from their point of generation... that is, the hazardous waste, through their transportation, to their ultimate disposal. The reason for this section, as we understand it and based on evidence that we have, is that there are many, many fine hazardous- well, a number of fine hazardous wastes disposal facilities around the Country who are constantly wondering why they're not getting any waste when we know that some of the responsible manufacturers are shipping waste to those facilities. And, the reason they're not is that it's much cheaper to pay the higher fee to the transportor, who, in this case, who is irresponsible and he carries off the waste to the side of the road and opens up the valve on the back of his vacuum truck and the waste dis-

appears, or, down storm sewers and so forth. So, the purpose of the manifest system is to permit... as we've said, the state government, hopefully, to be able to track the fact that a waste that is defined as hazardous at the beginning of the cycle, does indeed reach the disposal facility for which it was intended. So, this manifest system will recur on the other slides, but I wanted you to have a general idea of what is meant by it. The second set of national standards relates to transportors. This is much broader. It does not just limit us to these subjects, but these are the ones listed in the Act, are record-keeping, labeling and again, compliance with the manifest system. We recognize, as I mentioned earlier, that the Department of Transportation is in the business of regulating the packaging, marketing and shipping papers that relates to the transportation of hazardous materials. And, we're meeting with them regularly and I expect it will be more frequently to try and see how we can mesh the requirements in our Act with the existing work that they already have underway and also the work they already have on the books. They have a number of regulations already on the books, but, unfortunately the Department of Transportation's mission is to provide for safety and public health of the transportor and his vehicle. Our mission is to prevent damage to public health and the environment. And so they, at the moment, do not recognize environmental damage. That's one of the reasons for writing regulations by the Department of Transportation.

They have put out, and you should know, a Federal Register notice on December 9th which is asking for your comments, and we are putting in our comments as to whether or not they should start considering environmental matters in the writing of Transportation regulations, assuming that we, meaning you and us, are able to make a case for that. And hopefully, we will have on<sup>e</sup>set of regulations written jointly by us and the DOT as it relates to this section. The third section has to do with those who own and operate treatment, storage, and disposal facilities. Again, this is national standards. There's a whole list of things, monitoring, record-keeping, location design, maintenance and operation, ownership you see on them. We are familiar with cases where individuals opened so-called hazardous wastes disposal facilities, they accepted many, many drums of wastes, all different kinds on their property, and for a variety of reasons, they walked away. So this is going to be a portion of the regulation devoted to making sure that there is the where-with-all in the firm to carry-out to completion the operations that they have begun when they began in their business. That's the kind of thing covered in the ownership which is rather a new concept in environmental statutes as opposed to the others. I mentioned that there is a permit program. The permit program does not affect generators, it does not affect transportors. The permit program is for those who store, treat and dispose of hazardous wastes. That includes people who are in the business, commercially. That is those to whom you can go and hire out and use their incin-

erators. And it applies to those industries who have disposal facilities or treatment facilities on their own property. So both sets of storage, treatment and disposal facilities are covered. Not only off-site, but those on-site. The interesting thing I want to mention here which was Congress have provisions for interim permits. That is, while we are analyzing or hopefully, while the state is analyzing permit programs, if a business-that is, the storage, treatment, or disposal facility that was in business on the 21st of October last year, which was when the Law was signed, and if that same facility has notified the state or EPA via a procedure I will discuss in a moment, and if they have applied for a permit, then, they have a permit until such time as we have a chance or the state has a chance to act on their application. This provides a way for industry or- who will have facilities to continue to operate them while either the state or federal government is able to, with the limited resources that we have, to analyze the permit application and process them. This gets us around the problem that we've had in past acts, for example, the Water Pollution Act, whereas an industry would apply for a permit and since they got no word back from EPA due to the fact that we were trying to process something like forty-five thousand of them, nationally, they were in violation of the Law. This provides a way for the facility to be in compliance with the Law. That is, to have an interim permit while their true permit is being analyzed. Briefly, this is the Section 3006 that relates to

states programs and if possible and we are hopeful that as many states as possible will chose to take over this program rather than have EPA operate it out of its Regional Offices. There are three criteria listed in the section relating to state authorized programs. One is equivalent to the federal program which is a word that we're going to be trying to define what that means. The second is that it would have to be consistent with other state programs and this is a very important concept when we're talking about hazardous industrial waste. You may be aware that the State of Ohio recently completed a survey of their manufacturing industry which indicates that Ohio industry ships waste to thirteen other states. So, there is definitely a trade or a market interstate in these kinds of wastes for not only disposal reasons but also recovery reasons. Therefore, the consistency between and among the state programs is a very important factor. And finally, as you might expect in a regulatory program, there would have to be adequate enforcement in the state program in order for the state to take it over. There is a section in there which you might want to look at, particularly interesting to the states, where they can obtain interim authorization. That is, if they're on their way to having a fully authorized program there is an opportunity for them to take over. Another chance for states who want to play, to use the expression, to be able to take over the program early, as early as possible. The last section I want to cover is a very unusual one, and it was somewhat of

a surprise to us when it was in the Law as we were tracking it, but it is a very helpful one to us. This is the section on notification and it affects generators, transportors, treaters, storers and dispos<sup>al</sup>is of hazardous waste<sup>s</sup>. The reason for this section, as we understand it, is that it provides us with a way, as I mentioned earlier, for those of you who need a permit to have an interim permit. That is, it is a load-level devise. If you'd remember, a business facility that was in business in October that has applied for a permit and has notified EPA or the state under this section would then have a permit. So, this notification is a kind of registration for storage treatment and disposal facilities. And it's a way for us to be aware of people who generate and transport wastes so that we know where the manifest should be coming from. The manifest that I mentioned earlier. Obviously if someone has not notified, then we would not expect them to be generating manifest as time goes along. And this requirement... this notification, by-the-way, could be as simple as a name, ~~and~~ address and location, and phone number, and the fact of which business you are in and the general character of the waste. So that the coverage of this particular section is a very interesting question which we hope to get comments on as we go along. Ah- you might be interested to know that the waste oil re-refining industry testified at our public meeting in December, or ~~like~~ like this, in Washington that they felt that used motor oil, meaning waste oil ought to be a hazardous waste. And, if you carry that to it's logical conclusion, the impli-

cation is that gas stations, those that- who generate used motor oil would have to notify the area EPA. So, I think that's a little extreme example and we don't think that's necessarily the way it should go. And yet they're advocating the fact that used waste oil might, in fact, become... that it's failed some of the tests that was mentioned earlier. So this section is very important in the sense that the coverage of people who might be required to notify. If you do not notify, you are not allowed to transport, store or treat or dispose of waste. So, it is... there's a penalty associated with this section and it's very important that it be constructed sensibly, in a way that we can all read it, sensibly. So let me stop there. I probably over-loaded you with information, and ask for questions.

Moderator: Do we have questions or comments?... pertaining to Sub-Title C or hazardous waste? Please feel free to step right up, we'll move right along.

Question: My name is Peter <sup>J.</sup>Dawson. I'm with Henn<sup>IN</sup>~~ix~~<sup>SON</sup>, Durham and Richardson, a consulting firm in Charlotte. You mentioned that you cannot write regulations on the process. Are you referring to the manufacturing of wastes that could be termed hazardous?



Speaker Kovalick: Yes.

Question: (Same Speaker) Okay. Thank you. (Pause)

Speaker Kovalick: That was too easy. (Laughter)

Moderator: Mr. Chiply<sup>e</sup> will make it harder.

Question: No. I won't make it harder. I'm Chiply<sup>e</sup> from Alabama. I don't know quite where to start, you asked whether or not the states are willing to or want to take over this type of program. Personally I feel that the states should assume the responsibility for these types of programs. They are in their states and the wastes are generated in their state and this is where it should be taken care of. You have a Law that's quite broad and you're talking about writing some three sets of rules and regulations to cover these laws, and here we get into a point of possible danger. I'll give an example, in our state we've been trying to get a central amendment to our solid waste act and everybody agrees it should be there, but people set around and decide and start shooting in things that they want from their special effort and the law becomes... the writing of rules and regulations, and a law should not be rules and regulations. I think federal rules and regulations that are written are often accepted as law and perhaps of necessity so. And, if this is true, then they must be broad, because the rules and regulations to apply these things have to apply

to the local areas where the Acts that are set-up will function. A facility, for example, that will work in Alabama may well not work in Florida. And, to go further, a facility that may work in parts of Alabama, may not work in other parts of Alabama. So, there has to be a local effort. Now, we speak of grants and frankly grants scare the hell out of me. I think there is a place for grants and a need for them. But, in some cases, I think, personally, if our state should become eligible for a federal grant on hazardous waste, we would, in the first place, need a greater staff to manage and handle that grant than we would need to manage hazardous waste. (Laughter) This does bother me to a considerable degree. Now, last night, you didn't bring it up this time, but you were mentioning a specific problem of the analysis of hazardous waste. Where it should be done and who should <sup>do</sup>~~be~~ the analysis. I think the question that was posed was should it be a community payment, or by the generator of the waste. I think here again we all know who is going to pay for this, whether it be a grant or whether it be an analysis. It's going to be the people whose going to pay for it, in the long run- it's going to be the consumer, one way or another. If that is a true premise, then I think the analysis of the hazardous waste should rest with the generator of that waste, because then he could pass that cost on to the primary and secondary buyers of his product. Thank you.

Moderator: Yes sir.

Question: My name is Bob ~~Sharp~~<sup>Scharff</sup> and I'm with Mineral Research and Development Corporation in Harrisburg, North Carolina. One of the biggest problems in dealing with hazardous waste is that the options of disposing the material is getting smaller and smaller. There are fewer and fewer places that we can put these residuals for ultimate disposal. I would like to suggest that in setting up programs that waste exchange or things of this nature be considered. For some people could use the waste of others. And also, a program for technical assistance to assist generators to determine what they can do with their product. Whether they could treat it themselves or find other sources of disposals... other people who might accept it.

Speaker Kovalick: Thank you. I'm glad you brought that up because on my limited time with these programs I have to discuss the regulatory part of the Law... you should know that we've published a policy statement, that is an EPA policy statement on the handling of hazardous waste, last August. That is long before this Law was passed, in the... August 14th, I believe, Federal Register and we'd be happy to get you some of those if you have not seen it. But it does have at the top of the list, priorities, not generating the waste or isolating it, so that it could be used for exchange. And I appreciate you bringing up the concept of waste exchange. That is, that one man's waste could be another man's feedstock. Especially in the industrial sector. We've spent quite a bit of time and

have completed a contractual study of not only the waste exchanges that are in existence in this Country of which there are less than a half-dozen, right now. One... some are more successful than others, and there are over thirteen of them in Western Europe, right now, run not only by trade associations, industrial trade association, but also quasi-government institutes. So, we've been doing our best to popularize the concept of waste exchange and if any of you think there is a possibility, that is, in terms of quantities or an institution that might be used to operate that, you might want to get in touch with Jim and he with us to get a copy of that recent study on waste exchanges. It is a pre-script of one, it tells you where it makes sense. That is, the kinds of government, quasi-government or industry institutions that make sense, like trade associations, to run these exchanges. Your point about facilities also I want to cover or mention as a very important part, we think, of the state program as it develops. That is, it's all very fine to have these regulations defining hazardous waste and tracking them, but if there isn't any place to track them to, it becomes very difficult. So, we're very conscious of the fact that there's decreasing numbers of options. That is, ocean disposal is becoming very restrictive. They're increasing incineration restrictions and so we think that some energy has to be put into trying to think of ways to provide for these kinds of facilities. As the gentleman said, it's hard to site a sanitary land-fill, should try to site a hazardous waste incinerator,

sometimes. It's a very difficult process according to the industry that's tried to do it. We're aware of one firm that tried sixteen different times to obtain a site upon which they could build what might be considered a quite adequate hazardous waste incinerator. So, it's no small problem.

Question: My name is Tom Lesley<sup>ie</sup>, I'm with the Atlanta Regional COMmission. I wonder if you anticipate the definition and the regulatory program would extend to radioactive waste on a military facility?

Speaker Kovalick: Again when I read the definition of solid waste which I didn't <sup>do</sup> ~~go~~ justice to, it does exclude only one kind of radioactive waste. Those that are... the high-level radioactive waste controlled by the Nuclear Regulatory Commission and <sup>ERDA</sup> ~~URTA~~. So that means that there are a number of other low-level radioactive waste. The kinds that are used to make radiant watch dials; the kinds that are used in low-level isotopes in medical practices and so forth that could conceivably be included in this definition of hazardous waste. So, we have not... we're only restricted from covering those things that are already regulated by <sup>ERDA</sup> ~~URTA~~ and NRC. So, I think it's quite likely that some radioactive waste will be included.

Moderator: Yes sir, go right ahead.

Question: I'm Howard Jolley with the Regional Enforcement Program. I had two questions. One on radioactive waste which is just been answered. My second question is, did I understand you correctly in saying that industrial sludge if it would be determined hazardous... stored on an industrial site, would require a permit?

Speaker Kovalick: That's possible. Yes.

Question: (Same Speaker) Thank you.

Speaker Kovalick: I might add that what it is that can define storage is becoming one of the more knotty problems. That is, if you're storing two or three drums for three or four days in order to fill-up and get an amount or quantity to ship to disposal, is that storage or is a lagoon with several million gallons of contaminated solids a storage. And so, trying to draw a line between the two kinds of storage will be a problem for us over the next few months.

Question: (Same Speaker) I agree.

Moderator: We still have ample time if anyone would care to comment on the subject of hazardous waste or the regulation of hazardous waste. I might ask you for... we're seeking your opinion and perhaps the state people represented here would

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be interested in your opinion as to whether or not you think the state should, in fact, regulate hazardous waste. Go right ahead.

Question: I'm Andrew <sup>CAMMACK</sup>~~Garamack~~. I work for the Environmental Quality Commission in the State of Kentucky. I'm a little bit confused about this radioactive low-level waste. You said that they could be included in the definition if <sup>ERDA</sup>~~URTA~~ or NRC wasn't responsible for them. Well, at the present time I... the specific example I have in mind is a low-level waste disposal site in Kentucky which is... it's regulated by the Health Department in Kentucky, or the Human Resources, but NRC has the final say in that situation. It's low-level waste, but NRC is the regulator. And I just wondered if you anticipate any interaction with NRC on those sites?

Speaker Kovalick: I'm not an expert in radioactive materials, I... we are just beginning in the program to look at radioactive-type waste. So we obviously have to go to such as <sup>ERDA</sup>~~URTA~~. We <sup>ye</sup>had a radiation program in EPA that's related to setting the standards that affects the sites that NRC is licensing, but all I'm trying to say is that there are some radioactive wastes that are not controlled that will probably fall under the umbrella of this Act, but which ones, I'm not sure.

Moderator: If you read the Act there is a specific exclusion for those that are covered under the 1954 Atomic Energy

Act and if it's not covered under that Act then I think what Walt is saying is that it's a good possibility it may be covered under this Act. For those of you from Florida, you might know that there is a great deal of phosphate mining in Florida. And phosphate ore, in its natural state contains radium and some of the mining concentrates that's radium, as well as some of the ground-water has radium in it, and when you treat the ground-water for drinking purposes, perhaps you may concentrate the radium. And some of these type wastes will be some of the things we'll be looking at as to whether or not they should be regulated under this Law. Yes sir, go right ahead.

