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U.S. ENVIRONMENTAL PROTECTION AGENCY

and

ENVIRONMENT CANADA

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JOINT U.S.- CANADA INDUSTRY WORKSHOP ON THE TRANSBOUNDARY MOVEMENT OF HAZARDOUS WASTE AND BORDER SECURITY

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Introductory Remarks:

MR. HEISS: Good morning. On behalf of Joe Wittwer, my co-chair, and myself, Bob Heiss, we would like to welcome you to this workshop. Also, our agencies would like to welcome you, Environment Canada and The United States Environmental Protection Agency. I know, reflected in this group, there are some incredible travel stories of perseverance and survival, and we really appreciate your making it through the snow.

There will be a minor change in the order of appearances and who is appearing at the very beginning of the program. There are remarks that are listed as

keynote remarks that are actually more in the nature of introductory remarks, which Thomas Skinner, the Regional Administrator of the EPA here in Chicago, was to have presented today. He was unable to attend. Will Damico, from Region 5 in the Waste Management Program, will be presenting Mr. Skinner's remarks instead, so I will begin by inviting Will Damico to address us.

MR. DAMICO: Apparently, I'm not tall enough. Maybe this will work better. All right. I was fortunate enough to get Mr. Skinner's remarks e-mailed to me, and I'll attempt to deliver these in the manner that Mr. Skinner would have. Good morning, and welcome to Chicago -- or at least as close to Chicago as you might want to get right now, since this is actually Rosemont. Since our friends in Environment Canada publish everything in English and French, I'll add "Bonjour, et bienvenue a Chicago." (Applause.)

MR. DAMICO: That's all the French they wrote for me. I took Spanish in high school, and I haven't gotten any kids to take French yet -- I'm working on it. I've got a fourth one. I've got Spanish and German covered, but not French yet. As I already mentioned, I am not Mr. Skinner, Regional Administrator Of EPA, Region 5. I'm just a lowly staff person in the office who happened to mistakenly volunteer to bring my cell phone here so that he could call me and tell me he wasn't coming today. It is my pleasure to welcome you to Chicago, where our regional offices are located. For those of you who don't know, the regional offices here in Chicago house the oversight for Ohio, Michigan, Indiana, Illinois, Wisconsin and Minnesota, and we also share our offices with, and our Regional Administrator has a dual title as head of, the Great Lakes National Program Office.

So I would like to welcome you to this third meeting on the movement of hazardous waste between the United States and Canada. Previous meetings in Windsor and Montreal were very productive, and I hope these two days will be, too. We are definitely making progress as we continue working together in a partnership that fosters respect and trust. We, the EPA, have found that we gain a great deal from working with our counterparts in Environment Canada, not just on this issue, but in many other areas, such as the health of the Great Lakes. It's a privilege to have our Canadian counterparts here. I would also like to note that customs officials of both the United States and Canada are here -- or at least we hope they'll be here. They play a major role in assuring the safety of these shipments, and their participation in these discussions is greatly appreciated. The regulators are here and the government officials are here, but, perhaps more important, the regulated community is here. Most of you represent companies and organizations that generate waste, transport waste and/or dispose of waste. It's important that you're here because we can accomplish more together. We see this as a strength.

We at EPA have found that working with the regulated community in partnerships works better than just issuing orders and then enforcing them. We have learned that it is easier and more productive to build bridges than barriers. I am a firm believer in negotiated regulations and that kind of thing. We all have a stake in this issue, and, as partners, we are more inclined to share information, to develop innovative approaches, and to be sensitive to issues that affect us all. The movement of hazardous waste across our common borders is certainly not a new issue, but new threats from potential terrorists have made this a whole new ball game. The border between the United States and Canada is the "longest, undefended border in the world." By "undefended," Tom meant that -- he asked people to call him Tom. That quote I said about not being Mr. Skinner, that's how he introduced himself to the region. He didn't want to be called "Mr. Skinner." What Tom meant is that we don't have armed

forces to defend ourselves from each other. We see this as strength that we don't have to protect ourselves from each other, because we are friends and allies, but others see this as a weakness that they can exploit to inflict injury upon us. So now we must work together and develop new ways to defend this undefended border.

This is a problem that calls for cooperation and also for innovation. You will be hearing more over the next few days about maybe the Smart Border initiative and Smart Cards. We will be discussing innovative concepts and ways we can cooperate to move waste efficiently and securely. Tom would want me to encourage all of you to share ideas at any chance you get.

So, once again, welcome to Chicago. I hope you will enjoy the workshop and have a spirited discussion and move us closer to our goal. I hope you also get the chance to get out and enjoy the Windy City -- not snowy -- at least while you're here. I would like to also note that, for those of you who might have watched the weather and saw the storm "allegedly" moving in from the North and the West, we have Bob Heiss here from Washington, where they have had two snowfalls in the last month that were significantly larger than this one. So on behalf of the citizens of Washington, D.C., Bob, I would like to welcome you to your new winter home. Thank you.

MR. HEISS: Thanks, Will, and my house has the ice dams to prove it. I wanted to reflect a little bit about the workshop that we will be presenting over the next two days and note a few things about it. Some of them are probably seconding Mr. Skinner's thoughts -- Tom's thoughts on the subject.

First of all, this is really our third workshop, as Tom's remarks noted, as Will presented them, and the first one that has been presented in the United States. It's worth a minute's notice that we're talking about a particular time, place and circumstances here. We are located in Chicago. Obviously, Chicago is a very major industrial center close to the Canadian border, and it really serves as the gateway city -- certainly the way EPA is structured -- as the gateway city to two of the busiest crossing points on the planet, Port Huron-Sarnia and the Detroit/Ambassador Bridge-Windsor. Also, right now we are in the time of a regulatory change, as some of the presentations will certainly note – big changes in Canada, some changes also on the U.S. side.

We are actually at the moment conducting an initiative on the whole subject of how we in the Environmental Protection Agency can coordinate our activities more closely with U.S. Customs activities. This is coming at an interesting point when the earliest government agency in the federal government, the U.S. Customs Service, no longer is known under that name and is now a constituent part of the Department of Homeland Security as of March 1st. There will be more about that during the presentations. Also, frankly, the currently unsettled international situation affects legitimate trade along our border, and so it really brings an extra edge to the work that we are jointly involved in. The workshop itself reflects the various relationships and partnerships that exist between two countries and their governments, multiple agencies within each national government, the regional and national layers in each national government, the state/provincial involvement in these activities and, of course, last but not least, industry/government relations. That’s obviously why we put on these workshops and think that they are useful, and we hope that you do as well.

I would like to extend special thanks to our Region 5 within EPA, and in particular, Phyllis Reed, who is the Acting Director of the Waste, Pesticides and Toxics Division, for her support in our putting on this program, and two

of her staff -- one you have heard from, Will Damico, and David Star. Will, I would like to note, as the import/export Regional Coordinator, plays a key role with our office, particularly on the import side, but also with respect to enforcement activities on our export side. On the import side, the consents or objections that come out of my office owe their research to Will's fine efforts, and I want to salute him for all that he does for the program that I run on the Washington side.

As you know, our co-chair, who will be speaking in a moment is Joe Wittwer. He is my counterpart in Environment Canada, and I think the fact that our two offices are putting on this program is a reflection on the close coordination that we do have between offices on notification, compliance and operational issues. If there are any distinctions between how our two offices are structured -- and Joe can correct me on this -- although we both are notification operational offices, I think it's fair to say that his has a greater policy development role than mine does. As to EPA's policy development work, a lot of it comes out of our Office of Solid Waste. My office may have a little more direct involvement in some parts of the enforcement process, although his office is substantially involved in compliance monitoring, I know.

Our program will start today after the introductory remarks with some discussion of present laws and issues, and that will serve as a springboard to focus on new developments which will affect the way we all operate, both in industry and in government.

What we are doing, as you can tell, is recording our remarks today and tomorrow and the questions and answers. We know it will be useful to us in government. We hope it will be useful to you. We intend to put it on a web site so that it is accessible to you, and we hope that those who couldn't be here today will benefit from it. There will be opportunities for questions and answers. There's a microphone between the tables with an "On" button on the top of it that will need to be used. We hope that for most of the presentations there will be a few minutes at the end for any questions and answers you have. We have reserved some time tomorrow afternoon for any questions that you may not be able to ask before that or that may occur to you later. So I will now turn things over to Joe Wittwer.

MR. WITTWER: Thank you very much, Bob. I don't have a long introductory presentation to make at this point. I think it's only about ten slides long. I would also like to reiterate what Tom and Bob were saying. Welcome to this third joint Canada/U.S. EPA workshop on regulations and compliance issues, and congratulations to those of you who had to fight through the storm this morning to get here against all those adversities out there.

Bob mentioned that I am the head of the export/import section -- or he may not have used that exact term -- but that's a recent appointment for me. I have only been in the position for about five weeks. Up until then, I was the head of the Basel and Agreements Section, looking after the international issues regarding hazardous wastes and hazardous recyclable materials. That doesn't mean to say that I am not familiar with the export/import regulations and those particular issues. I have been working with those regulations and with our enforcement compliance people for approximately ten years, so there was a nice fit to move from the international forum into the regulatory forum once again.

As Bob mentioned, as well, I'm part of the Transboundary Movement Branch. My particular section looks after notification, manifest tracking of movements

of hazardous waste, exports, imports and transits. We also feed into, as he was saying, the policy development work. There's also a unit that looks after environmentally sound management within our branch. And during the presentations, I intend to bring a lot of these elements together to give you the bigger picture of what's going on.

Now, someone once reminded me or told me about the ancient Chinese curse, "May you live in interesting times." In Canada, we are living under interesting times, and I mean from a regulatory perspective only. We have sort of an exciting and dynamic period of time with us right now. We have a new Act, the Canadian Environmental Protection Act, and that has given us new authorities. We are working on new regulations, and I'll be covering some of that in my presentations. There are new things going on at the international level, as well, which have implications and influences what we do domestically in Canada.

So, as I was saying, it's an exciting period of time. It's a very dynamic period of time, and in the next 18 months or so, you will be seeing some of these things coming to fruition. There's also an effort underway within our branch to go paperless as much as possible, so tomorrow afternoon, I believe, I'll be making a presentation on the initiatives that we're taking right now to minimize or do away with people and try and go electronically, and to also ensure that we have enhanced security at the borders and keep the borders open to the free flow of goods between Canada and the United States.

Over the next two days, I'll not be the only speaker for Canada. We have four additional speakers here. We have Guy Martin from Environment Canada and David Noseworthy from Environment Canada, as well. David is from one of our regional offices. In addition, we have Elizabeth Maloney from Canada Customs and Revenue Agency, and we have also got Edgar Ladouceur from Transport Canada here. So I think, with the participation of those four people, we'll have a really nice, rounded series of presentations to give you an overall idea of what's going on in Canada as far as regulations, compliance and enforcement are concerned. So that is essentially what I wanted to say as the introductory remarks. At this point, Bob, as far as procedure is concerned, do I pass it back to you or shall I continue?

HEISS: Actually, I think you're next.

International Agreements Presentation:

MR. WITTWER: Following what is in the agenda, I would like to start off with the international agreements, what is transpiring with them, because they do act as drivers and influence the policies that we adopt and the regulations that we develop. Now, for the people that I have met before in a number of workshops that I have held, they always know I start off my presentations with a short joke. The transcriber doesn't have to include that, I don't think. (Pause.) As I was saying, the international agreements do act as things that influence the policies that we design and the regulations that we develop. three big ones for us (Canada) are the Canada/U.S.A. Agreement -- that's on the transboundary movement of hazardous waste -- the Basel Convention, and the OECD Council Decision. Now, the Basel Convention, for those of you that are not familiar with it, is a global UNEP convention. That's under the United Nations Environmental Program, and right now it has 155 parties, and that includes the Economic Union or the European Community. They signed as a unit, as well.

Canada and the U.S. signed the convention back in 1989. Now, signing only

shows your intention to comply with the articles of the convention itself. It does not mean that it is in force for your particular country. Canada ratified the convention in 1992. The way we did that was by introducing the Export and Import of Hazardous Waste Regulations. For our purposes, that was how we implemented the articles of the Convention. Therefore, that permitted us to ratify the Convention, so we are a full party.

The Basel Convention itself covers both hazardous wastes and hazardous recyclable materials. It does not distinguish between the two of them, although it does list a series of disposal and recycling operations in order to determine whether the waste is destined for disposal or recycling. It places strict controls on the movements of hazardous waste. I do not want to go through the elements, because the elements of the Convention cover about five or six pages, but the key one is prior informed consent. You might have heard of it as PIC in various different forums. It requires the tracking of shipments. It also requires the reduction of exports; in other words, the parties are supposed to deal with the hazardous waste or hazardous recyclable as much as possible within their own jurisdiction. There are certain prohibitions. For example, you can't export to Antarctica.

Since its introduction, there was a ban amendment adopted back in 1995 which prohibits the export to developing countries from developed countries. Another key element in the Convention is Article 11. For those of you not familiar with it, Article 11 allows countries to develop and sign bilateral agreements or multilateral agreements, provided the conditions in the agreement are equivalent to the intent and the controls set out under the United Nations convention itself. Now, the Canada/U.S.A. Agreement is an Article 11 agreement, so that allows us to exchange hazardous recyclable materials and hazardous wastes between ourselves, even though the United States is not a party to the Convention. Another one of the key elements of the Convention is that only parties can trade between each other. But since we had the Article 11, Canada/U.S.A. Agreement in place, we can continue to do so.

A highlight that I wanted to present to you is the Liability and Compensation Protocol. That was adopted at what's called COP 5. “COP” is an acronym for Conference of the Parties. So it was adopted in 1999, and it gave countries an opportunity until December 2000 to actually sign on board for the Liability and Compensation Protocol. Essentially, its concept was that there should be immediate monies made available to do environmental cleanups and third-party damages, so that it would be immediate and fulfill the needs of the particular accident, spill or upset, rather than having to go through the courts. The Protocol has 13 countries that have signed up so far. No one has ratified it yet, which has the Basel Secretariat and the United Nations a bit concerned as to why no one has actually ratified the Protocol at this point, so they are planning on having a survey of parties later this year to find out what difficulties countries are having with signing the Protocol itself.

The Ministerial Declaration on ESM: for those of you familiar with the convention, that is Decision 533, and, essentially, it lays out nine key elements that should be looked at for ESM. Sorry, I'm using acronyms. Working in the government, you learn a third language: it's called acronyms. “ESM” stands for environmentally sound management. The Ministerial Declaration, as you will see, has some implications down the road. It's a domino effect to what we end up doing in our shop. A future issue under the Basel Convention that you will see coming up is the development and implementation of ESM, environmentally sound management.

The working groups under Basel are looking at developing guidelines and trying to implement ESM-type capacity in developing countries. They are trying to ratify the Liability and Compensation Protocol, as I mentioned a few minutes ago. There's also an analysis of the Ban Amendment. The Ban Amendment essentially prohibits developed countries from shipping wastes to developing countries for disposal and recycling. The Ban Amendment is not worded in quite that way. In order to qualify what a developed country was, they decided to recognize the OECD, which is the Organization for Economic Cooperation and Development. It has thirty members in it, but it's an economic union; it is not an environmental union.

So under Annex 7, there is the OECD, there are the European Community and Lichtenstein identified as developed countries. The analysis of the Ban Amendment is an issue that they want to take a look at, too, because it has not been ratified by enough countries to come into force yet. They want an effective review mechanism, and this has happened because a lot of the lists that were under the OECD have been moved over under the Basel umbrella, and that has implications for our regulations, as well. The last Conference of Parties, COP 6, was just held in December before Christmas, and the Parties adopted a compliance and implementation guideline, so they're trying to set up a committee to oversee that particular guideline and to act as an adjudicator for disputes between different parties or accusations made by the parties against one another. They also are going to try to strengthen the Regional Training Centers and partnerships with NGOs, the Non-governmental Organizations; in other words, partnerships with industry. There are a couple of people in our shop going to New Delhi at the beginning of April to look at the Regional Training Center that are supporting establishing in New Delhi.

There's also a need for guidance on distinguishing between waste and non-waste. There seems to be a difficulty between parties to know exactly when something crosses that threshold from a non-waste into the waste regime, and then it ends up being controlled.

Bear in mind that the Basel Convention is a government-to-government agreement. The way it gets implemented is through domestic regulations or through domestic legislation, which actually puts in force those particular agreed-to controls in the Convention itself. Now, the Basel Convention controls waste and recyclable materials. The OECD Decision only controls recyclable materials that are hazardous, and the initial decision came out in March, 1992, and the amendment to that decision came out in 2001. The reason for that was that you had two international agreements trying to do essentially the same thing, so it was agreed that the recyclable materials and the list that the OECD had developed would be rolled in under what is known as Annex 8 and Annex 9 under the Basel Convention. They would help to qualify better what is controlled under that United Nations convention, so they needed to amend that decision to remove those substances and retain some that could not be agreed to.

Now, as I was saying, the OECD tries to encourage recycling. and permits modified controls on what is called "amber recyclable wastes." The Decision had a green/amber/red system similar to our stop lights that was developed, where red was highly dangerous materials, amber recyclable materials were moderately hazardous -- and there were reasonable controls already in place for those -- and green-listed wastes got the green light. They weren't controlled under Basel. Now, the green-listed wastes have been transposed to the Basel Convention, and you will find them under Annex 9, and the amber and red substances that were under the OECD are now under Annex 8 of the Basel Convention. The Basel Convention has now developed a means by which to have

applications submitted, review certain wastes to see which lists they fit on, and that was accomplished through the technical working group that they had established.

The Canada/U.S. agreement was adopted and came into force in November of 1986. It has a five-year self-renewal clause in it, so if either party does not notify the other that there is a problem with it, it automatically renews itself every five years. It was amended slightly in 1992.

Now, as I said, Canada and the U.S. are under Article 11 of the Basel Convention, so we can trade with the U.S., even though they aren't a party to the Basel, but when those export and import of hazardous waste regulations came in 1992, under the Basel Convention, we were supposed to control nonhazardous wastes, as well. There is Annex 2 of the Basel Convention, which has two materials listed on it, municipal solid waste or household waste, and incineration ash from municipal and household wastes. Therefore, to meet our obligations under the Convention, we were to control those two. Consequently, we had to amend the Canada/U.S. agreement to reflect that we, the two countries, would take the appropriate legislative actions and the regulatory actions to control those things in order to keep the borders open between the two countries for the movement of nonhazardous waste.

The Canada/U.S. agreement is not very long. It is 13 articles long, and it fits into this little booklet. I brought a couple with me, but we have lots in our office, if anyone is interested in getting a copy, and we are also putting it up onto our Internet web site. It essentially sets out the administrative conditions that the two countries will follow for export, import and transport of hazardous waste between the two countries. Now, hazardous waste is defined by each country, so we find that there are some discrepancies between the two countries in the way our various regulations define or list hazardous wastes.

One of the four principles of the agreement is to adequately manage the hazardous waste within the jurisdiction, but the agreement does recognize what is called the Proximity Principle, in that it makes far more sense to ship something, say, two or three hundred miles to a facility that's authorized and is environmentally sound, rather than ship something across the same country two or three thousand miles away to a facility that can handle it. So you're actually having environmental benefits by shortening the distance that something has to move in order to go to the appropriate facility.

As I mentioned earlier, in accordance with PIC, the prior informed consent, we have to notify each other of intended exports to our jurisdictions.

We have to ensure that the shipments are documented through a manifest or some other type of tracking document.

We also have to allow or permit the reentry of a hazardous waste that is stopped in the other country, where it cannot be recycled or disposed of as intended and has to come back. So the agreement assures that there will be a re-entry of that material to the country of origin.

Now, I included this overhead to try and give you a quick concept of what's going on, in that these are government-to-government agreements that we have come up with, but under the Canadian regime, there are different roles and responsibilities, depending on what level of government you're in.

The federal government has clear jurisdiction over interprovincial movements,

and we introduced some of those conditions and controls in 1985 under the Transportation of Dangerous Goods Act and the regulations under that Act. International movements: we have had the export/import regulations in place since 1992 -- actually, November 26th. International negotiations: we're in charge of that. That used to be my group, and we do extensive consultations with other government departments and state borders, and as some of our Canadian friends and colleagues over there have noted earlier today, we have just finished another round of stakeholders' consultation. The provincial governments are responsible for movements within a province -- that is interprovincial. They're responsible for licensing, permitting, issuing certificates of approval, and things of that nature, to facilities. They license carriers. They also license generators, and they review our import notices, and they are the ones that provide consent to Environment Canada for the notices that we receive and send to them. Municipal governments are involved in the household hazardous waste pickups. They're also involved in the municipal waste pickups, and then there is what is called the CCME, the Canadian Council of Ministers of the Environment. We have a hazardous waste task group set up under the CCME, and they develop national guidelines on the management of wastes.

So that is a quick overview of the international agreements, and as we go along, you will see how they impact and influence the regulations as we develop them. Are there any questions on that particular presentation? I'm down again for the next item on the agenda. I hope you're still awake.

We used to have a physics professor who always kept his head down in the university, and he never looked up at the class and just scrawled on the chalkboard the whole time, and we had a question one time, and after 15 minutes, somebody threw an eraser at him to catch his attention. So you can throw a pen or eraser at me if you want catch my attention. If you will just excuse me a second. My apologies to Bob here. When we first discussed this, I thought I had an hour and a half, so I'm afraid I might eat into some of your time -- actually, the presentation is not that long.

What I wanted to present to you is some of the new developments that have occurred, as far as the control of movements of hazardous waste and hazardous recyclable materials, and what we're calling "prescribed nonhazardous wastes," are concerned. What I plan on looking at here is some of the new authorities that we have been given under our new Canadian Environmental Protection Act, and how that has implications for the export/import of hazardous waste regulations, the PCB waste export regulations, the interprovincial regulations, prescribed nonhazardous waste destined for final disposal and what we call ESM, environmentally sound management.

Now, the reason I'm doing this is for the benefit of some of the Canadian people that are here in order to show that we are trying to ensure that, at least in all of the regulations and guidelines that we are developing, we're taking into consideration a consistency across all of them, so that the definitions are consistent, the criteria are consistent and how we are going to be looking at them will be applied uniformly or as much as we can across the different regulations, so you don't have to deal with different definitions or criteria as you go from one to the other. Currently, we do have regulations in place. As I said earlier, the Export and Import of Hazardous Waste Regulations have been in place since November of 1992. They were made originally to the CEPA 1988, which only gave us authority to control exports and imports. And the initial controls, I mentioned earlier, had been set out since 1985 in the transport regulations. The reason for that was that was the only regulatory vehicle available to us.

As you can see from this overhead, our act, in which Parliament gave us the authority to control hazardous waste, only came out in 1988, so the transport regulations predate our act by three years. Then it took us a further four years to develop the actual regulations to control exports and imports. With the introduction of the new act in 1999, these regulations were rolled over. That meant that any place where we referenced the old act had to be rewritten to reference the new articles and paragraphs of the act. These regulations were designed to implement those three international agreements that I just talked to you about, the Basel Convention, the OECD Council Decision and the Canada/U.S. agreement.

Now, CEPA has been in force since March of 2000. It's called "CEPA 1999" because the Governor General of Canada approved it and signed it on behalf of the Queen in September of 1999. So that's when it actually was signed, but it didn't come into force until March of 2000. It places certain prohibitions on exports and imports and transits when required under the international agreements. We already have some of them in our current regulations. For example, you can't export to Antarctica. What we're working towards is a decoupling of wastes and recyclables.

Under the old transport regulations, it was "any product, substance or organism no longer used for its original purpose, including recyclable materials." Well, we have been listening to our stakeholders in Canadian industry and a number of other people, and it generally was the opinion that we should split the two apart. We are also developing what we consider to be environmentally sound criteria. There's also a need for reduction plans on exports for final disposal, and we're introducing another concept, which is called the "Permits for Equivalent Level of Environmental Safety," so that allows us to issue variances to the regulations and to the controls under certain circumstances, provided that our minister is comfortable that the environment will be protected as much as the regulations would. We are also allowed now to control interprovincial movements of hazardous wastes and hazardous recyclables, and we also have been given the authority to control prescribed nonhazardous waste. Now we are going to retain the export and import amendment elements, we're going to retain those elements, such as prior informed consent. We're keeping the definitions for "exporter/importer, authorized facilities and carriers," but we're rewriting them so that they reflect the new realities. There still will be requirements for contracts and liability insurance, but we are thinking of streamlining some of those -- and I'll get into that in a later presentation. Tracking of transboundary and certificates of disposal or recycling will still be required, but we are hoping to go paperless in some of these areas. And the obligations for rejected and returned shipments or rerouted shipments: we are going to be retaining those types of provisions.

Regarding the export and import amendment, what we are planning on doing is implementing the new authority under the Act, and that includes the environmentally sound management criteria, activating reduction plans on exports for final disposal and implementing a system so that we can issue permits for a level of environmental safety. We are also trying to improve regulatory efficiency to promote compliance and reduce costs to the people that are subject to the regulations. That means going paperless, developing new administrative operational controls, which I'll get into later, as well.

We are also trying to harmonize the definitions with the interprovincial regulations to make sure that we're talking about the same thing, that we control things domestically as we control internationally. We just had a series of consultations on this in February/March of 2001, and further

consultations with stakeholders in January/February, 2002, and we just had five weeks of discussions with stakeholders on related issues related to all our regulations. So based on the consultation workshop report, we are developing detailed regulatory proposals right now. In order to publish regulations, we have to do a regulatory impact assessment, so we are doing a socioeconomic study on the impact of some of these changes. The draft regulations are expected sometime by the end of 2003.

When I say "Gazette 1," we publish in Canada Gazette Part 1 to show intent to make a rule or regulation. When it's published in Canada Gazette 2, it comes into force, or you can stipulate a particular date when it comes in force so it becomes law. We're looking at 2004 for that.

Regarding PCB Waste Export/Import regulations, we needed to amend our old ones to include the movement in both directions, exports and imports. We have a number of stakeholder consultations, January/February, 2001. That consultation workshop report was released and is on our web site. Gazette 1 is expected sometime by this summer, and hopefully, publication in Gazette 2 by 2003. It's one of our shortest regulations, and there's not that much involved in that one. Regarding the interprovincial regulations, we're trying to integrate what was developed under the CCME -- the Canadian Council of Ministers of the Environment -- as far as their recommendations on the test criteria and how we can modify and improve the existing controls. We are going to set out the definitions for waste and recyclable material, and, at the same time, decouple the two, so that we can assist in encouraging recycling.

Regarding implementation of the tracking system for both hazardous waste and hazardous recyclables, right now we use the Canadian hazardous waste manifest, allow permits of equivalent level of safety as well, introduce a mechanism for the classification of the hazards, which are based in part on the transport criteria and what the CCME Hazardous Waste Task Group has recommended for environmentally hazardous.

We held initial stakeholder concentrations in the year 2000. We had a pre-Gazette discussion paper for consultations in 2002. That discussion paper was posted up on the CEPA registry. Under our new act, anything that we present to the public has to be put on the Internet web site on what is called the "CEPA registry" under Public Participation. We just finished the issues workshops, and stakeholders have identified a number of issues that we're taking into consideration right now, for example, the harmonization between federal and provincial regulations, to do that as much as possible where it's legally possible, and to facilitate and promote recycling -- we are hoping to do that by splitting the definition -- and to make the permit mechanism as easy to use, efficient and timely, and also to recognize the role of transfer stations and waste brokers in this entire scenario. So with the interprovincial regulations, as well as the export/import, we are going to have a workshop report in March 2003 of the latest meetings.

The draft of the regulations is underway with our drafting lawyers. They have been assigned by our Department of Justice to us. We are hoping to go to Gazette 1 late summer/early fall of 2003, and again, publication in Gazette is anticipated for the spring of next year. Prescribed nonhazardous waste regulations are a new area we haven't been in before, and we are trying to establish a regulatory framework for the export and import of what we call "prescribed nonhazardous wastes." We use the term "prescribed" because we will define, either through definition or through lists, what is considered to be nonhazardous waste and subject to these regulations, and we are still

undergoing some focused discussions with the industry right now and stakeholders to find out how they do business and what should be controlled. In this particular case, nonhazardous waste would not be controlled for interprovincial or intraprovincial movements. This is just a requirement that spun out of the Basel Convention, and our government has suggested that this is an area that Environment Canada should control, or rather the federal government should control. It's intended to apply only to wastes destined for final disposal, so it excludes recyclable materials.

As I was saying, this regulation will help us meet our obligations under the Basel Convention, and with the amendment we made in 1992 to Article 5 under the Canada/U.S.A. Agreement to do the legislative changes and the necessary regulatory changes to control these types of wastes. With the new CEPA, we now have the legislative authority, so we are in the process of regulations development. These are a couple of highlights that we need to put into this regulation -- a prior informed consent mechanism, criteria for environmentally sound management, also the possibility of issuing a permit for an equivalent level of environmental safety, and there is also a need for reduction plans on exports for final disposal.

There was an interim voluntary notification system that we tried back in 1994/'95, and we found it didn't really work. So we have had some multi-stakeholder consultations since 2000. We developed a discussion paper which was up on the CEPA registry. We had further multi-stakeholder consultations in March, 2001. Focused discussions are underway now with the industry. Draft regulations are expected for Gazette 1 to come in late this year, and the publication in Gazette 2 for coming into force is anticipated for early 2004.

Now, ESM is a new concept, environmentally sound management. Its objectives are to minimize the generation of hazardous wastes and control all the aspects from generation to storage to recovery and final disposal of anything that may result from that. ESM is there to try to encourage cleaner production methods and to be incorporated or to be applied as part of the authorization process for facilities. The principles and criteria are being developed right now. There were a number of existing guidelines under the CCME and three codes of practice that have existed. They were developed in the early 1990s. They are all being reviewed at the present time, and the one that's the furthest advanced is the interim guidelines on land filling, because of the large influx of contaminated soils into Canada over the last few years. So we are working on ESM, and I'll get into some of the details later on.

[Reference to overhead] I thought these were some useful Internet sites that you might care to look up sometime, or user guides and newsletters and regulations, that are on our Transboundary Movement Branch web site. For the new Canadian Environmental Protection Act, you can get fact sheets and other materials related to the general Environment Canada web site, and then to get onto the CEPA environmental registry under Public Participation, they have an archived series of documents that we have posted there, and you can access it through that site. Thank you.

RCRA and Implementing Regulations and TSCA and Implementing Regulations:

MR. HEISS: Thanks for bearing with us. We are now moving over to the U.S. side, to consider the statutory, and to some extent the regulatory, scheme. As undoubtedly all of you in the room know, the basic hazardous waste statute and regulatory scheme in the U.S. is the Resource Conservation and Recovery Act. This goes back to 1976 and is codified under the Solid Waste Disposal

Act, and, of course, within the category of solid waste is the subcategory of hazardous waste. Something may be listed as hazardous or it may be hazardous by virtue of its characteristics.

Unlike the more integrated Canadian scheme, PCBs generally fit under a different statute and different implementing regulations, that being the Toxic Substances Control Act, commonly known as TSCA. However, as the slide indicates, we have made provision for the integration of our operations under the bilateral agreement with Canada governing hazardous waste, and so we consider PCBs to be hazardous waste for purposes of the bilateral agreement.

The reason I am talking a little more about TSCA, in particular, is that at one point in time there was an import rule for the disposal of PCBs in the United States. This went back to 1997, and TSCA was the ostensible basis for this amendment. The amendment had a short history in the United States because it was invalidated by our 9th Circuit, but for a brief period of time PCBs moved from Canada into the United States for disposal under this rule. There has been no Congressional activity since then to try to authorize such a provision. The Court said that we, EPA, had exceeded our authority in 1997, that we did not have the authority to do what we did, that the only opportunity that exists -- and it's already in TSCA -- for bringing PCBs into the United States for destruction is under Section 6(e)(3) of TSCA, and it's a petition and comment process -- a rather arduous one, quite frankly. So that's where matters stand, as far as imports. So in practice, TSCA, other than that petition process, prohibits *imports* of PCBs for disposal of two or more parts per million without the exemption that I referred to.

Of course, it is illegal to *export* PCBs in concentrations of 50 or more parts per million. This has also been a sensitive issue for a different reason. Unfortunately, a number of exporters from the United States have, in fact, been shipping hazardous wastes contaminated with PCBs in concentrations of 50 or more parts per million. Now the incidence of such PCB exports has declined greatly. I think now we're seeing very few a year, but there was a flurry of this in prior years. We are not quite sure how that came about. It did cause great concern understandably, in both countries, particularly in Canada where this material was determined to be nonconforming because of the PCB concentrations, and the issue was bringing it back into the United States.

Unfortunately, also, there is a catch-22 aspect to TSCA. You're not supposed to ship 50 or more parts per million out of the country. Once you do, those PCBs are considered to be of foreign origin for purposes of TSCA, and, as I just mentioned, it's illegal to import PCBs into the United States. So, curiously, the U.S. origin PCBs were stuck at Canadian facilities, and, short of a statutory change, the best that we could do -- and it's tended to work rather well under the circumstances, but it's an unusual fix, you might say -- was that the office within EPA responsible for TSCA regulation decided to issue a letter of interpretation which had the effect of deeming those stuck PCBs as being *in transit*. Whether that was the original reality or not, it enables us to allow these PCBs back into the United States where they belong, as though they were transits, as though they were not intended to come to rest in Canada. Indeed, the rationale, you could say, is that there was not properly or legally an intention to ship PCBs in that concentration to Canada in the first place, so bringing them back as a transit has some nexus with reality. Needless to say, it enables us to get where we want to go: to resolve a problem that was a very vexing one for Canadian facilities, for Environment Canada and for the EPA.

An important principle in RCRA is that the burden is placed on regulated

industry to know when a waste is a hazardous waste. Admittedly, the regulations are complicated in that regard. You have to consider the list of hazardous wastes, hazardous characteristics, exemptions, et cetera, et cetera, but the burden does fall on the person that's dealing with these wastes. Obviously, there's some technical help available at EPA, both in headquarters and in the regions, but the final responsibility rests with the private sector in that regard.

The hallmark of the system is the catch phrase "cradle-to-grave tracking," as you well know. There are implementing regulations in our Code of Federal Regulations. You'll find certain requirements for importers. We are going to come back to importers in a moment. Regarding generators of hazardous waste and primary exporters, “primary exporter” is a defined term in the regulations which is not coterminous with the definition of a generator. You can be a primary exporter, even though you are not the generator of the waste, as long as you are an intermediary in the movement of the waste out of the country. You could be the transporter. You could be the broker. The primary exporter does assume responsibility as the notifier of the waste, and, ultimately, if there are shipments during the year, as the reporter of the waste at the end of the year in the annual report. There are also transporter regulations of various kinds. So the exporter rules I talked about were in Part 262 of 40 CFR; the transporter regulations, in Part 263; and finally, for receiving facilities, so-called "TSDFs" -- Treatment, Storage and Disposal Facilities -- in Parts 264 and 265 of the regulations.

I will now move into the subject of imports, transits and exports in a little more detail. What is unusual about our scheme compared to the Canadian or other foreign government schemes is that most of the authority that exists on the import side for the United States exists as a result of international agreements: the bilateral agreement with Canada, the bilateral agreement we have with Mexico, the OECD Council Decision, agreements we have with certain Basel countries.

The United States is not a Basel party at present, as you probably know. We'll talk a little more about that, as well. We do happen to have bilateral agreements that are one-way agreements with several other countries. The Mexican and Canadian agreements are two-way, but the countries I'm thinking of are Malaysia, the Philippines, Costa Rica, and there's a limited term, limited-purpose mercury import agreement with India right now.

Getting back to the basic point, it is the international agreement that establishes the notice and consent process for our imports. You will not find this in RCRA implementing regulations, and basically, the grounds for our objection to notices do not derive from the statute with respect to imports. They really derive from other legal authorities -- the fact that we have permitting authority with respect to receiving facilities, TSDFs in the United States, and our inherent enforcement authority when it comes to the operations of TSDFs. So it's a rather different scheme that we'll spend a little more time exploring also in a session this afternoon.

There are several requirements of an import nature. One of them, actually, as we'll see, is that the importer is really in the shoes of the generator for purposes of completing a manifest on the import side. You probably know that. The other thing is that, by regulation, when the hazardous waste is expected from a foreign source, the first time it is expected from that source, for that kind of waste, there must be a notice given to our regional office; and that notice must be received at least 28 days prior to the expected date of arrival at the facility. Now that's not the same thing as an

arrival at the border; it's arrival actually at the facility. It is a one-time requirement. But, again, we're imposing that requirement domestically, because, in the absence of an import statutory provision in the RCRA statute, our hook is really on the domestic side, in our regulation of the TSDFs. This sounds very technical, but it has some serious consequences for our regulatory scheme and suggests areas for change, frankly, which we will be talking more about later. Again, standing in the shoes of the generator, the importer is the party who certifies the hazardous waste manifest.

Moving on to transits, transits are rather invisible in the statutory scheme, and this also has consequences, as we will see. In fact, transit shipments -- because they are not domestic, because they are not technically imports, because they are not technically exports at any point in their movement -- are something else. They fall out of the other schemes, and one concrete consequence of this is that, technically, there is not a manifest requirement associated with transits. Some transits move substantial distances within the United States, while others do not. Some, of course, as you know, are shipments that arrive at one of our ports, move out of that port, are never off-loaded. There are transits that come from places as far away as the Pacific rim and actually end up in Canada and traverse almost the whole distance of the United States. There are others that are not nearly as dramatic in movement.

Turning to exports, it is our export side that is most heavily regulated under RCRA -- under the statute, in Section 3017, and in the implementing regulations. The reason for this historically is that the greater concern at an earlier point in time -- and that is not to say that it is not still a concern, and it undoubtedly is something that we always need to be cognizant of -- but the greater concern, actually, when the schemes were first devised, was dumping in other countries, typically in third-world countries where particularly unfortunate things could happen with waste.

So, as a result, there is a much more elaborate arrangement on our export side, including the express notice and consent process, certainly manifesting requirements, and, most particularly, also an annual report requirement. The summary report that is due, of course, was due this year March 1st for last year's shipments.

I have mentioned the definition of "primary exporter" and the fact that a primary exporter assumes responsibilities as the notifier, and, ultimately, for shipments as the reporter -- the annual reporter. I will touch also on a couple of the exemptions in RCRA that do have a bearing on the import/export context. The household waste exemption covers wastes generated by normal household activities, for example, routine house and yard maintenance. We're talking about wastes such as old solvents, paints, pesticides, fertilizer, and poisons, which, of course, could technically be classified as hazardous. The decision was made as a policy matter by EPA that they should be exempted, frankly, because it would be impossible to regulate them. It's better that they be dealt with in some fashion so that they be brought into the waste stream, but it is not possible to regulate them in the traditional ways that we would regulate other waste.

I'll also talk for just a minute about something that is treated in some detail in one of the handouts in the back that you probably already have, the Universal Waste Rule. The distinctive feature of Universal Waste, in the import-export context, for our purposes here, is that *notice* requirements apply on export, but that no hazardous waste manifest is needed. The idea is that this is an alternative, streamlined set of regulations under RCRA for

certain widely generated wastes known as "Universal Waste," namely, batteries, pesticides, thermostats and lamps -- and I'll talk in a moment, also, about mercury-containing equipment. The idea was that streamlined requirements would reduce barriers to collection programs, reduce complexities and reduce the cost of compliance to regulate these wastes in this general manner. It was designed also to encourage environmentally sound collection and recycling or treatment of these wastes, ease regulatory burdens and reduce the waste going to municipal landfills or municipal combustors. These wastes are generated in a wide variety of nonindustrial settings by a vast community, and they are present in significant volumes in nonhazardous waste management systems.

I'm going to move on to mercury-containing equipment. There was a petition that EPA received in 1996 about mercury-containing equipment: barometers, relay switches, regulators, meters, pressure and temperature gauges, sprinkler system contacts, and so forth. And EPA was asked by the petitioning industrial group to add this equipment to the Universal Waste Rule. These devices often fail the toxicity characteristic for mercury found in many industries. They are generated by many generators in small quantities. They involve a relatively low risk compared to other hazardous waste and they would otherwise be diverted from the municipal waste stream. The EPA's decision as to these was that this equipment could be treated as universal waste for these reasons.

This concludes my portion of this segment. I think, at this point, we seem to be running a bit ahead, so we do have ample time for questions and answers for Joe concerning his presentation or for me. If anyone would like to raise any questions, feel free to come to the mike and switch on the button at the top.

AUDIENCE: Question for Joe Wittwer. Environment Canada is coming up with environmental regulations, and sometimes the provinces are not willing to wait that long, like in 2001, and you might follow suit, or something like that. How does the Environment Canada incorporate these provincial regulations into their scheme in coming up with regulations?

MR. WITTWER: Well, in response to that, we do work through the CCME, the Canadian Council of Ministers of the Environment, where the Hazardous Waste Task Group has a representative from each of the provinces, and three territories. Some of the provinces don't have their own particular regulations or controls on wastes within their area, so they have provided us with recommendations and suggestions on how we can update what we were doing. Some of the provinces without their own regulations usually reference the federal regulations for their particular purposes. Some of the work to amend their existing regulations that has been done by some of the provinces, for example, Quebec and Ontario, even Alberta and B.C., now is in anticipation of the federal regulations coming out, and what we are attempting to do is ensure that there is a harmonization of the definitions, the testing criteria across Canada, so we are all controlling the same thing. Some of the provinces for their internal movements may be more stringent or less stringent, but whenever something crosses the border, it's definitely the federal regulations that will be applied. We had to wait until 2000 before we could take further actions to do some of this before the government actually gave Environment Canada the authority to make these regulations, and by giving us these authorities, they set the barriers and boundaries of that authority, so we are just complying with that right now. I know it has been a long process, but all of the activities that are taking place is trying to move us towards a harmonized approach.

AUDIENCE: Joe, you are writing many new regulations in the next few months that will be promulgated. One of them is to get rid of the Canadian manifest and maybe go with the OECD transport document. I know there's some pressure to meet what OECD is requiring, but for most of the people leaving Canada and the U.S.A., and I would say most of the import/export that's done between our two countries, it would be a lot easier if you can get rid of the Canadian manifest to go with a uniform manifest for both countries. So if it's something you could look into, it would be greatly appreciated for us.

MR. WITTWER: Thanks for that comment. Hopefully, in tomorrow's presentation, we are taking further steps to get rid of the paper altogether and try and work with an E-tracking system, rather than having to deal with a particular form or a particular paper. For international movements, we are seeing the OECD or quasi-Basel movement document used quite a bit from European countries, and we had stakeholders' consultations on this. During another major snowstorm in January 1999 where we got snowed in -- and I had visions of that happening again last night -- we discussed with stakeholders a proposal to move to an OECD document for international movements, and they felt that was a good idea, in that it would differentiate between the manifest used domestically, and this would be a movement-controlled document for international movements. But as we try to move towards an electronic regime, it doesn't matter what the form is or how you print out the information, it's the data that we need to collect to assure ourselves that things are leaving from where they say they are and they are received at the appropriate facility at the other end, and to close the loop, in our case, we need the Certificate of Disposal or Certificate of Recycling. So those are our needs, and we're trying to figure out a better, more efficient, streamlined method of doing that, and I hope to do it for you later on.

AUDIENCE: Looking at the regulations earlier, it looks like Canada is adopting some new LDRs [Land Disposal Restrictions]. Are they going to have an implementation time period, such as the U.S. does, usually around two years for implementing LDRs for waste disposal?

MR. WITTWER: Right now, we don't have a particular time line for that. We haven't decided whether we are going with the LDR-type system. We are still discussing with ourselves and other departments and through the CCME Hazardous Waste Task Group whether to go through a risk-based type approach or best-available technology, and how the UTS -- the Universal Treatment Standards -- will be applied, or even the LDR. That hasn't been set yet. We have developed guidelines that for land filling that we are still discussing with the provinces, so we really haven't made a decision on that yet.

AUDIENCE: I've got two questions. Joe, first of all, who is involved in the socioeconomic evaluation? Who is performing that for the federal hazardous waste amendments?

MR. WITTWER: Typically, what we do is we engage a consultant who specializes in economics, and then we give them a list of stakeholders to contact that are representative of the industry that will be regulated, and then we ask them what the consequences of certain changes to the regulations or controls will be on that particular industry, whether positive or negative, so that we can cost out the impact of the regulations before they come into force.

AUDIENCE: Bob, when Does EPA intend to adjust its regulatory obligations to reflect the OECD Basel harmonizations? I particularly see, obviously, 2001 amendments under the OECD.

MR. HEISS: This would be done by the Office of Solid Waste. They have informed me that they will begin a rule making and expect to complete it by the end of calendar year 2004.

MR. DAMICO: I wanted to add one thing to what Bob said about universal hazardous waste. As the person who reviews these things, as Bob said, on the end for approval, there's the notation that the disposal facility -- the TSD facility -- at the end, when they're importing hazardous waste, is supposed to provide the prenotification of intent to import. The universal hazardous wastes are sort of a subset of hazardous wastes that have a reduced set of paperwork requirements for them, but one of the paperwork ones that is not removed if you have a RCRA Subtitle C permit, which you would have if you're a TSD facility, is the need to provide us with a prenotification of intent to import. So, for instance, I see a lot of notices coming in for automobile batteries and things where the receiving facilities haven't provided us with the prenotification because they mistakenly believe that they don't need to provide that.

MR. HEISS: Any other questions? If not, I will propose to have our morning break at this point and convene at 10:50 -- a twenty-minute break, roughly. (Whereupon, a recess was taken from 10:30 o'clock a.m. until 10:50 o'clock a.m.)

Compliance Issues:

MR. HEISS: For the next hour, Joe and I are going to be talking about compliance issues, and that will wrap up the morning's part of the program. When the first workshop was organized, -- actually even before 9/11, although the first workshop occurred after 9/11 -- the heart of it was this notion that it would be a great opportunity to have outreach between government offices and industry on some issues that had been identified in the course of our compliance function, to try to stress certain things that we had found where we think improvement might be called for, and we're hoping to stress that to industry. So this was an opportunity to do that. We quickly realized there were a lot of things we could do in a workshop, and we tried to cover a lot of bases, and that's even better. But I like to harken back to the roots a little bit, because this is sort of the roots part of the program, so you will get a compare-and-contrast sense of how two offices are seeing things, what we're seeing. There are some points of conjunction in all of this, and because our regulatory schemes are not identical, there are some points of difference in terms of what maybe I'm more worried about on the U.S. side and what Joe may be more worried about on the Canadian side.

Mine sort of boils down to 20 slides, and when I first mentioned to Joe that I had sort of a "Top 10" list -- with apologies to a certain late-night talk show host -- I think he was sort of taken aback. I'm not treating this frivolously, but I think you will see in the issues that I am going to walk through here that I have actually started with number one on the list rather than ten -- number one in terms of the seriousness of the consequences of some of these problems.

So what I'm doing by way of outreach here is enlisting your support: if this has been an issue for you, and if you can work with us in terms of getting on the same page with respect to some of these requirements, that will be helpful. I'm not suggesting that any of these problems are rampant. Some are more widespread than others. Some are fairly infrequent, but maybe of a more serious nature than some others, so -- in my book, at least -- they all merit this listing of "Top 10". There may be another 20 issues that exist out

there, but these are the ones that have come across my desk from time to time and trouble me. So I'm hoping we can develop a common sense of what to do about these.

The one I have put up as the first strikes at the heart of the relationship between any two sovereign countries. It is, as you know, the need for prior informed consent before waste moves to the receiving country. There have been times when waste did move, especially from the United States to Canada, and perhaps the other direction as well, but I'm most cognizant of the ones from the United States to Canada, where, in fact, Canada did not have the opportunity to consent or object to the waste. We do have compliance mechanisms in the U.S., and we have taken certain steps with respect to situations where waste did move, and, in some cases, there were multiple shipments, without a consent.

Obviously, our whole process is based on a notice and then shipments following the consent to that notice over a period of time, typically a year. Most often there are multiple shipments over the course of the year.

But this comes about in several contexts. Sometimes there is initially a notice and a consent, and then there is a change in the volume, invariably an increase -- a decrease wouldn't require any action -- and a "renotification" is submitted to EPA under the regulations -- an amendment to the existing notice is sought -- but the shipments may occur before the consent is obtained. That is as though you're shipping without any notice whatsoever, and the problem, of course, is that in that situation Canada has not had its sovereign opportunity to respond – either consent or object – to that additional amount at that particular receiving facility. This is a very serious matter under international law, under the bilateral agreement, as well as under RCRA, so I would like to underscore this one.

The second point I would like to make is that there is an interpretation that gives some latitude to primary exporters when other generators wish to ship -- this is sort of a peculiarity of interpretation that we have where the wastes of multiple generators can actually be brought under the notice of one primary exporter. Unfortunately, there have been some situations where, apparently, when that happened, there was not an accurate accounting of what actually went out under that one notice, so that the streams coming from the multiple generators actually exceeded the maximum total aggregate amount allowed under the notice and the consent. So, in that special circumstance, companies have to be particularly aware of what has been shipped, and what remains to be shipped for a year, so as not to exceed the lawful maximum under the notice and consent. So that's one to consider.

We have talked earlier today about PCBs exported in illegal concentrations. Fortunately, the number of notices reflecting this seems to be dramatically reduced from what we faced a few years ago. We do have a mechanism for bringing the waste back now -- and that's the good news. The bad news is that these shipments are really illegal <u>ab initio</u> -- from the beginning -- and shouldn't be happening. I recognize that there may be special difficulties for exporters which are collecting wastes from various sources, and it requires extra diligence and extra information sharing about what is in the waste streams that are collected by the exporters so that this doesn't happen. It would be great if this never happened again, but unfortunately, we haven't gotten to that point. The law in Canada is such, as I understand it, that I know there's been very good surveillance on the receiving side as far as detecting the excess concentrations of PCBs; so it's not something that will go by the boards. It has to be taken seriously at the front end, in the

United States, because, for a variety of reasons, that is the responsibility of the exporter; but, beyond that, it will also be detected on the Canadian side. So coming and going it should be something that's attended to.

We do see from time to time something that might be just a clerical error where the generator of waste that is being exported does not manage to sign the certification block of the U.S. manifest form. That, as you know, is Block 16. It indicates that the description is an accurate one of the consignment of the wastes on the manifest, up to four streams per page of the manifest form. But I have also seen this more than once by the same company in a series of shipments in rapid succession, and I just want to alert you to the fact that, technically, the law makes it more than just a clerical error. The definition of what is a manifest under RCRA regulations is set forth in 40 CFR §260.10. The definition of what constitutes a "manifest" is a manifest form with a signed certification. It's completed and it is signed. If the certification is unsigned, you're actually shipping without any manifest whatsoever, and that's a serious problem. How can there be cradle-to-grave tracking, as the Congress intended in RCRA, without a valid manifest?

This next problem is one that was brought to us by Environment Canada. I think it's an excellent example of the cooperation that exists and has flourished between the two governments. It's also a reflection of the system advances on the Canadian side that make this matching possible. Frankly, I'm not sure that we really have this in the United States yet. In fact, Canada is actually seeing a mismatch between the export notice that we send to Environment Canada from the primary exporter, the United States, and the notice which Environment Canada receives from the receiving facility for those same wastes. When there's a mismatch, it tends to be in the nature of more UN/NA PIN numbers listed on the U.S. export notice than there are on the receiving facility notice, although it could, I guess, be the other way.

But, in fact, what we have here is two private parties in a course of commercial dealing who supposedly have a mutual understanding of what is going to move from the United States to Canada. They know what the waste is, yet when they report to their respective authorities, EPA and Environment Canada, there's a mismatch. They don't match up. Canada's position on this, which I entirely understand and applaud, is that Canada is not prepared to consent to any of the UN numbers or PIN numbers which they do not see on the receiving facility notice -- their domestic receiving facility's notice -- submitted to them about the import into Canada. So, as a result, we'll get consents back from Environment Canada for these wastes which will say, "Consent except for these UN numbers." They will disallow the UN numbers that are unique to the U.S. notice.

Now, there must be a way of resolving this internally, privately, among the regulated parties, getting together, comparing UN numbers, making sure you know the nature of the waste. In doing the descriptions in a consistent way, you should be able to avoid this. If there are any marginal differences between the two countries and their PIN number schemes, that can be readily resolved. But that is not what we are talking about here, by and large. It seems to be wholesale differences. We have gotten consents back from Environment Canada where 10, 15, 20 UN numbers for a large notice with multiple waste streams are disallowed. Again, I applaud this, because Canada is making a catch before it's too late and is telling us, and we're telling industry, what cannot go forward. In some cases, it results in the disallowance of a whole waste stream where there may be one or more UN numbers applied to that waste stream, but none of them appear in the receiving facility's lists of PIN numbers. It's still happening. I have guesstimated

that about four percent of all of our Notices of Intent to Export still have this problem, and it's been going on for a while.

So my plea to you is to get together privately, work it out before you start notifying the two governments, and then we'll all be happy. But right now we are not all happy.

We do compliance monitoring in the United States, even though some of our software is not as sophisticated, unfortunately, as what exists in Canada, and we do detect situations where the annual report, which is a very valuable tool for us, is not identical with what we have in hand from the manifests. Now, as you probably know, your transporters -- or if you're the transporter, you -- are dropping the manifests at the border with U.S. Customs on departure for Canada. In fact, we try to total up the manifests and make sure that we're talking about the same wastes and the same quantities when it comes to the annual report, and we are sometimes surprised to find that your manifests and your annual reports are not in sync. We don't know why that is. It's of more than routine clerical interest. It isn't just a paperwork problem in this sense: It is not only the manifest, but it is also the annual report that we rely upon to try to determine what the total aggregate exports are for the year from the United States. Our Office of Solid Waste does those totals. Unfortunately, I must say that we are a bit behind as an agency in doing those totals, but the annual reports serve as the basis for our determinations. For an individual company, when we start to find that the manifests reflect a greater total amount of waste shipped by the company than what they report in the annual report, this is a problem. Now, I'm not saying in these instances that we have the first problem that I discussed: the original consent limit was exceeded. I'm just saying that the two shipment numbers, all the manifests and from the aggregate, end-of-the-year summary, are not identical, and we don't know why that is. We have inquired further when we see these discrepancies, and we do see them now and again.

You'll notice that this next issue is the only one of the issues that involves our import side. As I was saying earlier, the control scheme on our import side is very limited. As a result, we have had a very limited range of information on imports historically. This is something which I think has to change, especially after 9/11, and just generally to ensure an adequate cradle-to-grave tracking of hazardous waste in the United States. We'll be talking more about this subject later. What we do find -- and frankly, I will say that here in Region 5, which is a very active import region, Will Damico, our import-export coordinator whom you've met, has found -- is a number of instances where the facility that is supposed to receive the hazardous waste is not permitted at all or is not permitted for that waste, or there might be a capacity issue, but it tends to be one of the first two that I mentioned.

Again, this is a mismatch that could easily be cured by the two private parties. The two private trading partners could get together and get their act straight so that notice is not sent to Environment Canada that identifies a facility that is not going to pass muster In the United States. I can assure you that Will has a very keen eye and has identified a lot of these, and what do you get: an objection from EPA. The objection goes back to Environment Canada, and Environment Canada duly notifies the generator of the objection, and you're dead. So why be dead when you could find a facility that doesn't have this problem or resolve whatever problem there is with that facility so that you will be allowed to ship to it. But it's the old ounce-of-prevention story. Yes. Will.

MR. DAMICO: If I can offer a correction, most often what I see is a waste

that facility is permitted to handle, but they are not permitted to do the particular disposal activity that waste disposal goes to.

MR. HEISS: Very good. I stand corrected. Again, it's a matter of a total fit between the notice and the intended facility. There have been some improvements in this area. I like to tie this to 9/11, but it really goes back to the basic cradle-to-grave notion. The transporter -- your transporter or you, if you're the transporter -- does have an obligation to EPA under the regulations to make sure that there is a signing and dating that occurs at the time of departure of the hazardous waste from the United States. This is in addition to all the signing and dating that may occur earlier in the process: the original certification by the generator of the waste, the signing of the receipt of the waste by the transporter at the facility. This is at a later point. When the manifest is dropped with Customs at the border, we look for the signing and dating at that point. Some people would say, Well, there are some facilities in Canada, for example, that are good about signing the U.S. manifests on arrival in Canada. Well, that's great when it happens, but we can't rely on that always happening. That's something that is extra-jurisdictional. We cannot enforce such an obligation on a Canadian company. In one sense, our RCRA "grave" – in a jurisdictional sense, the grave for cradle-to-grave tracking purposes -- is the U.S. border, so we get positive confirmation at that point that the waste was not diverted at some earlier point, and so forth. Now, admittedly, if the Canadian facility does sign the U.S. manifest, we would in fact also have that additional confirmation, although it was purely gratuitous.

The other thing is that the primary exporter does have an obligation in our exception regulation, which appears at Section 262.55, to inform us if it did not receive a confirmation of receipt from the receiving facility. But this is also not a substitute for contemporaneous border signing. Frankly, EPA will not necessarily know -- unless, at the time of a subsequent inspection of the primary exporter that EPA conducted, it happens to turn up in the inspection -- that, indeed, the exporter never had confirmation of receipt at the receiving facility in the other country, yet the exporter never sent EPA an exception report to let us know that. The exception report is very useful to us. It gives us a clue that there is something we need to investigate and that something may have gone awry. Admittedly, we are getting it after the fact. It is not in real-time, but when we get an exception report, if we need to get in touch with Environment Canada, because maybe we know that the shipment got to the border, but we don't know the rest of the history, we have a lead to pursue. It gives the two countries a chance to work in a cooperative fashion, as we like to do, to find out whether there's anything seriously amiss. Signing and dating the manifest on departure from the U.S. is something that some people would like to dismiss as a mere record keeping requirement. It has some real environmental consequences for us.

AUDIENCE: If the company that is receiving the waste in Canada does not send back the certification page [of the U.S. manifest] within 45 days, but it sends the exporter some other notice that it has received the waste, is that sufficient, as long as the exporter receives a notice that the receiving facility received the material?

MR. HEISS: Yes. The term that is used in 40 CFR §262.55(b) is "written confirmation." It need not be the U.S. manifest. Indeed, as a legal matter, we couldn't require the copy of the U.S. manifest to come back. Any written confirmation will do for your purposes.

AUDIENCE: Okay.

MR. HEISS: We have already touched on exception reports. There are actually several circumstances here. One would be if the transporter failed to return to the exporter a signed manifest on leaving the U.S., which is the other side of what I discussed. (I was talking earlier about EPA's getting back a copy through Customs that has been signed and dated.) If you don't get your own signed manifest copy from the transporter, you need to give us an exception report. Another is the confirmation of receipt of the waste in the receiving country -- what we were just talking about. There's a third: if the waste happens to be returned to the U.S. for any reason. As you probably know, there are provisions in our regulatory scheme governing the return of RCRA hazardous waste. If it cannot be accepted at the receiving facility for any reason, the exporter has obligations and, of course, it could go to an alternate facility in Canada only with the permission of the Canadian authorities. But if it needs to come back, there's a duty incumbent upon the exporter to give instructions to the transporter about how the manifest needs to be amended to reflect the return and, of course, it needs to be to an appropriate facility in the United States. If, for example, the waste is allowed to go to a different facility in Canada, with the permission of Environment Canada, after it is not received at the first facility, then we would need an exception report under Section 262.55(b) that the waste did not arrive; of course, you have no confirmation it arrived at the original facility. Indeed, you have confirmation it actually arrived at the alternate facility instead.

Now this is an accommodation. In fact, the exception report requirement is not the only applicable requirement. There is something else in our regulations that would technically require you first to renotify EPA of the redirection of the shipment to the alternate facility. EPA has decided not to insist upon that where waste has already been exported and becomes stranded. We basically have waived that requirement, because it is much more important as an environmental matter for the waste to move to a proper place without further delay, if it has been refused, and to go to a place where it is acceptable. So we don't want to hold it up. We know that Environment Canada has approved, if that is the scenario – and that is the main thing -- so we don't insist that we get another paper from you notifying us that there is a new destination. Instead, all we insist upon is that you fulfill your obligation under the exception requirement and let us know that it did not go to the original place, and to identify where it actually went instead, and that can be after the fact. That completes the loop for us.

I've taken this opportunity to mention this unusual circumstance in connection with the overall exception report process. The next issue I will discuss is a peculiarity of the U.S. regulations, and Canadian law may be a little different under the same circumstances. It arises when a notification from a U.S. exporter identifies both an intermediate importing facility in the receiving country and a final destination for the hazardous waste. In such circumstances, in accordance with the RCRA definition of "consignee," EPA will use the final destination as the consignee. Why? Because under U.S. law, specification of the "consignee" means you must identify the ultimate treatment, storage or disposal facility. Now, sometimes, an exporter won't even know the identity of the ultimate facility receiving the waste. Frankly, if you put one down, we may simply accept that facility as the ultimate facility, but, to be consistent with our regulations, when we are confronted with two, we've got to pick one, and that can be problematical. We have to identify just one as the consignee, and that is the one which is the ultimate treatment, storage or disposal facility -- not just a collection receiving point, but the ultimate facility. So, for a lot of you, you'll just be identifying one. I may never know whether it is the ultimate one, but I'm

taking on face value that is what you are telling me. On the other hand, if you identify two facilities in your notification, I've got to make a choice in terms of what is the ultimate one. That is just the way it is under the RCRA regulations.

Turning to the export annual report, we have had instances where an annual report was signed -- that was the good news, and there is a certification for that signature. The bad news was that, as it turned out, the party who was signing and certifying to report to us was not actually an employee with the company. They were hired by the company to do the work up, and that's fine as a regular business practice. It's fine to provide the work up, but not to do the certifying signature. Ultimately, the buck stops with the company, because of the specific certification language set forth in the regulation at 40 CFR §262.56(a)(6): "I have personally examined and am familiar with the information submitted, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete." An independent contractor could certify to parts of that statement, but to do the whole thing right -- and we have checked this through counsel -- there's really no question but that it must be an official employee of the company that is the actual exporter, and that's pretty straightforward.

With that, I am finished. I'll turn things over to Joe. He will not give you a Top 10 list, but he will give you his list.

MR. WITTWER: Thank you, Bob. I'll just take a second and pull up my presentation. What we have put together here is not the top hit list, but frequently asked questions and recurring compliance issues that we see under the different areas that we deal with, for example, the notice, the manifest and certain exceptions to the regulations.

So I propose to start off with the notices themselves. What we have is what is called "Box 5" on the notice. That identifies the ultimate destination to which a waste or a hazardous recyclable material is destined. This is a requirement that was set out under the OECD Council decision to make sure, if you do receive a hazardous waste or hazardous recyclable and the disposal or recycling operation is not the final disposal operation or the final recycling operation, and it's an interim-type activity, that we know where it's going to go from that point on, to make sure that the waste or recyclable doesn't come in and then ends up leaving the country.

Now, what we have in our regulations is a list, an "R" list for recyclable operations and a "D" list for disposal operations, and D-13 and D-14 are not final disposal operations. D-13 is a type of repackaging accumulation before you send something off. D-14 is a type of interim storage pending a disposal operation, and the same for R-12, it's a type of operation in exchange of wastes -- before you ship it out to a recycling or recovery facility, and R-13 is a type of accumulation operation pending recycling -- pending being sent to a recycling facility. Now, typically, we do not get Box 5 completed, if it's a straightforward type transaction. But if it comes into a mixing and blending or a transfer storage facility, they may do something to that waste, and they have a number of different destinations at the end of it. We are saying that the importer must provide to us -- TMB is the Transboundary Movement Branch -- an attached list of the final sites to which the waste or the recyclable material is destined.

Now, when we use the term "importer" in our regulations, we clearly define "importer" and "exporter" as being the Canadian entity in any of these

transactions. So even on the notice, in Boxes 2 and 3, you will see "Importer" and "Foreign Receiver, Exporter" and "Foreign Generator" -- those types of designations.

As Bob was saying earlier, we have the same problems with trying to apply our regulations extra-territorially. We can't necessarily hold a U.S. company accountable under our regulations, but we can hold the Canadian importer and exporter accountable. Therefore, there are various obligations within our regulations to ensure that there is appropriate communication between the Canadian exporter and the foreign receiver, and that the disposal and recycling operations are clearly set out in a contract so that the people know who and what they are dealing with. Now, that is the intent of the regulations.

So in this particular case, by recognizing how we do business or how the industry does business, we need to have that information to know where that final destination is going to be, when it's not disposed of completely or not being recycled, in order to make sure it doesn't go offshore after that particular mixing/blending package, et cetera, operation has taken place.

I thought this might be useful to you [referring to overhead]: In the Transboundary Movement Branch, our notification officers are the following three people. So if you do require extra notices or have questions about your notice that has been submitted, then these are the people to contact.

Now, in our particular case, we require a notice for both exports and imports, and in the case of imports it's the Canadian importer that has to submit it to us, and they have to apply the Canadian classification system. So we get notified in both directions, and we try to do the matching with Bob's office to make sure that both of us are aware of any of these movements.

Here again is our web site address: www.ec.gc.ca/tmb

Now, in "Inbox 10," that is where the waste description is set out on the notice, and we make use of what's called the IWIC code. It stands for the International Waste Identification Code. It's actually a code that was designed by the OECD back in the mid-1980s; it is a very simple, alphanumeric-type code to help describe what a waste is and to assist in the reporting process. It is a six-part alphanumeric, which is used to describe the hazardous waste in a little bit more detail, because it is not a pure product, as are many things that are listed under the transport regulations.