Question: Just have a comment, Peter Dawson, again. <sup>J. HENNINGSON, DURHAM E. RICHARDSON</sup> Concerning your question about storage or not storage, you may have already been made aware of this, but I'm referring to one installation where they had an ore material that they stored in rail-cars that they shipped later. And they were really in a conflict as to whether or not that was storage of whether or not that was transportation. And if it was storage, they had to put a dike around it. Put a dike around it, then they couldn't haul the rail-car. (Laughter) I thought I'd throw that out to you to give you something to think about tonight.

Speaker Kovalick: I'll try to be conscious of the fact that dikes (~~this word indistinguishable~~) around railroad tracks makes it hard to move the car.



Question: (Same Speaker) Some of the consulting firms may want to take that into consideration for designing a portable dike. (Laughter)

Question: My name is Henry Hudson, I'm with the EPA Regional Office in Atlanta and I would like to get a clarification if I could regarding the disposal. Also, in regards to the question earlier or the statement earlier, about possibility of a lagoon or pond or pit containing an industrial solvent. For example, from the definition of disposal as I read it in the Act, it would appear that if such a lagoon leaked some of its content into the ground or into the ground-water, that facility would by definition be a disposal facility as opposed to a storage facility. Is that correct?

Speaker Kovalick: I would say if it's an unlined lagoon that's probably the way it would go, but the point is the lagoon would be covered either as a storage facility or as a disposal facility. One way or the other.

Question: (Same Speaker) Yes, but my point is that ~~that~~ normally one would be quite surprized to think of a pond or a lagoon as a disposal option rather than a storage option. It is a rather strange definition as storage and disposal normally *has* been regarded.

Speaker Kovalick: Yes, along with re-defining solids to include liquids, the definition of disposal deserves some study, too.

Question: Good morning. My name is Jerry Cousins of Piedmont Engineers, of Greenville, South Carolina. I've been associated with the development of regional hazardous waste treatment plants. The EPA has suggested three possible definitions for hazardous waste, all could be complicated. I want to suggest a fourth that could not go anywhere else. And I'm concerned about the definition of hazardous waste, that what you might do... it could become very complicated and I suggest another alternative. In practical terms, if you're going to build a plant you do a market survey. You decide which materials are presenting problems that you could handle. And those are the hazardous materials. And since I'm looking for prototypes I suggest that as an alternative for compliance. The things that can't go in the land-fill. The things that can't go in the sewers, can't go in the water. It would be very broad and it would be the most realistic kind of definition you have. I'm pleased to see that you know about these facilities, I hope those people have an input into it. I think they've had a lot of experience. I think that's the major point. I'd like to talk to you afterwards about analysis and how these things could be done because I've gone through it.

Speaker Kovalick: To elaborate on your simpler definition, I guess I'm....

Question: (Same Speaker) A definition... a backwards definition on things that are hazardous waste or things that can not go to the sewer, can not go to the land-fill, that cannot be disposed of at large. And ah- when you know... you know what those things are. I can tell by your talk that you have a good feel for what these materials are. I know what these materials are. In practical terms, you don't have any trouble. You know, you go into a given area, you look around, you know what's there. And, the definition really is the things that cannot go somewhere else. And, that kind of an approach, I think, will be the most successful and the least cumbersome... most realistic.

Speaker Kovalick: That's a good point. The only... there is quite a bit of research, as a matter of fact this St. Louis Conference that Truitt<sup>2</sup> was mentioning is going to discuss land disposal waste and I would say that it's certainly not consensus about those things that cannot be land-filled. That is, the soil is quite a continuator in many people's view and it can be used as a treatment mechanism, if you will. So....

Question: (Same Speaker) Well....

Speaker Kovalick: It would be easier if there was concensus that certain things cannot be land-filled, but some waste- there is a great area of waste where that concensus doesn't seem to exist. That's why... it's a tough solution....

Question: (Same Speaker) Let me come back on that one there. There are a great many ways to use land-fill treatment systems besides the practice that is used for land-filling, garbage and solid waste, and the land system and the land disposal system would probably be part of most hazardous waste plans. Now, I... there's another comment, you're talking about being more positive and people are talking about the options that can be removed. Another way of approaching this whole problem now that I think has to be done is to take a look at this whole process again from backwards, and find out what material residues you would like to have... what can you produce. You're going to have salt, you're going to have things like organic materials, you're going to have ash and a limited number of things and you have to decide where these are going. Is the salt going to the ocean. How is it going to get there. And work backwards and in your regulations, I think, the one thing you should not do is prohibit things from going to the right places. Just make it so complicated- you know.... There's a law outside the radioactive business, the law of conservation of matter. If you work at it you can account for everything. If you burn it, you know, there's the gases, pounds of gas out there. Nobody can make anything disappear. So you really have to decide where you want it to end-up, and you have to decide that early, to plan intelligently so that you get there in the best possible way. And so, your objectives... there ought to be some positive objectives in these regulations about where you do want things to go.

Speaker Kovalick: I guess at the same time you would agree that we would want to leave the options open to the generator so that we don't... these regulations do not say that you must take waste X to the incinerator. They may say that if you take them to the incinerator they have to be burned at certain temperatures and have certain kinds of monitoring. But you still have the option of taking that waste to the land-fill. These regulations are not, ah....

Question: (Same Speaker) Well, the guys who are operating that central treatment facility, he's got to have an outlet. He can't make it disappear....

Speaker Kovalick: No. No, he's got a... from his point of view, he may move on to the land. But I'm saying as an industrialist, if I had a waste the Law provides me with the option to chose incineration or land disposal or chemical treatment or physical treatment or whatever....

Question: (Same Speaker) Oh yeah, but still those end products are there.

Speaker Kovalick: Oh yes...

Question: (Same Speaker) And please don't write the regulations in such a way that they're supposed to disappear. Don't tighten-up on us, the guy that's got no option. Otherwise the

the whole program breaks down.

Speaker Kovalick: Thank you very much. Yes sir, go right ahead.

Question: <sup>WHEELER DIAMOND</sup> William ~~Wheeler~~, Don Shamrock Chemical Company. We have at the present time an on-site lagoon which is in compliance with the state of North Carolina and the federal regulations. Do we need any additional permits under this new Act to operate that facility?

Speaker Kovalick: I don't <sup>14</sup> know, because we haven't written the regulations, yet. This... I think it's fine to say that this set of regulations will affect storage or disposal facilities that are lagoons and since this Act does get the federal government involved in ground-water protection, I know there are no federal laws right now except in the underground <sup>IN</sup> adjection area that affects the operation of that lagoon. So, depending on the North Carolina statutes, with which I'm not familiar, there may be some additional requirements regarding ground-water protection. Not surface-water which is probably well-protected in your regulations.

Question: (Same Speaker) Just a comment that any regulations that be written, especially in our case of lagoon overflow, that they not be written any tighter than drinking water regulations.

Speaker Kovalick: <sup>h/ke</sup>Well, you're on the subject of surface-water there, I think it will have to mesh with the existing water pollution regulations on surface-water, certainly.

Moderator: Alright. Thank you. Thank you, Walt. The next item on our agenda is land disposal. We have with us this morning, <sup>e</sup>Truitt DeGeare. <sup>e</sup>Truitt is the Chief of the Land Protection Branch in our Systems Management Division, Office of Solid Waste, EPA Washington. <sup>e</sup>Truitt.

Speaker <sup>e</sup>Truitt DeGeare: Good morning. The Act contains important new definitions. Some which have been alluded to earlier this morning. Also a requirement for the Administrator of EPA to promulgate regulations containing criteria for determining which facilities shall be classified as sanitary land-fills and which shall be classified as open-dumps. A requirement that the Administrator publish an inventory of all disposal facilities in the United States which are open-dumps and a requirement that the Administrator publish suggested guidelines for various solid waste management practices, including disposal. The implications and requirements for state and local governments will be discussed later under <sup>State</sup>stand and local program development provisions. Part of the Act that addresses land disposal of non-hazardous waste is Sub-Title D and you may in the future want to refer to various sections of that. First though, we should look at a

couple of these key definitions which appear in the first part of the Law as opposed to Sub-Title D. The definition that's of special importance are those for open-dump and sanitary land-fill. The Law defines those two practices as the only two types of disposal facilities. The two practices will be distinguished by the criteria to be promulgated under Section 4004. RCRA adds clarity by defining disposal and solid waste. I think these definitions are of such significance it's worthwhile for me to just take a minute to read them for you. Then you can look at them, later, in your copy of the Act. Disposal is a pretty broad definition. It means the discharge, deposit, injection, dumping, spilling, leaking or placing any solid waste or hazardous waste into or on any land or water. So, that solid waste or hazardous waste or any constituent thereof may enter the environment or be ~~em~~itted into the air, or discharged into any water, including ground-water. So, any practice of placement of waste on land is virtually defined as disposal. The term solid waste, as Walt mentioned, is very broad. And it means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, and other discarded materials, including solids, liquids, semi-solids or contain gases<sup>gas</sup> materials ~~ah~~ resulting from industrial, commercial, mining and agricultural operations and from community activities, but does not include solid or ~~de~~solved material in the irrigation return flows or industrial discharges which are point sources subject to per-



mits of Section 402 of the Federal Water Pollution Control Act, or source special nuclear or by-product materials as defined by the Atomic Energy Act of 1954. As I said earlier, the statutory definitions of sanitary land-fills and open dumps refer to Section 4004 of the Act which is entitled, Criteria for Sanitary Land-fill, sanitary land-fill is required for all disposal. This Section requires the Administrator to promulgate regulations containing criteria for determining which facilities shall be classified as open-dump and which shall be classified as sanitary land-fills. At a minimum, the criteria shall provide that a facility shall be classified as a sanitary land-fill and not an open-dump only if there is no reasonable probability of adverse effects either on health or the environment from the disposal of solid waste at the facility. An important aspect of the implementation of the Law then is for the interpretation of what constitutes no reasonable probability and what constitutes adverse effects on health or the environment. The task of developing this criteria will be particularly difficult for ground-water protection because of technological uncertainties and the general lack of ground-water protection policies. It seems appropriate that the criteria would be performance rather than operational and the intent, as we read it in the Act, is not for federal regulation of sanitary land-fills or the establishment of a federal regulatory program, but for state control. This regulation containing the criteria is due by October <sup>21</sup> of this year, after consultation

with state agencies, notice and public hearings. Section 4004B requires each state plan to prohibit the establishment of open-dumps and to contain a requirement that all solid waste within the state be disposed of in sanitary land-fills unless it is utilized for resource recovery. Finally, Section 4004C indicates that the state's prohibition on open-dumping shall take affect six months after the date of promulgation of the criteria which is due October 21 of this year, or on the date of approval of the state plan, whichever is later. Not later than one year after the promulgation of the criteria, the Administrator must publish an inventory of all disposal facilities in the United States which are open-dumps. Section 4005 also prohibits open-dumping when usable alternatives are available. If such alternatives are not available, the state plan shall establish a timetable or schedule for compliance, which specifies remedial measures including an enforceable sequence of actions or operations leading to compliance with the prohibition on open-dumping within a reasonable time. And, that time is not to exceed five years from the date of publication of the inventory. If the state plan is not being undertaken, the citizens suit provision of Section 7002 provides recourse to a grieved party. Section 1008, Solid Waste Management Information and Guidelines requires the Administrator to publish, in one year, guidelines which provides a technical and economic description of the level of performance that can be obtained by various available solid waste management practices. Areas

to be addressed by guidelines include appropriate methods and degrees of control that provide at a minimum for protection of the public health and welfare; protection of the quality of ground-water and surface-water from leakage; protection of the quality of surface-waters from run-off through compliance with applicable limitations under the Federal Water Pollution Control Act; protection of ~~ambient~~ <sup>ambient</sup> (this word indistinguishable) ~~and~~ air quality through compliance with <sup>new</sup> ~~the~~ sources ~~of~~ performance standards <sup>and</sup> of air quality implementation plans under the Clean Air Act; disease <sup>TRANSMISSION</sup> ~~infection~~ control, safety and esthetics. It is our interpretation of Congressional intent that these guidelines would be descriptive and not prescriptive. And, that they could suggest alternatives for dealing with the concerned raised in the criteria. Section 1008C requires minimum criteria to be used by the states in defining open-dumping <sup>of</sup> solid waste as prohibited in Sub-Title D. The Congress did not specify which practices and guidelines are to be developed to address--our initial reaction to the charges of Section 1008 is to address the predominant practice which is land disposal, and the first attempt in this area would then be to up-date and revise on current land disposal guidelines. We will also be initiating sludge <sup>disposal</sup> ~~disposal~~ guidelines. In order to provide for future activity under this Section, we're going to be carrying out a process to determine a logical and reasonable sequence for promulgation of future guidelines on various practices. We obviously

can't dump all our resources at one time into trying to cover every solid waste management practice. So, we would appreciate any suggestions you might have or any input to determining a prioritization of the various practices which should be covered, ultimately. (Pause)

Moderator: Thank you, <sup>2</sup>Truitt. We'll ask you to step forward now and comment on the land disposal, definition of a sanitary land-fill... criteria for an open-dump. (Pause)

<sup>W. M. Crenshaw</sup>  
Question: I'm Bill ~~Probert~~ <sup>TENN.</sup> (last name may be spelled in-  
~~correctly~~) at Eastman Company. I think my question may pertain more to the previous speaker, but it's raised somewhat by the definitions that were just discussed, and it pertains to the regulations under RCRA, ah- a lagoon. Well, suppose a lagoon is part of a waste-water treatment system which is subject to permitting under the NPDES system, would there be any regulation of such a lagoon? Which would be part of a point source discharge under RCRA?

Speaker DeGeare: I think it's very possible from the viewpoint of any leakage to the bottom of that lagoon as opposed to any kind of permitting or regulatory action on the upper-surface water.

Speaker Kovalick: Just to add on to that point, I... we've thought some about that, the waste in that lagoon are but

prior treatment then they might well be considered to fall into the category of domestic sewage in the sense that they are not yet a sewage sludge. That is post treatment. So we are... there may be a possible gap in the coverage for that one kind of lagoon prior to the time that the domestic sewage is treated. Even though domestic sewage could include industrial input, of course, from the hazardous waste point of view. And I'm purely saying that there is a possibility we might be able to put out the guidelines that might, would reflect management might be able to cover them under the non-hazardous portion.

Question: Bob <sup>SCHAEFF</sup>~~Sharp~~ with Mineral Research, again. Your definition on open-dump, I'm considering a facility which is a settling of a lagoon for inorganic materials, would this also be defined as an open-dump and how would it be fitted <sup>one</sup> of these classifications?

Moderator: <sup>E.</sup>Truitt, you want to speak to that?

Speaker DeGeare: Okay. We can't, at this point, say that it would be an open-dump or sanitary land-fill. What we can address, I think, is whether it's a disposal practice as covered by this Law. I can give you my opinion from my reading of the Law and at the same time I'd like to solicit your opinion on whether it's appropriate for us to address

that practice. My reading is that it is... it would be disposal, placing of waste on land. And the criteria would therefore have to address that. Now, as far as to whether it would be classified as an open-dump would depend on whether there was probability of adverse effects on environment and public health.