Now, IWIC includes the reason why it's being sent for disposal -- "disposal" here is the international definition where, again, disposal means anything destined for recycling or final disposal. Here, the alpha part is a Q, and then you have about 16 different codes that go with it. In the example I have a plus-two (+2) behind the Q, because you can add in two possible reasons why something is going for disposal. It could be, for example, the material is off-spec, and you are sending it because you no longer have a use for it, so that gives you two reasons why you're getting rid of it or sending it for recycling.

The second part of the code is to indicate a recycling/disposal operation, and that has the R&D codes, and they are set out in the regulations themselves. We also put them in our Users' Guide to help you with those. The D or R code links back to Box 1 on the notice. In Box 1 you have to describe right up front whether something is destined for disposal or it's destined for recycling, with a number of recycling options, depending on whether you're

going to the United States or to a Basel country.

The third part of the code is your physical state, and we have the alpha code there as G, L, P and S. You can only use one of those letters. G stands for gases; L stands for liquids; P is for pastes or sludges, if you will; S stands for solids. We do control gases when they are destined for disposal or recycling. Typically, we see aerosols or old gases being sent for destruction.

The fourth part of the code is the contaminants. There is a list of about 51 possible contaminants that could be in the waste which contributes to its hazard. You can list up to three contaminants in this part of the code, and the list is not in the regulations, but it is in our Users' Guide on waste classification.

The hazard class is designated by an H followed by a number, and they go from the number two up to 12 at the present time. They represent the hazard classes that were set out by the Basel Convention. We have incorporated them into this code. They were also set out in the OECD Council Decision back in 1985, I believe, when the IWIC code was set up. You can have two hazard classes here, so, in essence, you could have a corrosive liquid which is toxic, so you would have an H-8 for corrosivity and a H-6 for toxicity. That is followed by an A code for the activity which generated the hazardous waste.

Sometimes these codes are not completed correctly. The notice is published in our regulations. Therefore, the notice itself has the same status as the regulation itself, so you have to complete the notice correctly. In some cases, there has been some confusion about the A code: what is the activity? It is the activity which generated the waste or recyclable material. It is not the activity to which it is destined. Many times we see someone completing it, and it is the recycling or disposal or capturing-type activity that they have put on there, not the activity from which it is coming. In addition, under the physical state, we see that there is a generic catch-all. There are about 40 possible physical compositions that are listed there, and 40 is "None of the Above." We see many people just taking the easy way out and saying, "L-41," and it's anything that might be captured in this annex, but it's not specifically listed. Where there are more specific listings within that particular annex or table, that could apply to that particular waste. The same goes for the contaminants. We have Contaminant Number 51, which is any organic material that contains carbon, sulphur, nitrogen or oxygen, and there are other things in the list that are more precise than that, and we find that people are using that just as a default value, in many cases.

So not providing the accurate or precise information up-front does create a notification problem when our notification officers review these notices -- and they do -- to make sure that they're consistent, that the recycling disposal operations agree with what they are declaring, and also agree with what's in the contracts and other things. So it will hold up the entire review process when these are not completed properly. Also, the IWIC code must agree with the other codes. We're talking about the TDGR codes, the Transportation of Dangerous Goods Regulations and the CEPA codes. We have a list of CEPA codes in the regulations, and they are set out in Schedule 3. There are four parts to that particular schedule. Now, the TDGR codes can be precise, and sometimes you're describing a flammable liquid or an oxidizing liquid, and then in the IWIC code you're describing a solvent. Well, there's an inconsistency there. Or under the CEPA code, you're describing a liquid, and in the IWIC code, you've got a solid. So all of these things are checked, and if there are discrepancies found, it holds up the entire process. Right

now, we are handling it at an administrative level, as opposed to a compliance issue.

I think Bob quite eloquently described the problems we're having with the variance in the PINS. The PINs are your product identification numbers. In our case, we take them from the transportation of dangerous goods Regulations -- the TDGR -- and they have just been amended. The new clear-language TDGR came out on August the 15th last year. As I was just saying, our representative from Transport Canada will be getting into more details of that regulation. Essentially, what they have done in their schedule, which lists all the dangerous goods, is that they have removed all the former NA-type numbers. The NA numbers were the North American numbers that we have been using. There are also some other changes in the PINS. For example, the one that we used to see quite a lot of is the UN 1760. It's your corrosive liquids. Well, now that's been expanded under the UN 3260 to 3267 series of PINs. No longer is it just a corrosive liquid: it's a corrosive liquid that's organic or it's inorganic, and it can be an acid and it can be a base. So it's far more detailed, gives us far more precise, far more accurate information. After all, if you do have a spill of a 1760 corrosive liquid, and you go in and don't know whether it's an acid or a base, are you going to the right emergency response at that time? So here again, the PIN, as I said a moment ago, needs to correlate with the CEPA code and the IWIC code. If it doesn't, it puts the brakes on the review process and we have to evaluate it.

As Bob was saying earlier, regarding the discrepancies with the PINs, we need to have the same PIN on the manifest that is on the notice, or else it triggers a noncompliance. Another issue that we have seen is subcontracting to independent truckers or other carriers. On the notice, you have to identify your mode of transport and the carriers you plan on using, and all the carriers must be identified and they have to be insured according to provincial requirements, and they have to be authorized to carry hazardous waste. We have had lists of 200 carriers submitted to us in the past, and when we phoned them up, there were about to 30 percent of them that were hauling milk or produce and they weren't licensed to haul hazardous waste. So just lists of carriers are not acceptable. They must be insured and they must be authorized to carry these materials.

As I was just saying, each carrier involved in the import and export or the transit of hazardous wastes or hazardous recyclables must also be named on the notice. So you can have multi-modal type shipments where you go from, I guess, marine shipment to rail to truck, and all of the carriers involved must be named on the notice so that we know who is involved. In some cases, we have notices that are in place. We have issued a permit for the transaction and new carriers have been engaged to haul these particular materials. We have to be notified of that, and we can amend the permits and add new subcontractors to the notice, but the bottom line is to know about them.

Next, I would like to discuss the manifest. Typically, we get phone calls about manifests, "Where can we get them?" There is an understanding between the federal government of Canada and the provincial authorities that, combined, we make the manifest system operate. To get manifests, typically, it would be the carrier that is licensed in the particular province or the receiving province that you would go to in order to get the manifest. In some cases, a province does not regulate a particular hazardous recyclable and therefore will not issue a manifest. In most cases, you can get the manifest from the other authorities in the other province. For export and import, Quebec has stopped using the manifest for recyclable materials, and notifiers can get their manifests from the Transboundary Movement Branch. We have

stepped in to fill the void for the paper manifests. In some special circumstances where there is a need for a manifest for interprovincial movements, we do step in, as well, to provide the manifests for those particular movements.

Now, if you have any manifest questions or require further information, these are the manifest officers that work with me in my group. Also, these people do conduct some compliance promotion behind the scenes, and they will phone you up if they are missing certain copies.

We have three checkpoints in the manifesting process. We have the generator or the consignor's place of business, with the consignor obligations; we have the manifest being dropped off at the border points to show that something is entering into Canadian territory; and we have the consignee, who sends us a copy of the manifest when it is received and accepted at their facility. So we've got three points of control here. At the generator's facility, they're supposed to send us a copy of what is called copy one, within three days after the shipment leaving. We get a customs copy as the shipment crosses the border, and we get copy three at the receiving facility, and that is the third copy. We do the matching between copy one, copy three and the customs copy, and it is entered into our database, and we do get a compliance profile.

This is an important note as well: because the prenotification kicks out a permit for you to export or import certain hazardous wastes or hazardous recyclable materials, there has to be that correlation between the notice and the manifest. So what we have always suggested is that the notice never be put in the box down towards the bottom of our paper manifest that's called "Special Handling" or "Emergency Instructions" box. It is in there we suggest to people that they indicate which notice the waste or the recyclable is coming from -- not only that, but which line on the notice the waste is referring to as well. There are three lines on the paper notice, so you have the notice number and line one, line two and line three. The numbers on the bottom of this slide here show a way of expressing the notice number and then separating it with the line number. Sometimes there are multiple wastes on the manifest, too, so what we have seen is the notice number and the line number written on the margin next to the waste stream itself, because you can put up to five waste streams on a manifest, and it needs to correlate back to the notice.

Signing and dating the manifests: the manifests must be signed and dated by the generator or the consignor, if you will, the carrier and the receiver or the consignee. The date is to be expressed in the year, month and day format. That is how we enter it into the database.

This is an interesting situation that we are encountering since the new Transportation of Dangerous Goods Regulations came in last year. On the manifest, the proper full shipping name needs to be used. That complies with TDGR and the Export and Import of Hazardous Wastes Regulations. The manifest itself has a dual function. It functions as a shipping document for the dangerous goods aspects, and it also functions as an environmental control document for our purposes. The two departments have different mandates, different needs. However, with the new Clear Language Amendments that came in last summer, there has been a slight discrepancy between how some of the environmentally hazardous substances are described. So for recyclable materials, the shipping name can be the TDG name, but it needs to be indicated that it's a special provision or a special type of material that's controlled under the Export and Import of Hazardous Wastes Regulations.

Now, this overhead is a bit busy, but our manifest is broken up into three parts: you've got Part A, Part B and Part C. Part A is completed by the consignor or the generator. It gives his name, his address, the shipping site from which the waste or recyclable material is leaving from, and also the receiver's name. It gives the waste description, and then he signs off. He also identifies special handling instructions, things of that nature. The carrier is responsible for completing Part B, which means that he is accepting the responsibilities for the load. He is now going to be in possession of that load, and he has to make sure that what he is signing and receiving is actually what is in there. When he gets to the border, he has to make sure he has enough copies of the permit, the notice and the manifest to follow the movement of that shipment from the beginning to the end, plus he has to have a copy to drop off at customs. That's our customs copy which customs gets. They date stamp it, and that gets entered into our database, and that's where we do the matching of copy one, copy three and the customs copy. Now, the carrier must retain a copy of what's called copy four. That's the carrier's copy, and they have to retain that for two years. That is a requirement for us, and in the case of dangerous goods, it's a requirement for Transport Canada, as well. As I said, the carrier must ensure that the manifest, as well as the attachments, accompany the shipment right from the start to the finish.

Using multiple carriers, there's what we call a Successive Intended Carriers form. It's not in the regulations at all. It allows using one manifest and identifying up to five carriers. It just allows those multi-modal type of transports for a shipment to go from generator to the receiver, and we published this form -- I hate to use the term "form." It sounds like it's officially adopted, or whatever, but the layout is similar to this -- and my apologies for the way it came out, because I imported this from a Word document into PowerPoint, and I couldn't modify it after the fact, so the lettering is in black. But, essentially, it is a duplication of what we call Box B, and it's four copies of Box B, so you can use one manifest and staple this onto it and get each special carrier to sign off as they take possession of the shipment. So that is there to simplify the process, not to have to use five individual manifests and then cross-reference all the manifests for that one, particular shipment.

AUDIENCE: Is that available on the web site, Joe?

MR. WITTWER: Yes, it is. Actually, it was published in our newsletter, Resilog, in I think the 1997 edition. I have it in Word format, as well.

This next part is an exception to the rule, rerouting. Now, it is possible that a receiving facility is unable to receive a particular material for exceptional reasons, and it may need to be rerouted or redirected. That circumstance is actually set out in our regulations, and it is quite clear in the regulations that these are for exceptional purposes. It is not for standard business practices. If something is not accepted at a facility and needs to be returned or alternate arrangements need to be made, our office needs to be informed of that and we need to approve of that rerouting or the alternate arrangements that have to take place. The receiving facility must have a valid notice in place with the generator to accept the material.

We are talking about the rerouted facility. The receiving facility from which the shipment was transferred will be debited for the material shipped; in other words, our database keeps track of all of the quantities -- the kilograms and liters of the material received. So if a particular facility on the manifest shows that it received 18,000 kilos and then it was rerouted

to another facility, we would take that 18,000 credit off that amount for that first facility, so that we don't double count the material.

Again, as I said earlier, it is in the regulations that the Chief of the Transboundary Movement Branch must be informed in writing of the intention to reroute within 10 days of your finding out that the material cannot be received or dealt with at the facility. Now, returns are similar to that, too. If a shipment needs to be returned to a generator because the waste received is not the same as what appears on the notice, or perhaps the halogenated content is greater than your certificate of approval or your licensing permit, or things like that, you need to return it, if, after you do the analysis, you find out it's not quite exactly what you expected. So the shipment must be returned to the same generator as the one which appears on the notice, and the importer or exporter must send to TMB -- that is us again -- a clear explanation in writing of the reason why they intend to return the waste. We have to be involved in the return.

Part C of the copy three must be dually completed. There is a spot on the manifest in Part C that allows for returns. So if you accept 45 barrels out of 50, but the other five don't agree with what you want, there's a spot in Part C of copy three that allows for that kind of transaction.

We'll send a confirmation in writing that the material can be sent back to the generator where it originated from. We are involved in this process and we want to be involved. It's in the regulations.

Something we forgot: what happens if the shipment exceeds the quantity of the valid permit? This is what we call "overages." We do keep track of the kilograms and liters that are received at the facilities, and if you go over that quantity set out in the permit by actual shipments, this would be considered noncompliance with the Export and Import of Hazardous Waste Regulations, and this could result in some enforcement action. I think Guy Martin from our headquarters office will be talking about some of these things later.

In this particular case, the company must reapply for a new notice, and the consent will actually end on the same date as the original notice on which the exceeded quantity happened. Unfortunately, the approval process takes about the same amount of time as a regular notice. Under the Canada/U.S. agreement, we have a 30-day clause in there that either one of us can have up to 30 days to respond. It can be less if we can do it faster, but there is that 30 days in there.

It does happen from time to time that a company realizes that their notice is about to expire. A notice is good for one year, and it's good for multiple shipments over that one-year period. So a company may realize: My notice expires in three months. I need to renew it. So they will send in for renewal. They will get the renewed notice before the three months expired. They are now in possession of two valid permits. So when they start shipping, as soon as the old one expires, they should make sure that the new notice is on there and not use the new notice after it has expired. We have seen that companies may have two notices in place. This one expires, say, March the 1st, and they could still keep using the old one, because they've got the new one, but the two of them have two different notice numbers. So you have to make sure those notice numbers agree with what's actually in place at the time.

As I said earlier, the quantities on the notice are good for a period up to

one year, and they are not per shipment. We do get notices sent to us and somebody thinks that, "Well, each shipment is tons, so that's 20,000 kilograms, so that's what I'll put down," when they actually intend to make 10 shipments, which means the number should be 10 times as much. In this example, if I'm making that first shipment, I will already face an overage. Quantity discrepancies --

AUDIENCE: The question I have is on the notices. When you're applying for renewal and you have to do it within the 30-day or notice preapproval, it's just a renewal of a long-term agreement, so it ends at the end of the month. You're starting at the beginning of the month and you put it in, or even two months before. Is there any way that the agency can just extend it from that point on and give you another year, rather than taking the month, if it's approved quickly, and then have the two notices that are still valid?

MR. WITTWER: That is what we're proposing to do in the new regulations when rewriting them to try to address some of these problems here -- not only that, but to introduce a new way and faster way to address renewals. Right now, when a renewal notice is approved, the start date is as of the approval date, not at the end of the last notice date. So with the electronic changes that we're proposing to make, I think that problem can be addressed to make the whole system far more efficient, and then it eliminates one of these problems, but this is a problem that exists right now.

Quantity discrepancies are another problem that we see quite a bit, and the quantity shipped doesn't necessarily equal the quantity received. In some cases, we find the way that companies do business is that they've got a 20-ton truck. They say, "Well, it holds twenty tons." They don't do the weighing up front. They rely on the receiver at the back end, and then we get a value of 18.3 tons received or 18,300 kilos. So what happened to the other 1.7 tons? Did it fall off the back of the truck? We are not sure. So we're asking you to be a little bit more diligent, and maybe change the way you do business somehow to make sure the quantity measured at the front end correlates a little bit better with the things at the back end.

The other thing that we have seen, as well, is that our notice and our manifests only accept kilograms and liters. Now, that agrees with the international standard: the OECD forms, the Basel forms, other international partners, they all use kilograms and liters. We get pounds, we get gallons, we get CY's. CY's was a bit of a brain teaser one day. They weren't gases, so it wasn't standing for cylinders, although we do get cylinders as well, but CY's stood for cubic yards, so soil being excavated from a site came out as cubic yards, but we had to account for it in kilograms. Now, what was the density of that stuff? Well, to do all the conversions, and things like that, we're not quite sure. So kilograms and liters, I'm sorry, are the only things that we accept right now. I think I have already covered the consistency of the quantities.

What's new? I'll get into more detail in some of this later on when I get into the new amended export/import regulations. As I mentioned earlier, the new Transportation of Dangerous Goods Regulations came in last August 15. They removed the requirement for the waste manifest, so we published a short regulation to cover the Export and Import of Hazardous Wastes Regulations to keep the manifesting provisions alive and in force and to keep the waste definition as it was under the old transport regulations still alive and in force. So those are still there until we come out with the further comprehensive interprovincial regulations and the more comprehensive Import and Export of Hazardous Wastes Regulations. Therefore, the manifest is still

required, and it is still recognized under the transport regulations as a shipping document for their particular purposes until August 15, 2004. Now, some of the changes to the transport regulations were written in clear language. They also adopted the United Nations' Recommendations on the Transport of Dangerous Goods or what the special committee of experts developed.

Formerly, we had three divisions within class nine. We had class 9.1, which was the miscellaneous class, class we had class 9.2, which was the environmentally hazardous class, and class 9.3, which was the HA toxic wastes. Now, under the new transport regulations, all of those three divisions are gone. There's just one simple class nine, which now agrees with what the UN recommendations say. As you can imagine, that has caused a little bit of confusion, and what we had to do was make sure that our regulations agreed with the changes. So now we just make reference to class nine with no divisions within that group, but we still control environmentally hazardous substances. We still control leachate toxic or miscellaneous wastes and recyclable materials.

That brings me to the end of the presentation. Thank you very much. Bob just asked me to let you know, after the questions from the floor, we'll recess and start up again at 1:15, so we'll have a lunch break until 1:15.

AUDIENCE: Joe, as Bob commented earlier, the United States cannot regulate a Canadian corporation to make sure that they return to the U.S. a copy of the manifest that needs to go back to Canada. It is the same thing for us as a receiving facility in Canada. The United States doesn't necessarily send copy one to Environment Canada, yet we get requests saying, "I need copy one." We cannot create copy one if they didn't send it to us. Is there anything we can do to make it less of a burden?

MR. WITTWER: That's what we are hoping to address with the paperless-type exercise with the electronic manifest. I was going to get into the presentation tomorrow afternoon where we can give electronic keys to the actual U.S. generator to activate or sign the manifest electronically and send to us directly so that there is no having to pick up a paper copy anymore, and that will hopefully address some of those problems.

AUDIENCE: Thank you. Number two, you mentioned the IWIC number, and you said it's a simple code, but I can tell you it's a nightmare. In reality, a generator, for example, a plating shop, would have three contaminants to put under the IWIC number. They will put chrome, nickel and cadmium, let's say, but in there, all the relative menus, they might have six different contaminants, so when it is the time to ship drums or bulk material, they will put in three of the six contaminants, but not necessarily the three that have been put on the notice. So the manifest will show different contaminants from the IWIC number on the notice, and we will have to create six, eight, ten different notifications for one waste stream that is the same, but sometimes there might be one material. Is there some way to make it simpler or to make it clear to the inspectors that there might be some other contaminants than just the three that are noted on the notice?

MR. WITTWER: Yes. We certainly don't want to create more IWIC codes, although we find them fun to play with during different exercises, but the combinations and permutations are almost endless, and we don't want just notices ad nauseam to create more paperwork. Typically, we would suggest, as I was saying, that you make sure your CR code from the CEPA list agrees with the TDG code, which agrees with the IWIC code. So try and identify the three

constituents which impart the hazard to that particular waste. There is only room for three. There's only a requirement for three. If there are six constituents in there that are hazardous, identify the three that contribute to the hazard and agree with what's on the CR code or with the PIN number; for example, with cyanide wastes, there is a PIN for that. There is a CR code for cyanide. It should show up as a contaminant, as well as some metals that may be there, for example, but don't use the cyanide PIN and the cyanide CR code, if you don't show cyanide in the IWIC code, but you show three different metals. There's an inconsistency there, and you're trying to do it as precisely and accurately as possible.

AUDIENCE: Thank you.

AUDIENCE: You mentioned a users' guide. Where can you get this?

MR. WITTWER: There are actually four users' guides. They are up on our web site, and we do have paper copies, if you want a paper copy. There's one for waste classification, how to complete the notice, more information on the Export and Import of Hazardous Waste Regulations, and how to complete the manifests.

AUDIENCE: Joe, actually, I have a question for Bob, too. On the annual report, you talked about the discrepancies. A lot of times, you know, we only have estimates in pounds coming out and it gets converted to kilos. I know, evidently, you see some difference. Is there a percentage that you stay within or you guys are comparing them to the outbound manifests and what the facility received?

MR. HEISS: In terms of a percentage, I'm interested in what you're saying: that there is a conversion factor that can result in what -- rounding or that kind of thing? I think from a compliance standpoint, we are interested in something that goes beyond an infinitesimal rounding difference. I can't give you an exact figure. We have seen five percent and more in terms of discrepancy, and I think that would clearly be much more than rounding. That's what concerns us the most. But it's an interesting point. I can see that there would be some very marginal ones. We don't tend to focus on those.

AUDIENCE: Okay. Also, back to Joe. The ID schedule, or in Schedule 3 of the CR codes, I find it still quite challenging to match up with TDG, you know, and, of course, other stuff in the CEPA regulations, particularly if it's coming into contaminated soils or tank problems. We have actually seen objections come in because, in the province, the codes that we do select to try to catch it, you know, do not work out. Are we looking at establishing or looking at K or F list or waste codes and trying to install them into that Schedule 3 list or --

MR. WITTWER: Actually, we are. Right now, a good chunk of the F and the K lists are in what used to be the hundred-waste types. We haven't reviewed or revised that list since about 1985. During the last five weeks, at the stakeholders' consultations, we have been asked to look at those lists and update them, and we are in the process of doing that. The province of Ontario has already done that with their new schedule of wastes, and they have included the new K-listed wastes and the new F-listed wastes since 1985. We are planning on doing something similar to that. In addition to the CR codes that you saw in Schedule 3, we put them in at the time that there was nothing else available. So we created them to help us manage and track the hazardous wastes.

Under the CCME Hazardous Waste Task Group, there's an initiative underway right now to come up with a harmonized hazardous waste code for all of Canada, and it's based on something that might be similar to the UCD code or to the Ontario code, where you have an alphanumeric to identify the wastes. So that may alleviate some of the difficulties we're having right now to try to correlate three codes, and then, at the same time, to send it to the province and have them try and correlate it against their code, which is a quasi-UCD code -- UCD is the University of California at Davis-type code. We are looking at that now and hoping to have something we can work with.

AUDIENCE: Okay. Also, if there's an importing facility that is bulking and then it's going to go to a final facility, is there any requirement that the final facility receive any notification at all? In other words, for the facility that's bulking, is there not any reporting requirement for either Environment Canada to notify them or for that other company to notify?

MR. WITTWER: We do send the notice for Box 5 to the province in which that facility is situated to make sure that it's licensed and permitted so that final transaction can actually take place, but we don't notify that facility ourselves.

AUDIENCE: Okay. Also, do you still insist we fax copy one before we go?

MR. WITTWER: Yes.

AUDIENCE: That's not written into the copy we need at the Canadian border, but we are still required to fax a copy prior to that truck leaving?

MR. WITTWER: Well, in the regulations, it says within three working days of that shipment leaving. So she is well within her rights to ask you to fax it at the time, but you can send it to us as the shipment leaves or within three days.

AUDIENCE: So indeed you will probably receive two copies of it, one from Canada Customs and --

MR. WITTWER: Oh, we receive three copies of every manifest. As I said, we've got three points of control, the generating facility, the customs point crossing and the receiving facility at the end.

AUDIENCE: Okay. Also, back to our OECD form numbers that come out, if we have more than three waste streams, there's still some confusion -- at least some other people have experienced this -- where you may forget what waste that was. It might have a specific F or K-listed waste code, and all we see is one, two, three being approved, and I know we make little notes as to which waste stream is what. However, I have had waste codes that have the same IWIC numbers going on that notice, and it actually had them bumped off the notice because you're looking at two identical streams, except that on the U.S. side, we've got a very different generation or source code. What can we do in a situation like that?

MR. WITTWER: Well, here again, the Canada/U.S. agreement allows each country to do their own classification, and the classification at our end is for our purposes. If there are some discrepancies like that, I would be intrigued if you could send us the exact situation so that we could take a look at it on the paper copies to see what the problem was, because typically, the F and K-listed wastes are in the waste types already, and they correlate not too badly with the US codes. For example, F-001 to F-006 are on our waste types one to

six.

AUDIENCE: The example of F-37 or 38 from a refinery indeed spells out the same IWIC code, but they are two different waste streams as far as the US goes. When you're notifying the U.S. EPA that you received this information, how are you telling them? If you're not using those codes, how do you differentiate for EPA?

MR. WITTWER: I don't think we differentiate for the U.S. EPA, and that does create some problems when they do review the notices, but we are in constant contact with them. The people in my group speak with Bob quite often to get further explanation on what some of these things are. But I'm glad you raised this issue right now, because we are looking at the way we applied the F lists and the K lists and how we may be able to streamline and simplify the way we send things back to each other. If you don't mind, please set that out for us and send it to us and we'll take it into consideration.

AUDIENCE: Sure. I would be happy to. Thanks.

AUDIENCE: It's quite possible that once in a while you might send a waste or export a waste which doesn't meet the receiving facility's compaction requirements. The same company, let's say, that owned a facility 20 miles from the facility can solidify and then send it back to them for disposal. It would be much less environmental risk to send it 20 miles than to send it 400-500 miles back to the generator. In that case, it's my understanding, I don't need to submit any prenotification for the facility to U.S. EPA, in order to facilitate the process, but I have to notify Environment Canada?

MR. WITTWER: If that is being rerouted within Canada or within the U.S.?

AUDIENCE: Yes, it's being rerouted to a treatment facility in Canada that sends it back to the --

MR. WITTWER: Well, in any changes in what is set out in the notice, because something can't be received or recycled or disposed of, as it's set out in the notice, we have to be notified of that and we have to take a look at the options that are being proposed in those facilities, and that's why we need to know and assure ourselves that the facility that's going to receive it is licensed or permitted or can deal with it in an environmentally sound manner. So I'm not saying no to it. I'm just saying that these are considerations. This is information we need to make that decision.

AUDIENCE: Now, assuming you get permission from Environment Canada and file an exception for the U.S. EPA, and at the end of the year, I submit an annual report to the U.S. EPA, and the waste was received eventually by the facility I had notified for, but it was routed to a treatment audit bank facility, which was intended to receive the waste. How would it be handled on the annual report?

MR. HEISS: Just so that I understand the facts: the shipment did occur. Initially, there was a rerouting, and the new facility in your example is actually in Canada or the United States?

AUDIENCE: In Canada. It's sent back to the facility which was notified for.

MR. HEISS: Okay. But both facilities are in Canada, so there was a net shipment out of the United States to begin with, at least, and the waste never did come back to the United States. It involved two different facilities in

Canada --

AUDIENCE: Right.

MR. HEISS: -- so how would you account for it in the annual report?

AUDIENCE: It was disposed of at the facility which was notified for initially.

MR. HEISS: I see. So there was a change and then back to the original facility. That's an interesting question. This issue is whether there is anything in Section 262.56 that would require to you disclose all of that, since the net result was what was intended in the notice. It's just that there was an interlude -- and there was movement -- before it reached that point. I will need to back to you on this after I check the regulatory language. [*Answer*: The export annual report requirement at Section 2.56(a)(3),(4) specifies that the report shall contain information relating to the "consignee" and export shipments to that party. The definition of "consignee" set forth in Section 262.51, as discussed earlier, is the "ultimate" facility to which the hazardous waste will be sent. Thus, the identity of any intermediate facility in the shipment chain, and any circumstances pertaining to it, need not be included in the exception report.]

AUDIENCE: Second question: suppose, in your shipment, you exported to the receiving facility, and they look at it and say, "Well, we can only accept it in an oil container," and it returns. Would that material be considered in transit, because they never signed a manifest, never even accepted it?

MR. HEISS: I'm not sure I understand. You have a hazardous waste for export being shipped. Did the transporter sign for it to begin with?

AUDIENCE: Transporter signs, but the facility never accepted it. They just said, "It's the wrong container shipped," and they're returning it.

MR. HEISS: So it is then returned to the U.S. for that reason.

AUDIENCE: Right. We can make a case it was *in transit* and not even exported, so now you have a PCB situation.

MR. HEISS: It was refused for whatever reason in Canada. The container didn't meet the specifications, and it is technically a *return*. The finesse that EPA has used for the re-entry into the U.S. of waste PCBs under TSCA as a transit would not apply, but there is a specific provision in the RCRA regulations at Section 262.54(g) for a return of waste which "cannot be delivered for any reason" at the receiving facility. It would seem to fall under that requirement, where then the exporter needs to have the transporter modify the manifest to indicate the return. It isn't technically a transit, it's technically a *return*, but fortunately, because it's RCRA material, it's RCRA hazardous waste, it can be returned. The problem is a different one with waste PCBs, where TSCA prevents the return, but you do have the transit provision instead to cover it in the TSCA regulations.

AUDIENCE: It still needed a three-day notification to Environment Canada before it can be returned, or it can be returned immediately?

MR. HEISS: The Canadian requirement for the return is what you're getting at.

MR. WITTWER: I'm not sure where the three-day came from, but we would have to be notified of it, and there is the part in Part C of the manifest which allows that return, but we would have to make sure.

AUDIENCE: Not a three-day requirement?

MR. WITTWER: Not a three-day requirement.

How about we break, if there are no further questions, until 1:30? Thank you very much. (Whereupon, a recess for lunch was taken at 12:30 o'clock p.m.)

AFTERNOON SESSION 1:30 O'CLOCK P.M.

New Developments in Statutory and Regulatory Framework: Canadian Side:

MR. WITTWER: Is everyone ready to start the afternoon session? This afternoon -- in your agenda, it says between 1:00 and 3:00 -- we'll be talking about new developments in the statutory and regulatory framework. So I thought I would like to start off with the suggested amendments to the Export and Import of Hazardous Waste Regulations. Rather than focus on what has been and what is in place today, since things from our perspective in Canada will be changing within the next 18 months or so, I thought I would give you a snapshot of where we are planning on going and what we're planning on putting into the Export and Import of Hazardous Waste Regulations.

The review process for these regulations actually started back in 1999. We were working on what had been proposed and recommended through the Canada Council of Ministers of the Environment. We held public consultations on the directions that we would like to go with a number of discussion papers in the year 2001 and in 2002. There was a consequential amendment that we put out last year, August the 15th. That was put out there as a means to maintain the waste definition and the manifesting controls and to make some changes to the hazard class criteria in order to make sure that we were in agreement with the new transportation of dangerous goods regulations that came into force on that particular day. In relation to that -- and we'll be getting into the permits and the equivalent level of safety a little bit later -- there were some outstanding waste permits that dealt with waste issues that had been issued under transport when our manifesting provisions were in their regulations. So we issued a number of permits of equivalent level of environmental safety last August, as well, to make sure that those particular controls were still in place and those variances were still allowed.

We are having some focus discussions on a number of specific issues. Focus discussions are essentially where we sit down with certain industries or certain companies to address some of their problems. We sit down with NGOs and sit down with our other government departments to see what some of the problems are and see if we can't come up with what we would like to think of as smart regulations.

We've also drafted what's called a Waste/No Waste Guide. The Waste/No Waste Guide was sort of an initiative that started under the OECD a number of years ago to try to actually put down on paper what it was that we were doing intuitively when we got questions, to know when something crossed that line and fell into the waste category and when it was out of that. We felt that would be useful for stakeholders to have. We also created a background document for drafting instructions.

We went to five cities across Canada in January and February of this year. We

were in Halifax the second week of January, then Calgary, then Toronto, Montreal, and then two weeks ago, Vancouver. That was just after I had gotten back from Europe. I had been there since the first of December. I was in the office for three days and was handed my tickets to go to Halifax, so it was quite the experience. I don't think my body has recovered yet. My stomach still thinks I should be eating at 3:00 in the morning.

Right now, on our schedule, we're proposing to go to Canada Gazette Part 1 in the late summer of 2003. We are sitting down with the drafting lawyers, and because we are dealing with so many regulations all at the same time, we are working on the common issues right now.

The common issues are definitions and the application of those definitions, the tests and criteria that apply in order to characterize what is hazardous. Some of the main aspects of the amendments to the Export/Import Regulations are that we'll retain the notification and tracking requirements, but behind the scenes, what we're trying to do is to streamline the administrative approaches that we have been using and clear our obligations. Through some private conversations and through some of you that have come up to me with over the lunch hour, some of those obligations do need to be clarified, and that's what we are hoping to achieve here. With the administrative streamlining, some of the requirements of the regulations are that we need evidence of insurance, we need evidence of a contract, things of that nature, and we are proposing to reduce some of those requirements by -- if you have number of dossiers with us, a number of files -- the same insurance companies, same carriers, whatnot; we just keep one file, so that you don't have to submit a Certificate of Insurance each and every time you send in a notice.

There will be a ban on exports to developing countries for disposal. As I mentioned earlier, there was a ban amendment to the Basel Convention that was adopted in 1995. We are not party to that particular ban, but Canada's position has been that we think it's a good idea to ban exports to developing countries when the waste is destined for final disposal, and it's better for the environment for us to do that sort of thing.

With the splitting up of the definitions for recyclable materials and hazardous wastes, stakeholders have been commenting to us through the last round of consultations that we should have separate regulations for recyclable materials, separate regulations for waste. We don't think that more regulations are the way to go, and I think most of you would agree with me there, but what we are considering and talking over with our drafting lawyers is that we have separate parts to a regulation, a separate part for hazardous recyclable materials and a separate part for hazardous waste, actually to differentiate between them and maybe have a slightly separate regime for the recyclables.

In these new regulations, as I explained this morning, under the new CEPA, we are incorporating new elements, such as the environmentally sound management concept, the permits of equivalent level of environmental safety, and also the need for reduction plans on exports that are destined for final disposal. Working through the CCME and discussions with the provinces, we're trying to improve the federal/provincial ways of controlling hazardous wastes and making sure we harmonize our definitions. We are also trying to harmonize a little bit more closely with the U.S. a way of managing hazardous wastes. One of those things is, for example, adopting the TCLP with its lists of hazardous contaminants. We have the old leachate extraction procedure. Some of you may be familiar with that, the old EP tox method. We still have that on the books. So essentially, people that were in the business of exporting and

importing had to do two different tests on the different sides of the border for leachate toxicity or for the toxicity characteristic properties. So we're working in that direction. At the same time, we have to keep our international obligations in focus, and that means making sure that we meet our obligations under the Basel Convention, the OECD Council Decision, and as well, the Canada/U.S. agreement.

We are trying to strengthen linkages to other elements of CEPA 1999, which includes the CEPA toxic wastes. They are CEPA toxic substances when they become wastes. In that case, the CEPA toxicity is not necessarily equivalent to acute toxicity. There are different parameters used for that. We are trying to figure out how we can actually incorporate some of those substances into our regulations.

The big issue right now is the definitional issue. It has implications for the interprovincial regulations and the export/import, and what we're trying to do is make sure that there's this consistency, and we're also trying to make sure that the linkage with our international agreements is in there, in the case of Export/Import Regulations. We're creating a number of lists and looking at the test-out options. The list would be based on Schedule 1 of the Transport Regulations, but we also have to take into consideration Annex 1 and Annex 8 of the Basel Convention. Annex 1 is your hazardous lists of categories, and Annex 8 is your hazardous waste lists. Some people were asking me about the F and the K lists. We have a good chunk of them in the 100 waste types that used to be set out in TDGR.

We were being asked by the provinces to make sure that there was something equivalent to what you have in the U.S. called the "delisting mechanism" associated with these industry-based type waste streams. What we have come up with is a conditional, exclusion-type option for these types of wastes, rather than using the term "delisting," so we could exclude them conditionally from controls under the regulations, if you meet the descriptor, but you can prove that your process is different, your feed stock is different so that you don’t meet the hazard characteristic coming out. So we're still looking into that. There were three waste streams that did not meet the acute hazardous class set out in the transport rates, the used oil from combustion engines, glycols used as cooling agents and biomedical waste, as well. So we were making a separate list for those particular substances just to say that we want to control these materials. The hazard criteria essentially are those.

If you're familiar with the transport recommendations or the UN recommendations, we're looking at Classes 2 to 8, but not including Class 7. Class 7 is your radioactive materials. We don't plan on controlling those. Class 2 is your gases; Class 3 is flammable liquids; Class 4 is your dangerously reactive subjects; Class 5 is your oxidizers; Class 6 is toxic; Class 6.2 actually is infectious; and Class 8 is corrosive.

Now, we would also be controlling leachate toxicity, and we will be adopting the TCLP to do that characterization. Then what we have is what we consider environmentally hazardous lists. Those are what we had as formerly Class 9.2 substances, and the vast majority of those materials were based on the old IJC list, the International Joint Commission on the Great Lakes, where they identified close to 400 substances that were hazardous or potentially hazardous to the environment. So we actually have had those in our regulations since 1985.

We are also looking at small-quantity exemptions. At this point in time, the Export/Import Regulations have no small quantity exemption whatsoever.

Technically speaking, if you have one molecule present that's going to be a hazardous waste, that would be controlled. I mean, that's going to extremes, but we're looking at harmonizing with the interprovincial and what we have had domestically for quite some time, so that there would be an exemption for 5 kilograms and 5 liters. Those are small quantities that we don't necessarily want to have manifested or controlled, except perhaps biomedical waste, that is, infectious substances. You can just imagine a small vial of infectious substances doing far more damage than 5 liters or 5 kilos of an acid. So anyway, we are going to control biomedical wastes down to a lower level.

Under the OECD revised decision, there is now an exemption for kilograms or liters of hazardous waste going for testing for recyclables. Up until now, we had no exclusion for that, so we are planning on putting that in, as well.

Some outstanding issues: harmonization with RCRA, we were looking at the P&U lists. Some of you brought up land filling considerations this morning. We were looking at putting them into our main list of hazardous wastes and hazardous recyclables. Due to some stakeholders' comments on that not being the best approach, we are reevaluating what we can do with the P&U lists. By splitting up the regulations into two parts, one for recyclable materials and one for disposal, we can make use of the P&U lists to help define a specific disposal operation, such as land filling, and put that in that particular part of the regulations. By splitting up the definition into different parts, we can also look at the pretreatment standards for waste destined for landfill. Listing specific materials: we're still looking at treated wood, the materials that are treated with creosote and those things that contain the cupric gromine-type materials. We are also looking at electronic scrap to see how we can develop a mechanism to not overly control these things, but to make sure they are dealt with in an environmentally sound manner.

Now, behind the regulations, there are always the operational issues. Our objective right now is to try and streamline the process, make it as efficient as possible, so we need to identify and set up criteria: who needs to apply for a notice; what the notification process involves and improvements to it. There are certain documentation requirements, clarified and streamlined controls, and how we're going to deal with returns and rerouting. That has to be built in behind the regulations to make them work properly.

Some of the operational issues: the first one, by definition, would be looking at residents of Canada with a place of business in Canada. That does not mean a post office box only. We need to have a clear demonstration that there is a capacity to implement the obligations arising from non-completion of a shipment, so it has to be able to be returned someplace, and, as I said, a post office box doesn't hold tons of waste. Owner operators have contracted with a final disposal or recycling facility. That's not too different from what we have now. Foreign exporters must be under the jurisdiction of the country of export. We have seen different people representing different companies, and they are not even in the same country together, so you may have a broker in Singapore asking to do an export from China and coming to Canada. I'm just using that as an example, it doesn’t really exist, so we want to make sure the foreign exporters are under the jurisdiction of the country of export. We need further clarification, in the case of transfer stations, of how they do business.

We're trying to streamline the controls, and so we are looking at the structured regulations, as I said, maybe splitting that up into two parts, updating the definitions. With the notice, we were thinking of moving towards the OECD form that has the notice document already developed, and it's also

accepted under the Basel Convention. What we are planning on doing is moving away from paper-based and going towards an electronic form.

We need to update the IWIC code. There are certain codes within the IWIC that have changed over a number of years due to amendments and changes at the OECD level and the Basel level. For example, under the H code, H-11 right now is leachate toxicity. For some unknown reason, they took H-11 and made it H-13 and stuck in a new H-11, so now H-11 is chronic toxicity, as opposed to leachate toxicity. So there are a few things that we need to fix up in the IWIC code to make it consistent with what exists in the international forum.

We also need to discuss further and establish a mechanism to identify whether a waste reduction plan is required and what the requirements of those plans are. We're working on the linkages to other CEPA requirements. For example, the CEPA toxicity, other regulations, and also what the international requirements are with the new lists that now exist in Annex 8 under the Basel.

The confirmation of insurance with copies on file at Environment Canada is one area where we could probably streamline our controls and not require a copy of the insurance with each and every notice, but keep the insurance on file so that we can refer back to it.

We would like to remove the restriction on the number of waste streams per form. Right now, the number of waste streams on our paper form is limited to three, because there are three lines. That's all we had left on the legal-sized paper notice. With the electronic notice that we're proposing, you can have as many waste streams as you want to there, and you would have one unique officer, the notice number that would go with it. So we are proposing to have a mechanism similar to that with a paper copy as well, a simplified process for a list of carriers, and also the additional information requirements on the final destination for operations D-13, D-14, D-12 and R-12 and R-13. As I explained it this morning, that Box 5 issue, we need all the destinations.

AUDIENCE: Is there any sort of time line, Joe, when the ability to submit electronically will come to fruition?

MR. WITTWER: We're doing the last of the programming right now, and I have an entire presentation on it for tomorrow afternoon. That presentation will be forward-looking, looking into the future when we can expect this. We are planning on running a pilot with a number of companies starting in April using the electronic system.

AUDIENCE: Will we be able to notify EPA as well?

MR. WITTWER: That is in the cards as well, but it won't be April. We're working on that, but that's under NAFTA/CEC, the Commission for Environmental Cooperation. Not only are we looking at an E tracking system or a system of exchanging information with the U.S., we are including Mexico in the whole process as well.

AUDIENCE: Joe, what does EPA see when you receive a notice? What information are you giving them? Are they getting everything off that OECD form?

MR. WITTWER: We don't use the OECD form right now. We have our own notice, but they get the notice faxed to them, and in the future, we can send all of the data elements electronically.

MR. DAMICO: We get the notice faxed to us in letter size, so don't try to use

small type on the form, because it's illegible.

MR. WITTWER: Because the notice is on legal-sized paper.

AUDIENCE: How will Ontario's electronic manifesting system -- how are you coordinating with the provinces on that? Is that electronic strictly for import/export, or will that impact Ontario's electronic manifesting system?

MR. WITTWER: It will. It will impact on both the interprovincial and for export and import, and we are working with Ontario. They have their electronic manifest system up and running. Ours is slightly different, but we are investigating ways to avoid duplication with them and how we can effectively exchange the data. Once the data is captured, you can transmit it in various forms or print it out in paper copy in any form that you want. So we're looking at ways and setting up an agreement with Ontario so that we can capture certain information, they can capture certain information, and then we will exchange it. Ontario has an enforcement requirement that they need the information in a timely fashion in order for them to take enforcement action on noncompliance, so we have to make sure that the information gets to them within three days.

The other thing we are looking at is a simplified notice renewal mechanism where the original notice, the precedent-setting notice, if you will, comes in, and we do a lot of review and work on that, and if the material hasn't changed and the parties are the same, we are looking at ways of speeding up that renewal process and not have to take the full time to do the actual inspection of that particular notice. Now, for tracking of shipments, we were thinking of replacing the manifest for international movements, with the OECD movement document. Now, we're hoping that might alleviate some of the stigma associated with the term "waste manifest," especially where hazardous recyclable materials are concerned. We're looking at reducing the documentation requirements at the border. Right now, there's a requirement to drop off the manifest, a copy of the permit, a copy of the notice, all at customs, and then they fire that all back to us. We are thinking of reducing that to just the movement document and the permit, or in the future -- and this will be coming tomorrow -- we are looking at implementing a Smart Card process so you won't have to carry any documents whatsoever.

Then there's the expanded authority within the regulations that we're looking for to enable us to make use of electronic documentation. So we are going down that way as well. We are working with the Rail Association for a clarification of the obligations under the rail. They also make use of an EDI mechanism, their Electronic Data Interchanges. They make use of CONSYS. Their point of release is different from truck carriers, so we're trying to integrate the rail mechanism into our regulations as well, to avoid some duplication and make use of some of the electronic capabilities that they have as well. And we'll be retaining the tracking to final destination, but hopefully a new improved electronic system will make life a lot easier for all of us. Right now, there is no requirement in the regulations that a disposal or a recycling operation will occur at any time. Once the operation has been completed, the regulations stipulate that, within 30 days of that recycling or disposal having taken place, you're supposed to give us a certificate or a letter indicating that the material has been disposed of or recycled. There's nothing in the regulations to say that you can only keep it for a certain length of time and you have to dispose of it within any time frame, so we were proposing to put a one-year time limit in there and possibly extending that time limit for some recyclables.

For returns and rerouting, right now we're doing it as it happens. We would like to develop more specific procedures, especially for imports into the Canada, and establish specific consent and tracking requirements for these with our electronic system, although we are undertaking the reprogramming for that type of mechanism right now.

New rules for the volume calculations: under the compliance issues this morning, the discrepancy with what is actually being shipped and what is actually being received, we're trying to figure out how we can put in a factor of -- I don't know -- 10 percent or -- I'm just throwing that number out right now -- to see if there could be some variance between the two of them before it triggers a noncompliance-type issue.

We would like to develop specific rules for the notice amendments. Right now, we do get a lot of notice amendments for carriers, and we would like to set up some specific rules in-house and to share with everyone to make sure that goes effectively as well.

Now environmentally sound management, ESM, is a big issue these days. It's a big issue at the OECD, it's a big issue at the United Nations under the Basel Convention. It's a big issue under NAFTA, under the CEC, the Commission for Environmental Cooperation. The ESM regime is there to make sure that there is protection of the environment and human health. Right now the OECD is developing an ESM recommendation for all the party members to sign on board to strive towards ESM. They are also putting ESM guidelines together. Canada is developing ESM guidelines for our facilities and for waste management. Under the Basel Convention at the United Nations, they have developed, as I mentioned, and adopted the ESM declaration by the ministers. That happened in 1999 at COP 5, and from that they have also developed a 10-year strategic plan, which they just presented at the last Conference of the Parties in December, and that strategic plan was adopted. That's for the next ten years, and, as I mentioned, the NAFTA CEC, under their Hazardous Waste Task Force, is looking at environmentally sound management as well, and how they can apply that between the three countries, not just Canada and the United States, but including Mexico. We are also looking at the ESM regime.

In the domestic context, we are working through the Canada Council of Ministers of the Environment. We are looking at provincial regulations, how they can incorporate that, and as I mentioned earlier, environmental controls and waste management are a shared responsibility with the federal and provincial governments. The provinces are in the business of licensing and permitting issuance of certificates of approval for facilities. They also set the liability levels for carriers, the liability levels for our facilities, post-closure cleanup procedures. They are also responsible for implementing WHMIS, the Workplace Hazardous Materials Information System, and all of those various factors. When you take those in, those are essentially what are called the nine core performance elements that have been developed at the OECD level.

Now, we finally under CEPA have the authority to put ESM in, and this is a very important authority, because now the minister can say no to a particular shipment, an export or an import, if the minister feels that the hazardous waste or hazardous recyclable will not be managed in an environmentally sound manner. And under the new authority, it also applies to what we termed "prescribed nonhazardous wastes"; that is, a new element under our Act. So right now, we are working on the ESM criteria and how we're going to integrate them or reference them in federal regulations. We're looking at preparing certain guidelines to assist us with what is ESM and how you meet it. The ESM

structure and components: part of the structure is what's called the EMS, the environmental management system, that would be built in the facilities, and, as I mentioned, there are nine core performance elements that have been developed at the OECD level that we have taken. We were planning on basing our guidelines on those core performance elements to establish the ESM regime. And the ESM is designed so that it would support that, the management at the facility level, and it provides an assessment tool. Here again, the provinces need to be involved, because they are in the business of licensing and permitting these facilities, and in many cases, some of these core performance elements are built into their permits right now. It's just that they don't stand up.

What we are thinking right now is that the regulations will not necessarily have the ESM standards in them, but we could reference the guidelines that are developed inside the regulations. Some of them would be facility-based type systems. They would be unique to a facility type and the operations that are carried out there, and the management system would be unique to the waste stream that's being managed at those particular facilities.

Now, we're looking at -- and some of these issues are still under discussion with the provinces -- is an umbrella-type system that would provide the organizational structure within the facility. That would help the facility ensure that it meets all the core performance elements on an ongoing basis, and that could include third-party audits, self-audits, internal audits, environmental-type audit situations.

One of the key elements of the ESM right now is the technical guidelines, and since about the early 1990s the CCME Hazardous Waste Task Group developed nine guidelines for hazardous waste management and three codes of practice. These guidelines are a bit dated right now because technology has advanced. The nature of the wastes, the processes have all changed, and so we're looking at those guidelines to change and update some of them.

This work is now, as always, done in cooperation with the provinces. The CCME works under a consensus process, so we need the bio in from the provinces. We have engaged stakeholder consultations to input and solicit feedback. The ESM regime was one of the issues that we just had the consultations on as well, and once all the guidelines are in place, the guidelines will have the ESM as part of their structure.

The one that we are working on right now is the hazardous waste landfill guidelines. We just finished the stakeholder consultations through the issues meetings, are we are hoping to have the landfill guidelines completed in April 2003. There's still further discussion ongoing with the provinces on that. We're developing management of electronic scrap guidelines, as well. The ESM unit in the Transboundary Movement Branch: there's the export/import section, there's the international section and what we call the ESM section, and they are working on having consultations on the E Scrap Guidelines this March. They are hoping to have these guidelines completed sometime in September.

Now, Canada actually helped fund and we actually sent an engineer over to an electronic scrap workshop that was held in China in Beijing last November. Electronic scrap is a big issue in the Asia/Pacific area, and we feel that this is an area that we need some clear ESM guidelines on. The other guidelines that are involved right now are the physical, chemical and biological treatment standards. The stakeholder consultations have been completed now and we are hoping to have those guidelines completed sometime in May. There was some rush on because the export/import of hazardous waste

regulations are moving forward so we would have some of these guidelines completed and we could reference them within those regulations. Now, we're also developing guidelines on the core performance elements to support ESM, and we're planning on holding some stakeholder consultations this summer on that particular issue. This is just to let you know that we're not alone on this. The Basel Convention did create several guidelines back in the early 1990s. They prepared a PCB guideline. They did the landfill guideline, an incineration guideline, one on solvent recycling and one on the management of household hazardous wastes. Now, those are all based on the disposal and recycling operations that they have set out in the convention. The OECD recently developed some guidelines on metal recycling, and I think through the assistance of the U.S., they prepared a guideline on the environmentally sound management of PC's. Right now, the OECD is working on electronic scrap guidelines as well, so it seems to be that is a waste stream of interest in many different forums.

The CEC, as I already mentioned, is looking at ESM under the Hazardous Waste Task Force and how it would apply in the North American context. Our minister actually was down in Guadalajara, not last summer, but the summer before, and actually asked the U.S. and Mexico to develop a North American action plan on ESM and work towards its implementation across the three countries.

Controls on recyclables: as I said, we are hoping to split the regulations up into two parts. We still need to track the shipments of hazardous recyclables to make sure they are destined to environmentally sound recycling, and what we are also trying to encourage is that recycling takes place, as opposed to disposal. Here again, we're working on further definitions.

As I mentioned, we have prepared a guide to distinguish between waste and no waste, and, by having different parts of the regulation, we hope to have differentiated controls put on recyclables. Here is a quick look at the differentiated controls. We have a mechanism available for preauthorized facilities that do recycling, so that, if the province agrees that facility can accept a particular waste for recycling and only that kind of waste, they can preauthorize that facility to accept that, and we can turn the notification process around within seven days. Not only that, we would be able to authorize these preauthorized declarations or permits for a three-year period. Right now, we're considering the extension of the time for initiating final recycling operations, as I mentioned earlier, the one-year time frame or perhaps a little bit longer. Right now, what's happened is that we do issue certain permits to companies to do things differently in the case where a manifest is not required or the material is not considered hazardous in the country of export, and we are proposing special provisions for those particular movement documents.

The only way that those movements can take place is under a special permit that we issue. We were thinking of building this mechanism right into the regulations.

The example I'm thinking of is lead acid batteries: no manifest is required in the U.S.; it's required for manifesting from the border in. Companies that are involved in that particular transaction can actually complete the manifest on behalf of the generator and have it waiting at the border for the carrier to come through so that the shipment is manifested on the way in. Our electronic system might assist in that area as well. In those particular cases as well, we are looking at the possibility of looking at self-certification for the contract. Right now, we need a contract with all the different parties involved to make sure that they know that they're supposed

to be involved in the transaction. We're also looking at low-risk, hazardous recyclable materials.

The feedback we have been getting from stakeholders is that recyclers are requesting exemption for these types of recyclable materials. But we have to make sure when we propose a mechanism under the regulations that it's consistent with our domestic regulations, for example, the interprovincial, that there's a consistency with our international obligations. We don't want to be left open for a WTO challenge or a NAFTA challenge. We also have to make sure that the level of environmental protection is afforded by this particular exemption.

Again, I have already mentioned the trade issues, and we really need in this particular exemption to make sure that we maintain clarity and the level playing field. Right now, one of the tools that we have available to us and is going to be incorporated into the regulations is what we call the permitted equivalent level of environmental safety, and those are proposing variances on a case-by-case basis.

Regarding PELES, again I just touched on it as a new authority. It will be applicable to all aspects of the new regulations: exports, imports, recycling, disposal. We are in the process of preparing a guide that will describe what information the applicant has to submit to us. The key test when we evaluate these applications will be that the variance provides the same protection, or at least an equivalent level of protection, to the environment, so our minister can be comfortable that we are achieving our mission, as far as Environment Canada is concerned, to protect human health and the environment, not just for the present Canadian population, but for future Canadians, as well. The other consideration always is to make sure that any permit we issue is consistent with our international obligations, that we make sure that it's consistent with the OECD and the Basel Conventions and the Canada/U.S. agreement.

Other considerations when we were evaluating the permits: we do have a set of criteria, which we'll be setting out in the guide, so that people will know what kind of information we are looking for and how it will be evaluated. There could be a net benefit to the environment by these particular variances. In other words, you're throwing away small batteries, household batteries into a landfill, but if we can collect them through another mechanism and have them sent for recycling, that would be a net benefit to the environment. We also need to ensure that there's adequate information provided that we can track these shipments, and there's always the question of enforceability. We have to make sure that any permit for any variance to the regulations is enforceable.

With the PELES, our act requires us to be transparent and we have to publish on the Internet through the CEPA environmental registry a summary of each application and each PELES as we issued them. Before we issue them, at a minimum, Environment Canada will consult with the authorities from affected jurisdictions. Now, that's a requirement, because, if we give a variance for something for a recycling or disposal operation within one province, the consequences are that we may not be able to deny it for another province; therefore, we need to consult with the authorities in the affected jurisdiction, plus, through the CCME, we would be contacting the others as well.

And that brings me to a third bullet, which is, consult with other interested parties. Depending on the significance of the variance, that could involve

other government departments. It may require us consulting with our Department of Foreign Affairs and International Trade just to make sure we are not in violation of any of our international obligations.

The last key point is reduction plans. The act requires reduction plans for exports of hazardous waste that are destined for final disposal, and they are only for final disposal. We are not including hazardous recyclables in here. And another area that is new to us is the nonhazardous wastes, so there are two types of reduction plans that will be required, but the export/import of hazardous waste regulations are only dealing with the hazardous waste. In some cases, with the reduction plans, we're proposing to require waste exporters to certify that they have explored options to reduce the exports of waste for disposal. It would be very difficult for some companies to reduce their exports of waste for disposal because they receive the wastes themselves. I'm sorry. I was thinking of municipalities, but anyway, we were looking at that from our P-2 perspective, the pollution prevention-type perspective.

The regulations could also establish rules for requiring comprehensive reduction plans and progressive reports. The operative word here is "could." We're still looking at this. Under the P-2 under CEPA, that's the pollution prevention, there are similar rules proposed there, so we're looking at those to see if we can make use of them.

We are making use of or taking the counter proximity principle and any changes in production that could assist in reducing the number of exports. We also give credit for plans already implemented under other requirements. For example, provincial regulations: there is some work underway in Ontario, Manitoba and Alberta under their waste diversion legislation. So if you divert things from disposal to recycling, then we were looking at giving credit for those types of activities.

Those are the changes that we're looking at for the amendments to our regulations. As I said earlier today, we're living in interesting times, and what we are planning on doing under CEPA is very dynamic at the moment. So thank you very much.

AUDIENCE: Are there any plans from U.S. EPA's perspective to coordinate the NIE process that corresponds to that annual notification they are talking about so the two would match?

MR. HEISS: I doubt it. I was going to just ask you, Joe: the input that you may have gotten from the Office of Solid Waste didn't suggest an interest in trying to do that kind of coordinated work, did it?

MR. WITTWER:: I missed part of the question, but there is some coordination right now under the CEC, and the study is being undertaken to look at synergies and what needs to be done to bring everyone to the same sort of level, and they will be proposing a number of recommendations on how we can do that. There have been a number of meetings held by the CEC, one last November, one in January, and there's going to be another one or another two in April, and they are trying to finalize an approach for a NAFTA-type E tracking system so that we can make use of what we each have and how we can improve what we have to get up to the same level.

I also suggested that the American Rail Association and the Canadian Rail Association attend one of these meetings as an industry rep, because, as I mentioned earlier, they make use of the EDI right now, the electronic data

interchange. They are willing to modify some of their systems to help identify what is a hazardous recyclable, what's a hazardous waste, so that they can exchange their information for tracking purposes electronically with our systems.

We are also working with the Office of Environmental Information, the U.S. office, and they are very interested in this particular area, as well. I don't know if you've heard about the CDX system. It was made public recently, their central data exchange. We're looking at that. That's being factored into the scenario, as well, as a means for our information to go in and then the information being sent to the U.S. EPA so that the notification process can be sped up quite a bit.

AUDIENCE: I have a question for you, Joe. Under the technical guidelines for hazardous waste landfill guidelines that are coming out, is Canada going to take the step with LDRs and the U.S., in other words, adopt the same policies? Certain K codes, of course, can't go to landfill at all, where currently today it can. Is that a definite change?

MR. WITTWER:: We haven't gone that far yet. We are looking at all of our options at the present moment. The guidelines that we are developing essentially reflect the structure of a landfill: what would be the best approach for the landfill design and site specifications. For wastes coming in, we are still looking at UTS, LDR, all those other factors, as further down the road, but certainly right now we haven't decided one way or the other.

AUDIENCE: It's not going to enter CEPA at all this year?

MR. WITTWER:: I'm not involved directly with that particular project. The ESM unit is the one that's working on that, and the head of that particular section is Dave Campbell; I would suggest speaking with him, because he knows more of the detail of it than I do. But, definitely, the Hazardous Waste Guidelines are more of the site specifications, the development of a landfill itself, whether you use double liners or whether you use natural attenuation for your design, and things like that.

AUDIENCE: I have two questions. One is related to the definition of residue, and the question comes up: why is the definition for residue so different in these regulations versus the Clear Language Regulations, because there's going to be a disconnect? The Clear Language Regulations specify that a residue is less than percent of the maximum fill limit, and you've got a hard limit identified for each of the different waste categories, which will mean that you have materials that are only regulated the moment they cross the border, but they are not regulated on either side of the border. The second question I have has to do with the interim management of those materials that were previously identified by an NA number, and what happens before the regulations become effective on those hundred-waste types, and the present day, where those hundred-waste types are not described at all in TGD and have no sort of real definition elsewhere.

MR. WITTWER:: I wasn't too clear about the term "residue." Whereabouts would that be in the regulations?

AUDIENCE: Under TDG, Clear Language is specified in two places, Section 1.44 and Section 3.5.4, and it specifically says that "The means of contaminant has been emptied to the maximum extent possible in the normal course of use as is less than percent of the total use, and the means of containment is being transported for the purposes of reconditioning or refilling."

MR. WITTWER:: Right. In that particular case, we have come across residues a number of times. Typically, it's the residue itself that is the hazardous waste in there. I don't think we have set off a minimum level within the export/import regulations that would control that, but if transport has a minimum residue -- we do for PCBs, or we are proposing one for PCBs.

AUDIENCE: I notice in the latest draft of the background paper that was released in December of last year, it says that for all other liquids, the maximum residue content is five liters. Five liters in a tank wagon is virtually impossible, unless the tanker wagon is pristine, which is unlikely, if it's just recently been emptied, and the same is true for a drum or anything over the 20-liter size.

MR. WITTWER:: In that particular case, I think we may have been using a term and not linking it back to the transport regulations. We'll have to take a closer look at that again to make sure, because we were using the term "residue" in the interprovincial regulations as well, and we decided to remove it, because we're looking at residues in defining what a contaminant was, and therefore, by different legislation or different regulations using the same word and applying it differently, we have to make sure that there is a consistency there. So thanks for bringing that up, because we came across that in a couple of other regulations, too.

As for the hundred waste types, right now they are not in the transport regulations. They didn't carry them forward. What they had been proposing at one time was that, for example, an F-006, your wastewater treatment sludges from plating operations, would be a class 6.1, a toxic substance. Rather than actually having the waste types in there for transport purposes, they were going to cover that under a generic-type entry; in other words, it would be poisonous solid NOS with the appropriate UN number, and they got rid of all of the NA numbers and they would convert everything to the UN numbers. Since it would have been covered under the generic entry anyway, if it meant that hazard class, they felt it was redundant for their purposes to include it in regulations.

Now, for environmental management purposes, we would still like to bring the waste types back. There, if you exhibit that hazard anyway, it would be shipped as a generic, whether it's a flammable liquid NOS or toxic substance NOS, but we want to bring it back for waste management purposes, because some are from specific and nonspecific industrial processes, and that's important for us from a waste management consideration. You will see them coming back in. It was in the discussion paper for the interprovincial regulations last January, and we are revising and reviewing that list to include the latest editions to the F and K list, as well.

AUDIENCE: Hi, Joe. Under the ESM criteria, one of the nine corporate elements in the environmental management system is the obligation for the Canadian exporter to do an audit of the facility that they are exporting to in the United States. Is there a similar provision in the U.S. in order for a U.S. generator to ship to a facility in Canada as a receiver? Will we be required to demonstrate that they bought it from us in order to get our permit, as well, in the notice?

MR. WITTWER:: No. It wouldn't go that far. Right now, the mechanism that we have between ourselves and the U.S. under the Canada/U.S. Agreement is that we rely on them to evaluate the particular shipment to a particular facility and to inform us whether they consent to that or not, and the facility has to be licensed or permitted and deal with the material in an environmentally sound

manner according to the U.S. regulations.

AUDIENCE: Okay. So if being an exporter would be shipping to a facility in the U.S. and that facility in the U.S. has a permit that you referred to earlier, will that be enough for Environment Canada, or are you expecting more? Is there a certain audit standard you're contemplating that will have to be demonstrated somehow?

MR. WITTWER:: Here again, it's difficult for us to expand our authority extraterritorially, and the Canada/U.S. Agreement allows the U.S. to do that sort of activity on their side of the border, and they do the review of the notice and then they provide consent to us or object or whatever else. So it's still left up to them to do that. Under the NAFTA, the North American context, hopefully in the future -- and this is looking several years down the road -- we would have an ESM mechanism that could be applied in the North American context, and the OECD is looking at an ESM guideline for an OECD member-type context, as well. So once those guidelines or those controls are in place, then we can be assured that if a facility is labeled as ESM, then everything will be fine, but right now, our regulations are moving ahead and we're still meeting the obligations of the Canada/U.S. Agreement.

New Developments in Statutory and Regulatory Framework: U.S. Side:

MR. HEISS: I have some remarks to make in this section, as well, but I want to make sure we do not shortchange the two customs presentations coming up after our break, and so I propose to stop by 3:15. Then we'll have a fifteen-minute break. The two 45-minute sessions that will follow, from U.S. Customs and Canadian Customs, will take us until five pm, and then we'll break until morning. That's what I propose to do.

The developments that are occurring in the United States are not as far-reaching as the ones that Joe has been enlightening us about, but there are a number of things that are going on that I think are of substantial, significant interest to the import/export program. There are four that I would propose to cover in this segment of the program. The first is a rule-making that has been pending since actually April of 2001. It's the manifest rule-making. We don't have a handout on this, and I will only briefly cover it. If you are interested in reading the original proposal, and I recommend it to you, you'll find it in the May, 2001 copy of the Federal Register. It's at 66 Federal Register 28239. It was issued in April of 2001 and published in May. The comment period, of course, has long since ended. It ended in October of 2001.

There are three major parts to the rule-making, one of which involves the whole question of E-commerce and manifests, a very interesting, ground-breaking area, complementary to things going on in Canada as well. The news here is that portion of the proposed rule is continuing because there are a number of technical issues to be dealt with. It will continue to receive attention from the agency, but the other two parts of the rule-making have now been designated for earlier adoption, and that is now likely to be before the middle of next year.