Question: Peter Dawson with Henn<sup>INGSON</sup>~~ix~~, Durham and Richardson. We've been talking about open-dumps and sanitary land-fills, but does an inert land-fill such as receives this construction waste, is that part of the sanitary land-fill area?

Speaker DeGeare: Yes. It's prohibited.

Question: (Same Speaker) And the other question I had when would Appeal 945A affect land disposal sewage slush<sup>dgc</sup>, just when it would have hazardous waste and heavy metal?

Speaker DeGeare: Ah- no. If it... based on the tests and criteria that Walt discussed, the sludge would fall into the category of hazardous waste, then it would be regulated under Sub-Title C. Otherwise the criteria called for in Sub-Title D would apply.

Question: (Same Speaker) Which ah... Sub-Title D refers to what?

Speaker DeGeare: The open-dump and sanitary land-fill criteria.

*NORMAN SCHALL*

Question: I'm ~~Marvin Shell~~ from the State of Kentucky and I might say that we're quite interested in seeing here guidelines for the management of sludges as soon as possible in your priorities. And I'm somewhat interested in the fact that the water pollution people have a great interest in this, and personally I am inclined to come up with management guidelines of their own in this regard. As I interpret the present Law, this really lies within the province of the solid waste act and that's probably where it should be done. I'd like to have your comment on that, and I'd also like to have some comment relative to what time-frame you see management guidelines for sludges.

Speaker DeGeare: The Act doesn't addresses sludges, specifically. There is a definition for sludge, and sludge is included in the definition for solid waste. Therefore, we are addressing that. And, as I indicated, our guidelines on sewage sludge or... I guess you would classify it now as a second priority. Our first will be dealing in land disposal guidelines. Or, within our own Agency the development of suggested practices or guidelines on sludge is going to be a very painstaking process, because we are going to be coordinating very closely with the Water Program Operations Office. They have dealt with wastewater treatment more extensively than we have and are pretty

familiar with the sludges or components of sludges produced. We then are going to take the attitude that we will be following up after the sludges is produced and dealing with it from that point. So, we're going to be coordinating very closely with that Office in the development of these guidelines.

Question: (Same Speaker) Thank you.

Moderator: I'd like to add to that, Mr. <sup>C</sup>Shell. Waste-water treatment plant sludge and water treatment plant sludge are specifically included in the definition of solid waste in this Act. However, I do feel like the governor and designated agencies should utilize any agency you see fit as long as the appropriate measures are carried out under this Act. But I also point out that by these sludges being included in the definition of solid waste, they will have to be covered in the required state solid waste management plan and appropriately provided for in that plan. Yes sir, go right ahead.

*E. Kellmar, J. M. Huber*  
Question: Carl ~~Comard~~, Jan ~~Uber~~ Corporation (~~Last name and company name may be spelled incorrectly~~). I'm concerned about the settling ponds and in the operation we mine cacodyl clay and we've got some heavy metal settling out of this pond which is covered by NPDES permit. Are you saying if this stuff is leaking into the ground where it applies, you can force us to make it into a sanitary land-fill in five years, or what?



Speaker DeGeare: Surely not a sanitary land-fill in the since that we've traditionally known what a sanitary land-fill is....

Question: (Same Speaker) Well, can you force us to light it at sometime? This is a hundred and eighty acre impound, now. What are we going to do?

Moderator: We understand....

Speaker DeGeare: We really don't know what we're going to do. The issue that we're trying to deal with now is whether and how we should deal with those types of impoundments. We know that there can be and has been damage from surface impoundments and it's apparent that the Act was intended to provide control to prevent damage. But, I understand your concern for a hundred and eighty....

Moderator: There's also a call for appropriate coordination with the '72 <sup>deleal</sup> Fair Water Pollution Control Act which requires you, if that has a discharge, to get what we call an NPDES discharge permit, as well as the Safe Drinking Water Act. We'd be most happy to hear from you how you think this should be handled in the instance of a storage lagoon, let's say, that does, in fact, have a discharge permit under the water act but is in fact not lined and leaking to the ground-water. Now, what do you think we should do with that?

Question: (Same Speaker) I don't know. Ah- how are you going to determine whether it's leaking or not. Cacodyl clay is so fine, we all assume that this seals itself after a period of two months, it settles itself. Now, how are you going to determine whether we're leaking into the ground-water supply?

Moderator: Well, I didn't mean to imply that we would say you were leaking. I said perhaps one is leaking. Now, the question is what to do about one that does have a discharge permit and is leaking. You know, we're asking for your help here or anybody else's who is here for that matter. You know, this is something we've got to face up to.

Question: (Same Speaker) Well, will there be meetings or something like that in the future or when the criteria is published?

Speaker DeGeare: There will be hearings on the criteria. They will be published as proposed in the Federal Register to provide opportunity for comment. Then there would be hearings specifically on the criteria.

Question: (Same Speaker) One other question, what about overburden, the dirt which covers the clay? Can that be termed as solid waste?

Moderator \_\_\_\_\_: Mining waste as... are mentioned in the definition of solid waste.

Question: (Same Speaker) It's only a waste for a certain amount of years, then we have to reclaim the land and we can use it again.

Speaker DeGeare: Sure....

Question: (Same Speaker) Up 'til then will that be included as a solid waste?

Moderator: It depends on how the criteria is developed. Here again we're seeking your advise on how to develop the criteria. We don't know what the criteria is going to be, yet. We're at the ground-zero... we're at the start-point.

Question: (Same Speaker) Okay. Thank you.

Speaker DeGeare: One issue that was discussed some last night was what types of disposal practices, that is the combinations of the various waste types and ways of dealing with those on land should be addressed by the criteria and then how the criteria could address.that. If, that is, by means of a general rather broad criteria or specific criteria for various types of practices. One particular practice that was commented on by three or four individuals last night was that of land dis-

posal and demolition waste and land clearing waste and it seems like the consensus of those who commented was that it would be most appropriate to have a separate criteria for that type of practice. So you may want to discuss that a little bit this morning.

Question: I'm Bob <sup>SCARFF</sup> ~~Sharp~~, again, I'm from <sup>MINERAL</sup> Research Corporation. The last speaker has mentioned in effect his company's practice for preventing seepage is to line the pond with cacodyl, and he didn't know whether this was done deliberately or in the process of building the pond. My own company's process is to take the waste materials out so that the mineral component will not be soluable and <sup>us</sup> ~~this~~ will not seep down to the ground. I'm sure this is not the proper forum to discuss the application of these techniques, and I, too, would be interested in participating in such discussions and formulations.

Speaker DeGeare: There will be public notices- hearings on these regulatory actions. If you have specific concerns, you can indicate that. Leave your name and address or card with us.

Question: William <sup>WHEELER</sup> ~~Wheeler~~, I'm with <sup>DIAMOND CHEMICAL</sup> ~~Shamrock~~, again. On the definition of an open-dump, a quarry that's filled with water... an abandoned quarry, material... waste material going into that from beneath the surface. Is that considered an open-dump?

Speaker DeGeare: Waste material going into it beneath the surface?

Question: (Same Speaker) Beneath the surface discharge to build up the solids in the bottom of this abandoned quarry?

Speaker DeGeare: Yes. It's possible. But ah- I don't know if it would be an open-dump, that would depend on... again on what the criteria would say. But, it sounds like a practice that should be addressed by criteria.

Question: (Same Speaker) It's an interesting situation, anyway. Thank you.

Question: Tom Tiesler with the State of Tennessee. Talking about the ponds and lagoons, what you are saying is then it is possible that a lagoon that is currently permitted under the NPDES system, it may have to come back and be re-permitted under this new Act? Would you have two agencies, possibly, regulating a permit of the same facility?

Moderator: I think what Truitt said Tom is that that may be possible. My own personal evaluation of that situation is that I don't see that happening, myself. Now, the guys from Washington may well see that differently. Having grown-up in the water program, myself, it doesn't seem right to me. However, you know, when he says it's possible, that's anywhere from zero to a hundred percent. So keep that in mind. Ah- we would be most interested to hear how you feel about that, as a matter of fact.

Question: (Same Speaker) Okay. Well, we're in the process of putting together a hazardous waste bill in the State of Tennessee, a state law, and we've been talking to the sanitary

industry there and that's one of their primary concerns, not to have duplication of enforcement activities. And I tend to agree with them. There is confusion enough, I think, probably in dealing with one agency, but if you've got two different agencies regulating the same facility you can really confuse things more. So I would think there ought to be a real effort, I guess, at the federal level to make sure that we don't have more than one regulatory agency regulating it... the same facility. Get that ironed out before it gets down to the point of implementing the Act.

Speaker Kovalick: I think that's a very good point which we'll be asking about in our public notices relating to the Sub-Title C, as well. I think the challenge lies more in the states. You can usually do quite a bit of one-stop shopping at an EPA Regional Office in terms of talking about air, water, solid waste, radiation and noise, but a lot of strain, at least in the industrial hazardous waste area, is that at least in two states, I know of, you have to go to three different places to get answers on waste management, alone. That is, the water board controls liquid waste that are not municipal; the Health Department controls the solid wastes that are municipal; and, there's an overall state solid waste board that controls resource recovery. So, I think the challenge lies with the states and I think there are ways to do it. I'm familiar... in my experience in air pollution

with ah- when air pollution permits used to be granted in one large major city and you went to the building department to get your permit just to begin construction; that permit was automatically routed through the Air Pollution Control Department of Environmental Quality for a check on air pollution control devices. So, I think the opportunity for creativity is both in our office where we are at least, in many cases, in one building talking to each other in terms of air and water and solid waste; and, at the state-level it's even more of a challenge to assure industry... if you take on the program, that you are going to coordinate and pass... have some kind of opportunity for them to have one-stop shopping or one kind of contact point.

*FLORIDA DEPT. OF ENV. REGULATION*

Moderator: Mr. Druse, go right ahead.

Question: Thank you, Jim. So far we haven't heard a great deal about the economic impact of a lot of this activity down at the local level. If you look at certain portions of this particular section, under 4002 it says you should consider the volume of solid waste that should be included. So that might be interpreted to say that you might partially exempt sites that handle very small numbers of people. And yet, on the other hand, you go into 4004B and there it says that everything's got to be sanitary land-fill, and there's also another section, 4003 in a section there. So you have a dichotomy

there where in one case you might think you could see a way.. you take a small community. The reason this is quite important to us at the moment, we're getting a lot of flack from some of our senators and representatives whose constituents are in small communities that even our daily cover requirement is creating an economic difficulty for small communities who just can't afford to do it. And we're being impartuned to relax our rules which we are very loathed to do. And ah- this is not only true in the sanitary land-fill portion that we're discussing at the moment, but when you get over into the hazardous waste aspect, the economic impact is going to be terrific. And I'm wondering if anybody in EPA has done anything on a national-scale as to what the true economic impact of this law is going to be? It would seem like it's going to be into the trillions, rather than into the billions. Have you any thoughts on that?

Speaker DeGeare: An economic impact analysis has not been done on the Act. Somehow Congress is able to avoid that responsibility. Regretfully not everyone can. We will be doing an economic impact analysis on regulatory actions. We have not done it for the criteria. I'd like to back-up and comment on a couple of your comments. Section 4002 deals with guidelines for identification of planning regions and we'll be talking about that a little later. But it doesn't really relate directly to the criteria for classification of disposal facility and I have not found any place in the Act



which contain... call for an exemption or any implication that there should be an exemption for disposal facilities of a particular size or smallness. Or, for a community of a particular size.

Question: (Same Speaker) Well there's the old story, you can't get blood out of a turnip and these small counties are poorly financed low capital income and low tax base. Sometimes it's almost impossible to come up with the right kinds of dollars.

Moderator: The rural systems portion of the Act, I think, directs itself to that very issue. However, you'll note that the funding level is tagged at authorization of twenty-five million dollars a year. Which, if you think about the number of cities that meet those criteria for size and counties that's quite thin nationwide. If you would permit me... if you would allow me to use that term, permit, I will allow one more speaker, the gentleman standing in back. And then we will move on to the next item. If you have more discussion about this particular topic, please hold it until the end and then we'll have ample time until I have to clear this facility.... Yes. One response to your question, Mr. Druse before the next speaker.

Speaker Kovalick: I think you asked that similar question last night and I didn't get around to responding. The

economic impact. For all the regulations we're writing we have to prepare an environmental impact assessment to show what kinds of improvements that's going to be resulting. And, also do an economic impact analysis. So, almost... on the order of about twenty percent of our contract and grant funds, such as they are, that we have available are being spent on that very subject, and one bit of data that may be some comfort to you in not so much for the local sector, but we have studied industry categories about thirteen of them that we think might be a particular hazardous wastes generators and we published these reports. And our tentative conclusion is that the cost of complying properly with the kinds of regulations that we'll be coming out with we're talking about less than a half of one percent of sales would be involved in terms of economic impact on that firm. Now, admittedly that's very rough data on a national basis, but it does indicate that we're not talking about massive infusions of... a massive infusion of money to get at the problem.

Moderator: Jack, go right ahead.

Question: I'm Jack McMillan with the Solid Waste Program in Mississippi. There's one point that I want to go back to, briefly, in regards to interfacing with NPDES permits. I have about sixty-two of our plants that have been submitted for assistance... I believe forty-two facilities have been designed that have such holes in the rooms that are tied in

with the system inverter and they do not have any discharge. Ah- this becomes a disposal facility and get full consideration under the present system air and water program of site-selection of these facilities? And, I think this is an issue that we should address at an early stage and make a decision on whether or not the other agencies, other programs....

Moderator: You want to address that, Truitt?

Speaker DeGeare: There is one option for dealing with those types of facilities, it is to just let the entity responsible for the NPDES permits expand their analysis and address that in the permitting of the facility.

Moderator: If you would like to stand up and stretch, we're not going to have a break. But, if you want to stand up and stretch and turn around, we will permit that, and then we're going to go right ahead because we don't have all day to use this room. (Pause) If I could have your attention, Mr. John Shanbo, I have a message here for you. (Pause) If anyone knows this gentleman and he's not in the room, would you please tell him when he comes back, we have a message for him. It says it's very important. Okay, we'd like to get started back again, please. The next item on the agenda is resource conservation and recovery and overall technical assistance. We have with us to give you a brief discussion of that, Mr. Tom Canfield. Tom is with our Resource Recovery Division in the Office in Washington.