I wanted to mention what they are, and one of those two parts of the rule-making has a number of subparts that are of particular interest to import/export. Both of them are of at least some interest. The one that is not as directly connected to import/export has to do with the intent of the rule-making to try to reduce the sources of variability in the manifest form itself over time. The U.S. manifest form developed a number of different

versions, depending on the state that was actually issuing the document. So there's some attempt at some greater conformity and greater standardization, especially reducing optional fields, and so forth, that would be a universal form ideally that could be used in all states. My understanding is that the Office of Solid Waste is coming to closure on those points.

More directly related to the import/export function is that there would be several changes in the way business is conducted. One is -- and this is of particular interest to our office and would affect you -- that for the first time, a copy of the import manifests would be given to Customs on entry. That is not now a requirement. This morning I mentioned that our import side is very lightly documented right now, and this is an essential document for us. Right now, as I was telling you, we at EPA don't have a picture of the total importations for the year. There was a customs development in 2002 that now requires that, as you probably know, a hazardous waste tariff code designation be given for all imports. That's a notable development in its own right, but as far as actually collecting a manifest that we would be able to compare against the notices that we see, we don't have that at the moment and we don't know what the total imports are for the year. It's a curious state of affairs for us, given that we know a good deal about the export side, and as I was saying, very little about the import side. So that would require for the first time delivery of the manifest to Customs on entry, and there is an existing Memorandum of Understanding with Customs, going back to March of 1996, wherein they commit to collecting those manifests on behalf of EPA and sending them to EPA, but the missing link is the one in our regulatory scheme where we now do not have the mechanism for collecting or requiring an importer to make delivery to us of a copy of the manifest, and that would change with this new rule.

Also, there would be some other changes in the format of the manifest. Block 15, for special handling instructions and additional information, has been a catch-all that did include the requirement that the point of departure or entry be specified. For the first time, there would be something specific on the form that would indicate a line where you're supposed to indicate the port of entry or departure. In addition, there would be checkoff boxes to indicate that this manifest indeed is one not in domestic commerce, but one that is an import or export, so it would clarify that the manifest does relate to the transboundary movement process. That frankly would also be helpful to us. I guess those are the basic points. So these would all be adopted when this part of the rule goes final, which is likely to be early in 2004.

So that is one of the pending developments, and another we have been talking about, E waste, Joe was talking about a little while ago in his presentation. One aspect of E waste is the cathode ray tube disposal. I'm going to go through this presentation rather quickly. There is a proposed rule pending at the moment dealing with disposal of cathode ray tubes, part of the whole E waste stream. The idea is to encourage greater reuse, recycling, better management. This is a rapidly growing waste stream, inasmuch as over 250 million computers will be retired over the next five years. We're talking about the video display component in connection with the rulemaking. EPA's Common Sense Initiative in the late nineties made a recommendation that we should streamline our RCRA management requirements for CRTs. We are trying to encourage collection, glass-to-glass recycling, better management. There are certain categories that would not be regulated -- households, CESQGs, and users who send CRTs to a collector or reseller for potential reuse or repair. If the CRTs may be reused, they are products, not waste.

Also, intact, off-spec CRTs sent for recycling, again, are products. Non-CRT

electronic materials, where you have whole used circuit boards, shredded circuit boards, are not regulated. We're looking at other electronics. So who or what is regulated? Regulated with streamlined requirements would be the used broken CRTs sent for recycling. They are conditionally excluded if they comply with universal waste-type packaging and labeling requirements and there's no speculative accumulation. Also regulated with streamlined requirements would be glass processors. They must store their broken CRTs indoors or in accordance with universal, waste-type packaging and labeling with no speculative accumulation, and must use temperatures not high enough to volatilize the lead. Processed glass would be regulated with streamlined requirements. If processed glass was sent to a glass manufacturer or lead smelter, it would not be regulated; and, if sent other kinds of recycling, it would need to comply with universal waste-type packaging and labeling. No speculative accumulation. Regulated under the full requirements, hazardous waste requirements, would be CRTs for disposal in a landfill incinerator, unless the disposer was a household or CESQG.

We talked a little bit about the status of things in terms of the import program, and also the situation with transits. I think the assumption that the program needs strengthening in the import area is borne out by these facts, that under current U.S. law regarding hazardous waste, it's legal for an import to enter the United States without notice or consent having been provided, because that is established by international agreement; and, although the U.S. government has committed itself to those agreements and is trying to follow those agreements, it does not follow that a party subject to our regulations necessarily has to comply with notice requirements and seek and obtain consent. This is really an anomaly in the system. There's also nothing that allows us to specify minimum requirements for a particular notice. That's determined by the sending country, and there's variety in that throughout the world; and, although we have an opportunity, before consenting or objecting, to question the sending authority, it's just not the same thing as having minimum requirements that we can rely on for every notice. But that's where we find ourselves.

Also, if there's the need to renotify, to amend a notice, there's no provision in the regulations right now to provide for that, and except under OECD right now, we receive no manifests or other documentation concerning specific shipments. Now, that will be cured by the rule making that I referred to, but in terms of the overall import program right now, that's another deficiency that we face. Specifically, when an import comes in, there does not need to be evidence of the consent that travels with that import. Contrast that with our exports, where there is an acknowledgment of consent on the outbound side. Right now, we receive no information about aggregate shipments for the year. There's nothing like an annual report requirement on the import side. There are no express requirements for return of an import to the sending country. If it cannot be accepted for any reason at the receiving facility in the United States, there's nothing in the regulation that specifies what the importer or other party does next with it. As a practical matter, we have worked out ways of dealing with this, but there's nothing in the regulation about it. If it doesn't reach the TSDF, the receiving facility, or if it's returned to Canada, or whatever the sending country is, EPA receives nothing in the nature of an exception report. We were talking about reports on the accepting side this morning. And the TSDF doesn't have to report to us in such a way that, for each shipment, the name of the party and the amount, or the nature of the waste and the amount and the foreign source of the waste, have to be identified, so that we would really have a clear picture of the shipments coming in. There is a biennial report, but annually, or even biennially, it doesn't require that all that information be integrated so that

we have a total picture of import shipments.

So these are all things that don't exist now, and, frankly, you can translate a lot of them also to the transit side of things, to the extent that they are relevant. Obviously, a transit does not go to a receiving facility in the states, but these other documentation-type issues are a problem for our transit activities, as well. So what we have, really, is an asymmetry between the import and export side, and transits for that matter as well, even though we, like any other sovereign government, would have at least as much interest in waste originating elsewhere and coming into the United States. We are fortunate that most of our trade is with countries like Canada and the OECD countries where we are dealing with known authorities, and that's a plus. Also, ironically, because we are not a party to the Basel Convention, we have relatively little trade with countries outside the industrial orbit.

Still, it's a peculiar position to be in, and given that we have terrorist threats we didn't once have, even legitimate trade that starts out on the right track can run amuck, as we know. So we are interested in developing controls, at least as stringent on our import side and our transits as we have on the export side; but we don't have the authority, because RCRA, as we were saying this morning, lacks it. We do not have the analog of Section 3017, which exists for exports in the statute, for the import side, and we don't have coverage for transits. So anyway, this is an enumeration of the things we were missing. Our regulations reflect this situation. If you look at Subpart E, Part 262 of our regulations, you see all of the things that exist on our export side. This slide really is just an enumeration of the kinds of things that we would get once we had that authority. But we have the issue of what legislative vehicle we should be using to strengthen RCRA. We are at that crossroads again where consideration is being given to Basel ratification in the United States. Where it will end up, I don’t know.

As you are probably aware, we had other initiatives going back a decade, but ratification has not yet occurred. Periodically EPA drafts implementing legislation. That implementing legislation, among other things, does contain authorities that would strengthen our hand on the import side and in the transit area, as well. If that vehicle does not succeed, will there be a second bite at the apple, as far as securing authority? It would be a stand-alone amendment to RCRA that would accomplish some of the same purposes. That is what we are looking at right now, so that, one way or the other, RCRA would not remain without this kind of authority.

Should the legislation articulate some sort of general standard for objection to an import notice? Right now, import review proceeds under some criteria that are based on other existing authorities, like permitting and enforcement authority. As I was saying this morning, should we write something into the statute about the grounds for objection?

Also, how would we go about providing evidence ultimately to the importer of the consent, so that the import could travel into the United States, or, for that matter, a transit could travel across the United States if it goes that far, which would communicate that EPA had consented to the shipment? This is a bit of a tricky question, because the importer may or may not be a U.S. national. Our communication now with Canada and other countries when we consent is on a government-to-government basis. We do not provide evidence of consent directly to a party like the importer. Indeed, we don't even provide it to our own receiving facility, the TSDF. Instead, it is consent communicated government-to-government, and just to complicate matters a little more, we have streamlined the process in the bilateral so that most consents

are tacit. These are knowing consents, but there is not a piece of paper generated at EPA and sent to Canada for most of these.

Under the agreement, Canada knows after the running of the 30 days that they can rely on our consent and can notify the generator in Canada that a consent has been given by the United States, but it is tacit. So we would have to go from where we are today to the point of having something in writing, and eventually, it might be electronic, but somehow, we would have to get the word out, and it may be that the TSDF, who is in the U.S., is the nexus for us, and it might then have to be the importer getting that evidence from the TSDF to bring the hazardous waste into the United States. This is an issue for us to resolve and work through, and I'm sure industry will have some thoughts on such subjects, as well.

So these are some of the issues we're facing. What would be the benefits of this? I have been lamenting the problems that we have. I think, fundamentally, we would underscore the commitment of the U.S. to prohibit environmentally risky imports from entering the country; it would certainly do that. It would provide a more fleshed-out scheme. Furthermore, making it illegal to enter the U.S. without EPA's consent is basically an enforcement lever that we feel we should have. Also, having a minimum core of information for all notices would be a plus and would really assist us. I can think of some notable examples in the past where we didn't have that, and I'm not talking about examples with Canada. Things are working very well with Canada, but in the world arena, we receive wastes from other places; for example, for notices from Taiwan and some of the countries in the Basel network through these import bilateral agreements, and from time to time, there may be issues about the adequacy of the information and whether we need to go back to those countries and get more information to satisfy ourselves before deciding whether to consent or object. Although industry would like to avoid burdens, here I think we are talking about leveling the playing field between the import and the export side. There would be some additional burdens for industry. Government would also need to shoulder additional burdens. The idea is that right now we are in a system that does seem to be asymmetrical, so we wouldn't be burdening anyone on the import side beyond the baseline that exists for exports already.

Finally, I'll just mention one other development, and that is that, as has been mentioned already in these proceedings and, as you're all quite well aware, the U.S. has a somewhat different scheme as far as lead acid batteries based on incentives that were created for recycling. The reality in the international arena is that there are opportunities potentially for mischief because of the different schemes, mischief in terms of things getting lost somewhere in the process. As a result of this concern and others, right now the agency is also looking at the whole issue of how we deal with lead acid batteries. There have been other initiatives like this before, but some interesting developments at the moment are worth mentioning. The Office of Solid Waste is forming a work group on this very subject, the project on lead acid batteries, and it will be seeking stakeholder input. It is possible -- maybe even likely -- that this will eventuate in a proposed rule, and there's a tentative date for issuance of such a proposed rule if one is formulated, of April 2004 -- I don't know how reliable that date is -- with final rule making a year later. Whether all of that will come to pass in exactly that schedule, I don't know.

Basically, given the existing exemption, we are the only industrialized country that ships spent lead acid batteries without export notification and consent. That has been the source of international controversy. We consume

approximately 90 million lead acid batteries annually, which is 87 percent of U.S. lead consumption. About 90 percent of the spent lead acid batteries generated in the U.S. are recycled, and possibly, we think about 10 percent are exported. A large portion of these go to smelters abroad that are owned by U.S. manufacturers in Mexico and Canada. The remainder is purchased by foreign entities through scrap brokers.

So what concerns us, in particular, is that some of these may be going even to countries that don't have smelter capacity. That's the gravest possible situation environmentally, and those almost certainly are not being handled in an environmentally sound manner. So we might be interested in bringing the export requirements relating to spent lead acid batteries in line with those of other batteries, but perhaps without imposing domestic hazardous waste requirements on them, and that would perhaps mean that we would drop the export exemption, but without restricting exports of spent lead acid batteries. This is all in the realm of possibility as a result of this project.

So if we go forward on this basis, it would have the benefit of bringing the export of notification requirements into line, universal regulations, OECD regulations and the Basel Convention. We would be responding to the heightened concern of other countries about this issue, and it would allow the tracking of such shipments to identify them when they are going into countries without smelter capacity, to try to avoid substantial environmental risk.

You may have questions on some or all of these topics. Perhaps they will just need to be held so we can do a quick break and reassemble at 3:30 for the customs presentations. If you have questions and you can preserve them, hopefully there will be other times in the next day to raise them, but I appreciate your attention. We'll take our break now and try to be back by 3:30. (Whereupon, a recess was taken from 3:15 o'clock p.m. until 3:30 o'clock p.m.)

Border Security and Cargo Facilitation: U.S. View:

MR. SHANNON: As Bob mentioned, the U.S. Customs service has existed since 1789 as part of the Treasury Department, and now we have shifted over, beginning March 1st, to the Department of Homeland Security. Our role has not changed, however. So although this presentation was put together a month or two ago, we are still focused on exactly what I'll be talking about this afternoon.

One thing I did do, however, was change the top left-hand side of the slide. The scrolls with BSF are something I inserted there to replace the old Customs Service seal. The BSF stands for Border Security and Facilitation. That is the name of the new division, and that is the theme I'll be talking about this afternoon.

The other thing to keep in mind is I'm not a hazardous waste expert or hazardous material expert. I am a trade expert -- at least I hope I am, because I have been doing that for years with customs.

In keeping with the border security and trade facilitation theme, today I'll be talking about four programs, hoping to convey to you how customs goes about securing the border while facilitating legitimate trade. I won't limit the discussion to hazardous materials, but be assured that customs does work with EPA and other agencies to target and regulate hazardous material imports. In May of last year when we were still with Treasury, our Commissioner, Robert Bonner (and he still is the head of Customs and Border Protection) established

with Treasury the priority goals of the U.S. Customs Service. Those goals (as shown on the screen) still apply today to our current organization. Those two priorities -- to protect the border and facilitate trade at the same time -- those two goals go hand-in-hand and are inextricably linked. Our mission is to combat international terrorism, while facilitating legitimate trade. Customs recognizes that we cannot afford to combat terrorism by doing an extraordinarily large number of cargo examinations. We would have trucks backed up from the border to Montreal, and containerized shipments would remain stacked and sitting at ports for too long a period of time. Therefore, there's a balance that we have to reach here.

The four programs I will talk about today are designed to achieve that balance by complementing each other in facilitating trade while protecting the borders against terrorism. Those programs are the Containerized Security Initiative, which we began after September 11th, the new 24-hour Manifest Rule that we applied last month, the Customs Trade Partnership Against Terrorism, which is the program that I manage, and the Free and Secure Trade Program, which the U.S. and Canadian authorities have created to expedite legitimate trade across the U.S. Canadian border.

Let’s begin with CSI. Why did Customs create the Container Security Initiative? Well, over 90 percent of the world trade moves by containerized cargo, and over 200 million cargo containers arrive at major seaports each year. While Customs obviously cannot examine all of those containers, we do analyze data associated with each and every one of those containers, in order to effectively target the ones to be examined. Another CSI factor: almost half of the incoming trade to the United States arrives by sea and about two-thirds of all containers that come into the United States are shipped from major foreign ports.

So with those things in mind, our commissioner, Commissioner Bonner, decided to begin working with foreign governments to examine suspect cargo earlier in the supply chain. As I stated earlier, I have worked with U.S. Customs now for years, and supply chains really didn't mean that much to me until September 11, 2001. Prior to that, I had little interest in supply chains. I was just concerned about inbound shipments when the goods reached the port of entry, and it was my job to determine how much duty was to be paid, and that all trade laws were being met. That's not the case anymore. Certainly, Customs needs to consider the security of the supply chain all the way back to the foreign manufacturer, and such supply chain security is not unique to the United States.

In this regard, the CSI program is one that is a reciprocal program, and while we have customs inspectors and analysts in Canada, Canadian authorities are also at some of our major ports, as well. The slide you are looking at shows the top containerized ports of export to the United States, and if you add up all those percentages, it comes out to 65.6. Therefore, effectively two-thirds of all containerized sea cargo arrives from these ports. So the initial CSI goal has been to put customs personnel and analysts at these foreign ports. We already have customs personnel at Montreal, Vancouver, and Halifax in Canada, and, as you can see on the slide and in your handouts, we have other locations already staffed.

So what is CSI? Well, it's targeting and pre-screening cargo destined for the United States before it's even put inside a container at the foreign port of lading, to get ahead of the curve in front of the supply chain, so to speak. The key element of CSI is that customs works with the foreign governments to establish key targeting criteria that enable us to consider whether we want to

examine cargo even before it leaves the foreign port of lading. We work hand-in-hand with the foreign administrations to do that, and CSI enables us to pre-screen containers at the earliest possible stage of the supply chain. That only makes sense, since certainly there are potential terrorist scenarios that would have disastrous results by having a container simply arrive in the U.S. port even if that container is targeted for examination here in the States.

As part of CSI we also use new technologies that are applied here at home as well. These new technologies allow us to see inside containers; thereby, without even opening them, keeping trade moving at a quicker pace.

When we implement CSI at a location, we work with the foreign government administrators and determine whether the port is suitably equipped for the program. If so, and if the foreign government is committed to working with us to share information and apply the targeting and risk management techniques to examination of cargo, an agreement is signed and a team of five Customs officers is sent overseas to work with the foreign administration.

The team performs examinations, for sure, but they also analyze data, and much of what is analyzed is automated manifest information that we receive from NVOCCs, and from other industry sources. Understanding that examinations must be limited, the team reviews material to determine what should be examined prior to loading. Then with non-intrusive instrumentation or NII (like large X-ray machines), in many cases they find no irregularities in the container and have no need to go further. If we do open up a container, we will seal it with a U.S. Customs and foreign government seal so that the recipient of that container understands that Customs and the foreign government opened it. If that seal is in any way tampered with, it will then be evident to the ultimate consignee or a service provider along the way.

Where are we headed now with CSI? Well, we want to expand beyond the ports we talked about and include other strategic ports that might not be the largest, but might be the more susceptible to terrorist infiltration. What that means to the trade is that, before anything is allowed to be put on board a foreign vessel, if it's destined for the U.S., U.S. Customs must receive manifest information for that container hours in advance of its being loaded. That gives Customs the opportunity to review the manifest information and do the exact targeting I just described.

The other key aspect of the new requirement is that we no longer accept vague descriptions like “freight of all kinds" or “said to contain.” That is insufficient in today’s environment. Customs needs to know with certainty who is sending what to whom.

If you access our web site, we have information on everything I'm talking about today, including the types of manifest commodity descriptions that are acceptable and those that are not. Beginning on February 2nd, we started enforcing the 24-hour rule. The rule was actually implemented in December of last year, but with a two-month grace period. Since February 2, we have had instances where we have denied the loading of containers on board a vessel. In other cases, carriers transmitted insufficient information in advance of the hours, but corrected it in time for lading. We’ve also had situations where inadequately described, manifested, containerized cargo made it on board a foreign vessel but was later entry here in the United States.

So we are very serious about this, or where carriers have received monetary penalties for failure to comply. Customs is very serious about this new

requirement, and I think the trade community understands why we have this new regulation and they have worked with us quite well.

So far I have talked about CSI and the 24-Hour Manifest requirement. I will provide an overview of the Customs-Trade Partnership Against Terrorism, or C-TPAT. This goes even further to develop a partnership between customs and the trade community. The 24-hour requirement in a sense is a forced partnership, because it's covered by regulation. On the other hand, C-TPAT is a voluntary partnership that companies are invited to join with Customs. We have had a lot of success so far in terms of C-TPAT participation. Since we began the program, over 2,000 companies have signed up. That includes about 1,200 importers, 500 brokers and freight forwarders, more than 200 carriers and four U.S. port authorities.

When companies join C-TPAT they are making a commitment to do what they can to secure their supply chain. It is important that the trade community understand that Customs cannot control the security of the supply chain to the degree that the trade community can, and that's the purpose of C-TPAT. It is understood that industry may never be able to achieve an air-tight security system, but an importer in today's international trade environment needs to be concerned about more than just the price of the item that he or she is ordering. They need to be concerned about supply chain security from the foreign manufacturer and all of the hand offs that occur to get that product to the United States.

Securing the supply chain is a very complex and difficult challenge, but the fact is that it is a challenge that both government and the trade community must confront together. We are in a position to work with foreign administrations under CSI. We are in a position to control the U.S. borders when things arrive here, but with regard to the security of all of those hand offs that occur in the supply chain, the trade community is the one in a better position to do that, and that's what we are asking them to do as they join C-TPAT. The numbers I told you about, the 2,000 or so companies, represent in the mid-30 percent of all imports by value that are imported into the United States. We have 60 of the top 100 importers signed up for C-TPAT and about two-thirds of the top 50 ocean carriers. And that final bullet shows that about 93 percent of all in-bound sea containerized cargo is represented by 32 companies who are already part of C-TPAT. So we have had some success. (C-TPAT has been in place for less than a year.)

Customs needs to make sure that companies that have joined the program are following through on their C-TPAT commitments. When a company voluntarily joins C-TPAT, we ask that they conduct a self-assessment of their own security program and interact with their service provides worldwide. The idea is for C-TPAT companies to address vulnerabilities in their security plans so that we can have a more secure supply chain. For the most part, the profiles have been good, although, in most cases, we have asked for additional information. On rare occasions, we have had concerns about a company's understanding of or commitment to the program, based on their security profile submission.

Nevertheless, the majority of companies that go through that process become certified partners with us, and the benefits that they receive are a secure supply chain, number one, but also a commitment from U.S. Customs that where we can, we will expedite their cargo. For instance, generally we will do fewer examinations on their cargo, if they have established themselves as a reliable company, and when we do examine their cargo, if possible, we will expedite their examination. Sometimes that's impossible, particularly at some locations on the U.S. Canadian border where one road leads up to a bridge, and

you can't do things in that situation, and it is difficult to expedite cargo in that situation.

So far I have described the documentary process that C-TPAT participants follow. But it is important to recognize that C-TPAT is not a paper exercise. We perform a thorough analysis of a company's profile, provide feedback to the company and work with them to improve their security program, but we are also now beginning a validation process where customs officers who are expert in anti-smuggling techniques and who have been trained in supply chain management visit a C-TPAT company to make sure, number one, that the company is carrying through on the measures they outlined in their security plan.

As part of our C-TPAT commitment to work with the trade on supply chain security, at the end of April, Customs will be hosting our first anti-terrorist training session. It will be open only to C-TPAT participants, and we will be exchanging best practices, identifying vulnerabilities that might exist in industries, and providing guidance on how to develop and maintain an effective program.

We are also creating a new position at Customs and Border Protection, a C-TPAT security specialist. These officers will be trained in supply chain management and security. They will perform C-TPAT validations and will be points of contact for individual companies that have joined with us in C-TPAT. While we have not yet opened C-TPAT to foreign suppliers, we do plan on doing that later, and we are currently developing a strategy to do that in an effective and manageable way. Among other priorities is to continue coordinating border security and facilitation issues with other government agencies in the United States. We currently enforce hundreds of different laws related to U.S. federal agencies, and while I did not address specific hazardous waste issues, we do work hand-in-hand with EPA and others to prevent illegal and dangerous importations. Many of the targeting mechanisms that I referred to have other agency requirements or interests built into them.

I'd like to finish today by touching on our new FAST program. FAST (the Free and Secure Trade program) is a U.S./Canadian joint effort to facilitate legitimate trade while protecting the borders against terrorism. Companies eligible for FAST have to be C-TPAT participants on the U.S. side, and on the Canadian side, there are comparable programs that are perquisites, as well. FAST is part of the Ridge/Manley Smart Border Accord. We have been working with Canadian Customs and Revenue, since shortly after September 11th, FAST is one of the key initiatives that came out of that effort.

I just mentioned that to be eligible for this FAST program at the U.S./Canadian border, from a U.S. standpoint, you have to be an approved C-TPAT importer. The carrier has to be C-TPAT, and the driver has to be registered both in the U.S. and Canada. Participants also have to use a recognized release mechanism, to give U.S. Customs advance information on what is being transported in the container. Again, Customs is looking for who is sending what to whom.

I will describe the technical aspects of FAST fairly quickly. A transponder on the inbound truck gives off a radio frequency that's picked up by Customs authorities. Based on that information, Customs can identify the specific truck that is approaching the border and what is in the container, based on the data previously submitted electronically. The driver also has a registered ID that includes a digital photo and electronic data. Through FAST, then, Customs is able to expedite most participating shipments because of the advance, reliable information provided to us by C-TPAT participants.

That completes all of what I was planning on covering today. Are there any questions?

AUDIENCE: Is CSI going to be incorporated for Hawaii coming into Seattle?

MR. SHANNON: Well, by the time cargo leaves Hawaii for Seattle, it will have entered the United States, so there will be no need for CSI in Hawaii. CSI is designed for foreign ports of lading where companies are shipping goods to the U.S. Hawaii may receive inbound cargo that has already been examined at a foreign CSI port, however.

Any other questions?

AUDIENCE: So these programs will also apply to all kinds of commodities?

MR. SHANNON: Yes, all kinds of commodities. The thing to keep in mind is that there are certain commodities that are more risky than others, and hazardous materials would be one of them. So when I say that we will expedite the movement of cargo, I course, I have to qualify that, because we are consistently and constantly working with other agencies, like the EPA; if the EPA has an alert about a certain product, shipper, or importer, we will be working with EPA on that issue.

AUDIENCE: Just out of curiosity, with containers coming into Vancouver and driving down to Seattle, is Canada working with you guys on the same program -- again, the CIT program or CIS?

MR. SHANNON: CSI. Actually, we have U.S. inspectors in Halifax, Montreal and Vancouver, and Canada has inspectors in Newark and a couple other places in the United States, so CSI is a reciprocal program.

AUDIENCE: Is Canada doing -- well, you guys are going to the foreign countries?

MR. SHANNON: Elizabeth Maloney from Canadian Customs and Revenue will be up in a few minutes to speak so I will leave that question for Ms. Maloney. Thank you.

MR. WITTWER: It's my pleasure to introduce to you this afternoon Elizabeth Maloney. She is from the Canada Customs and Revenue Agency (CCRA). She is a Program Services Officer from the Windsor/St. Clair Division. She works for the regional director, and among her many, many roles, she ensures that customs inspectors are trained in the export and import of hazardous waste regulations and other pertinent legislation. For those of you who may not be aware, we do have a memorandum of understanding with Canada Customs to enforce our regulations at border crossings. In that regard, Elizabeth also does performance audits to ensure that CCRA is meeting its obligations to Environment Canada. So it's my pleasure now to introduce Elizabeth.

Canada Customs and Revenue Agency:

MS. MALONEY: As I have been introduced, I work for the Windsor/St. Clair Division. I'm actually located in Sarnia, which as some of you know, is the heartbeat of the hazardous waste world. I have been with customs for 15 years. In that time, I've worked in Sarnia and Windsor. I've worked on the drug team, the marine team, and I supervised at the tunnel. My current assignment is everything from quality control, internal audit, the employee recognition program, training programs, statistics and liaison with other

government departments.

Probably one of the biggest files I have worked on recently that some of you might be aware of is the NEXUS program. The NEXUS program is another harmonized program with U.S. Customs, U.S. Immigration and Canadian Immigration, which was a huge undertaking, and I will touch on that. If anybody wants to talk about it after, I have not included it in the presentation, but I'm more than willing to talk about it later.

I'm speaking to you on behalf of the CCRA, and the presentation I've put together is a combination of an internal presentation that was recently given to all staff, as well as a press release that the Minister of National Revenue recently gave with respect to where CCRA is going in the immediate future. Regarding the role of customs, our duty is to ensure that all people and goods entering and leaving Canada do so according to all Canadian laws and regulations. This has not changed. This has been and will continue to be our role.

What has changed, though, is the way that we do it: for example, technological advances. We have a more skilled work force, we are striving to become a learning organization, and you're going to see and some of you may have already witnessed some of the training that we have offered to our staff. For probably the first ten years of my career, it was just "Do what the other guy did. Just keep following what they told you to do." That's the way we operated. We can't do that anymore. We are devoting time, money and energy into training our staff everything from identifying hazardous waste, placards, dealing with people, harmonization with other government departments, harmonization with other countries. We have included this in our hiring practices. We are looking for people that have specific skills. For example, people that have been in industry have years and years of experience doing what you do. People have come to our Agency and they are looking for something else. They want a change of scenery. Well, if we take those people in, we benefit, because they have knowledge and experience and they know the people, they know the industry, they know how it all works, and that's what we're looking for. We want to broaden our horizons.

Employing risk management strategies is becoming probably the most important thing that we do. My counterpart from U.S. Customs that spoke also stressed the importance of risk management. We have to separate high risk from low risk in both the traveler and commercial streams, so when I talked about the NEXUS program, in the travelers' environment, we have taken the low-risk people, people that we know that have a good profile that cross constantly, every day. They're commuters working in the States, living in Canada. We have moved them out of the bulk of the traffic because we know who they are. We've put them in this lane. So they're, as we say, down the road. They're home while the rest of the people are sitting on the bridge. Especially on long weekends. So we've done that in the travelers' environment. Now in the commercial environment, we're doing it with several programs.

One is FAST, which we have heard about -- this is the fun part about harmonization -- you're going to hear about it again in this presentation. The next thing we have really started to do within our duty to the country is outreach, such as this workshop. We are coming to you, not only just to tell about us and what we're doing, but to take from you what you want us to do and what you would like to see improved and how you would like to see us improve it. So, specific to your concerns with hazardous waste and the transboundary movement, if we don't know you, we don't know your risk level; therefore, we are going to keep looking at you until we are satisfied that you are low or

zero risk. That's just the nature of the business. We are continuing to improve our training, our vigilance and our enforcement. I can speak for Sarnia: within the last year and a half, 100 percent of our CI's have undergone retraining in the import/export of hazardous waste regulations. That's important, because when you look at over 40,000 shipments of hazardous waste, 30 percent of that crosses at Sarnia, whether import or export, so you're looking at 12,000 shipments, I guess that would be. So if we have 100 percent of our staff trained to look for it, they are going to do a good job.

Windsor, of course, the volume is much less and it should be much less, as it's not supposed to cross the Ambassador Bridge. It is supposed to use the barge, and I'm going to get into how we have identified some anomalies with that.

Canada Customs is one of the most complex rules in the federal government. Our role is to enforce Canadian laws at the border and through post-release activities. The customs role is multidimensional; it's protection, yet compliance; it's trade and travel facilitation and promotion. So we work at the border. We work at bridges, tunnels, highways, airports, seaports, but work also behind the scenes through post-release activities. For example, I want to go back to that Ambassador Bridge point. Some carriers here will know what I'm talking about when the authorization has come from Environment Canada saying, "Yes, you can bring this stuff across. You can use truck driver ABC and you can cross the Blue Water bridge." Well, guess what? He shows up at the Ambassador Bridge. He doesn't give us the paperwork, because he knows he is not supposed to be there. So he gets through, for whatever reason, but after the fact, we do an audit and we find out that shipments have crossed the Ambassador Bridge, and we do that through looking at how the broker finalized the documentation, and we do what we call a FIRM report. We look at the passage history of what's coming across. We call the carrier and say, "What's going on? Why are you guys crossing here?" "Oh, no, we told him he had to cross at the Blue Water Bridge. He couldn't be there. There's no way he crossed at Windsor," yet we have the proof that he did and he's down the road. We see him on here and on-line changing his placards, because what he is carrying in the U.S. wasn't hazardous, but yet it is hazardous when he gets into Canada, but he doesn't want to change his placards until he is past us, because he doesn't want to have to divert up to Sarnia.

So all of these things are a lot more obvious to us now than they ever have been, and it's something our officers are much more vigilant of. So what we have done to sort of work with Environment Canada's MOU and our own compliance is to put targets in against these carriers, and we have said, "Okay. When carrier ABC shows up, don't send them to the warehouse" -- we don't want to them at the warehouse -- "but pull his paperwork." Well, the next thing you know, he's got to shut it off because it's underneath his bunk and he has got to crawl underneath and over his dog and move all of the shopping bags, and he pulls out his paperwork. So the thing is, you guys have told them, "Don't lose this paperwork. Hold on to it. It's important. Don't lose it." So what do they do? They hide it in their truck from us. So then to get it, it's like pulling teeth -- or else they've got five or six different shipments, and they can't remember which one this is, because they forgot to hand in the last five, so when we say, "Do you have any hazardous paperwork," they hand over this mountain and say, "Is it one of these?" and that's when we identify, "Well, what happened with all these other shipments?" "Well, they told me not to lose the paperwork, so I hid it well."

So this is the thing: we're constantly training your drivers, and we are spending a lot of time doing that, when we should be focusing on some other

priorities that we have. So if I can do anything today for the carriers that are here, it's please go back and make sure that your drivers know to give us that copy.

One of the things I noticed in one of the presentations earlier today is that they have to have a photocopy, and that's what they present to us. All of our staff have been trained to write the transaction number on the face of that document. We have also created our own in-house matching. We want to make sure that when we do the audit of the company, before we send those hazardous manifests to Environment Canada, we are matching it up to the firm. So if a company has brought in 12 shipments, we'd better have 12 manifests, and if not, we find out who let that other one go, and we go back to that officer -- and this is under my quality control hat -- I go back and say, "Okay. You let this go in line 5 at 2:00 o'clock. Can you please tell me what you did with the hazardous waste manifest?" Well, I asked the driver and he said I didn't need one for this. Well, guess what? He did.

So we go back to the training issue and the performance issue, because one of the other hats that I wear is recommending performance reviews, and that is one thing -- and anybody that knows me -- especially people that I work with -- I'm a fanatic when it comes to our obligations with OGD, because for many years, that's what we did. That's how we made our money. The revenue side was diminishing as cross-border shopping days were lessening, so I focused on OGDs and it became a priority for me, which is probably why I'm standing here.

So with those targets against those companies, by doing that, what we have done is to identify the specific driver who is causing the problem and we are calling the companies and saying, Okay, we have John Smith sitting here. This is the fourth, fifth, tenth, twelfth, twentieth time we have told him to sign and date the document where he is supposed to do so, and this is the last time we are going to do it. The next time, we'll turn the truck around and send it back to the States.

But that creates a lot of other problems for everybody, especially if the manifests have been dropped off on the Port Huron side or the Detroit side, and because then we've got to get those pulled and we've got to get the bridge authority to escort them back because it's a rejected truck. It just gets messy. It's just easier if you train the drivers to do it right in the first place; then we wouldn't have these problems.

We do a lot of other things besides hazardous waste. We are responsible to enforce over 70 Acts and regulations. Everything that enters Canada comes through us. We are the "bottleneck". Before we let anything go, we'll make sure that we have applied the rules and regulations of all those other government departments, including those Acts. What we do involves the protection of society, the protection of Canadian businesses, cultural preservation, trade facilitation, information collection for Statistics Canada, environmental protection and revenue collection. This is only one really small piece of the puzzle, but it is probably one of the most important things that we do.

Our officers have recently undergone training in chemical, biological, radiological, nuclear and explosives awareness. This makes them better educated to recognize industry identifiers, mainly containerization. I can tell you this was not even on the horizon before September 11th. Looking at the ever-changing threats from the slide: terrorism, drugs, toxic waste, foot-and-mouth, E-Coli and other diseases, pornography, weapons, other government

department violations, child abduction and contraband. This changes every day. It's like somebody is shuffling the cards, and every day this changes, but it's pretty much consistent that this is what we are doing out there on top of regular customs duties.

So when we keep encountering companies that are constantly having administrative problems with their paperwork or we have drivers that continuously do it wrong and don't hand it in, we sort of have to put this stuff on the back burner to deal with it, and that's where we are saying to you, and one of the reasons I'm here today is to ask for everybody's cooperation. If we can take care of that, we have time to concentrate on these other things. Every piece of the complex puzzle involved with the movement of hazardous waste needs to accept responsibility for the administrative details. It's nice to talk to the drivers. They're good guys – don't take me wrong. We like dealing with the companies, we like going back to the exporters and learning where this stuff started, the routing, where it's going to and where it's coming from, but it's also nice that the companies take responsibility for that themselves.

Canada Customs has undergone an intense period of change. In 1998 we launched the customs blueprint. This is where we basically went out to you, we went out to industry, we went out to manufacturers and said, "Okay. What do you want? We are going through a major restructuring. We re-engineered our entire commercial operation." So in '98, when we went out to find out what our clients wanted, this is what we called the Wish List. "What do you want? How can we better serve you as our client?"

With that, all the ideas started coming in and we began to prioritize them, and from that it was apparent that you wanted facilitated, legitimate trade. So we developed the CSA, the customs self-assessment, which I'm going to go into a little more in the next slide. From that, it evolved into FAST, which, of course, is the U.S./Canada harmonization of streamlining, facilitating legitimate trade, while ensuring border protection. CDRP is the commercial driver registration program, where we have asked that every single truck driver entering Canada register with us. This kind of falls back on the NEXUS program, where we know everything about you -- you're of good character, a good client, you have a card. So when you pull up to the border, you say, I have my CDRP card. It takes that whole onus of worrying about the driver away from us so that we can concentrate on, you know, maybe the unknown commodities that might be in the back. The driver has always been and probably will continue to be an important component of what we want to look at, but it's nice to know that he's a good guy.

AMPS is the Administrative Monetary Penalty System -- and this is new. This is a complete change from before: if you didn't report your shipment, you got the $400 fine for non-report. What we have with this program is the first might cost you $400, but then it's going to keep going up until you correct it. You see, our penalties never had enough teeth in them. Sometimes, it was more advantageous to do it wrong and pay that penalty than it was to correct your practices. Well, under the AMPS environment, it will no longer be good to do that, because they continue to increase.

Advanced commercial information: basically, if you're not CSA FAST, in two years, give or take, you will be ACI. You will have to give us your information electronically in advance. FIRST is gone, PARS will be gone, R&D is gone -- all of the other release options that you know of using today will be gone. You'll have no choice, it's advanced commercial information or it's going to be CSA FAST. With all of this going on, the Smart Border Declaration

was released December 2001, which, of course, didn't change the direction we were going, but it certainly made us focus on a few other things. CSA is the Canadian-bound streamlined clearance, accounting and payment processes for importers. It's a linkage that's created between the exporter, the carrier and the importer, and it was specific to entering Canada, so the exporter and the importer trade chain was connected and the carrier was linked into that. They had to be pre-approved and every driver hauling a CSA shipment had to have that CVRP; then all the pieces of the puzzle came together.

So then came FAST. It's the same principle on the Canadian side harmonized with the U.S. side. It brings in Partners in Protection, which is the Canadian version of a similar program Neil discussed. The Canadian side, you must be in PIP, and as well as the American program. There will be a joint application the fall of 2003, and all of this in line falls under the Smart Border Declaration. Security and prosperity is basically the theme behind it. FAST partners, the Canadian and American governments, are in a program designed to cut the red tape for carriers moving both directions, while insuring that their loads pose little security risk. FAST will make cross-border commercial shipments cheaper and subject to fewer delays, all the while enhancing security. It works by adopting a common approach to risk management, while partnering those in the trade community who have a history of compliance and are committed to the integrity of their supply chain management processes using compatible and advanced technology.

So the key feature under FAST, of course, is greater integrity in the supply chain, which again, you have heard a few times, offers expedited clearance to those carriers and importers who have enrolled. Another key feature would be streamlined, where appropriate, integrated registration processes, and we are going to see some harmonized offices in the very near future. Expedited clearance of low risk transporter shipments by reducing the information required to meet customs requirements. Dedicating lanes where it’s feasible using common technology and focusing limited physical examinations. It's almost like you're up on a pedestal. Everything you have agreed to: PIPs and the Trade Partners Against Terrorism, your drivers are registered, your commodities are moving freely, and you have an expedited line through the major border crossings. It is FAST. That's what it's all about.

Dedicated account compliance managers who will monitor client compliance with program requirements: so you sign up for this, we're not going to just walk away. We are going to assign somebody --- an account manager that is going to help you through the ups and downs and help you get through the learning curves so that it continues, because we don't want to have to redesign something in a couple of years because there's too many people in and so much change, and technology keeps changing. You will have a dedicated account manager.

I’m not going to go through how it works specifically, because we have heard that, but I will state that the preauthorized importer, the preauthorized carrier and the registered driver, the shipment will be processed through the dedicated lane, and they pull up. There's no big mound of paper, no more of this, “I have to go see my broker,” because they don't have to see the broker at the border, because that whole thing has been taken care of in the forefront. They pull up, the officer wands the bar codes, the technology kicks in, they get the little green light on the screen and away your guy goes. Rather than sitting in the drivers' room for two hours waiting for the paperwork to be put together, he has already delivered the goods.

Continuing on the complex role that we play, our mandate is carried out with a

network of partners that support and complement our role. Specific to today would be Environment Canada.

We want to enforce and uphold the export and import of hazardous waste regulations. We want to assure that Environment Canada has been notified. We will do whatever it takes to ensure that we are meeting our obligations. So in conjunction with this, customs inspectors help to ensure compliance with the regulations to protect by collecting, verifying and notifying Environment Canada of discrepancies. What we do basically fits within the compliance continuum, and everything that our officers, our investigators, our intelligence officers do falls within this compliance enforcement continuum. That continuum starts with voluntary compliance, this is where you're low risk, up through our compliance, enforcement, through our justice system, where you become high risk. All of this is happening in the background, but all of it is a key element of risk management. Where you fit on this continuum is based on the risk management that we have assessed.

We do all we can to ensure voluntary compliance. We work with our partners to give the best possible service. The regulations state that all imports, exports and transits of hazardous waste must be accompanied by three documents: the notice form, the attachment letter -- the letter to proceed -- and the Canadian waste manifest. These three documents are required every time the truck pulls up. Carriers must keep the original, but they have to give us the photocopy. Time and time again, they show up and they don't have the photocopy or they have the wrong photocopy. When you ask to see the original document, it doesn't match the photocopy they're trying to present. It is imperative that they do the right document at the right time. We end up sending them to the broker, so they park. They go to the broker. They sit in the drivers' room for 45 minutes to two hours before they get back in line to come up to the front counter to say, "Oh, my broker had the paperwork I needed. I didn't know I was supposed to hand that in." We know how important it is to keep these guys moving. We know how important it is to keep the trucks going, because once they make that drop, they've got to head back for something else.

AUDIENCE: Could you repeat the items, please?

MS. MALONEY: You have to have the notice form, the letter to proceed or written confirmation letter, as well as the Canadian Waste Manifest. That is in addition to all of the customs paperwork. That is just the Environment Canada portion of what we do. if they are on a FIRST Program, for example, they have to have their first lead sheets. If it's on a PARS shipment, they have to have two copies of the PARS if it's paper, one copy if it's electronic. If they are pulling up and they don't have anything, they at least have to have a Canada Customs document -- a manifest that is split at the booth, so you break into your broker to get the appropriate invoices. Our officers are being vigilant to the Environment Canada requirements, and it is unbelievable what they go through to get this document away and out of the hands of some of the truck drivers. Go back and tell them that it's okay, that they can hand it in, but you put the fear of somebody into them not to lose that document.

We don't want the stuff sitting in our yards either. We don't want it sitting next to a load of cows or next to a load of watermelons or sitting next to a load of circus animals going to the Western Fair, and we've got a load of something that might glow in the dark sitting out there for two hours in the heat. We really don't want that scenario; we want them off the property.

This is why it's important that they have the paperwork with them to say, "Well, just go see your broker when you get to the border. They will have everything." Well, some brokers will have it sitting out. Other brokers may not get the connection that fluff is a hazardous waste. We have it posted on the wall in our commercial offices on the pillars so the officers only have to look up and there's the names, like dust that's come out of a drier or something -- where the brokers sometimes don't get the connection that it's definitely a hazardous load. So then we get it and we have to send it back, so your driver goes back to the broker's office again to wait for his paperwork, and he gets back at the end of the line again. Meanwhile, you've got people sitting out in your yard with all their equipment fired up ready to dump this thing and you wonder what happened with him, and he is playing ping-pong in the customs office.

I'm stressing the importance of making sure they have the paperwork, that they have it signed. We talked about that -- I think it was one of the top ten, that the documents were not signed -- or if they are signed, you go, "Who signed this document?" "I don't know." "Well, who do they work for?" "I don't know. It was like this when I got it." It should be the carrier. It should be the driver responsible for that equipment, not five, ten, twenty people ago that happened to handle the document so they signed it off. We want that carrier, that driver, to sign it when they are exporting it, on the day that they're exporting it, and we want it to match the photocopy. Sometimes that doesn't even match.

I talked a little bit about the fact that our officers are now responsible to write the transaction numbers on it. We're doing that so that we can go back -- this is part of my quality control -- to make sure that the right things are being let go at the right time. We are taking action within our offices, but it's hard sometimes when they do everything they can to circumvent.

Let's go back to the Ambassador Bridge scenario. They know they're not supposed to be there. They're not going to volunteer that paperwork. They're just not going to do it, because they don't want to have to reroute and go up to Sarnia. They want to head home for the weekend or something like that. It's important that when you give the paperwork to them, give them instructions where they have to cross. Make sure that if it's supposed to cross in Sarnia, it's only allowed to cross in Sarnia -- make sure they're in Sarnia -- straightforward.

At some point, hopefully, I'm hoping our AMPS will kick in and it will be a violation of the permit by showing up at the wrong port, and it will start hitting some companies monetarily. That might be what it takes -- not where we like to go, but might be where we have to go to get action.

AUDIENCE: Just a question on the Environment Canada requirements. For years, I have been doing a TSCA letter for Canada Customs, as well to ensure the load complies with the Toxic Substances Control Act; that's not been required?

MS. MALONEY: If you have been doing it, don't change anything. I don't know the company, I don't know the types of commodities you have been hauling, maybe port policy where you're crossing. If it is in there, leave it in there. Don't take anything out. That is the safest route to go.

AUDIENCE: Experience tells me it's only or mainly at the Detroit border they're asking for that document. Are there other borders that ask for that document?

MS. MALONEY: It's actually only Sarnia. On a couple of the slides, you'll see the compliance rate. There's 78 percent compliance at Sarnia, and that's because a few years ago, they said -- they gave us some astronomical number of shipments that should have been crossing there -- something drastic like 15,000. Well, we could only account for 2,000, so we went on this training blitz and we went on this compliance blitz with our targeters -- we were using our commercial analysts. I said, "I want to target every single shipment that falls within these possible HS codes," and by doing that, we started going after the importers and the carriers, to find out that they had this paperwork. So Sarnia is very vigilant to it, which luckily is 30 percent of the country's traffic, so we have taken care of a huge hole that was out there. I can't speak for why some of the other border crossings have not done the same. It's something that we are working at, and with our on-line training, we are trying to get it out to all sites.

It's going to come down to the fact that everybody has to be on board. If the carrier has it, the carrier has to surrender it, period. One of the big problems with Windsor is the off-site facility, where sometimes they only drop the customs manifest at the primary line and then they report to the off-site warehouse, which is a mile and a half down the road or two or three miles. By the time it gets there, the fact that it's a hazardous shipment has gotten lost in the processing, simply because they think it was dropped up at the primary line, which is where it's supposed to be dropped. That's an in-house thing that we have to fix, as well as the officers have to be a lot more aware of it.

If we look at the Environment Canada authorizations, under 300 shipments are authorized to cross at Windsor, so it's very difficult to extract that out of 7,500 trucks a day entering at the Ambassador Bridge; where as, in Sarnia, when you have a higher percentage, you're looking at roughly 7,000 to 8,000 shipments that are approved for Sarnia. To pull that out of 2,000, 3,000 trucks a day, it's a little bit easier to find, especially because Sarnia is known for the hazardous waste crossing. Everybody knows that's where it crossed, so the officers in Windsor are not as keen on those certain buzzwords that might appear in the paperwork. When you're dealing with that and the fact that carriers don't want to volunteer the fact they are there because they are not supposed to be there and their placards aren't accurate, it's a little difficult to find, but we are working on it.

In fact, when I had some numbers sent to me to prepare for this presentation, I looked at it, and the director happened to be standing next to me and I said, "What's going on in Windsor?" He looks at the numbers and said, "Guess what you're going to do the day you get back?" So there's certainly an issue at other ports and across the country, but it is something that we're working on. But it's better than it was a couple of years ago. I think part of it, too, is the fact that, with the training that we are getting related to terrorism and everything else, this has become sort of something we need to focus on. It is something we have to get to and we are getting to it.

We talked about voluntary compliance, and that was my preaching to get your drivers to do the right thing and make sure they have the right paperwork when they pull out, and we'll help you in any way that we can. We'll help identify those companies that aren't compliant. We will help identify it right down to the driver who is not handing it in, if we can do so.

Now, under compliance, though, we still have our role with our other partners and with the provinces, and what it means is that goods will get examined entering Canada. Okay? In this case we are looking at a lot more

documentation review and container review and routing, and that sort of thing, than we would be actually examining the product.

Risk assessment: this will continue to surface throughout the remainder of my presentation. It is what we do. We do it every day. So by having compliance, it's accomplished through two types of activities: promotion and enforcement; through verbal/written warnings, publications, education, information, meetings with stakeholders, inspections, technical assistance, prosecutions and technology-developing assistance. And what we have created -- and this will help in Windsor -- is within our operating environment: we are able to put in some key words where, for example, if it said "sludge", so "sludge," you type that in the bottom, it will automatically relate right into the Environment Canada information telling that officer: sludge, this could be hazardous. You need to refer.

We have never had that sort of thing before. Anybody that knows how customs has operated in the past, it was, “Just a minute. I've got binders I currently have to go through,” and we would go find it or else we would let it go.

I talked about the technological advances that we have: This stuff is right there at their fingertips while they're sitting there, and they can make a split-second decision, something that they couldn't do before. Also, with the increased training that they have, they are much more knowledgeable in this type of area, so they are a lot more aware. We've also created specific, core groups of officers that are very knowledgeable in the commercial environment, where before they were always moving around, they were traffic, they were commercial, they were constantly on the move. By creating a core group, we've created expertise that we haven't had in the past. These things are a lot more available. That's that guy two days ago that didn't have his hazardous waste manifest, because he forgot it on the kitchen table. Sure enough, you say, “Where is your hazardous waste manifest?” “I've got it today,” but he hasn’t handed it in.

So by getting to know our clientele and getting to know our carriers, it just seems to me we are able to focus a lot more on who our clients are, and I think, too, you're not as apt to use some itinerant carriers as in the past. We talked before about the carriers, and they've sold it to another carrier, who sold it to another carrier, who sold it to another carrier to bring it across the border. We're a lot more vigilant: the carrier has to be listed, it has to be approved by Environment Canada, and as soon as we start seeing that these guys aren't even supposed to be hauling this stuff, they have disappeared in the last two or three years -- probably not a hundred percent. We have had them drop it in the yard, call back to the dispatch and say, "You better send the other guy, because I just got caught," and they come and hook on and away they go. We've devoted our time and energy to training our officers to actually make sure the truck matches the paperwork. Sometimes, they have these letters of agreement, "I can use your customs bond," and we were under the false assumption that then they must be somehow related -- well, not necessarily, because we come down to the insurance considerations for hauling the hazardous wastes.

So then we get into the enforcement, and I talked a little bit about AMPS and how that's going to apply. We still have our seizures and obtained forfeitures for violations of customs law. Intelligence development is becoming quite an important role that we play, and it’s certainly a lot more visible since September 11th.

Regarding investigations, we will turn information over and allow the Investigations Unit to go with it, and also, we will arrest and detain at border points for our partners. I know that in the past, we always considered some problems to be administrative. We would look at them and say, “Oh, this is just a paperwork thing. Give them an hour and they will get it faxed.” We are not basically going to be doing that anymore. It's either park it or go back or Environment Canada investigators will be called out. Although both violations are against the law, the distinction between administrative noncompliance is not always intentional, and we know that, but illegal traffic is a deliberate and serious environmental crime capable of producing dangerous impact. Illegal traffic occurs deliberately. We hope to see in our efforts that entering misleading information on a notice or manifest relating to the nature or quality of waste or the type of disposal recycling operation, misdirecting a shipment or staying entirely out of the system by not completing a notice of waste manifest -- this is what our people are looking for. We don't want to spend our time showing them where to sign and where to hand in the copies, and "This is our photocopier. Go ahead. You can use it. Get your thing done." We want to find the people that are staying out of this so that legitimate trade can be facilitated, but sometimes we spend a lot of time dealing with legitimate trade that just isn't trained properly. We want to get out of this. We want to get into looking for the people that are creating the bad name for the industry.

With respect to the enforcement continuing in the justice system, we will participate actively in the investigation or prosecution. Our officers, especially our flexible response team, are out there digging for this stuff, and I think one of these days, we're going to hit, and I can't wait to call headquarters and say, “We just got the mother lode. No, it's not drugs. No, it's not guns. It's the hazardous waste shipment that went missing.” We want to be able to turn that over on a silver platter and say five years of administrative nightmare has finally paid off. I hope it's not there, but if it is, I want to be able to find it.

The customs inspector is the common denominator. They are involved in this entire process. This is why we are investing so much time and energy into their training and education, especially as it relates to hazardous and dangerous goods.

The keys to the success with respect to why we’re here are:

- education
- improved compliance
- continuous communication
- partnerships

I can't stress those four goals enough. The reality, though, that we have to look at is crossing the border today, security developments and the risks that it poses, as well as existing business practices. All I can say at this point is that we know that business has to continue, and we know that you have business practices in place right now that are going to be very difficult to change overnight. We are willing to communicate, to create partnerships. We are willing to come out and help you. We are willing to come out and show you better ways of doing what you are doing. Whatever it takes to improve for myself is to go back to some of these other ports and say, “You know what? You guys have got to up your compliance rate. You've got to start asking for this compliance paperwork.”

At the same time, we have to deal with the volume of traffic that we're facing

and security developments as they happen. As previously mentioned, Customs Memorandum D-1973, this is what we operate. This is our document that our officers rely on. We identify declared and suspected shipments of hazardous waste; we collect the shipment documents at the border; we verify the accuracy of the information; we detain any hazardous waste shipments that do not comply; we call the appropriate Environment Canada officials to resolve; we forward the documentation collected from carriers; we assist Environment Canada with the enforcement of the regulations and provide pertinent information, intelligence information. We also take emergency response precautions, if needed. We are very active in the export and import of hazardous wastes. This is what we do. We are and will continue to be the eyes and ears for Environment Canada.

Now, this is the Canadian component of what Neil was discussing. To be in CSA, you have to belong in PIP. To belong in FAST, you have to belong to CSA, so with PIPs, the Partners in Protection. Smugglers often try to conceal contraband in cargo and vehicles without carriers' knowledge -- we know that. CCRA and members of the transportation industry are working together to prevent this. PIPs offers a partnership agreement, which, if signed, involves information sharing, security and joint training initiatives. This allows us to target high-risk, while easing the movement of low-risk shipments and people. This is what we want to focus on. This is where our risk management kicks in.

Just to wrap up, I wanted to just show some of the new toys that we have received. It's nice to start getting these things, because the officers can finally get out there and start digging and looking for these things. Now that our work force is supported by improved technology, it makes our job a little bit easier, so if we have to run out and do something, it takes us five minutes instead of five hours or longer. CCRA inspectors, investigators and intelligence officers are working with Environment Canada to ensure compliance. New equipment and training is arriving daily, and priorities have been modified to ensure increased vigilance.

We're still doing what we did. We might be doing it a little differently, we might be doing it out of sequence. Some of this equipment that you're seeing is definitely in Sarnia and Windsor, for sure. It's also ready across the country. This is our newest project, and this fits into the container program that we were discussing. Yes, we do have our targeters working in the U.S. We have not gone overseas yet, but we do have connections with overseas offices through the U.S. component.

This VACUS is new x-ray equipment. This is where we are going to be x-raying these containers. We can't look at, for example, some of the hazardous waste containers. Nobody is going to crawl in. Some of the medical waste – we're not going in there. This will help. It's certainly not foolproof, and it's certainly not going to tell us everything that's in there, but it's certainly better than anything we have had.

If you have ever had a shipment on a bridge and we give you the call and say, "Guess what? We're going to offload you, and we need somebody to drive a forklift -- and by the way, it will be here 12 to 24 hours" -- this will fix that problem, hopefully. These were just e-mailed to me the day before I finished my presentation, so I thought I would just add those in to give you an idea of how it works -- totally unobtrusive -- nothing has to be opened. They just drive either the truck through it or they drive the container through it. It's going to work on some other vessels that we deal with. Sometimes, we get things at the bridge that are shrink-wrapped, tarped or

otherwise hard to get into. This will help.

AUDIENCE: Is the driver going to get zapped with radiation going through that?

MS. MALONEY: It depends if we like them or not (laughter) -- no. I don't think so. I think there are safety precautions that come along with this. In fact, it's only being delivered to Windsor and Sarnia, I believe this week, if not next. It's relatively new and we have dedicated staff to just operating this, so we pulled people right out of the secondary units and said, "Do this instead," because this is a lot more advantageous for us instead of spending hours offloading. For example, a load of watermelons that was hand-done could take us hours to offload, and there's nothing in there. Guess what? They've all got to go back on now and everybody goes home.

That's basically the presentation. We are going to continue the work. We are striving for perfection, in my eyes, with respect to Environment Canada regulations, and it is very important to us, and we certainly appreciate the fact we're able to speak here. I learn at these things all the time, and I was at the Windsor session two years ago and it's come a long way, and there's certainly a lot of accomplishments to where we were prior to 2001.

If there are any questions, I would like to take them.

AUDIENCE: Harmonization codes for waste: are there going to be any amendments to it for the HS tariff codes?

MS. MALONEY: I'm not a trade specialist, by any stretch of the imagination. I know we just went through a harmonized code modification. There were some nomenclature changes as of January 1st. If that affected your commodities, I'm not positive. I could put you in touch with client service, and they are the experts on that.

AUDIENCE: Okay. When is PARS going away? When is FAST taking over?

MS. MALONEY: FAST is up and running now. FAST is there. FAST is ready to go. CSA is up and running. We have people that are bringing loads across today using CSA PARS, I'm going to say, because we have to allow time for the industry to switch over, and we also have to allow time for a huge technological investment, because paper goes away. You don't see paper anymore, everything is electronic. We have to allow everybody to be on board. I believe the benchmark for the highway mode is 2005 -- it is completely gone. Now, everything that's happened under CAP, which is the Customs Action Plan, and everything related to CSA has been pushed back.

Everything keeps getting pushed back because of industry pressure from our stakeholders. For example, FIRST should be gone right now -- should have been gone in November. I know there are a lot of haulers that bring hazardous material in on the FIRST program, and it's been pushed back, I believe, another eight months, but we are phasing it out as we're going, so a lot of the companies on first or using PARS, whatever release process, have already started the transition into CSA. They are maybe not a hundred percent there, because all the truck drivers haven't gone in and had their pictures taken. We have companies that are approved, we have carriers that are approved, yet, of the 500 drivers they have, maybe one has shown up to have their picture taken. Of course, everything is getting caught behind. We have sent out 30,000 letters, yet people aren't coming back in to process the card.

AUDIENCE: Is FAST tied to the Environment Canada notice to proceed or the

letter of acknowledgment?

MS. MALONEY: No, there's no OGD interface with it at this point. That was one thing that we talked about before. We have a lot of OGDs that are on line with us that are cross-system because they're using electronic data, their using electronic permits. Well, part of the reason that we have never been able to connect is because of the paper. We'd like to have a lot of this stuff streamlined down the road, but we can't because of the paper permit attachment.

What I heard today is a huge development -- a huge step in the right direction. Our old systems were like a stove-pipe; everything went in one and out the other. With a lot of our new systems that are being created, there's a lot of interface and interlinking with all the other government departments, whether it's Transport Canada, CFIA, Industry Canada. So I'm sure that this is going to be there 100 percent. I'm not going to say 2005. I'm certain that it's a step in the right direction, and I think if the pressure was on the right people, it would certainly be a lot faster.

AUDIENCE: I have seen no information for this in British Columbia yet regarding registering drivers, or anything like that. When is that supposed to happen?

MS. MALONEY: It's rolling. It's going. I know that Windsor, Sarnia, obviously, because of the volume of traffic we have, it's up and running. I would say -- I believe it's heading west -- I just read something on this, too -- I'm going to say September, but don't quote me, but I think it's September. Check our web site. There's so much stuff on either the Canada Customs web site or the U.S. Customs web site on FAST. The information is coming FAST and furious -- pardon the pun -- because it's constantly evolving. Even the opening of some of our joint offices for registration where the drivers can come in, the FAST office is on the Port Huron side. We have one office. It's jointly operated by U.S. and Canada Customs. You don't have to come to Canada to get one card. Everything is being merged together.

AUDIENCE: Will this be available at the smaller border crossings out West?

MS. MALONEY: Eventually.

AUDIENCE: I'm dealing with Montana. These are not large border crossings seeing an enormous amount of hazardous waste traveling in either direction, but --

MS. MALONEY: When the customs action plan is fully in place, there will only be CSA or ACI. Those are the only two types of accounting packages or customs clearance that you can have. FAST is going to be the only thing going the other way, so if you're going between Canada and the U.S., FAST is going to be an option. It's going to take a little bit longer to get to some of the other smaller ports, granted, but I think now that the pilot stage is over, it's going to just start. It's the same with the NEXUS program. It started in Sarnia as a pilot. It's now opened at the Ambassador Bridge, it's opened at Pac highway. It's opening at Niagara Falls. They have got to work the bugs out before they drop it in all the small sites, but it's going to have to be there, because that's one of the only release options available. Anything else?

AUDIENCE: What were some of the other equipment and pictures I saw there, the tire and the guy looking at the tire and the other machines?

MS. MALONEY: Those were X-ray units in the commercial environment. What we have had in the past was x-ray at airports in the travelers' mode, you know. We can put suitcases and that kind of stuff through a lot more readily there, but we have always sort of neglected our truck drivers in the commercial environment, so now those are all mobile x-ray units that can be wherever we want them when we need them. We can have them at the marinas, truck lines, we can start putting the equipment through, containers through that in the past we wouldn't have. We are trying to focus on the risks and we are trying to focus on the unknown. We have focused on everything else. We have looked at everything we possibly can, and that now we are trying to streamline and using targeting and zeroing in on what we need to look at, we'll start employing some of that equipment. Before, one x-ray unit sitting down in Toronto didn't help us in Windsor, did it? All the rest are being equipped. There are fiber scopes in there looking at a lot of containers, density readers, you name it.

I don't know where all the stuff came from all of a sudden, but it's making our job a lot easier. It's faster. Sometimes you would have something, and you just didn't want to let it go and you had no choice, because you couldn't find anything, you know; and now they can x-ray it and put it through the stuff and let it go, and that's huge stuff at border locations. You know, at the airports, they always had the x-ray. It's much different when you've got a tire or two gas tanks or you've got containers that are completely sealed, and, you know, you pretty much have to --

AUDIENCE: That was a hand-held x-ray?

MS. MALONEY: The small one that was there was the density reader. There was the portable x-ray equipment, there was the scan truck, which was one that drives from site-to-site. It will be in our warehouses, down in the marine yards, wherever we need it. What else was there in there? There were lots of new toys, and it just shows that we are finally getting, I guess, into the new millennium with a lot of technology, and the whole purpose of that is to move everybody's freight out of there faster. We don't want it sitting for hours. We don't want to hand-bomb it off. If there's nothing there, there's nothing there. Take your shipment and move on, and we'll move on to something else.

MR. HEISS: Thank you. We have a full day tomorrow as well, but an abbreviated day, and we'll see you at 9:00 o'clock. (Whereupon, the above proceedings were adjourned at 5:15 o'clock p.m.)

MR. HEISS: Good morning. For any people who arrived yesterday morning after the registration desk closed, if you wouldn't mind, come out during a break during the day and just check off your name on the list in front. We were trying to figure out all the people who eventually got to the program. That would be most helpful for us.

We have a very busy day, and I'll just quickly walk through the agenda items you see on your program, and then we'll proceed straight away. We will have a regional customs presentation -- we're looking forward to that -- followed by remarks from Transport Canada, two enforcement sessions the latter part of the morning from Environment Canada, nationally and regionally, and then after lunch, a Homeland Security presentation from EPA, and finally, the Promise of the Future -- a very exciting program about technology. Then, after a Q&A period, we'll adjourn for the day.

I'll start by introducing Ken Muellner, who is an import specialist on the Chemical Import Commodities Team. As we have all learned, he is not with the U.S. Customs Service, because we know that it's now the Bureau of Customs and

Border Protection, U.S. Department of Homeland Security. Ken. Welcome.

Waste Tariff Codes and Other Customs Inspection Issues:

MR. MUELLNER: Good morning. I'm glad to see you could all make it today with this terrible weather we are having. I would like to just give you a brief overview of what customs would do with a hazardous waste shipment. We'll start out looking at it from a load going across the border, and then we'll go into some of the more technical classifications and entry provisions.

As you're all aware, hazardous waste can present a lot of problems -- much more than any other single, straight type of shipment would comprise, because you can have such a variety of mixes in there, and some of the mixes within the waste itself could present a greater problem than any single component in it. You know, it's also more likely to be transported and used or damaged in packing, and it might be presented and used, and damaged packaging can be quite a problem.

As far as customs is concerned, when a shipment arrives at the border, the shipment has to be clearly labeled, packaged, placarded in accordance with all the DOT and EPA and other federal agency regulations. Leaking, improperly marked or placarded shipments are going to be refused entry. Shipments won't be released until all documentation required by law is presented. Customs is only going to maintain custody of a hazardous waste shipment for 48 hours at the border. If the required documents aren't presented within 48 hours of detention, the shipment will be turned over to the EPA for disposition or storage.