Speaker Thomas Canfield: We're here today to talk about the RCRA, and we really haven't talked about resource conservation and recovery. Clearly Congress recognized three major objectives in this Act, public health and environmental protection, but also recognized for the first time in an Act administered in the Office of Solid Waste, an explicit objective for materials and energy conservation. A couple of points I want to make before I go to the slides. Resource recovery in the United States is increasing. Economic scarcity of materials, coupled with hard-to-find land is resulting in cities turning to serious looks at resource recovery. RCRA will help speed this process. The major way it does it is to shut-off the cheap option of inappropriate disposal. Resource recovery and resource conservation can reduce the wastes to be disposed of in land disposal sites. I think we all clearly recognize there will always be a need for land disposal. On a national basis, our estimates are that the waste to be disposed of in land disposal sites will increase over the next decade, even assuming highly optimistic rates of increase in resource recovery. But, on a local basis, resource recovery can significantly reduce the pressure for new land disposal sites and result in environmental improvement. We find that resource recovery is not solely limited by economic factors. The technology in resource recovery is developing and fairly new. When the technology seems to be better established for the resource recovery systems, such as floor separation at the local-level, seems to be well in hand, those technologies and those systems are not well understood. Resource recovery

technology and the resource recovery system usually require new kinds of arrangements between cities, companies operating system, and companies buying material or energy from those system; new financing arrangements; new marketing arrangements, and it's just not been the normal way cities have conducted business. Our efforts in resource recovery focuses on three area. The first, aid, we focus our aid to try to resolve a non-economic problem to resource recovery. Secondly, we are involved in systems evaluations to better understand the technology, such as refuse to derive fuel; water wall incinerations and to better understand resource recovery systems and explain them to people, such as source separation of materials at the local-level. Third, we conduct studies on the ways to reduce waste. Our studies have, to-date, emphasized re-use of products. An example of this is that we have written guidelines for beverage containers which require deposits on beer and bottles... cans sold at federal facilities. So, with that I would like to go into the slides to give you a feel for what this Act does in terms of resource recovery and resource conservation. The first major point I want to make is that there is not a neat, clear, distinct sub-title in this Act for resource recovery and resource conservation. The resource recovery and resource conservation aspects of this Act are spread throughout a number of sections. Some of them are listed here. I'll go into further detail on resource recovery and conservation panels, development of state and local programs, later. One thing that I do want to point out

that I don't go over later is the bottom line of this chart which describes... mentions demonstrations. The Act in Sections 8004, 8005 and 8006 gives added emphasis to evaluations of technology and systems. I think you may know that our previous laws allowed EPA demonstrations with public agencies with resource recovery systems. This Law expands that to allow demonstrations with public and private agencies for resource recovery. Section 2003 is a major section in this Act on resource recovery and resource conservation, focusing on a... the point of this slide... major point of this slide is to say that the aid that we will provide, even though the title of it is Resource Recovery and Resource Conservation Panels, the aid that we will provide will be broader than that. We'll cover all aspects of solid waste management. Again, in resource recovery and resource conservation, this section really emphasizes that kinds of things we have been doing. The panels that are called for in this section will comprise of teams of people. It calls for federal, state and local people, local public officials, as well as consultants to make-up the team of the group of people that will provide aid to state and local agencies upon request. The item there called ~~pure~~<sup>see</sup>-matching really means that we should be trying to match county officials who have solved the problem with county officials who are facing similar problems. Or, mayors who have solved a similar problem with mayors who are facing a similar problem. This section of this Law requires that twenty percent of the appropriations under the Act, under the general- the general appropriations under

the Act should be devoted to this kind of aid. The Act in Sub-Title D also provides- allows EPA to give financial aid to states and local agencies to plan and imple<sup>S</sup>ment programs. It names some specific things for imple<sup>S</sup>mentation in the Act; resource recovery; resource conservation services; hazardous wastes management services and also points out that it's broader than that, it can include all the solid waste management. Fifteen million dollars is authorized for this se<sup>S</sup>ction, each of two years. And, the implementation- the funds that we can provide for implementation covers all of the activities leading up to construction, but do not include construction of the facility. Section 6002 addresses federal procurement. And, the key points of this section are that within two years EPA must issue a guideline on how to imple<sup>S</sup>ment this se<sup>S</sup>ction. But, within two years in the federal government, agencies that procure products or materials will have to use the highest percent of re-cycable material as possible. Those agencies-.. those federal agencies that use fossil fuels will now have to use refu<sup>S</sup>ge as a supplementary or primary fuel to the maximum extent possible. And then there's- to the federal government will have to certify in their products the amounts of re-cycled material in those products. This is applicable to procurements over ten-thousand dollars. In Section 8002 Congress asks for a number of studies. Actually, they ask for eleven studies, most of which are due in two years, some of which are due in three years. Some of the key studies I want to point out here, or explain a little bit better. The priority

study is the priority in research and resource recovery. The small-scale, low technology study emphasizes- is to emphasize resource recovery for small communities. The study on front-end separation is meant to be a study of source-separation of materials by the householder for separate collection and re-sale materials to be re-cycled; and, the compatibility of that system with large-scale, centralized, resource recovery systems. We've already done a number of studies on this that indicate that source-separation is totally compatible with large-scale, centralized plants. The Congress wants a more detailed examination of this issue. One of the major studies in this section which is not listed on this slide is a study to be conducted by a resource conservation committee. This is the highest priority study in our mind of this study section. It has a separate, two-million dollar authorization. It is a two-year study headed by EPA, with six other heads of agencies, and it's going to focus on those kinds- those concepts for incentives or new taxes or regulations to increase resource conservation and to increase re-use of secondary materials. We'll probably focus on those concepts which have been most widely debated over the past several years. Such as further examining existing policies that encourage virgin materials use at the expense of use of secondary materials, such as depletion allowances for certain materials and capital gains treatments for certain virgin materials. We'll examine new kinds of incentives, taxes or bounties, such as money for



each ton of new material that is re-cycled; money for each new dollar of investment for re-cycling equipment; and, specifically mentioned in the Act, a tax or a product charge to reflect solid waste management cost in products that are sold. The Act also requires us to examine product regulations to increase resource conservation and resource recovery. Those are the major portions of this Act that address resource conservation and resource recovery. I'd be glad to answer any questions that you may have.

Question: Goodmorning, Shell Luddon, Solid Wastes Task Force, DeKalb County....

Speaker Canfield: Well.... Can I just wait 'til I switch this... the lights on....

Moderator: Now... hold it. We've got a dimmer over here. You all have got to get coordinated. One of you're doing one thing and the other is doing- counteracting it. There you go!

Question: (Same Speaker) Thank you very much, although I'm not that great to look at. (Laughter) We just went through an exercise in refuse-derived fuel in which Georgia Power... I don't know whether they're represented here this morning or not. Is anybody here from Georgia Power? (Answered affirmative by unidentified speaker(s) ). Okay. These gentlemen are...

fortunately their company decided that refuge derived fuel was detrimental to their boilers, and therefore, they were not interested in using refuge derived fuel from DeKalb County to burn in their boilers. Now, do I understand you to say that you are going to force private industry to burn refuge derived fuel at the detri... and incur degradation of their facilities?

Speaker Canfield: No. The Act... that section on federal procurement says that the federal government will use refuge derived fuel or other recovery materials as a supplementary or primary fuel if they are already using fossil fuel. It only applies to the federal government to the maximum extent possible.

Question: (Same Speaker) That's federally-owned boilers?

Speaker Canfield: Federally-owned boilers, it would not be a private power company. I should add that other... other public utilities or private utilities do not feel that refuge derived fuel is necessarily a detriment to their boilers. Union Electric in St. Louis is a prime example.

Question: (Same Speaker) Thank you, sir.

Moderator: Before the next speaker, I'd say again that Mr. John Shanbo has a message here if he's in the audience. It says it's important- very important. Go ahead.

*WIGLEY, ESCAMBIA UTILITY DEPT.*  
Question: My name is Chuck ~~Wiggly~~, ~~Seaboard~~ County, Florida.

Ah- I too have the same problem with private power companies. We are experiencing the same difficulty with Gulf Power in Pensacola. They say this resource recovery, as far as using solid waste, would be detrimental to their boilers. Now, I've also talked to some people who are having the same problem, it seems, in this part of the Country.

Speaker Canfield: What do you feel that we should be doing to resolve that problem?

Question: (Same Speaker) Well, I'm not real sure it's a... so much of a technical problem, one of the big things that Gulf Power has brought up would be not only detrimental to their boilers, but would also degrade their air quality, and this would have an impact on permit under the Air Quality Act. There may be more information generated by EPA to the industries indicating that it might not be such a detriment to their operation, or some sort of discussion panel set-up with industry, both government and federal officials to go over these problems?

Speaker Canfield: Good thinking.

Question: Tom Tiesler, the State of Tennessee, again. You just said that it would be a requirement that federal facilities, you used refuse-derived fuel, in their boilers. From the national point, that's practical? Would this apply to TVA, Tennessee Valley Authority?

Speaker Canfield: Yes. (Pause) We already have guidelines for federal facilities on the use of ~~refuge~~<sup>3</sup> derived fuel or solid wastes as an energy source that is already applicable to federal facilities. The requirement in this Law is really not a new...is not a new addition. It really just reinforces the existing guidelines we do have that are applicable to federal facilities.

Question: Paul Wagner, Mayes, Sudderth and Etheredge. Pertaining to Section 4008 and the portion of that section which deals with assistance to communities for resource recovery studies. I wonder, first of all, what's the status, if ah- you might be able to give us to-date might be in initiating that grant program and can you give us any information on how you see it being administered. That is, for example, would it be a partial grant, total grant, what would be the qualifications and the priorities for obtaining those funds, who would administer it and at what level and basically what you see as the application procedure being?

Speaker Canfield: I can only reflect on what we've done in a similar nature in the past. If you have any kind of ideas as to how it should be administered and the kind of criteria, we'd like to hear from you. We have, in the past several years, issued, at the federal level through the Congress Business Daily a set of criteria and solicited grants on a cost-shared basis with local communities for resource recovery. We call them

implementation grants. That- the funds were limited each year. The number of grants to be funded is relatively few. We don't have funding. Authorization for this section is fifteen million dollars, we don't have appropriations for this section, yet. I think much of your answer... much of the answer on how it will be administered, who will administer it and what the criteria will be when the flow of money will start is going to be tied to the magnitude of the appropriations for that section. But, I think if you want to get a general feel for it you could refer back to the kinds of criteria that we've published for those grants in the past which are available.

Moderator: We have time for about one more speaker and we have a gentleman here, ready.

Question: My name is John Lynch, and I'm Vice-President of Garden State Paper Company. And, incidentally, I made similar remarks last night. So, for those of you who were here, my associate is quite skilled as a member of a one-man-band. He'll be performing up at the top of the escalator, if you'd like to step out for a couple of minutes. Garden State Paper Company is the world's largest recycler of used news into fresh newsprint. My purpose in speaking here today on conservation and recovery is to underline the value of paper as an important resource. I want to preface this statement by saying that Garden State Paper, a subsidiary of Media General of Richmond,

Virginia, has recycling mills in Garfield, New Jersey, Pomona, California and a joint-venture mill with Field Enterprises in Alsip, Illinois. These three mills consumed more than a half-million tons of used newspaper in 1976. We recently completed construction of a joint venture mill with the Mexican government. The mill, located two-hundred and fifty miles north of Mexico City, has an initial capacity of sixty-one thousand metric tons which is expected to be doubled in the near future. Much of the paperstock raw material for this mill comes from the southwestern United States. We have selected this public meeting of the EPA to make our statement because we are considering construction of a paper recycle mill in the State of Georgia. Our company has given continuous support to recovery and recycling of all resources in the solid waste stream, but today I would like to focus specifically on paper. In the months ahead, the municipalities, the counties, and the states that comprise Region IV will be facing decisions on how to manage the paper in the solid waste stream. An option they will be faced with is burning refuse for energy. An argument has been made that burning paper fraction of the waste stream for energy constitutes an efficient and beneficial utilization of that portion of the waste stream. We would like to emphasize that where a viable market exists for used paper, burning is not the best use of that waste in terms of energy or in terms of most productive utilization. When paper is recycled there is an offsetting energy consideration. According to an article

in the Harvard Business Review that quotes the National Association of Recycling Industries, "the use of recycled fibres rather than virgin pulp in paper manufacturing results in energy savings ranging from sixty to seventy percent." In effect, burning old newspapers for energy is a gross waste of energy. To say it in a slightly different way, it takes the BTU value of two-tons of paper to make one-ton of virgin paper. Pre-sorting can make available considerable quantities of used newspapers and corrugated boxes for recycling, there will still remain in the solid waste stream a high percentage of paper that is contaminated and not commercially recoverable. The paper and boxes that have been separated at the household, office and business levels and not get into the waste stream will be available to the paper industries in the area. According to your own estimated figures, the elimination of this portion from the waste would affect the BTU value of the garbage by five percent or less. And, I don't really think the tolerance of these systems even accounts that. In addition, these recovered fibres can be used several times in the recycling process. And they will still be available for burning in the end as they eventually find their way into the contaminated, unrecoverable portion of solid waste. Therefore, we urge that in considering how to handle used news and corrugated that the following steps be taken to develop guidelines for the most efficient use of this portion of the waste stream: First, that on municipal, county or state levels surveys be made to determine what markets exist or could exist for used newspaper and corrugated as well as other recyclables. Second, that

industries wishing to purchase these recyclable materials be given priority to do so. And thirdly, that in order to assure the continuous and expected flow described above, that these industries be asked to guarantee that they will purchase the recyclable materials specified for a reasonable number of years, at prices which will be to the advantage of cities or other sources to provide them for recycling. Finally, municipalities should reserve the right to exclude from contracts for the operation of Refuse Derived Fuel Systems (RDF) recyclable materials, such as newspapers and corrugated, recoverable through household and commercial source separation programs. We urge that proposed guidelines for identifying regions and for State solid waste management planning emphasize that materials recycling is a national objective which must be reflected to the maximum practical extent in State and local government plans. To accomplish national objectives for materials recovery for recycling into useful products demands that government at all levels must join with industry in a common effort to remove existing impediments to the achievement of these objectives. And we at Garden State certainly stand ready to help in anyway we can.