Cargo has to be manifested as per existing regulations. A driver has to have the EPA form 8700-22, the Uniform Hazardous Waste Manifest. Customs would like an MSDS or a chemical profile along with the shipment, and if there's any exemption involved, it's up to the waste generator to prove to customs that the shipment is exempt. Again, if any of the documentation is missing, shipment will be refused entry. You have 48 hours before it's turned over to the EPA.

The carrier has to meet the minimum DOT requirements as indicated in 49 CFR Part 387, Subpart A. The driver has to have proof of financial responsibility on the truck, and he must have an EPA identification number as shown in 40 CFR §263.11. The carrier is also responsible for any spills, any cleanup. Customs may require an additional bond to cover any cleanup costs, if we're going to detain a shipment. As far as examination is concerned, we do have qualified lab personnel and inspectors in hazardous materials. If they're not available, if the safe exam site is not available, the importer may select a qualified hazardous materials contractor from a locally compiled list to perform the examination or to draw a sample for the customs lab. These lists are available at the local port offices. These firms are approved by the customs labs to act for customs. All the costs for the sampling would be borne by the importer.

Customs may, in some instances, release a shipment intact to the importer's premises. This means only that the shipment can go to the importer's premises. It cannot be processed, it cannot be broken down. It has to remain intact until customs releases it. Customs may require the importer to send a certified sample. It may send out a lab technician or a contractor to draw the sample, and the shipment is on hold until released by the customs service. The importer would be responsible for the safe delivery of any sample to the customs lab, if so directed. All hazardous waste shipments are subject to

formal entry requirements, a Code 01 entry, which means you need a customs bond. The only exception would be samples imported for analysis under the EPA hazardous waste program.

People on the northern border are probably familiar with the Line Release program or the BRASS system where a load can be released against the bar code. Shipments of municipal waste classified under 382510 have been removed from the BRASS program as of January 7, 2003. I don't know the exact reason. It might be because there's such a variety of problems presented in them, but the other waste shipments are eligible for the BRASS program. On a single-entry bond, the minimum bond value would be three times the entered value of the shipment. For any shipment where there is a possibility of danger to the public health or welfare, customs requires a 04 bond of at least three times the entry value. We might want to look at the country of origin of waste.

If you have a producer who might be using, for example, a cutting oil produced in France that is used in Canada in the production of something and then is going to be brought into the United States for processing, what's the origin of the oil? You might think it would be France, but if you go into the general notes at the beginning of the tariff, general note 12-N, which would be the NAFTA Rules of Origin, indicates, "Goods wholly obtained or produced entirely in the territories of Canada, Mexico or the United States, means waste or scrap from production in the territory of one or more of the NAFTA parties or used goods collected in one or more NAFTA parties, provided such goods are fit only for the recovery of raw material." So in almost all cases, your waste material would be considered of Canadian origin.

For the most part, these waste provisions are duty-free. There wouldn't be a tariff difference, but it is going to make a statistical difference. You had the presentation yesterday from Neil from headquarters, and you can see where a country of origin might result in a different approach to the shipment of customs, so it is important to get the country of origin straight.

Classification issues: We have to have a clear invoice. Customs Regulations 141.86(a) states that "An importer must provide an invoice in sufficient detail to facilitate any classification of the merchandise." A simple invoice showing production waste or garbage or whatever isn't going to help customs determine what the merchandise is. They will have to go into a little bit more detail.

As you will see, there's a lot of different classification provisions, and we have to have enough detail to back up those classifications. Most waste is classified under heading 3825 in the customs tariff, "Residual products of the chemical or allied industries not elsewhere specified or included, municipal wastes, sewage sludge, other waste as specified in Note 6 of Chapter 38." The first heading is Municipal Waste. In 3825.10, it is free. It would be "Waste of a kind collected from households, hotels, restaurants, shops, offices, road and pavement sweepings, construction and demolition debris, dumpster, dumpster-type wastes." As I mentioned earlier, this would not be eligible for Line Release under the BRASS program. Sewage sludge would be heading 3825.20. The next item in the subheading would be sludge or items from urban effluent treatment plants, including pretreatment wastes, scourings and unstabilized waste. Now, any waste which might have been stabilized and processed into use as a fertilizer would be classified somewhere in Chapter 31 as a fertilizer. Again, it would be freight, but we can't call it waste.

Clinical waste, hospital materials, 3825.30; this would be contaminated waste arising from medical research, surgical dressings, diagnosis, treatment,

medical/surgical, dental, veterinary procedures. It would contain pathogens, pharmaceutical substances requiring specialized handing. You could have used syringes, soiled dressings, used gloves, things like that. We had to be careful not to include waste pharmaceuticals in here, which would be pharmaceuticals which might be contaminated in transport, might be over the shelf date. I'll show you in a little bit that they will be classified separately.

Also, any waste x-ray material, radioactives would not be included in this heading, they would also be classified elsewhere.

Organic solvents, 3825.41, 3825.49. I don't know why the tariff breaks out halogenated, other organic solvents. It would be any kind of waste containing primarily organic solvents, no longer fit for use for its primary use, and it would be classified here whether it's intended for recovery or for disposal. In either event, it would go under this heading. Wastes of metal detectors, hydraulic fluids and antifreeze fluids, your service station wastes; the heading is self-explanatory. The only exception would be some oils which would be included under waste oils, 2710, and we'll touch on that a bit. Waste pharmaceuticals, as I mentioned earlier, would be pharmaceuticals unfit for their original use. They could have an expired shelf life, they could be contaminated -- not to be confused with clinical waste.

I recently had a shipment -- a situation where an importer was shipping insulin, and a drug cartel put some cocaine in there, and he was trying to hide it within the insulin. In the process of it, they ruined all the insulin, so it was unfit for use. It would be returned as a waste pharmaceutical under 3005. Waste oils, 10.99.0050 through 10.99.9000. This would be the oils heading. It would be containing many petroleum oils and oils contained from the two materials. They would have to be not fit for original use. You could have lubricating oils, hydraulic oils, transformer oils, tank sludge, oil spill cleanup. You could have oils that were mixed with water in here. They would all fit under this general heading.

Radioactive residues, spent elements; there are a couple different classifications here, 44.40.0050, general classification for radioactive residues. The hospital stuff I was talking about would go there. It's a catch-all. You have a broken-out provision for spent fuel elements, nuclear reactors. All these nuclear reactors have other carbon energy requirements. I didn't bring them with me, but if you call the office --

AUDIENCE: Is that the same for NORM, naturally occurring radioactive material?

MR. MUELLNER: Yes, anything radioactive would fall under that classification.

Other wastes, here we have a shopping bag for anything left over when we didn't cover all the other points. It would be wastes -- any wastes from the chemical or allied industries. It's broken out into mainly Organic and Other. It doesn't have to be truly organic. It would fall under these catch-all provisions, if they didn't fall anywhere else in the heading of the tariff.

One thing you might want to look at is the difference between scrap and waste. When we are talking about waste, customs would consider it a load of various mixed materials not sorted out for any use, where as scrap would tend to be a particular material, scrap plastics, metals, scrap brass. I know there's a specific heading for the kibbled plastic soda box. They come in as scrap plastic under Chapter 39. Generally, there is no need for an importer to try to call scrap waste to get it in.

Just try to remember, if you have a single commodity, it would tend to be called "scrap." If you have a mixed load of various products, it would be called "waste." Other than that, that's basically customs' position on that.

If you have any other further questions, you can call me, myself, Ken Muellner, or Jim Bruton at Team 305 in Chicago. We are the chemical team. In Port Huron, where they deal a lot more with this type of stuff on a daily basis, Lenny Schneider, the team leader there, is very helpful in giving a lot of insight for the border. I have her number there for your purposes, if you would like to contact her. Anyone have any other questions?

AUDIENCE: Under waste oils, you look for tank bottoms from refineries; do they fall under this category?

MR. MUELLNER: It would be 10.

AUDIENCE: 10.

MR. MUELLNER: I don't have a tariff in front of me, but it would be in that general classification.

AUDIENCE: Okay. For some time, we have been shipping under 3825.90, which we were advised to do. Is there some way to get clarifications at our port of entries, which would be in Washington?

MR. MUELLNER: What you could do is ask for a binding ruling and customs would issue an order telling you exactly where to put it. The classification guidelines I'm giving you are very general. I didn't have a lot of time to research specifics, but whenever you have a specific commodity, if there's a question on the classification, customs headquarters would provide a ruling within 30 days. You can contact the local port office and they can give you the details on it. Basically, it consists of writing a letter to the area director of customs in New York. Under the new reorganization, I'm not exactly sure what they are going to call that office, but within 30 days, a national import specialist either issues a ruling or sends it to one of the local port offices who issues a ruling on it. That ruling will supersede any generalized information you have on it.

AUDIENCE: Thank you.

MR. MUELLNER: Anyone else?

AUDIENCE: For a customs invoice, are DOT names acceptable, as well, or is that considered too much information?

MR. MUELLNER: The DOT name would be helpful. Again, it would depend on how specific it is. If you have, more or less, a straight load of one commodity, it would be fine. If you have a mix of a lot of commodities, break it out into all the names. If you're talking about a rating like maybe a flammable solid, we might want a little more information than that. We might want to know what the chemical name is. We do have access to a lot of chemical trade name information. Usually, I can get by on that.

Anyone else? Thank you.

MR. WITTWER:: Thank you very much, Ken, for that presentation on the HS codes and U.S. Customs. It's now my pleasure to introduce to you Edgar Ladouceur from Transport Canada. He's the Director of the Compliance and Response

Branch of Transport Canada's Transportation of Dangerous Goods Directorate. He has a Bachelor of Science Degree from the University of Waterloo, and during his career in the public service, Edgar has acquired extensive experience in the area of transportation, enforcement, environmental assessment and applied research. He has held previous positions with Environment Canada, Indian and Northern Affairs Canada, and recently as director of the safety programs with the Railway Safety Directorate at Transport Canada. So now, without further ado, I would like to ask Edgar to come up and make his presentation.

Transport Canada:

MR. LADOUCEUR: Good morning, everybody. First of all, I would like to thank Joe and Anne Patton for inviting me to speak to you today. It's nice to go back to my roots. As Joe mentioned, I did work for Environment Canada for a number of years, basically involved with wastewater treatment involved in cyanide destruction in the steel industry, and I notice this morning when Anne showed me the attendance sheet that there were a few people from the steel industry. I did work in Hamilton for a while and then spent a lot of time doing arsenic reductions in gold mines in the far north in Canada, and that led me to become involved with transportation of dangerous goods. So it's nice to go back to my environmentalist roots this morning and have the chance to chat with you.

I have about 14 slides. It should be take about 30 minutes. Although I'm told you're somewhat flexible with time, I'll try to stay within the 30 minutes. Also, I had mentioned that this is somewhat informal, so if you want to interrupt, make comments or ask a question as I go along, please feel free. Hopefully, this will be more of an exchange than my standing up here talking to you.

So hopefully technology is not going to fail me here. What I will cover with you today is a number of things. First of all, I'll give you a bit of a regulatory update. As you know, our regulations have gone through a fair amount of redesign, so I'll give you a little bit of update where we're at. To go back a little bit, for me to talk to you in terms of where we are at from a transportation of dangerous goods point of view, in terms of hazardous waste and regulating the movement of hazardous waste, I have to go back a little bit to explain a little bit of the history of what brought us to where we are today and point out to you the change our regulations have had on the industry and what is in place right now in terms of requirements.

Also, when I talked to Anne and Joe about coming here, they mentioned that I could cover quickly security issues that we are working on right now from a transportation of dangerous goods point of view, and one thing that I thought I would mention to you is a small project we have been working on that has to do with cross-border emergency response. That might be of interest to some of you that are involved in the response business. Actually, when I talk about the cross-border response guide, when we put that guide together, we had to work with a number of departments, and one of the departments we worked with was customs, and the Customs and Revenue Agency in Canada. I had made a presentation in New Orleans to the American Association of Railways to talk about the emergency response across the border and some of the challenges, and I thought I would use this slide to indicate that customs had a good team and they really work well together, and that slide really illustrated, you know, what I call horizontal networking. Then somebody raised their hand and said that, for them, the slide really illustrated more the point that, you know, in terms of upward mobility in the organization -- so I don't know. I'll let you

come to your own conclusion on that one.

Now, we started rewriting our regulations over eight years ago. We thought we could do it in about two to three years. We had written our act. It took us about two years, and we thought the regulations would be a little more challenging. We gave ourselves three years. It took us eight years. In 1999, the regulations were published in Gazette Part 1, which is comparable to your proposed rule-making. They were finally published in Gazette Part 2, which normally makes them the law of the land, in August of '01, but at that time, what we did was we gave an extra year before they really came into force, so it wasn't until the 15th of August of last year that the new TDG, clear language regulations came into being.

Already, we had to come in with an amendment at the same time, because, in the past, our regulations referenced a number of standards, mostly on the means of containment, how to use and rail tank cars, trucks, road tankers, drums, whatever. We reference about 30,000 pages of the standards, and in the past, the way we did that was to basically say that, as these standards are amended from time to time, the regulations would then capture them. The new regulations -- and we have been discouraged from doing this -- actually specify specific standards with specific dates, so when the standards change, we actually have to change the regulations to capture this most recent version on the standard. That's why we had to come with an amendment at the same time the regulations actually came into force. We captured the latest standard, certainly in terms of the rail tank cars, for example.

We are presently working on a second amendment, and that's going to account for a lot of the inventories, a lot of means of containment as labeled at some industry inventories, one or two, sometimes greater than two years on their shelves, and all of those containers had already been labeled. They were meeting UN standards that were in force before the 15th of August, but are no longer in force. So to allow industry to cope with moving that inventory through their system, Amendment Number 2 is going to allow some flexibility. Right now, we are covering these specific situations with permits, but Amendment 2 will put that in force until 2004.

Then there's Amendment Number 3. I'm not going to go through too many details, but there are a number of issues we are trying to address with Amendment Number 3. We thought we had gotten almost everything right with Clear Language, but there are still some things that we need to fix, and there are some issues that have arisen before the regulations came into force. For example, we have a major issue with the classification of anhydrous ammonia, and Amendment Number 3 is going to propose, where it is right now, that we change that classification of anhydrous ammonia from a 2.2 nonflammable, nontoxic, noncorrosive gas back to a toxic gas. Canada and the U.S. on the world scene are the only two countries that classify anhydrous ammonia as 2.2 right now for internal shipments. Internationally, we line up with the U.N., that classifies it as 2.3. That's just an example of some of the changes that we are proposing in Amendment Number 3. Amendment Number 2 will hopefully be coming out this summer. Amendment Number 3 won't be out until 04.

In Ontario, interestingly enough, we have had three fairly significant derailments over the last few weeks. This is a picture of the derailment that actually happened in Princeton, Ontario, but the most recent derailment we had was close to Bellville, which is located, more or less, halfway between Ottawa and Toronto. What is interesting about that is that it's quite unusual that we had actually two rail tank cars that exploded, what we call BLEVE'd. The acronym stands for boiling liquid expanding vapor explosion.

Two of the cars that did BLEVE were full. They weighed about 3,000 pounds, and actually were rocketed close to a kilometer from the derailment site. Now, there were also a couple of tank cars that didn't explode, but they were fairly damaged. Transfer was not possible, so we did bring somebody from the U.S. to come and help us, and they did what we call a vent and burn, which is that they use explosives to basically open up the car and then blow up the car without having this rocketing kind of railcar that people might be exposed to.

Now, before I talk to you about hazardous wastes, where we're at with our regulations, it's important for me to go back and for you to understand where we were coming from. There were many reasons why we ended up doing a complete rewrite/redesign of our regulations. There's always the drive in government, just as in industry, that you want to do better with what you've got. We had some international pressures because our regulations line up with the U.N. recommendations on the transportation of dangerous goods. There were changes internationally we had to align ourselves with.

Politically, since the early 1980's in Canada -- and Canada is no different from other countries -- there was a lot of pressure from the politicians, from us, the bureaucrats, the people who do write the regulations, to write them in clear language using simpler terms that people could understand, and the thinking is that if people can understand the law, then it's easier for them to comply, and more compliance will lead to a safer system. Legally, there was tremendous pressure on us to rewrite the regulations.

Initially our Transportation of Dangerous Goods Act was passed in 1980, and one of the main drivers at that time for us to pass that legislation was a derailment that happened in Mississauga in 1980, a train derailment where 60 tons of chlorine was released, three propane tank cars that BLEVE'd and a quarter of a million people were evacuated from their houses for several days. So at that time in 1980, there was a bit of a push politically and from the public to put in place this transportation of dangerous goods legislation.

In getting this through, we had to make some compromise, the legislation was basically passed as a transportation-type piece of legislation, and then that came back to bite us a few years later when we started losing court cases. We lost one and then we lost a second. We were just about to lose a third court case where, basically, what was happening was that the Court was telling us that we certainly weren't capturing the activities or the people that we wanted to with this piece of legislation.

So in 1992 we rewrote our Act, and this time, we rewrote it not as a piece of transportation legislation, but as criminal law. It has the same standing as the criminal code, so that means basically it applies to anybody in Canada, just like the criminal code, and that leads to other complications -- and I'll cover this quickly in a few minutes -- but it's different from in the U.S., with your 49 CFR, where you have concepts like materials of trade. In Canada, basically, we regulate everything, which leads us to the need to have a lot of exemptions, because we don't want to capture everything. So, through our regulation, we have a lot of exemptions. We only capture really those activities that present fairly significant levels of risk.

Aside from the legal pressure, sure, there were also administrative difficulties. People that we were regulating often told us that our rules, which were about 500 pages -- and as I said, with reference to about 30,000 pages of standards -- were really complex and difficult for them to understand. My favorite example is in our old regulation: there was a

paragraph, and I call it the treasure hunt. There was a paragraph where you had cross-references, so to understand what that paragraph really meant, you had to go to other places in the regulations to understand exactly what was asked.

Those are the kinds of things that were pushing us to rewrite our regulations. Now, did we really change anything? We certainly did, but the basic principles are the same.

If you look in Canada, every year, there are about 30 people that are killed in the air mode and about the same level in the marine mode, by rail it is about 300 killed every year, and by road, about 3,000. Now, the number of fatalities in Canada, on average, that are directly due to dangerous goods are about one to two. Some years, there are none. There are very few people killed as a result of dangerous goods, so overall -- and if you think that we have million shipments made in Canada every year, and that 99.998 percent reach their destination without incident, you can see that we have a fairly good system in place.

So those are just the basic principles, which are that if you're going to deal with dangerous goods, you have to be able to identify what the dangerous goods are, you have to put them in the right package, you have to mark them properly so people know that they're dangerous goods, you have to document them, and if there's a mishap, you have to report them, and you have to make sure that the people that handle the dangerous goods are properly trained so they know what they are doing, and for certain dangerous goods that we consider presenting a fairly high risk, you have to prepare emergency response plans. So those basic principles never changed with the new regulations, but there were some changes. We have defined what offering was, we have re-defined what a consignor was. Those have had fairly significant impacts on the people we regulate.

This picture is an example -- this was at a company not too far from Ottawa -- of contamination, and because of that, there was overpressure, and not only this car but a number of these cars basically opened up, and we located some of the cars in the U.S. Funny enough, I used some of these slides to talk to the Canadian railways a while back, and somebody objected because I had a number of slides that had accident derailments, and particularly, the car I just showed you, somebody said, "Gee, you shouldn't show that. This is really pornography." I shouldn't -- accident after accident. So I put up this slide, and I thought, Well, he's broken a capital principle here, attacking a regulator. So I put up this slide, and I said that I have to apologize for this slide, also. I know there's something terribly wrong with this slide and I shouldn't keep showing these slides, so the person that hinted that I was showing technical pornography said, "What's wrong with this slide," and I said, "It's obvious, you know, the trains are on the track." Don't mess around with a regulator. (Laughter.)

One of the things that we try to do in our new regulations in the Clear Language was that we didn't really want to regulate by use. In other words, dangerous goods are dangerous goods, whether you're going to take it home, taking it to the farm or disposing of it as a waste. If it's dangerous goods, it's dangerous goods.

We did try different concepts. One of the concepts was the low-threat consignment. Again, that goes back to what I was mentioning before in our laws being based on criminal law, we have a lot of exemptions, if you look in our regulations. The biggest number of pages, the part that has the more

pages, is the part that deals with exemption, because we have to exempt so many things. We don't want to capture somebody that takes a small propane cylinder torch from Home Depot or Canadian Tire and brings it home. We don't really want to regulate that, but we do by law have to, so we have to have exemptions because of our law being criminal law.

We tried this concept where it's called low-threat consignment. We said, at a certain level, no matter what the goods are, if it doesn't present a risk, we won't regulate it. However, there were a lot of objections to that, because we were doing away with the concept of consumer commodity and a few other concepts and because of a lot of apprehension and opposition, a lot of it from the U.S., that principle was -- because we have to account for north/south movement, of course, and that principle was set aside, so we lost some and we won some.

One we did win was waste, that we weren't going to regulate dangerous goods, because they were going to be disposed of. It was either dangerous goods or it was not. So before the new TDG regulations came into being, we did have requirements to document and track hazardous waste, and that had been in place since 1985. The reason was that, at that time, Environment Canada didn't really have the legislation to capture that kind of activity, and it was something that needed to be captured. However -- and I'm sure Joe and some of his colleagues from Environment Canada have talked to you about this over the last day -- CEPA has filled that gap, and because of that, to a large extent, we try to extract ourselves from the hazardous waste business. We were never comfortable with being in the business. Our mandate is really public safety, and it's acute kinds of impacts. Regarding environmental longer-term impacts, we were much more comfortable with Environment Canada stepping in and taking over that part of the regulations that we had regulated since 1985.

So what are some of the impacts? Well, in our regulations, there's no definition of hazardous waste. There are no more divisions of class nine. In the past, as you know, there were three divisions, the 9.1 Miscellaneous Dangerous Goods, the 9.2 Hazardous to the Environment, and those different divisions then led to other requirements in our regulations, Schedule 12, the Special Provision 109, and so on and so forth, and dangerous wastes. So there are no more divisions to class nine.

In terms of the picture, I only have two pictures of where we have been -- we have had to deal with accidents and derailments actually where we have had to use water bombers to put out fires. This is one that happened out west in Manitoba. The other one, I don't have in my presentation, is another time where we did do a vent-and-burn, as I mentioned before we just did in Ontario, using explosives to blow up a rail tank railcar of propane, but at that time, we were, I guess, perfecting the technique, and too much explosives were used. We did vent and burn the railcar, but then started a forest fire, so you live and learn. (Laughter.)

Now, what are some of the other impacts? There are no prescribed waste manifests any longer in our regulations. There's no requirement to complete and deliver a waste manifest. In our past regulations, the provinces had powers to exempt certain recyclable materials, and we had a law requiring PCBs that are no longer in our regulation.

Do you want to know the story behind this picture? That was when I lived up North, and we used to respond to these kinds of incidents, but when we started way back six or seven years ago and we started rewriting Clear Language, a lot of people were interested in what we were doing, because it was the cutting

edge at that time. Since that time, a number of departments have gotten on board and looked at their regulation, and tried to write them in very simple terms, but at that time, we were a novelty, and I was asked to talk to a gathering of engineers and city planners in the city of Toronto, because they wanted to look at some of their bylaws. If you think our TDG regulations were convoluted, you should see some of the municipal bylaws that are out there in Canada -- it's unbelievable. Anyway, I was asked to go down to Toronto and talk to them. I thought, "I'll use this slide. They're engineers and they will probably have all sorts of questions, like how heavy was the truck?" This was an ice road, McKenzie River Crossing up in the Northwest territories. How heavy was the truck? How thick was the ice? How fast was the truck going and how close was it from shore, because as you cross these ice bridges, as you cross them and get closer to shore, you create a wave under the ice and then when it hits the shore, there's a feedback energy, and sometimes trucks fall through the ice. So I thought these are the kinds of questions I'd get. The first question I get from an engineer, and he must have been partly an environmentalist, and it was regarding the red placard there: "Is the placard water soluble?" So that's my engineer joke for the day.

So what is the new regime? We do have a Class 9 for miscellaneous products, substances and organisms, and these are either identified in Schedule 1, such as PCBs or asbestos, or they are not. They are not in Schedule 1 and do not meet the criteria to be included in Class one through eight. For wastes, there's an appendix for leachates that are destined for disposal and mixtures, also that are destined for disposal. There's an appendix that identifies those products and you have to classify them as Class 9, and then they are regulated like any other dangerous goods that are captured by our regulations, and then they are shipped, they are identified, and they have to be marked and documented as either environmentally hazardous substances, liquid NOS or solid NOS. I won't go through what's taken over from where we were in regulating waste, because I think Joe and his colleagues will cover that in terms of their interim regulations, international, provincial and interprovincial regulations.

The only thing I'm going to mention is that in getting out of the hazardous waste business, there were a couple of problems that have been created. One, we saw through amendment number one, that's when people want to use the waste manifest as a shipping document under our regulation. Our regulations specify the sequence of the information that you have to put on a shipping document, and the requirements under the waste manifests of Environment Canada didn't match up. So in Amendment Number 1, we did recognize that by saying that if you fill out a waste manifest according to certain regulations outside our regulations, we would recognize that. You would not be in contravention of our regulation.

There is another problem that, hopefully, I'll talk to Joe about before I leave here, and that is the fact that in the definition of waste in Environment Canada, we do not cover recyclable material. The small portion of hazardous waste that we regulate is only for disposal. We do not talk about recyclable, and the fact that Environment Canada talks about recyclable and refers to our clear language here has created some problems, because in our legislation, you can't display misleading safety marks or UN numbers, and the UN name of a product is a safety mark. So that has created some problems that, hopefully, we'll sort out over the coming weeks.

One problem that we're actively looking at in Canada, and we might end up with a new regulation is that we feel -- and I think it's a problem also in the U.S., although right now we're looking at Canada, and we have to be careful

how we solve this problem, because we don't want to displace it over to the U.S.-- that there are too many railcars that are stored on railway property for long periods of time.

Certainly, after September 11, it's caused us to look at this problem, plus we have had a significant accident in Canada involving fatalities where a train ran into some cars containing dangerous goods that were on a siding. So we have been looking at this problem, and one of the first questions when I have talked to the railways about this that they ask is: There are so many railcars stored all over the place, and where do they come from? What you have right now is probably the only slide in existence that was taken during a railcar tank mating season out in Alberta. (Laughter.) That's where railcars come from. I'm only kidding here. Are you writing everything down? (Laughter.)

So that's it in terms of waste before I move on to security. I don't know if anybody has any questions. I'm going to be around most of the day, so if you're too shy to ask, you can always corner me and we can have a chat.

AUDIENCE: I have a question. You just said that the transportation of dangerous goods regulations, as you interpret them, don't apply to hazardous recyclables, and that there is an amendment for the small means of containment to allow for the drums that are out in the inventory and in use by industry right now. It's very important for me to clarify this, because the small means of containment for drums, the old gauges needed to be refurbished each time and you could reuse the drum, reconditioning each time, but if it's a recyclable that's in that drum, that rule doesn't apply. Is that correct?

MR. LADOUCEUR: You're talking about the means of containment for a recyclable, that's the means of containment. There are some requirements for recycling means of containment. What I'm talking about is the dangerous goods itself, that if it's just going to be recyclable, either it meets the criteria of being dangerous goods, and then it’s fully regulated; or if it's going to be waste, there might be some relief, depending on whether it's in one of the schedules, like if it's a leachate or if it's a solution. So I almost have to look at your specific case and the details, but I think what you're talking about is a means of containing the drum, and that's not what I was referring to. I was referring to the dangerous goods itself -- the product itself.

AUDIENCE: If you can't regulate the dangerous goods because it's deemed to be a recyclable, are you then still able to regulate the means of containment that's containing that recyclable material?

MR. LADOUCEUR: What's in the drum is either a dangerous goods or it's not, and when it comes to waste, for us, if it's going to disposal, then it might be regulated as a dangerous goods, but because it's a waste, it won't be regulated to the full extent of, let's say, sulfuric acid, but if it's something that is recyclable, then we don't have any provision in our regulations for that. We don't have a sulfuric acid recyclable, it's either sulfuric acid or it's not, but when you get to something like a solution of sulfuric acid that is quite diluted and that's going for disposal, then it would be regulated, but you wouldn't have as many requirements as if it was pure sulfuric acid.

AUDIENCE: A question regarding liability for U.S. shippers on Canadian rail systems: if an accident were to occur with the dangerous goods or hazardous waste, what is the response time typically, from your experience, when the U.S. shipper finds out?

MR. LADOUCEUR: The response time for the U.S. shipper to respond or to find out?

AUDIENCE: To find out the railcar --

MR. LADOUCEUR: Well, that could vary. The only thing I can tell you, in Canada, we don't have specified response times, but the industry works on bringing somebody to the site, about eight hours. In terms of being notified, we are talking, you know, minutes. There's no requirement.

AUDIENCE: Now, if there's a hazardous waste in that railcar, I guess I'm looking for a fault or no-fault on the U.S. shipper. Please tell me, is there legislation or is there criminal prosecution, or what happens to environmental impairment on the railroad? Again, the U.S. shipper has put the hazardous waste on that car, and hypothetically, the car is wiped out and there is an environmental impairment: is it shared with the railroad? I have never had an experience -- I don't want to have one -- but I'm curious.

MR. LADOUCEUR: So there's a shipment by rail that makes its way, originating in the U.S. coming into Canada, and something happens and it derails in Canada, and you're asking: So who shares the responsibility/liability? Under our legislation, the person that has charge, management and control must do certain things. So the railways must be able to have the shipping documents, the person must be able to read the shipping documents, including the 24-hour telephone number to call in an emergency. So those are the kinds of things they have to do, and that's it.

But there's an exception to that, and those are what we call the Schedule 12 -- very nasty, dangerous goods -- where shippers might have to file with us an emergency response plan, and when that happens, they would have to activate the emergency response plan, but in the scenario we just described, the responsibility to add that plan would be on the importer in Canada, so he would have to have a plan and we would call -- we would activate or the plan would be activated and he would have a responsibility to then assist the local responders or the railways to deal with the product. When it comes to waste, there are very few dangerous goods that would require an emergency response plan.

I'll move on -- a little bit of a shift of pace here -- and talk about security. This is a picture of the HMS hospital ship Comfort making its way out of Chesapeake Bay shortly after September 11th on its way to New York City. After September 11th, there are many, many things that have happened, just like in the U.S., on the security front, so there's no way I can cover even a very small portion of it, but I'll just talk to you about a couple of things.

After September 11th, we basically stopped all our transportation of dangerous goods inspection and activities and we asked our inspectors to go visit shippers and carriers of these dangerous goods that I was just referring to, the nasties that have special requirements attached to them, including having to file with us an emergency response plan. So the inspectors developed a guide that was very similar to a guide that was developed in the U.S., and they basically visited all the shippers and carriers; it was a security enhancement visit. They sat down with them and went through some specific talking points in terms of who was handling their dangerous goods, did they know them, did they check their background, and so on and so forth, and we did some 500 visits along those lines, and even some people from the U.S. came to Canada and looked at some of the carriers that moved goods into the U.S., so

that was fairly successful. We worked with the provinces and the territories, and at the same time, they looked at the road carriers, their commercial driver's license, and also their TDG certificate, to make sure, first of all, the driver's license was valid and it was the right person that had the certificate. If you go back, there was a lot of talk about some trucks carrying dangerous goods being hijacked, and so on.

So we did those kinds of things immediately after September 11th, and right now, the big issue for us is what's going to come down as a result of the Patriot Act in terms of background checks for carriers of dangerous goods, what kind of background checks are going to be required; what are they going to involve in terms of checks; is it going to involve biometrics, so on and so forth. We know there's going to be something required in the U.S., and it's going to have an impact on us in Canada, so we are following that. There have already been some requirements that have come into effect in the U.S.

As a result of the Homeland Security Act recently, basically, people in Canada carrying explosives were declared as a result of that legislation as aliens and they couldn't bring explosives from Canada to the U.S. or bring explosives back to Canada. We're operating right now under a transition period, but again, it raises the whole question of the people that move dangerous goods back and forth to the U.S. and the whole question of, as I said, security checks and, of course, as I mentioned, our legislation is based on the UN Subcommittee of Experts on the transportation of dangerous goods. At their meeting last December they did talk about bringing in some requirements dealing with security, the need to put in place security plans, and I know in the U.S., under HM 2 I believe, there have been some proposals put out there in terms of asking people to submit these security plans. This issue is going to be talked about next week in Prague again to see where the global community is going in this area.

This is a picture taken shortly after September 11 of Halifax Airport. All these aircraft that were coming from Europe destined for the U.S. obviously had to land somewhere in Canada, and this is the Halifax Airport -- what I call the Halifax Airport on steroids. You never see that many planes in Halifax.