Moderator: Thank you very much. If we have additional comments on resource conservation and recovery and the federal assistance, please hold them until the end of the next presentation when the floor will be open to comments on any topic. The next item



on the agenda is state program development, and again, we have Mr. Truitt DeGeare. Truitt. (Pause)

Speaker Truitt DeGeare: The RCRA recognizes that the major role in solid waste management lies with state and local governments. This is especially evident in Sub-Title D. The states may play a key role in eliminating open-dumps and also the regulating of the hazardous waste program. The governor, in consultation with local-elected officials can structure a mechanism for preparing and implementing solid waste management plans that's built... that is build one existing at the state and local level. At the federal level, the Administrator shall publish guidelines for identification of regions, state plans and state hazardous waste programs. Section 4002A of the Act gives the Administrator six months to publish guidelines for the identification of those areas which have common solid waste problems and who are appropriate municipal planning regional solid waste service. This activity is a kick-off of a three-step process that is suppose to entail eighteen months according to the calendar set forth in the Act. Within six months after the publication of guidelines, the governor in each state after consultation with local elected-officials shall promulgate regulations identifying the boundaries of each area within the state, which, as a result of urban concentration, geographic conditions, markets and other factors is appropriate for carrying out regional solid waste management. The state then has another six months to jointly with appropriate elected-officials of general purpose units of local

government, identify an agency to develop the state plan and identify one or more agencies to implement the plan and identify which solid waste functions will, under the plan, be planned for an carried out by state, by regional or local authorities or by an agent of regional, local and state authorities. Where feasible, agencies designated under Section 208 of the Federal Water Pollution Control Act shall be considered for designation. In summary, the three-steps are during this eighteen months, EPA will first, publish guidelines on the identification of planning areas. Second, governors and local officials will identify planning areas. Thirdly, the planning roles of the various entities involved. Sec. 4002B requires the Administrator, after consultation with appropriate federal, state and local authorities to promulgate regulations containing guidelines to assist in the development and the implementation of state solid waste plans. This is due April of 1978. The Act discusses the minimum requirements for approval of states plans. And, these requirements includes the identification of the responsibilities in implementing the state plan, the distribution of federal funds to the authorities responsible for the development and implementation of the plans, and the means for coordinating regional planning and implementation under the plan; prohibition of the establishment of new open-dumps within the state; and, the requirement that all solid wastes, including solid waste originating in other states but not including hazardous wastes, shall be utilized for resource

recovery or disposal of in sanitary land-fills; provisions for the closing or up-grading of all existing open-dumps within the state, and this is related to the requirements of Section 4005; provisions for the establishment of such state regulatory powers as may be necessary to implement the plan; provisions that no local government within the state shall be prohibited under state or local law from entering into long-term contract for the supply of solid wastes to resource recovery facilities; <sup>and</sup> ~~in~~ for provisions for such resource conservation or recovery and for the disposal of solid wastes in sanitary land-fill or any combination of practices that may be necessary for use or disposal of solid wastes in a manner that is environmentally sound. RCRA authorizes assistance to state and local governments in a number of places. Section 4008A(1) was discussed a little bit by Tom Canfield, it authorizes thirty million dollars for 1978; forty million dollars for 1979. These funds will be for grants to states to be distributed to state, local, regional and interstate authorities carrying out planning and implementation of state plans as discussed earlier. This distribution of funds will be laid out earlier through the planning exercise conducted by the states in conjunction with the local officials. The money is to be distributed among the states on a population basis, except that each state receives at least one-half of one-percent of the total funds available. Section 4008A(2) authorizes fifteen million dollars for each fiscal year, 1978 and 1979 for states, counties, municipalities

and municipal agencies, and state and local public solid waste management authorities for implementation of the program to provide solid waste management, resource recovery and resource conservation services and hazardous waste management. This assistance shall include assistance for facility planning and feasibility studies, expert consultation, survey and analysis and market needs, marketing of recovered resources, technology assessment, legal expense, construction feasibility study, source-separation projects, and physical or economic investigations or studies. But, this assistance will not include any other element of construction or any acquisition of land or interest in land, or any subsidies for the price of recovered resource. Agencies assisted under this subsection shall consider existing solid waste management and hazardous waste management services and facilities, as well as facilities proposed for construction. The Law also provides for assistance to what are described as special communities. Two and a half million dollars is authorized for each of the next two fiscal years. One such community would be allowed per state, and one project would be allowed per state; the project as such should be included in the state plans. Section 4009 recognizes the special needs of rural communities, especially with regard to meeting the Section 4005 dump closing requirements and this discussion in the Act leads me to... my interpretation is that there is no exemption called for as regards to rural or small communities as related to the dump closing requirement. These

are- this Section authorizes twenty-five million dollars for each fiscal year, '78 and '79 for grants to the states. In the case of these grants, the implementation is allowed to include construction, but not land acquisition. There are various criteria which are pretty stringent for allocation of these funds and there is an allotment for them. I want to emphasize that the planning levels that I've talked about are all simply authorizations contained within the Act. And they're based on past history, they do not necessarily relate in any form to actual funds which say eventually may become available. So, a key word of advise which I think is appropriate if you have on-going efforts and implementations, don't stop in anticipation of federal funds becoming available in the near future. I'd like to hear any views you might have on this part of the Act.

Moderator: Any comments on the state program development?

Question: A. S. Chiply, State of Alabama. I never know what I'm going to talk about when I get up here. The business of state assumption. The federal Act is divided into two major portions, I think. You've got the hazardous waste section which is mandated either by the state on the state, or the federal government. And, you've got the normal solid waste management which is left up to partly to the grace of the state to implement. But these are not separate twins, they are siamese. There is a bridge between them in the mandate to close open-

dumps. Whether or not these dumps contains hazardous materials, whether or not they are lagoons or what-not. This is a bucket of worms and one we've got to live with. I don't know whether or not we would accept the program as far as hazardous wastes are concerned. I don't think anybody else does, because we have to define what this bullit is that we have to bite. We don't know how big it is or what it's made out of. And, we don't know whether they're going to bite it or not. Grants are fine. But the question has been raised about the hardship that the dump closures and all the rest of this makes on small rural communities. It is a hardship. I don't altogether agree with Mr. Druse that it's impossible for these small communities to do this, because I think we've done a pretty good job of it, and it can be done in the since of a mandate. The public health of people in small communities is just as important as the public health of people in large communities. If these mis-managements of solid waste is a question of public health, then it should concern all of them. And, if it is mandated more-or-less that all wastes should be handled in such and such a manner, then it is an incentive to the smaller communities to band together to get some economic escape, which can be done. As far as the grants are concerned, this provision in the Act that ah- implementation and construction grants are available to small communities is somewhat of a farce. It's not available. There's not enough federal money to do this job for everybody, so there is little dribbles of money available. I think there's a portion in this Act on this special

communities bit which is to be determined by the Administrator of the Act in cooperation with the states to determine what is a special community. That such grant funds as are- is available is only available to one such community in each state. This is not an incentive, it's a drag, because it means competition and moneys spent in competition to see which of these small communities are going to receive this grant. And normally, the one that receives it will be the one that is most expertise in grantsmanship which almost parenthetically means the community that can best afford to do it on it's own, anyway. The poor community that cannot afford the expertise is the ones most in need of the money. So, I'll leave this, we've got a bucket of worms.

Moderator: Thank you very much for those remarks, Mr. Chip~~fy~~. The floor is open for comments, questions or remarks on any subject of the Law.

Question: My name is John <sup>J. Conlon,</sup> ~~Connors~~, I'm from the small city of Athens, Alabama, about sixteen-thousand people. We operate a joint county and city land-fill which is successful. We bury everything except the hazardous waste and liquids. They are referred to the County Health Department and if they are permitted to bury in the land-fill, then we bury them on permit of the County Health Department. What happens to them if they are not okayed by the ah- County Health Department, I don't

know. Now, we are concerned with the collection of resource recovery materials. We would like to collect as many of these items as we can properly collect so that it would extend the life of our land-fills. We're concerned about this because they are rapidly filling up with the amounts of garbage and trash that we have. Now, one of the items that concerns us is the throw-away items, such as bottles and cans. I understand that the federal government has instituted a program at some of their installations where they charge a fee, no matter whether the can is returnable or not. Is this true?

Moderator: Tom, would you like to address that for us, please?

Speaker Canfield: Our guidelines, ah- require that a federal agency that <sup>sells</sup> ~~sates~~ beer or soft drinks that those cans... cans or bottles must carry a deposit and those cans or bottles can be returned, can be recycled ~~or~~ re-used and re-filled, again.

Question: (Same Speaker) How successful has this been? Can you tell me?

Speaker Canfield: The guidelines were finalized in <sup>late</sup> ~~last~~ September. The date that the agencies have to decide how they're going to ~~em~~plement them is December 1977. We've begun a test, the Department of Defense, we think, <sup>sells</sup> ~~sates~~ ninety or ninety-five percent of all beverages within the United States and they are starting a test of ten facilities. All of those



tests are to start in June. The only federal agency that I can think of right now that has implemented it on their own has been Yosemite National Park, which implemented it last summer, voluntarily, and without the requirement of the guideline, plans on carrying it out forever. They achieved a seventy-percent return rate on all their containers. It increased their gross profits, increased the amount of material that they recycled, and they felt it was a success and they do plan to continue it.

Question: (Same Speaker) Thank you, sir. (Pause)

Question: Durham Shelton, Kentucky. I have a question here regarding what flexibility or options do you see relative to the mechanics- mechanisms which may be available to governors. And, the definition of planning areas. I'm considering that some states have special districts and special planning areas already set-up under law and the law is rather specific relative to involving local officials. And, I'm wondering what- how broad that definition is going to be and what might be possible?

Moderator: Ah- I think that <sup>e</sup>Truitt can speak to that. I might ask you to first of all give us how you think it ought to be.

Question: (Same Speaker) Well, I don't think I'm in a position at the moment to say specifically how I think it ought to be. I know what the objective is that you have in mind and I'm wondering whether or not what happens should be based upon the ability to meet the objective upon the specific mechanisms involved as stipulated.

Moderator: Will you speak to that, Truitt?

Speaker DeGeare: I'll only speak to it in a general manner, because I'm not coming to you with any preconceived notions. The prime concern is to see that the objectives are met. That is that workable planning areas are identified for the development and implementation of the state plan. And ah- I would think that there should be considerable latitude to accommodate the various, previous, collective agencies that have been established within the state if those are indeed acceptable in terms of a workable plan.

Moderator: I've discuss this, Mr. Shelton, with people from several different states. As you know, we have eight states in Region IV, and I've probably heard a preference given for the complete spectrum of how to do that. Some prefer that it not get any larger than at the county-level, and others prefer that it be a much broader scope than that. Some prefer that the discretion be left to the governor and the affected bodies

and the public at-large to determine how they want to do it in their particular area. Personally, I would hope that our guidelines are broad enough to the agencies, the governor and the local people can pretty much decide exactly how they want to put it together in their area and who they want to implement the plan once it's done.

Question: (Same Speaker) Thank you.

Question: Peter Dawson with Hennix<sup>J.</sup> and Durham and Richardson<sup>SEN</sup>. I have an amazing article that sort of summarizes the Law, may even take it a little bit out of context. I'd like to read one phrase of it, I'm not even sure what they mean. It says: Guidelines will be published for developing performance standards for solid waste management practices, including deciding the location, design and construction of facilities, and guidelines for states in planning open-dumping. Now, the open-dumping, I think, has been covered pretty well, but could you tell me what's referred to as far as performance standards concerning location and design of solid waste facilities?

Moderator: I think he's referring to 1008, and if you want to speak to that?

Speaker DeGeare: That is the general guideline section. Congress said for us to develop guidelines, and these are not

mandatory regulations, they are simply guidelines, in our opinion, describing various alternatives and how well they perform... and how well they perform. This is not just in terms of hardware, it's also site selection with regards to disposal sites, especially.

Question: (Same Speaker) Okay...

Moderator: May I offer to you that I don't know if you've travelled in other parts of the Country, but perhaps other parts of the Country the states' programs may not be as well developed as they are in the southeast and perhaps they could use some guidelines in developing state programs and developing local programs in solid waste. I think this is one area where these guidelines could be useful and helpful and will be. In addition to that, they may in fact be helpful to amplify or support the standards and criteria that are already under effect in state laws as the state programs attempt to explain the reasons for approving a site and a particular location or not approving at site.

Question: (Same Speaker) Okay, that helped me. My concern was, it seemed like a duplication of effort, if I was interpreting this article correctly. But, I understand what they were driving at now, with your comment. I had two comments I wanted to make concerning revisions to... I'm getting a little ahead of the game since you haven't written the criteria yet,

you obviously don't want to talk about revisions, yet. But, based on other programs, I'm sure there's going to be some revisions coming along which will be necessary when different problems come up. But, one thing I'd like to suggest or ask is that there's been a problem with P.L. 92-500 in that the regulations- the ah- special conditions for grants are set-up so that if revisions are and what time they've made and whatever revisions that are required will be- will need to be met as far as an on-going program. As a specific example, like the 201, like if a revision is made anywhere along the time-frame which you're under-going, the 201 process... the 201 has to be brought up-to-date with those revisions. Which, legally, it may be required, but it wrecks havoc with planning processes, say if you're ninety percent complete with a program and a revision comes along and change it, then you've got to drop back maybe three or four months of work and start over again. Some time-frame for these revisions could be implemented as far as this Act saying that this revision will become active in four months or six months or twelve months. I think it will make the whole planning process much more beneficial in the long run. There may be some legal ramifications of that that I'm not aware of. The other comment that I'd like to make is that in one of your slides you had a phrase in there about reducing public risks in implementing resource recovery facilities which is an important point. The comment that I would like to make is that the implementing the

program needs to be made aware of this as they reduce their risks they usually reduce the amount of potential revenue they could get. And, I'm not sure some really realize that until after it's too late, until after negotiations are already finalized, and it's legally binding that they've got to go through with the reduced risks. And then they realize then at that point that they're not going to get near as much of the revenues. And if they do have a trade-off there then they need to be aware of it before they go through with it.

Moderator: That's a good point about the revisions. I appreciate the havoc that perhaps has been caused in changed requirements with the water program 201 planning program, I'm familiar with that and I hope these gentlemen will indeed take that fact with them to Washington as they prepare our regulations and perhaps even in the future, decide they might need some revisions. Yes, go right ahead.

Speaker DeGeare: I'd like to follow-up a little bit more on the guidelines question you raised. That's the area that I especially wanted to solicit any viewpoints you might have on which practices should be addressed in the priority sequence.

Question: My name is Walter Trish, Coast Regional Planning Council. I have a concern, being a planner, and in a regional planning council. Again you see the federal government going into what I would call a <sup>pragm</sup>atation. It began to take a more

of a block approach, instead of categorical during the sixties, and I'm beginning to see, like with the health planning agencies, kind of going off and doing their own planning and doing it by themselves. And again, I'm beginning to see... it looks like some of EPA's programs may be doing the same thing. I have a concern for the... like I said, coordination. I look at EPA and say who is the land use agency on the federal level, and you begin the question and you say maybe EPA is because of the programs. When you talk about air, when you talk about water quality, you talk about solid waste management, you're really getting into crucial areas in terms of land use development and it's impact. And, I have my own bias in terms of the regional planning council, which should be a coordinating element within the total staffing because we try to deal with a number of issues. I mean, we get to transportation, we get to resource recovery how do we get it to and from and collected. So, we're dealing with a... I think a gentleman mentioned, I think a can of worms, and also a can of worms from my perspective plain. There is many aspects that can be taken into concern. I think maybe in 895, I noticed in one of the handouts the 895 is the type of thing that should be used so that everyone can make their input.

Moderator: Good point, thank you very much. Next speaker, go right ahead.

Question: Tiesler of Tennessee, again. I'd like to ask a question about the grants to the states to carry-out the program.

One is a funding period mentioned in the Act and is a matching ratio of monies in the Act? In other words, fifty-fifty grants; seventy-five - twenty-five; and, the period of time that these grants will be continued. Is this specified or is there any guidelines along that line, or is that going to be left up to EPA?

Moderator: Somebody want to catch that one?

Speaker DeGeare: There is no funding ratio... no matching ratio. And the authorization is provided for two fiscal years....

Question: (Same Speaker) Okay, I....

Speaker DeGeare: That's not to say that they won't ever become available or that it won't become available, and that's not to say that there's no potential for anything beyond those two fiscal years. All we know is what the Law says and it states authorizations for two fiscal years.

Question: (Same Speaker) What we're use to getting is grants one year at a time and not knowing the next year whether we're going to have federal money the next year to carry on the program, and is this going to continue with this new Act? The problem that we face is trying to hire personnel which is a problem getting positions set-up and then having to tell these people that we can only guarantee you a job for one year. It's



hard to work with... it's hard to hire people on that basis, and there needs to be something, say, in the term of at least two or three years so we can get scaled-up and guarantee these people that they have a job and hire competent people to do the work. I don't know if anything can be done or if the Act mandate something different from that. But, if there's anyway the guidelines can be written along that line, it sure will be helpful to the states.

Speaker DeGeare: I think the ah- I don't see the Act precluding that. To my knowledge, it's very possible that the grant regulations could be developed so to allow a funding program- say a three year program.

Question: (Same Speaker) I'd like to recommend that, for what it's worth, because it's important to the states.

Moderator: I'd like to point out to you Tom, perhaps you've read this the same as I have, but under the definitions, it says for the purposes of federal financial assistance, other than the rural communities assistance, the term implementation does not include the acquisition, leasing, construction or modification of facilities or equipment or the acquisition, leasing or improvement of land. And, it has an 'and' there and that 'and' is not underlined, but my opinion is it should be. It said 'and' after December 31, 1979 such terms does not include

salaries of employees due pursuant to Sub-Title D of this Act. Now, I'd be most happy to hear what the people from the Washington staff has to say about that, but it says to me that Congress intends for us to get our planning done prior to that date and after that date, they want it carried out. (Pause) That is, with federal money.

Speaker DeGeare: Also, the provision for federal assistance in Section 4008 says that funds can be used for the development and implementation. They jump from talking about the restrictions on implementation. So, if you're in a planning development process or if you're using people for planning development as opposed to implementation, I don't think there's any exclusion with regards to salaries on that. But, there is limitation.

Speaker Kovalick: Jim, I just wanted to make a comment that we have to take this Law in the context of other factors going on in Congress. And, I think, given the sunset, if you will, provisions of better interest these days that is programs deserve to have a regular re-evaluation whether they are environmental, social or military or whatever, I think, it is less and less likely to expect Congress to have long dates between initial passage and the next time they review legislation. And the way they ensure that they get around to it is that they turn-off the water in terms of their look at the legislation every year or two years. So, I think it would be remiss of us to think that. First of all, we're not being singled out

in the solid waste field of this Act for individual attention, but this is an overall trend. And yet, on the other hand, I think you realize that it's not likely that we in EPA and you in the states and local governments would want to start a relationship to vigorously implement a Law and then not be able to in some way, keep it up, partially. So, we get a lot of questions about the fact that this has '78 and '79 and no more in it, and I think you can only be comforted a little in that we are not being singled out in environmental programs. This is the way things are going. They deserve to be looked at every couple of years and the new legis<sup>l</sup>ature that you'll see in other areas will probably have the same kind of condition.

Moderator: Any further comments? I don't know if you can hear my stomach grawling over this microphone, but it's about that time for me. So, if there's no further comments, I'll close this public meeting. Remind you that the record will be open until our office closes on March 11th, that's on a Friday. If you have additional comment, or know of someone that was unable to be here that you think they would like to have something to say about this Act or any portion of it, either send yours in or ask them to send theirs in. I thank you all for coming here. We appreciate your help and we hope to have more of this sort of thing in the future as we proceed down the road to developing our regulations, guidelines, criteria and so forth. Thank you very much.

Statement by Richard G. Simmons, Chairman, State of Florida Resource Recovery Council before the EPA Region IV Public Meeting on P. L. 94-580, February 23-24, 1977, Atlanta, Georgia. My name is Richard G. Simmons. I am City Manager of West Palm Beach, Florida; but I am speaking today on behalf of the State of Florida Resource Recovery Council. In 1974 I was appointed by Governor Reubin Askew to serve as Chairman of the Council. On behalf of the State of Florida and its localities, I want to express my appreciation to the U. S. Environmental Protection Agency and to its Office of Solid Waste for this opportunity to present our views on the Resource Conservation and Recovery Act of 1976. The Florida Resource Recovery Council supported P. L. 94-580. Our favorable analysis of the Bill was given to Governor Askew and to all members of the Florida Congressional delegation. We were pleased to see the Bill received their unanimous support. But my personal interest in this legislation goes back to 1972 when I was asked by the National League of Cities and U. S. Conference of Mayors to serve on the National Municipal Solid Waste Task Force. That Task Force looked at the needs of cities in solid waste management and made several legislative proposals to EPA and to the Congress. Through the National League of Cities Task Force and as a member of the Solid Waste Advisory Committee for the National Commission on Productivity, I also learned more about EPA's mission and the difficult job they have. I gained respect for EPA staff and what they can

accomplish when given a chance. I have been pleased, therefore, to see new federal solid waste legislation that includes many of the provisions we first proposed years ago. (Who knows, maybe I can even convince my city commissioners that all those trips to Washington were worth it,) consequently, I believe P. L. 94-580 is a good piece of legislation. On behalf of the entire Council, I applaud its goals and objectives; and my comments are intended to improve its administration and not in any way to find fault with its intent. My remarks today are divided into two parts. First, I want to summarize what we've already done under state legislation in Florida. Then secondly, I think it will be obvious why certain potential problems in the new Federal Act concern us. One. Florida, like several other states, did not wait for Congressional action to establish state policy on solid waste and resource recovery. Through the leadership of Senator Guy Spicola of Tampa and others, the Florida Legislature in 1974 passed the Resource Recovery and Management Act. This Act did three things: It made adequate solid waste management and resource recovery goals of the state. It set forth the steps that would be taken to achieve these objectives. And it assigned responsibility for each of the tasks necessary to achieve the legislative goals. For example, the Law required the Florida Department of Environmental Regulation to develop a statewide resource recovery and management program. The Florida Law further required the statewide program to include guidelines for local governments to provide for proper handling

and control of solid wastes from storage to collection, transfer, disposal and recycling. The Department was given authority to permit all solid waste handling facilities and has made a diligent effort to bring all disposal sites into compliance with state requirements. The Law also required local governments to prepare comprehensive solid waste plans for approval by the state environmental agency. In addition to the responsibilities defined for the Department of Environmental Regulation and for local governments, a separate but complimentary mission was assigned to the Resource Recovery Council, a thirteen-member body established to advise the Governor and the Legislature. The Council was told to: One. Study the laws and programs of other states; two. Consult with local governments, regional planning councils, business, industry and environmental groups; three. Designate the areas where resource recovery is economically practical and which should be required to plan for resource recovery; and four. Make recommendations for and approve the state program before its adoption. In effect, the Council was given the charge of assessing the feasibility for resource recovery in Florida and identifying the logical planning regions. At the same time, the Council was made the vehicle for broad public participation in the program. This is evidenced by the make-up of the Council and its appointive nature. The nine council members appointed by Governor Askew represent cities, counties, business and industry, agriculture, environmental groups, professional engineering and the universities. There are also two members each from the House and the Senate. So, what have

we done? The Department of Environmental Regulation in 1976 adopted a statewide waste management and resource recovery program. Under the Florida program, all cities and counties are required to develop coordinated solid waste management plans. Amendments proposed to this session of the Legislature will make those plans countywide, if passed. The Resource Recovery Council has designated nineteen county area which, on the basis of population, waste volumes, and available markets, are required to plan for resource recovery. Local plans are due by July 1, 1978. But the Council has proposed an amendment to change that date to July 1, 1979, to make this requirement consistent with the planning deadlines in the Florida Local Government Comprehensive Planning Act of 1975. The Florida program is comprehensive. For instance, it includes hazardous wastes, although its provisions do not go as far as 94-580. Furthermore, the State program is designed for end results not endless planning. Every local or regional plan must include an implementation schedule which will be monitored by the Department of Environmental Regulation. Two. Now let me turn to what concerns us about the forthcoming guidelines and regulations under the new Law. As you can see from my summary of the Florida program, the Florida Resource Recovery and Management Act appears very compatible with the new Federal Law. Based upon the language of P. L. 94-580, we expect only minor revisions or additions to our State program. 1. P. L. 94-580 authorizes preventive medicine, not voluminous prescriptions for everything that ails

us. So let your guidelines be simple guidelines, not detailed specifications. 2. Specifically, the guidelines for identification of planning regions mandated in Section 4002A, and due almost immediately, should not be written so narrowly and rigidly that Florida, or any other state, would have to redo something that has already been done. Several states now have four or five years of solid waste planning experience, during the past two years, Florida has accomplished the objectives of Section 4002A and used the same guiding criteria contained therein to do so. 3. Similarly, in the guidelines for state plans, Section 4002B, all eleven of the guiding criteria in sub-section C have been considered in Florida. Likewise, we believe the Florida program also meets the minimum requirements in Section 4003 for approval of state plans, although the judgement will be yours to make, of course. Likewise, we believe Chapter 17-7, Part II of the Florida Administrative Code, adopted by the Florida Environmental Regulation Commission in 1976, accomplishes the objectives of Section 4006. You can appreciate the time consumed by public hearings and meetings. Members and staff of the Council have already participated in close to seventy-five public meetings and numerous hearings. The Department of Environmental Regulation has invested eighteen months of intensive staff time to carry out its responsibilities under Florida Law. You will not find us eager to repeat the process. 4. In connection with points two and three above, Section 4001 makes it absolutely clear that the objectives of



Sub-Title D (State Solid Waste Plans) are "to assist", and I emphasize assist. Section 4001 states further that these "objectives are to be accomplished through federal technical and financial assistance to states." Assistance, not regulation, and Section 4001 concludes by stating that the federal guidelines are to "foster cooperation among federal, state and local governments and private industry." Cooperation, not regulation. We in Florida accept the regulatory provisions of the Act where the Congressional intent is clearly regulatory, such as in Sub-Title C (Hazardous Waste Management); but we oppose any attempts to encumber the several guidelines in Sub-Title D with regulatory intent or language when such is not authorized.

5. We have similar concerns about the various solid waste information guidelines required in Section 1008. Clearly, these guidelines are supposed to provide positive, helpful guidance, not regulations. We also suggest that this information be presented in a format that is brief, readable, and practical.

6. I have no comment on Sub-Title C, since hazardous waste management is appropriately under the jurisdiction of the Department of Environmental Regulation. 7. We see a potential problem in Section 4004 when later this year EPA must define sanitary land-fills versus open dumps. We believe the intent of this Section is to close, up-grade and ban open-dumps through state regulation and enforcement, not federal regulation of local sanitary land-fills. True, one man's "sanitary land-fill" has often been someone else's "open-dump," so we endorse the need

for standardization; but we also stress the vast differences in geological and hydrological conditions from place to place and the danger of undermining state regulatory programs already in place. 8. The special studies for glass recovery and for small scale technology, authorized in Section 8002, are urgently needed and I encourage you to schedule and complete them as soon as possible. 9. The model codes authorized in Section 8003D, are also badly needed, much more so than some of the other items. For example, our staff ran a search (through EPA's Solid Waste Information Retrieval System) on the title to or ownership of solid waste, and legal precedents for its use in local ordinances and contracts. The search did not yield anything we could use. In fact, we have found research on legal and institutional issues in resource recovery is lagging behind the work on economic and technical evaluations. 10. EPA has new and broader authority for technical assistance under P. L. 94-580. We believe that any private firm retained by EPA to render assistance to state and local governments should be ineligible for follow on contractual work with the recipient of the federal assistance. Appropriate state agencies and officials should receive proper and advance notice of EPA assistance activities in Section 2003 should be assembled and assigned in a manner that will avoid both actual and potential conflicts of interest. 11. Federal financial assistance is also authorized under P. L. 94-580. In good government fashion, all of the monies authorized under the Act are tied to planning requirements. However, it appears that for many ~~state~~<sup>state</sup> and local governments,

completion of the various planning requirements will come well before the federal funds. If the earliest availability of funds is fiscal 1978, widespread distribution of those funds appears unlikely before 1979. As I mentioned earlier, if our proposed amendments are passed, Florida local governments will be required to submit their plans in 1979. In short, a concentrated effort must be made to obtain ample appropriations and rapid distribution of funds or else reimbursement should be allowed for planning expenditures already made. In conclusion, we concur wholeheartedly with the view of Sheldon Meyers, Director of EPA's Office of Solid Waste, that this Law does not provide all the answers to complex issues but instead establishes "a pattern for interaction" and an "assumption of roles by all the key parties" involved in solid waste management and resource recovery. You have a difficult job to do. But your tasks are no more difficult than those placed upon state and local governments. We must work together. You may be assured of our interest and cooperation.

Additional statements for the record submitted from:

Mr. Moses N. McCall, III, Chief                      Letter dated: 3/11/77  
Land Protection Branch  
Department of Human Resources  
Environmental Protection Division  
270 Washington Street, SW  
Atlanta, Georgia 30334

Mr. Moses N. McCall, III, Chief                      Letter dated: 3/3/77  
Land Protection Branch  
Department of Human Resources  
Environmental Protection Division  
270 Washington Street, SW  
Atlanta, Georgia 30334

Donald I. Hackney                                      Letter dated: 2/22/77  
Director of Sanitation  
Department of Public Services  
P.O. Box 1027  
Savannah, Georgia 31402

Mr. J. C. Edwards                                      Letter dated: 3/10/77  
Tennessee Eastman Company  
Kingsport, Tennessee 37662

Mr. Clark Gregory, Ph.D                              Letter dated: 3/9/77  
Assistant Professor of Accounting  
Morris Brown College  
Atlanta, Georgia 30314

Jerry C. Perkins, Head                              Letter dated: 3/9/77  
Solid Waste & Vector Control Branch  
Sanitary Engineering Section  
Department of Human Resources  
P. O. Box 2091  
Raleigh, North Carolina 27602



JOE D. TANNER  
Commissioner

## Department of Natural Resources

ENVIRONMENTAL PROTECTION DIVISION  
270 WASHINGTON STREET S.W.  
ATLANTA, GEORGIA 30334

J. LEONARD LEDBETTER  
Division Director

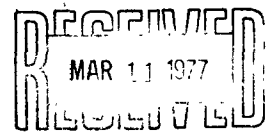
March 11, 1977

Mr. James H. Scarbrough, Chief  
Residuals Management Branch  
Hazardous Materials Division  
Environmental Protection Agency  
Region IV  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

Dear Jim:

Although I made several comments at the recent public meetings regarding RCRA, the following written comments are being submitted to be included as a part of the record.

1. Federal RCRA implementation policy should establish, in consultation with the states, national goals and broad guidelines for the achievement of these goals. The states, however, must be permitted to develop their solid waste management programs in concert with these guidelines while at the same time maintaining maximum flexibility. The Federal regulatory role should be designed to support state and local regulatory responsibilities rather than to over-ride, pre-empt or duplicate them.
2. The criteria for determining what wastes are hazardous will have a direct bearing on the states' abilities and desires to implement hazardous waste programs. The criteria should establish a realistic decision tree approach for determination and should not be too broad so as to list virtually all wastes as hazardous.
3. If pits, ponds, and lagoons are to be covered under regulations developed pursuant to the Safe Drinking Water Act, they should not be covered under RCRA.
4. Disposal sites which have been closed should not be addressed during the disposal site inventory.



SOLID WASTE MANAGEMENT BRANCH

AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER

Mr. James H. Scarbrough  
March 11, 1977  
Page 2

5. Planning guidelines must be broad to allow maximum flexibility to the states. In addition, the guidelines should not require the enactment of state legislation, should not disrupt what has already occurred in planning, and should not mandate that 208 water planning agencies also do solid waste planning.

Please advise if you have questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mose", with a stylized flourish extending upwards and to the left.

Moses N. McCall, III, Chief  
Land Protection Branch

MNM:bbk

cc: Mr. James W. Dunbar  
Mr. John D. Taylor, Jr.



JOE D. TANNER  
Commissioner

## Department of Natural Resources

ENVIRONMENTAL PROTECTION DIVISION  
270 WASHINGTON STREET S.W.  
ATLANTA, GEORGIA 30334

J. LEONARD LEDBETTER  
Division Director

March 3, 1977

Mr. James H. Scarbrough, Chief  
Residuals Management Branch  
Hazardous Materials Division  
Environmental Protection Agency  
Region IV  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

Dear Jim:

At the recent public discussion of PL 94-580 you indicated that the record would remain open for the receipt of additional comments until March 11, 1977. Please accept the attached letter from Mr. Donald I. Hackney of Savannah as supplemental to the comments presented in his behalf by Mr. John Taylor of this office. We would appreciate inclusion of this letter in the final hearing transcript.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mose".

Moses N. McCall, III, Chief  
Land Protection Branch

MNM:bbk

Attachment

cc: Mr. Donald I. Hackney





# City of Savannah, Georgia

DEPARTMENT OF PUBLIC SERVICES

P O BOX 1027

SAVANNAH, GEORGIA 31402

February 22, 1977

RECEIVED  
FEB 24 1977

LAND PROTECTION BRANCH

Mr. Moses N. McCall, III  
Land Protection Branch, EPD  
270 Washington Avenue, S.W.  
Atlanta, Georgia 30334

Dear Mr. McCall:

Thank you for your letter announcing public discussion sessions on the Resource Conservation and Recovery Act of 1976 (PL94-580) to be held on February 23 and 24. We will not be able to send anyone to the meetings but do have comments we would like entered into the record.


It is our understanding that under the new Act, one of EPA's first objectives is to draft a definition of a sanitary landfill. We agree with some of the views of Mr. Wayne D. Trehitt, Chairman of the National Solid Wastes Management Association's Institute of Waste Technology, which are paraphrased below:

Sweeping, specific criteria from the federal level could seriously hamper landfill disposal efforts in many states. A broad federal definition of a sanitary landfill must be results-oriented, not operationally oriented, and its intent should be that a landfill not harm its surrounding environment relative to the environment's current condition. If the water table at the proposed landfill site is already contaminated, then the landfill can be engineered so any discharge is below current acceptable levels of contamination. It would not make much sense to me to increase disposal costs for the sake of discharging pure water into an already contaminated source.

This type criteria would be especially helpful in Coastal areas where the water table is usually high. Arbitrary distances required between the bottom of a trench and the water table may be unnecessary and could rule out many landfill sites.

We appreciate receiving notification of the meetings and the opportunity to participate.

Sincerely,

  
DONALD I. HACKNEY  
DIRECTOR OF SANITATION

DIH/jar



Scarborough

ASSOCIATION OF STATE AND TERRITORIAL  
SOLID WASTE MANAGEMENT OFFICIALS  
Room 824, 270 Washington Street, S.W.

Moses N. McCall, III  
President

March 3, 1977

Mr. Nicholas Humber, Director  
Resource Recovery Division  
Office of Solid Waste  
U.S. Environmental Protection Agency  
Washington, D. C. 20460

Dear Nick:

We appreciate receiving the Technical Assistance Program Strategy Paper and the invitation to the March 9, 1977, meeting. Although I will be unable to attend, other State representatives will be there. As a whole, I find the overall strategy paper to be well done; however, I offer the following comments for your consideration:

1. Page 2--I disagree with the statement that "regulatory approach will not be implemented by State and local government..." without TA from EPA. This may indeed occur in some instances, but it certainly is not an absolute fact.
2. Page 4--EPA is not "the only source of objective information dealing with solid waste management in a comprehensive manner." Certainly your agency is the major source, but other organizations such as APWA are also sources.
3. Page 6--What is the supporting data behind the flat statement that "no new State initiatives would be undertaken and only ten more plants would successfully be built by communities by 1985." without technical assistance?
4. Page 6--I disagree with the statement in item 3 that "States would not provide adequately for the monitoring, enforcement, etc." See statement 1 above.
5. Page 7--There appears to be a word or phrase missing after line 9 of the Discussion.
6. Page 7, Issue No. 1--EPA should exercise Option A, and give technical assistance a higher priority than regulation. EPA regulatory authority under RCRA is limited to hazardous wastes.

Mr. Nicholas Humber  
March 3, 1977  
Page 3

7. Page 8, Issue No. 2--EPA should exercise Option C and develop a comprehensive technical assistance role.

8. Page 10, Issue No. 3--EPA should exercise Option B. I do not agree, however, that transfer of responsibility to the regions should be contingent on the regions having 9 full time employees who have completed a headquarters training and qualification program. The size and complexity of the regions and their ability to carry out technical assistance should determine when the transfer of responsibility occurs.

9. Page 12, Issue No. 4--EPA should exercise Option A. Technical Assistance has been the major thrust of OSW for years. TA efforts have contributed greatly to improved programs and certainly should be continued.

We appreciate the opportunity to comment. Please contact us if you have questions.

Sincerely,



Moses N. McCall, III  
President

MM:bbk

cc: ASTSWMO Board of Directors  
Ms. Beatrice Tylutki  
✓ Mr. James H. Scarbrough  
Mr. William B. DeVille  
Mr. David W. Johnson



**TENNESSEE EASTMAN COMPANY**

*A Division of Eastman Kodak Company*

KINGSPORT, TENNESSEE 37662 • 615 246-2111

March 10, 1977

James H. Scarbrough, P. E.  
Region IV, U. S. Environmental  
Protection Agency  
345 Courtland Avenue  
Atlanta, Georgia 30308

Dear Mr. Scarbrough:

A representative of Tennessee Eastman Company, Mr. W. M. Crawford, attended the public discussion session on the Resource Conservation and Recovery Act of 1976 (RCRA) in Atlanta on February 24. We appreciate this opportunity for public participation in the formulation of the Environmental Protection Agency's policies and programs for implementing the RCRA. We also appreciate your invitation to submit written responses and we ask that you consider the following comments which relate to Subtitle C, "Hazardous Waste Management."

The act provides for standards to include extensive record-keeping and reporting with respect to generation, transporting, treatment, storage, and disposal of hazardous wastes. Furthermore, treatment, storage, and disposal will also be subject to standards for construction and operation of facilities. In those instances where hazardous wastes are transported from one premises to another and/or custody of the wastes changes hands, the need for regulating such operations at the various steps is apparent. However, in cases where two or more phases of the generation-through-disposal cycle are performed on the same premises and without change in custody, regulations should apply only to the transfer of hazardous waste from such premises or to another responsible person. In many cases, the treatment process will result in a relatively small quantity, if any, of residual hazardous waste and the emissions or discharges from the treatment process will be subject to regulation under federal and/or state air and water regulatory authority.

The purposes of the RCRA will not be served by imposing duplicate regulation on such operations. The regulations to be promulgated by the Environmental Protection Agency and/or the states should provide exemptions for such operations and any others for which any harmful emissions or discharges are subject to regulation under other acts. Such an approach is necessary in order that the provisions of Section 1006 of the RCRA, quoted in part below, will be implemented.

(b) INTEGRATION WITH OTHER ACTS - The Administrator shall integrate all provisions of this act for purposes of administration and enforcement and shall avoid duplication, to the maximum extent practicable, with the appropriate provisions of the Clean Air Act (42 U.S.C. 1857 and following), the Federal Water Pollution Control Act (33 U.S.C. 1151 and following), the Federal Insecticide,

Mr. James H. Scarbrough  
Page 2  
March 10, 1977

Fungicide, and Rodenticide Act (7 U.S.C. 135 and following), the Safe Drinking Water Act (42 U.S.C. 300f and following), the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1401 and following) and such other Acts of Congress as grant regulatory authority to the Administrator.

As criteria are developed for identifying and listing hazardous wastes under Section 3001, attention should be given to the words "significantly contribute" and "substantial . . . hazard" (underlining added) as used in the Act's definition of hazardous waste. This will assure that priority is given to the more serious problems without the unnecessary delay and confusion which would be inherent in a system designed to cover all possible risks. Definitions of hazardous waste in some of the earlier bills; for example, a definition including any quantity of a material designated as a toxic pollutant, hazardous substance, or hazardous air contaminant under other acts, were rejected as Congress finalized the RCRA. Thus it is apparent that our suggestion on this matter is consistent with Congressional intent. Subtitle D provides for the regulation of other solid wastes under state and regional solid waste plans. Implementation of that Subtitle will enable the states and regions to establish appropriate priorities for such regulation.



J. C. Edwards

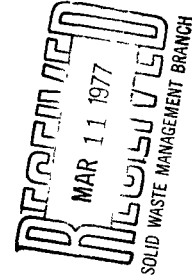
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# Morris Brown College

Atlanta, Georgia 30314

BUSINESS ADMINISTRATION

March 9, 1977



Mr. James H. Scarbrough, Chief  
Residuals Management Branch  
U.S. EPA  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

Dear Mr. Scarbrough:

Thank you for the opportunity to comment on RCRA. I would appreciate your attaching the enclosed article and schematic to your list of comments. I do not want to see artificial barriers placed in the way of any future "land application of wastes" systems that are designed for the benefit of the soil.

Thank you.

Sincerely,

Clark Gregory, Ph.D.  
Assistant Professor of Accounting



Since 1881

# Compost May Be The Most Misunderstood Product in America

CLARK GREGORY, Ph.D.  
*Georgia Institute of Technology*

A REVIEW of the current official literature in composting could easily lead to the conclusion that composting is not a viable alternative to solid waste treatment either in the U.S. or Europe.<sup>1-4</sup> Having just returned from an extensive trip through Europe, I can assure you that such a picture of composting is misleading. Compost plants *are operating successfully* in all parts of Europe—east and west—in spite of meager support from central governments. Latest figures show that the Swiss and Dutch each compost the domestic refuse (along with sludge in most cases) of 15 percent of their respective populations, Czechs, English, and Germans—two to five percent. There are about 50 compost plants operating in France alone.

These European compost plants are producing high-grade fine-sieved composts for a large variety of uses: as a soil amendment for erosion control on vineyard slopes, a food supplement providing essential trace minerals in the diet of piglets, preventing anemia and diarrhea; a growing medium for evergreen trees set out on harsh Alpine slopes for avalanche control, a topsoil substitute in landscaping, a soil builder for reclamation and recultivation of lands devastated by strip mining, a fill material for depressions in cultivated fields, a soil structure improver and soil-enricher in basic agriculture, a permanent litter for chicken houses, for soil improvement on highway shoulders and embankments allowing higher forms of plant life to thrive, a substitute for heating manure in hot-house horticulture, a lawn and garden soil enricher, and so on *ad infinitum*. The early literature was encouraging.<sup>5-7</sup> However, the American experience with municipal composting in the 1960's was dismal indeed.<sup>8</sup>

Municipal composting as a general proposition has not worked in the U.S. The most common and recurrent reason cited for this failure in report after report has been "There's just no market for compost." This has never made any sense to me. The fact is that no real market for compost has been demonstrated or developed.

This does not mean that no such market exists. *Compost may be the most misunderstood product in America.*

The statement that the lack of markets for compost is the major drawback to its production led me to undertake a study to determine where compost is most needed in America. On reading through Sam Hart's booklet on composting,<sup>1</sup> I became aware that compost could help salve the wounds inflicted on the American landscape by thoughtless strip-mining practices. An extensive literature search yielded the nature, extent and effects of strip mining in America.<sup>9-12</sup> A glance through the *New York Times Index* indicated the problems of strip-mine reclamation have not been solved, and in 1972 some 90 U.S. Congressmen co-sponsored Ken Hechler's (D-W. Va.) bill (HR 4556) to ban strip-mining entirely in the U.S.

Scientists, such as Mr. Carroll Duggan of Tennessee, and Dr. Hermann Kick and Dr. Eberhard Spohn of Germany, have had some experience in reclaiming strip mines by rebuilding soils. Other European scientists have been studying the effects of compost made from urban refuse and sludge on soils, plants, and animals. The Europeans' special interest in compost production and utilization is erosion control.

After writing about 20 letters to

*Mr. Gregory traveled extensively throughout central Europe during the summer and fall of 1972 to study the research, production, and utilization of compost. He traveled more than 10,000 miles in eight countries. He backpacked, hitchhiked and generally scrounged around on a budget of only \$500 furnished by himself. His numerous benefactors—students, professors, executives, blue-collar workers, housewives and children—who provided meals, beds or floppy rides, conversation in an often strange tongue, and encouragement, are scattered across many lands. He visited 33 composting facilities of various and sundry designs, shapes and sizes, discussed various aspects of composting with over 75 experts—theorists, practitioners, manufacturers and users, and actually spent two weeks working in the Schweinfurt Germany compost plant as a laborer.*

the European experts with whom I wanted to discuss composting,<sup>2-16</sup> I set off on my four-month European composting odyssey with a round-trip ticket to London, \$500, a 44-pound loaded backpack, and lots of questions. The voluminous information I gained in Europe boils down to this: Europeans have been composting urban refuse for as many as 40 years in some places. They have recognized that some soils need more than artificial fertilizers to gain and/or retain their fertility. They have recognized that waste disposal is a many-faceted problem, they have found ways to make their urban refuse and sludge beneficial to the land even when confronted with shortsighted, short-term and incomplete economic and social considerations. Composting in Europe is on the upswing in spite of meager support from central governments.

Compost marketers have found new, higher-valued uses of the life-giving material that provides soil humus, e.g., the Dutch annually sell 140,000 tons of high-quality compost, 80 percent of which goes into what they call recreational uses, generally landscaping, at \$7 per ton. German vineyardists continue to form cooperatives to supply themselves with an ever-growing supply of compost for erosion control and moisture retention on their steeply sloping vineyards.

The Czech Ministry of Agriculture has recognized that Czech soils need more organic matter, and has embarked on a massive compost plant-building program which will someday provide virtually every Czech agricultural acre with 12 tons of compost every third year. The Europeans know that piglets raised on the concrete pads, typical of modern hog husbandry and thus deprived of soil to "root" in, are susceptible to anemia and diarrhea. They discovered that finely-ground compost mixtures fed to the young pigs effectively and economically remedy this problem. They found that compost forms an effective base for "deep litter" chicken-house practices.

*Compost Science*

greatly reducing the drudgery and expense of chicken-house cleaning. They have learned to hang on to new composting operations in the early years, realizing that it takes time for local markets for compost to develop.

It is easy to say that the European culture is based on a "waste-not-want-not" philosophy, relatively and sadly lacking in the U.S. Although this philosophy may have encouraged the search for and development of ways to recycle organic wastes, there is more to it than that. Europeans live in the same world, the same western civilization, that we live in, and our paths seem to be converging. For composting to be practiced in Europe or in the U.S., the compost must be produced cheaply and efficiently, and it must be of value to someone and available at a reasonable price. This takes the understanding and cooperation of a lot of people with many different backgrounds.

If composting is so great, why aren't we doing it? "There's no market for compost," they tell you. What is compost? The kind of rough compost we are talking about for erosion control in strip-mine reclamation and highway embankment stabilization is little more than pulverized refuse that has been cleaned up by running it through a self-cleaning, long, slowly rotating drum screen with approximately two-inch holes and mixed with digested and/or dewatered sewage sludge and/or animal manure at a 3:1 volume ratio (refuse/sludge/manure). It can then be taken straight to the slope it is destined to enrich, and quickly mixed (not plowed) into the soil. The addition of sludge/manure speeds up decomposition and increases the nutrient content of the mixture.

After a brief respite, the land could be sown to legumes and ultimately to trees or grasses. This has already been done at Penn State, where Prof. William Sopper has grown trees, ornamental shrubs, grasses and vegetables on strip-mine land that has been treated with sewage sludge effluent. This is first-year strip-mine soil that has not been enriched in any other way.

With many American cities already questioning the merits of incineration and going to garbage pulverization for ultimate baling and/or landfilling, and with many cities seriously contemplating rail haul of refuse for remote disposal in so-

called strip-mine reclamation schemes, we are actually moving very close to the procedure just described. Why not go all the way? It would cost only about \$6 per ton: \$3 to grind, screen and mix, \$2 to rail haul 100 miles, and \$1 to deliver locally and incorporate into the soil. About one-third of this cost could reasonably be borne by the user, leaving the city a net cost of \$4 per ton. By comparison, incineration costs between \$8 and \$10 per ton, sanitary landfilling between \$2 and \$5 per ton.

Many studies have shown that incorporation or mulching of organic matter on steep slopes and/or poor soils is *decisive and essential* if permanent vegetation and thus erosion control are desired.<sup>17-19</sup> With more than four billion tons of sediment being produced by erosion in the U.S. annually,<sup>19</sup> clearly we as a nation have

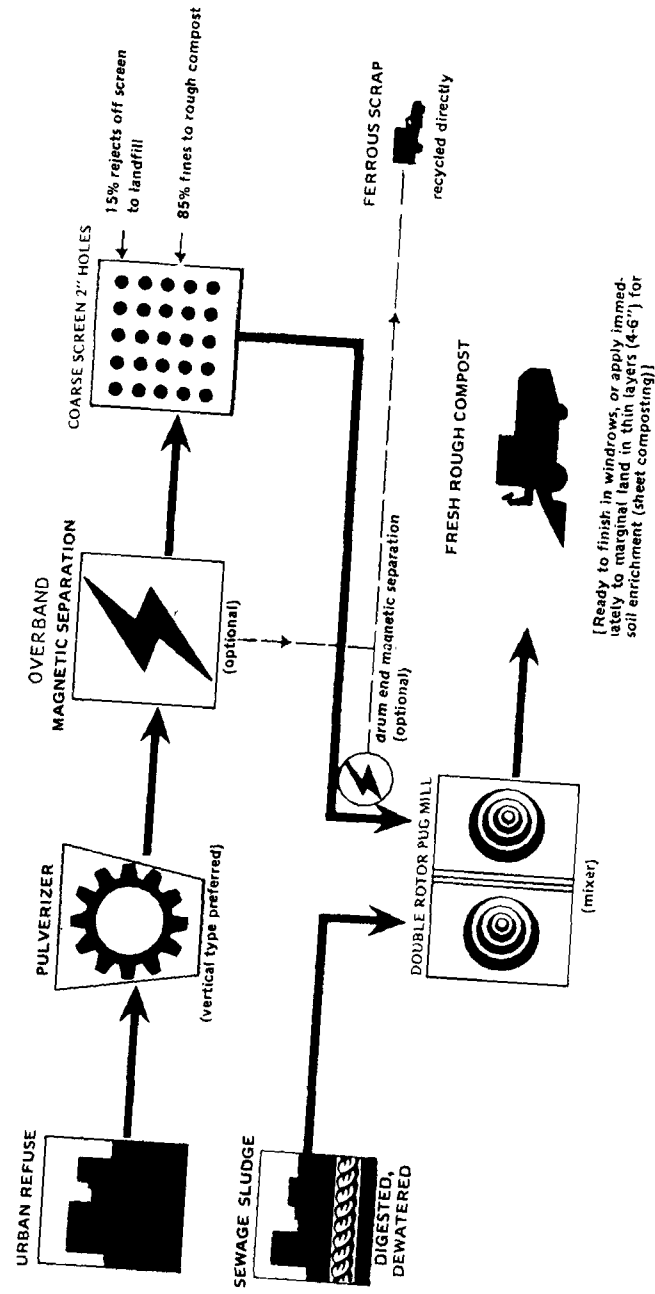
recognized neither the value of organic matter for erosion control nor its widespread availability. This is an especially glaring error considering that it costs us about \$1 per ton to remove sediment from rivers, roads and reservoirs.<sup>20</sup>

My European composting odyssey and subsequent study and reflection have allowed the ideas expressed herein to jell. We will be putting our ideas into practice in the spring with the cooperation of the DeKalb County (Georgia) Sanitation Department, the Southern Railway System, and the J. M. Huber Mining Company, and under the auspices of the Georgia Department of Natural Resources' Land Reclamation Section and Solid Waste Management Office and Georgia State University's Environmental Research Group.

#### REFERENCES

- McGahey, P. H. *American Composting Concepts*. Environmental Protection Agency, Solid Waste Management Office Publication No. SW-2r. Washington: U.S. Government Printing Office, 1971.
- Jensen, M. E. *Observations of Continental European Solid Waste Management Practices*. Public Health Service Publication No. 1880. Washington: U.S. Government Printing Office, 1969.
- Hart, S. A. *Solid Waste Management/Composting: European Activity and American Potential*. Public Health Service Publication No. 1826. Washington: U.S. Government Printing Office, 1968.
- Breidenbach, A. W. *Composting of Municipal Solid Wastes in the United States*. Environmental Protection Agency, Solid Waste Management Series Publication No. SW-47r. Washington: U.S. Government Printing Office, 1971.
- Reclamation of Municipal Refuse by Composting*. Technical Bulletin No. 37. Series 37. Sanitary Engineering. California: 1953.
- Gotaas, H. B. *Composting, Sanitary Disposal and Reclamation of Organic Wastes*. World Health Organization Monograph Series No. 31. Geneva: World Health Organization, 1953.
- Howard, Sir Albert. *An Agricultural Testament*. London: Faber & Faber, 1940.
- Wiley, John S. and O. W. Kochtitsky. "Composting Developments in the United States." *Compost Science*, Summer 1965.
- Udall, Stewart L. *Study of Strip and Surface Mining in Appalachia: An Interim Report to the Appalachian Regional Commission*. U.S. Department of the Interior. Washington: U.S. Government Printing Office, 1966.
- Boccardo, Louis A. and Willard M. Spaulding Jr. *Effects of Surface Mining on Fish and Wildlife in Appalachia*. Bureau of Sport Fisheries and Wildlife Resource Publication 65. Washington: U.S. Government Printing Office, 1968.
- Surface Mining and Our Environment*. U.S. Department of the Interior. Washington: U.S. Government Printing Office, 1967.
- Spaulding, Willard M. Jr. and Ronald D. Ogden. *Effects of Surface Mining on the Fish and Wildlife Resources of the United States*. Bureau of Sport Fisheries and Wildlife Resources Publication 68. Washington: U.S. Government Printing Office, 1968.
- Reclaiming Surface-Mined Lands*. U.S. Department of Agriculture. Miscellaneous Publication No. 1082. Washington: U.S. Government Printing Office, 1968.
- Dr. Phil Greear, biologist. Shorter College, Rome, Georgia. Personal communication, November 12, 1972.
- Magnuson, Malcolm O. and R. L. Kimball. *Revegetation Studies at Three Strip Mine Sites in North Central Pennsylvania*. U.S. Department of the Interior. Washington: U.S. Government Printing Office, 1968.
- John S. Wiley, retired Sanitary Engineering Director, U.S. Public Health Service. Personal visit, early June 1972.
- Dickens, Ray et al. *Conservation of Resources in Municipal Waste*. Environmental Protection Agency, Solid Waste Management Series (SW-13g of). 1971.
- Cosack, J. "The Reforestation Experiment at Zonser Heath." Reprinted in *International Research Group on Refuse Disposal (IRGRD) Information Bulletin*, No. 3 (October 1957) by Public Health Service. Washington: U.S. Government Printing Office, 1969.
- Soil Erosion, the Work of Uncontrolled Water*. Soil Conservation Service, Agriculture Information Bulletin 260. Washington: U.S. Government Printing Office, 1971.
- Sediment: It's Filling Harbors, Lakes, and Roadside Ditches*. Soil Conservation Service, Agriculture Information Bulletin No. 325. Washington: U.S. Government Printing Office, 1967.

SCHEMATIC DIAGRAM OF PROTOTYPE ROUGH COMPOSTING PLANT



Refuse to sludge ratio 3.1 by weight.

DR. CLARK CROSBY  
404) 377-5206  
506 CAUDLER PARK DRIVE NE  
ATLANTA, GA. 30307





STATE OF NORTH CAROLINA

DEPARTMENT OF HUMAN RESOURCES

*Division of Health Services*

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P. O. Box 2091

Raleigh 27602

March 9, 1977

James H. Scarbrough, P.E.  
Chief, Residuals Management Branch  
U. S. Environmental Protection Agency  
Region IV  
1421 Peachtree Street, N.E.  
Atlanta, Georgia 30309

Dear Mr. Scarbrough:

Please find enclosed a statement from the North Carolina Solid Waste Management Program concerning Public Law 94-580. This statement is being provided to complement the comments and questions provided at the public meeting on February 23 and 24, 1977, in Atlanta, Georgia.

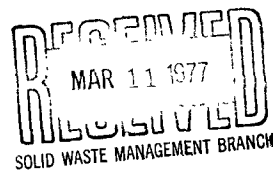
Should you have questions concerning our statement, do not hesitate to call for clarification.

Yours truly,

A handwritten signature in cursive script, reading "Jerry C. Perkins".

Jerry C. Perkins, Head  
Solid Waste & Vector Control Branch  
Sanitary Engineering Section

JCP:bm  
Enclosure



STATEMENT FROM THE NORTH CAROLINA SOLID WASTE MANAGEMENT PROGRAM CONCERNING PUBLIC  
LAW 94-580

Personnel from the State of North Carolina's solid waste management program appreciate the opportunity to have participated in the public meeting concerning PL 94-580 in Atlanta, Georgia on February 23 and 24, 1977.

In addition to the verbal input provided at that meeting, it was felt that a brief summary statement would be in order. This statement provides input concerning the program's current status in North Carolina as well as some of the implications of a projected program. The statement is brief but attempts to emphasize some of the major issues to be addressed with the implementation of PL 94-580, "Resource Conservation and Recovery Act of 1976".

The expanded definition for solid waste includes liquids and semi-solids which are not part of the present definition of solid waste as used in the North Carolina General Statutes. The addition of liquids and semi-solids in the definition has implications of much additional responsibility. In the past, disposal of waste liquids and semi-solids have been the responsibility of the North Carolina Department of Natural and Economic Resources especially when (1) those wastes resulted from liquid industrial treatment processes or from commercial activities which generated a liquid waste and (2) where stream quality could have been affected as a result of evaporation ponds and lagoons construction.

Responsibility for sanitary landfill approval, resource recovery facilities and recycling certification, and overall solid waste management is vested in the Solid Waste and Vector Control Branch of the North Carolina Department of Human Resources. Assistance in surveillance of solid waste collection and storage facilities is provided by local health departments in the State. With primary responsibility for solid waste management and authority being vested in the Department of Human Resources, there are existing permit procedures which will

have to be considered in an expanded solid waste management role for the State of North Carolina.

This Branch also has in existence rules for issuing permits to impoundments which exceed one-fourth of an acre in size. This program is carried out as a preventive measure against the re-occurrence of malaria outbreaks in this State.

The sanitary landfill definition currently used in North Carolina has dealt with solid waste from individual homes, commercial establishments, institutions, and industrial sources. Solid waste resulting from the demolition of old building sites, urban renewal projects, and landscaping activities have been found to be non-compatible with solid waste from the conventional sources. In developing criteria for the various requirements for sanitary landfills, the criteria for demolition waste sites needs to be considered separately. Also, in determining requirements for a secure landfill; that is, one which is projected to receive hard-to-manage or hazardous wastes, design criteria needs to consider future monitoring requirements for land, air, and water at the site regardless of whether the site is strictly for disposal or a part of a hazardous waste treatment and disposal facility.

The proposed manifest system for tracking hazardous industrial waste will have to take interstate transportation into consideration. The State of North Carolina does not propose to become a dumping ground for toxic and hazardous waste from other states.

It has been found that the basic and most versatile planning unit for solid waste management in North Carolina is the county unit of government. This concept allows planning within its jurisdiction as well as without. Solid waste management systems are financed with county ad valorem taxes and special tax assessments.

Where federal financial assistance has been specified as in the areas of resource recovery and recycling facility planning, rural operational assistance, and state planning assistance, it is highly desirable that the funds designated

for these purposes be specified by the above categories and by amount as the State of North Carolina and its local units of government become eligible for these funds. It is not desirable to have these funds sent to the State as part of a block grant to compete with other environmental programs. The State of North Carolina has developed an incentive program through special tax treatment for resource recovery and recycling activities. It would be desirable through implementation of the Resource Recovery Act of 1976 to provide expanded markets for the recovered and recycled materials.

The State of North Carolina is currently involved in a survey of industrial facilities to determine the magnitude of its industrial waste problem especially problems associated with hard-to-manage wastes and those considered hazardous because of their composition. It is anticipated that a formal program for control and management of these wastes will not be complete until mid 1979 due to legislative and budgetary changes that would be required for implementation.

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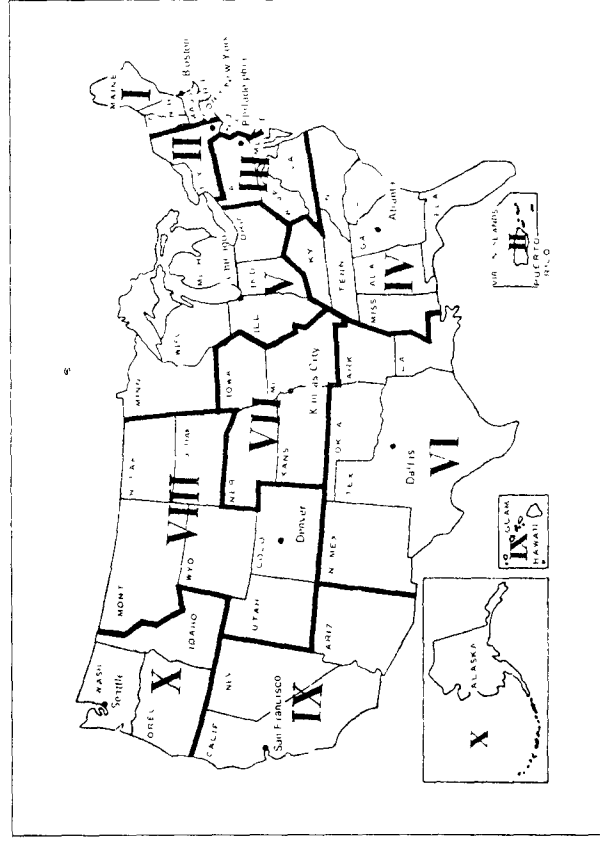
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