One of the programs that we did put together is what we call CBRN, the chemical, biological, radiological, nuclear program, and we received $1.8 million over five years. We hired a couple of specialists, and basically, again, to go back to the emergency response plans that I was talking to you about, in Canada -- it's a unique system for dangerous goods. We, by law, have access to industrial emergency response teams, the Dows, Du Ponts of this world, they normally have teams inside that take care of incidents inside their gates. What we have done through our TDG legislation is that we have been able to access these teams for incidents outside the gates for transportation incidents where first responders are overwhelmed. They have to deal with a 90-ton tank car of chlorine that's leaking, and most of the first responders don't have the equipment, the knowledge to do that. So, through our legislation and the requirements to have an emergency response plan, these industries that would put these dangerous goods in the transportation system must respond, but they only are required to respond to their shipments.

What we're trying to do with this program is to get access to these teams for incidents of a criminal nature where it might not necessarily involve their product, but they have the expertise, and we might not know who is responsible or whose shipment it is, but something has happened to it and we need some help. So we started talking to a number of national groups, Canadian Chemical

Producers Association, Propane Gas Association of Canada. We have in Canada an association of the emergency response contractors. So we sat down and talked with them, and, of course, any time you talk about emergency response in Canada, you have to involve different levels of government, and we have already had a number of roundtable discussions with these groups. So, hopefully, this program will be put in place in a year or so and we'll provide another level of comfort in terms of responding to incidents of a criminal nature.

The final thing I wanted to chat with you about is this Cross-Border Emergency Response Guide. For those of you who are in the emergency response business, it's something that we have been working on for many, many years. We have met in Washington with FEMA. Some of our U.S. counterparts were involved, and basically, without going through the whole history of this document, it's to assist when there is an incident in Canada or the U.S., because the guide is written to account for the two situations, and when you want to get a team over into the other country fairly quickly, what do you have to do beforehand in terms of what you should know, customs and immigration, exercise training, liability, so on and so forth.

So this guide basically provides you with that kind of information. It's a pre-incident planning tool. It's not a hands-on tool. It's not going to tell you exactly what to do, but it will give you a list of things and some background that you should have knowledge of, if you're going to be doing some cross-border response. As I said, it's basically guidance. If part of your response is to use a foreign-based emergency response team, and, if you read the 1600 Technical Committee on Disaster Management, it talks about making sure that your plans refer to these kinds of documents. The new guide, second edition, is going to come out within weeks. It's being translated right now in French and it's already started working, because there are a lot of requests from people from a security perspective that there are new security requirements if you want to bring a team over the border, and that should be accounted for in the guide. We have started to look into that, and hopefully will have a third edition within a year or so.

That's basically it. I probably went overtime a little bit, but any questions on anything I have said?

AUDIENCE: Do you have this handout?

MR. LADOUCEUR: I'll leave the CD, so you can make copies of it, if you can print it off.

MR. HEISS: We don't have that capability today, but the transcript will be available on the web, since most of it is covered in the transcript.

MR. LADOUCEUR: I would e-mail it to you, but it's a pretty big file, and I burn CDs for people. If there are only five people, I'll burn CDs and mail them to you, but if there are more than five, I can burn you a CD and send it to you. I'll leave a CD, if somebody wants to make copies and send it. The only thing I would ask is: Don't put it on your web site or something, because some of these pictures are not mine. Thank you very much. You have been good.

MR. WITTWER:: Thank you very much. That was a great presentation. I liked the picture of the customs inspection docks there. That could be open to all sorts of different puns, and whatnot. It sort of shows customs picking their nose in places.

Anyway, we would like to have a short break and reconvene at 10:30 for the next session. Thank you very much. (Whereupon, a recess was taken from 10:15 o'clock a.m. until 10:30 o'clock a.m.)

MR. WITTWER:: Can I ask everybody to come in and we'll start the next session. The next presenter will be Guy Martin, who will be presenting his take on enforcement in Canada from a federal perspective, and it's my pleasure to introduce Guy to you all. He has nearly 31 years of service with Environment Canada. He was the senior compliance and monitoring officer in the Quebec region for a number of years. He was also the emergency response duty officer, and he occupied this particular position for about 14 years. He was also the chief of the investigation division in Quebec, and now he is the chief of inspections, investigations division, at our headquarters in Ottawa.

Now, for some reason, Guy has asked me to inform you that he speaks French and English and limited Spanish, so I hope I have set the stage for you there, Guy.

Enforcement in Canada: Federal Perspective:

MR. MARTIN: Thanks, Joe. Good morning everyone. Bonjour. I will drive you through the enforcement continuum, and my talk is about enforcement in Canada. I wanted to stress just at the start of the presentation that the ultimate objective of our enforcement is compliance. Okay? We, as Environment Canada's enforcement officers, are not vicious people. We're people that are doing a job, and it's needed to obtain compliance, and we strive to have a level playing field within the industry, and that's the main point. I'll come back to that later on.

So I'll drive you through the act very shortly, the regulation, the policy. This is the enforcement and compliance policy, and the enforcement officer power and investigations, response to alleged violations, Crown security role and enforcement partners. I wanted to add that the export and import of hazardous waste regulations was and still is a priority in Canada. Okay? So we are serious about it and we are taking serious steps to make sure that we update compliance.

So this is the act. It's the Canadian Environmental Protection Act, 1999. There's a declaration, which is important: "Protection of the environment is essential to the well-being of Canadians, and the primary purpose of this Act is to contribute to sustainable pollution prevention." The preamble recognizes that Canada must be able to fulfill its international obligation in respect of the environment. In this case, the international obligation is the Basel Convention. Okay?

As a continuum, and following the ideas put forward by Elizabeth yesterday, in CEPA '99, Part 7, Division 8, it is looking at hazardous waste movement. So Division 8 looked at controlled movement of hazardous waste, hazardous recyclable material and certain nonhazardous wastes that are identified by regulation and are destined for final disposal. CEPA '99 is based on powers in the Canadian constitution that are reserved for the federal government. Division 8 is based on federal constitutional power and the criminal law, international and interprovincial trade and commerce, plus federal authority to sign and implement international treaties. The standard to prove any alleged violation of CEPA in a court of law is guilt beyond a reasonable doubt. That's a very important point. Now this is the enforcement policy, so it's bilingual and it's available.

So for those who would like to have a paper copy of this policy, it is also available on our web site, but those who would like to have a paper copy, just put your card with your name written on it and leave it at the back table there, and I will pick those up and I will send you the hard copy of the policy.

So the policy defines compliance as a state of conformity with the law, and it sets out the guiding principle. The guiding principle, compliance with the act, is mandatory, application of the act in a fair, predictable and consistent manner using processes, security involved, and the basis is on prevention of damage to the environment, and every suspected violation will be examined and action consistent with the policy will be taken.

Now let's go into the interesting stuff, the enforcement powers. Through CEPA '99, the enforcement officer has peace officer powers. In addition, they have the traditional power of inspection, which is to enter in any place or premises where act regulations apply, open receptacles and take samples, conduct tests and/or measurements, examine documents and/or computer data and take copies, direct that conveyances, such as cars, trucks, trains or railcars and other means of transportation, be stopped and moved to a location suitable for inspection, to detain anything found during an inspection when an officer has reasonable grounds to believe that the things were used in the commission of a violation or anything which the officer presumably believes is evidence of that violation, to seek inspection warrants where an entry is refused or for a private residence where you have an office in a private residence, and that's the case of our friend. So it's not a search warrant; it is an inspection warrant.

I would like to stress that refusal of entry in a business place could be seen as obstruction, and we have the power to arrest in case of obstructions, so I wanted to be clear about that. So the enforcement officer can issue orders, and in case of violations, for sure, we'll go case-by-case and we'll add investigations being initiated. The investigations involve gathering evidence and information relevant to the suspected violations. CEPA '99 provides authority to obtain search warrants to enter, to search, to seize, to contain and/or to take possession of a substance, including hazardous waste.

Search in exigent circumstances: the same authority to search without a search warrant in exigent circumstances. We have to have serious harm or risk of destruction and loss of evidence conditions. Okay? It's not carte blanche authority. So an enforcement officer may be called up in a court Justice of the Peace Officer to justify exigent circumstances. In the case of hazardous waste, reason for seizure and detention may include the need to prevent the exporter of a substance for which notice of export to the receiving country is required and where the notice was not provided to the receiving country or the domestic authority, which in this case is the Environment Canada Transboundary Movement Division.

Let’s now talk about the response to an alleged violation, the criteria. Whenever an alleged violation is discovered, enforcement officers will apply the following factors when deciding what enforcement action to take: The nature of the alleged violation, the effectiveness in achieving the desired result with the violator, consistency in enforcement. The tools that we have:

- Warnings: only one warning will be issued: two strikes, you're out. That’s a good point to note: there’s no second warning for the same offense, it’s one warning

- The tickets for minor violations
- Directions by enforcement officers in case of illegal discharge of regulated substance
- Arrest: in case of an officer obstruction we'll use Section 8, which refers to the enforcement officer or peace officer powers, and we'll be using Section 495 of Canada's criminal code
- Ministerial orders
- Environmental protection compliance orders
- Detention orders for ships
- Injunctions
- Prosecutions
- Court orders
- Civil suits for cost recovery

Now the penalties: "Upon conviction, enforcement officers will recommend that prosecutors request penalties that are proportionate with the nature and gravity of the offense." So there are two ways, by indictment or summary conviction. We will reserve indictment when there's an existing will to commit the offense or the violations. The fines via the indictment process are a maximum of $1 million and a maximum of three years in jail, one or the other or both. In the summary conviction process, a maximum of $300,000 or a maximum of six months in jail or both.

Now, let's look at the role of the Crown Prosecutor here. The Crown Prosecutor will give advice on the evidence required to prove the violation. He will give us a decision of whether or not to prosecute, and the guiding principles governing the decision are

- sufficiency of evidence, and
- whether or not it's in the public interest to proceed.

Sufficiency of evidence: Is there a reasonable prospect of conviction?

- The reliability, credibility and competency of the witnesses, and
- The defense of the accused? Is there any due diligence on his part that can be proven, or were rights under the Canadian Charter of Rights and Freedom denied or violated?

The public interest to prosecute: there are 18 criteria. I put on only the four or five serious ones:

- The seriousness or triviality of the alleged offense. Well, don't be worried. We will not go there if the violation or if our evidence does not support a violation or if it's trivial; we are not in that game.
- The compliance history of the accused is important.
- The need for general and/or specific deterrents; well, if we go to the prosecution, it's because there's a need there, and we have to correct the situation, and this is to deter future potential violations, for sure.
- The level of public concern -- "not in my back yard" – well, is there and will stay there, for sure, and it's a high-level concern. The public has a high-level concern for environmental matters, so this one is there to stay.

Regarding enforcement resources, we'll have the full use of CEPA powers, and if we look at the financial resources in the year 2000, the Martin budget increased our budget by $40 million over five years, so we had new officers and operational money. The inspection specialists went from 32 to 52, and investigations from to 41, and the intelligence officers from 1 to 13. In the Manley budget a few days ago, the Manley budget brings us $3 billion for

environmental matters. Maybe we had a few left over at the end, but we'll have monies for sure. We don't know how much yet, but we'll have some money to be more effective.

And now, our enforcement partners: we are sure in this case -- and by the way, we have about 36 regulations, two acts to enforce. The two acts, for sure, the CEPA, Canadian Environmental Protection Act and the Fisheries Act, which looked over water pollution. Regarding our principal enforcement partners, these come on the first step for sure:

- The Transboundary Movement Division,
- Justice Canada,
- Other federal bodies, and
- Canada Customs and Review Agency.

When I started some years ago, we were visiting or had a meeting with Canada Customs every now and then twice a year. Now, it's almost twice a week, so we're buddies, we're partners, and we work very well together.

- Royal Canadian Mounted Police
- Foreign Affairs and International Trades on the international side of things,
- Department of Justice,
- U.S. Customs,
- The U.S. Environmental Protection Agency.

We have joint committees and work on special cases together, and the United States and Mexico with the CEC, they are our partners, and Interpol. For those that don't know Interpol, they are an important partner. If I need some information in Pakistan, I would go through Interpol. If I need some information in France, I will go to Interpol. It's the way to obtain legally the information.

Early in my speech, I mentioned that there is a need for a level playing field, and the need is there. The level playing field will be obtained only if we have your contribution, your support. So it's very important for me to pass along this message to you that, most of the time, some companies do it right, and there's a cost of doing the right things -- of being compliant with the regulations, and some other companies don't. You will understand in order to obtain a level playing field, we need the information, all right? So it's fair only when everyone is playing the same game under the same rules. No one wants to play cards with someone cheating. That is I guess a simple example I can think of. To conclude, my personal recommendation is: be and stay in compliance. That's the final message, all right? So if you have any questions, I will be pleased to answer.

AUDIENCE: Are those Quebec snow suits?

MR. MARTIN: No. I guess my colleague here, Dave, will explain this picture. I guess he has it in his presentation.

MR. NOSEWORTHY: Not now -- I'm not going to.

MR. MARTIN: We had some exercise and control blitz at some ports, and Dave will discuss that. These are our guys dressed to sample hazardous waste.

AUDIENCE: How many new inspectors are going to be expanding to the west coast of Canada? How do those new hires I see --

MR. MARTIN: Well, I guess the answer would be that we are sharing the new resources proportionately to the strength of the commercial activity per region. Okay? We know that 83 percent of the hazardous waste dealings are done within Ontario and Quebec specifically for that regulation, so we'll have more people in those regions, but when we train our inspectors, everyone is trained. Okay? The sampling is limited to, let's say, four people per region, and that is enough, but inspection wise, if there's a specific problem in one region, we'll have team leaders, but we'll put the effort where it should be.

I don't know if I have answered your question, but, in some cases, we pulled back inspectors from all the regions for specific blitzes, or, if we are awaiting a ship containing PCB coming in from Japan, we'll take care of it while bringing people from other regions in support, if needed. Okay? So we are pretty mobile, and our guys love to work together. All right? Any other questions?

AUDIENCE: When we leave copies of the manifest at Canada Customs For Environment Canada, is it the Environment Canada officers in that province or jurisdiction that receive that information or is Canada Customs sending it directly to TMB?

MR. MARTIN: It's Canada Customs that sends those documents directly to TMB, but if there's an inspection just before, they will look at the documents and they will discuss with the officers, and they may have brought the regional information from the documents at the regional office and send it back to our headquarters.

AUDIENCE: So if a Canada Customs inspector may have questions regarding an in-bound load, his first call would be to the local jurisdiction versus TMB, would it not?

MR. MARTIN: Oh, for sure. We have a duty regional officer. We have a duty officer hours a day, seven days a week, and they receive calls from the customs officers. They have portable faxes, they have phones, they have everything they need to work anywhere. They can work from their truck, they will discuss with the customs officer, and, if needed, they will go to the customs office as required, and they should be there before four hours. They have about 20 minutes, at the most, to answer the call. Otherwise, the call could be reassigned to headquarters.

AUDIENCE: Okay. So for verification of a Canada Letter of Acknowledgment or Letter of Consent to bring it in, if a Canada customs inspector again has flagged that, TMB is closed for the day, given changes in hours, what tools does the inspector have to verify consents?

MR. MARTIN: Well, he will get into his network and get into TMB’s data at headquarters, so it's not a paper copy that is standing in a file in a cabinet at the headquarters -- that's not the case. Everything is on the network, so it's available.

AUDIENCE: Very good.

MR. MARTIN: So they are very effective. And they are effective to prevent stopping of vehicles for a long period of time, and they will not do that. They will do it if they need to sample the vehicle, for sure. That's part of doing business, for us and for the shipper and the trucker.

AUDIENCE: What type of interface do you have with Agriculture Canada regarding

soils or contaminated soils coming into Canada?

MR. MARTIN: Well, we deal with hazardous waste. If it's contaminated, we'll deal with our regulation first, and if we need to have support from Agriculture Canada, we will do it the next morning as they will be available. Any other questions?

AUDIENCE: You talked about Manley's budget of $3 billion. Who is this Manley?

MR. MARTIN: He is Canada's Finance Minister. Any other questions? Thank you very much.

MR. WITTWER:: Thank you very much, Guy. Just a point of clarification. If, sometime in the future, you go back to the overheads that Guy prepared, I noted up there, it said Martin's budget of $40 million per five years -- that's not Guy Martin, that was our former finance minister, Paul Martin. I thought you would put a footnote there, and you won't have to hit him up for some cash.

I'll just set this up for our next speaker. Next on the agenda is David Noseworthy. Thanks for setting the computer up. David works for Environment Canada and is the regional environment emergency coordinator in our Prairie and Northern Region. Environment Canada has Canada essentially broken up into five regions: the Atlantic region, Quebec, Ontario, Prairie and Northern, and the Pacific and Yukon. Dave is also the team leader for the Regional Hazardous Waste or Hazardous Materials Sampling Team, and he has been with Environment Canada now for about six years. He got his Bachelor of Science Degree from Memorial University in Newfoundland, which is one of our old Atlantic provinces, and, prior to joining Environment Canada, he worked with the Department of National Defense and the Newfoundland Department of Environment and Lands. So it's my pleasure to turn the floor over to David for his presentation on material sampling. Thanks.

Prairie and Northern Region Hazardous Material Sampling Team:

MR. NOSEWORTHY: Thanks, Joe, and good morning. I'm going to give an overview of the hazardous waste sampling team we recently developed in the northern region. It fits nicely into Guy's last slide. I'm just going to go over basically why we developed the team, what our roles and responsibilities are, go over some of the training that we have done, some of the equipment that we have, and end off with a couple of examples of some border inspections that we did in Alberta and Winnipeg over the past few months. As Joe mentioned, we have a number of regions within Environment Canada. Prairie and Northern Region is my region, and I'm in Edmonton, Alberta, so we have these three provinces. As a matter of fact, we are responsible for the whole North, as well -- northwest territory -- not a lot of hazardous waste. We don't do much work up there. Most of our work is the northern border sections, Saskatchewan and northern borders. We have about six or eight significant border crossings we use and do our sampling with.

So, just to review, Prairie and Northern Region is the first region in Environment Canada to have an operational hazardous waste sampling team. We've had sampling teams in the past. We sort of addressed it in an ad hoc fashion, had contractors do it on our behalf, simply because we didn't have the training or equipment to do it. Sometimes, staff would go down when necessary or we could sample at the receiving facility, if a load came through that was questionable.

Over the past year or two, we have recognized the fact that the export and import of hazardous waste regulations have taken priority nationally, and we decided that we would invest the money and the training and the resources into establishing a team for this region and have some kind of consistency in having a team available to sample whenever necessary, and, in line with the MOU's that we had with customs, we could provide a better service. The team is comprised of five fully trained members. We have three members in Alberta, two in Calgary, we have one member in Saskatchewan, and one member in Manitoba. All team members received their 1999 enforcement officer and a team is operational 24 hours a day, seven days a week. We are not on call, but we can mobilize, if necessary. Regarding the regulatory scope of the team, the team was established primarily For the purpose of obtaining samples for legal purposes from hazardous waste loads. The team collects samples as required for the enforcement of the Canadian Environmental Protection Act, the Fisheries Act and associated regulations. For example, we are not limited to hazardous waste. We can inspect fuels, we can inspect ozone-depleting substances, halocarbons -- there are a number of regulations with which we can sample shipments.

In terms of scope and limitations, as I mentioned, we don’t respond to uncontrolled releases except for purposes of collecting legal samples. There's always great debate about whether the team should be used for emergency response purposes for spills, and we were against that, because we didn’t want to become an emergency response team. The sole purpose is sampling for legal purposes, so, in our standard operating procedures, we have said we don't respond to environmental emergencies. However, if samples need to be taken as a result of an environmental emergency and enforcement action, we can do that. We have that capability. And basically, we work with other government agencies -- our provincial government agencies, federal government agencies. We work closely with local fire departments, because they have similar training and a lot of time use them as backup, if we get in trouble or something happens. We work closely with all the partners.

Some of these slides you see of us training are from a training course that we did. We tailored our training to our regional needs, and this training here was done with a local contractor in Alberta, and it was done probably in January of last year, and the temperature around the time was a minus 28 degrees, so it was pretty chilly and it presents some interesting challenges when you're trying to sample and it's that cold out. So in terms of training now, what we have done is we all have 40 hours of health and safety training, which is similar to you on the States side. All enforcement officers have that, even the people that weren't on the team have that. That's a basic level of training that we need. We just advanced that training for the team members. First Aid in adult CPR, transportation of dangerous goods, certificates training, other TGD shipping courses or training courses; we are currently working towards NFPA 472 certification. All fire departments have that level of training, and if we are going to get into sampling at the border, sometime this year we are establishing that, and a lot of fire houses in the region have that capability, or if not, we can come down State-side and do that.

Other training we have done includes H2S, hydrogen sulfide and container sampling, drums, compressed gas cylinders, things like that. Basically, we designed our own training course to meet needs within the region and deal with shipments we would be faced with.

As a result, to standardize everything, we came up with a standard operating procedure, basically to keep management confident of our abilities and what we

could and couldn't do, and also as a result of the Canada Labor Code, which also required it. Basically, it provides guidance to the team in all aspects of training and the operations of the team, but doesn't replicate or duplicate existing standards. It will reference those rather than duplicate them. Then, by the scope of the operations and limitations in situations where the team responded, including health and safety training procedures for obtaining legal samples, it just outlines what our health and safety requirements are, and when we need to be trained. A lot of training that we do has an eight-hour refresher requirement on an annual basis, and this basically documents what we will be doing.

Just take a look at some of personal protective equipment we have. This was the border facility, Alberta -- three inspection bays -- and when we went down in October, they gave us one of our inspection bays to deploy all the equipment. This is a Level A suit. This is the SCBA tank that we use. We don't primarily do Level A. At most, it would be Level B sampling, but we are trained to the 2 Level A capacity, so it's easier to suit up a Level A and dress down than it is the other way around. So that's why we do that, but we haven't actually sampled a Level A yet.

Some of the equipment we have: the Drager 60-Minute Air Boss, SCBA and spare tanks, full-face and half-face cartridge respirator, Level A and Level B suits, Tingly HAZMAT boots you saw, and Level C, Tyvek coverall suits for some of our sampling operations.

In terms of detection equipment, there again, that's at Kuntz. When we were there in October, it was our first sampling event, so the communications department wanted the media to come down and see us in action. They put out a media request, and we had three or four radio stations and TV stations come down and film us. We laid out our equipment so they could take a look at it. It came out really well. We got really good comments in the media. Some of the detection and monitoring equipment we had: Drager HAZMAT Simultest, Multiwarm II with sample draw pumps and IR-LEL samplers so we can sample the environment around the tankers. We have infrared thermometers we can use to detect temperature inside drums and containers to see if there are any reactions happening or indicate different densities, which again measure concentrations of contaminants in the air, and we got the all-refrigerant leak detector simply for measuring also substances, and things like that on the equipment. But basically, the primary use of this equipment is prior to sampling.

We always do a risk assessment of the facility that we are in and we do a sampling-specific risk assessment around the tanker and container we are doing monitoring for gases, to make sure that, if it's a confined space, there's not too much oxygen or lack of oxygen. Sampling for gas is to determine the level of PPE that we need. So basically, when we get through, we find out they have been complying with Level C, or maybe this is a little different, maybe we should do a Level B.

Regarding sampling capabilities, We can pretty well do anything. Drums and small containers, railcars and tankers -- tankers are probably the groundbreaking we have been doing lately, but we do compressed gas, and to limited purposes, we can do uncontained substances. As I said before, if there's a spill and enforcement officers need samples taken for charges down the road, we can go in and take a sample in that respect. But primarily, our training relates to contained substances inside a container or inside a drum or railcar or tanker. Typical waste streams are petroleum-based products, waste oils, chemicals, PCBs, halocarbons, ODS, and no explosive or radioactive

materials. We haven't gotten into the CBRN training yet, but it could be down the road, depending on where the department goes with that. These are typical products that come through Alberta and the Prairies. Alberta being such an oil-producing province, most of our training is around our waste codes or waste oils and waste petroleum products.

Why do we sample? Okay. We have done all the training, we've got the team together. Why do we sample? Well, there are a number of reasons: suspicion of alleged violation which may result in an enforcement action. Why is that? Could be a waste load different from what's located on the manifest, or we have a waste that would be masked, hidden or mislabeled.

Intelligence gives us targets. They may know of something they need to clarify. So we can be at the port at a certain time, and if we can be at a port because we know where and when they are coming through, as you have heard from other presentations, we work in support with partner agencies that require us to be on scene, if necessary, within a certain time frame. So we have to be down at the port or even assist them over the phone for the paperwork, go through the MSDS sheets with them, national inspection priorities, all the regulations for Environment Canada as a priority, and plant sampling events. Every year, we plan that we'll be at a certain border sometime during the year, so those are some of the reasons we actually have a team together and go actually go down and do the sampling.

This picture is Alberta, one of the loads that we sampled.

Just to finish off, I'll go into a couple of examples of border inspections that we have done over the past few months, often called joint information operations. We do a joint forces operation with Environment Canada and Canada Customs on a regular basis. We had a sampling team in some place jointly with them at the borders, and the reason we do that is to ensure compliance with CEPA 1999 and to protect Canadians in the environment from unknown or unwanted substances, and also to verify intelligence. Customs can have it and we can have it from our side regarding the substances, and just to enhance the enforcement role with HAZMAT sampling in conjunction with border inspection, we seem to be doing that really well.

Mike, you mentioned Canada was present at some of these. When we were at Emmerson just last week, actually, and CFIA and Air Canada people were there looking for corn, wheat, things like that, but now they are aware we have a sampling team, so contaminated soils come through. They are aware we are around, so they can call upon us and know our capabilities. We have two inspections planned, one at Alberta in October and one at Emmerson in February 03. These once were planned sampling events. Our enforcement officers were going down anyway and requested this HAZMAT sampling team to be present in case anything happened. Over those for the Alberta one, for example, over a three-day period, we had about 900 shipments come across the border. The numbers were nowhere near that at Emmerson -- around the hundred range probably. Enforcement officers reviewed 175 prerelease system documents in the advance release of us going down and flagged suspicious loads over to us, and customs does, too.

A lot of times, customs will flag a load even before inspectors see it. It's something they have an interest in -- maybe an empty tanker, maybe something hidden inside. They will flag those for us a lot of times where we are back in the inspection bays, the trucks will come out and we can do our work. These are like sampling waste fuel load, and they are just at Level C on there, but they have got flame-resistant coveralls on and a full-face, air

cartridge respirators, and they are sampling. I think they are sampling fuels regulations for phosphorous or solvent content.

What are the results? You don't always get good numbers from a HAZMAT sampling team point of view. You may get two or three trucks that you put over or may get none -- it depends on the day -- depends on the weather -- depends on match at the port. Sometimes we get good numbers, and sometimes we don't. A lot of times there's a wealth of paperwork after the fact, but there are a lot of benefits to the visibility with partner agencies increased. There's a heightened sensitivity by the transportation industry, I think, as a result of this, their legal obligations under the various statutes, and as a team member and staff member, it provides continuous training and learning for team members. The more we do this, the more competent we become and the more aware of what needs to be done.

That's basically it for the HAZMAT sampling team. That's my contact name. If anybody has any questions long after this workshop is finished, I can be contacted. So I will entertain any questions anybody may have.

AUDIENCE: You said this is the first in Canada. Is there a reason?

MR. NOSEWORTHY: First active team. All regions are looking. I think it was recognized that all regions should have a sampling team. I guess our region was maybe a little more proactive in starting it up – and other regions are not far behind us. I think the other agencies are just waiting to see how we do. We'll sort of work as guinea pigs, I guess, in terms of training and equipment and management acceptance of the team. As with any program in the government, as you're all aware, management needs to be appeased on funding. Ontario, I don't know if you need about a dozen-man team down there with the ports and traffic that comes through.

When I say we are the only operational team, we are the only team that actually has the equipment and staff in place. I think any region has the capability of sampling required, either through a contractor or through their own staff, but we and the Atlantic region here shortly are going to be the only two regions for equipment and staff dedicated to that purpose.

AUDIENCE: Who would analyze these samples? Would the government labs?

MR. NOSEWORTHY: That's a good question. Our region has its own lab and we send samples to our own lab and they can do a full sampling.

AUDIENCE: Maybe I should add that this is new with the Prairie Northern Region. They have their own team. The Atlantic region is just gearing up and will be available for sampling, let's say, in two months. Other regions are getting there. We had special budget with the security budget, the security minister, and we're going there. There's a demand from the senior management that we go there, but previously, when it was the case, we had the emergency people in many regions that were geared up already, and they were supporting the enforcement people. It happened in Ontario, it happened in Quebec, and the emergency people in other regions as the Prairie border are on duty seven days a week, 24 hours a day. So it is not a problem to obtain these within a few hours at the border port, as I was clarifying.

AUDIENCE: When you perform an inspection on something in-bound from the U.S., if you find a problem, do you notify TMB immediately?

MR. NOSEWORTHY: Not necessarily, but we can. We go through the paperwork

first to make sure everything is in order, because that's one of the flags sometimes of a suspicious load. The notice may not be present or they may have, you know, a hundred drums in the back of the truck, but only 60 are written on the manifest, things like that. If we need to verify information on the notice, we can contact TMB.

AUDIENCE: Do you guys have the authorization to nullify import notices or, if you had a number of truckloads that were going to be coming in consecutively, if you feel that there may be an inspection necessary, do you guys have the power to stop or keep other trucks from coming after the initial one?

MR. NOSEWORTHY: Probably more of an enforcement question. I don't know if we have that.

MR. MARTIN: We have the power to stop the truck any time, take a look at the documents, sample and even seize the property, if something is wrong. We have the power to do that.

MR. NOSEWORTHY: We don't have the power to change the notices. We would notify TMB that this has happened and they would have to change the notice, but we can't change the notice. But we can do what he suggested, seize the load or stop the truck and make them wait until TMB decides to amend the notice or --

AUDIENCE: I guess my question really is, if you were sampling an in-bound load, and maybe there are 20, 30 trucks coming after that one, and I'm just wondering if all the trucks would get stopped based on that single profile that may be shipping?

MR. NOSEWORTHY: Conceivably it could. What we would try to do is to get a sample taken from that as quickly as possible and get the results and find out if there is a violation or if the shipment is indeed suspicious. We may sample all of them. It depends on our intelligence information. It depends on the particular generator of the waste, where it's coming from, what kind of compliance history they have. So we do have the powers to do that.

AUDIENCE: In the event that a truck is stopped and a sample is taken -- not that we don't from industry all inherently trust the government laboratories -- would you make arrangements or is it somewhere in your SOP where the consignee or consignor both could have an identical sample as a backup in the case of litigation?

MR. NOSEWORTHY: That can be done, sure. In the course of normal sampling, open paperwork, that option is available, sure. Thanks very much.

MR. WITTWER:: Well, thank you very much, Dave. We are just a few minutes ahead of schedule here, which is maybe not a bad thing, because there may be some of us that need to check out yet. So that affords us about 15 minutes to do that before noon, and we'll reconvene at 1:00 for the afternoon session, and I hope everyone enjoys their lunch. So we'll see you back at 1:00. Thank you. (Whereupon, a recess for lunch was taken at 11:40 o'clock a.m.)

AFTERNOON SESSION 1:00 O'CLOCK P.M.

MR. HEISS: Okay. We're ready to resume for the afternoon. It's my pleasure to introduce my colleague from the Office of Enforcement and Compliance Assurance at the U.S. Environmental Protection Agency in Washington, D.C., Brian Maas. A graduate of American University, he previously was the Director

of the Water Enforcement Program in the enforcement office, and now has an even more significant title -- in this day and age -- beyond his earlier titles: he is the Senior Advisor for Counterterrorism and Infrastructure Security. Brian Maas.

Homeland Security and the EPA Enforcement Program:

MR. MAAS: Thank you all, and hopefully, I can keep you awake after that lunch. That's always a trick. If you're on right after lunch or just before the end of the meeting -- and this feels a little bit like both, so it's like enforcement -- it's always between you and something you want to do, and here it's like getting out of town. I tried to come in Tuesday night, but actually, my flight was canceled coming in because of the snow in Chicago, and it's one of the few times my Chicago colleagues got to accuse me of bringing snow from Washington, D.C., to Chicago. We usually don't have any, and this year, we have had four or five feet of snow. It's been a crazy year for us.

I'm going to talk a little bit about where EPA is going on homeland security issues, and really, what does that mean for the EPA enforcement program, and then a little bit on what does that mean for import/export programs that you all might be concerned with. Most of us know that the U.S. government has had its first major reorganization in close to 50 years, and it's a very significant reorganization. It involves up to perhaps 200,000 federal employees and a multitude of agencies. The concept was to take agencies that had some piece of homeland security, and hopefully, put them into an agency that could function without the usual terms you hear of a stovepipe, of being able to communicate across organizational bounds; and whenever you have large organizations with a specific mission, communication is always a very big issue. So the purpose here really is to figure out how the U.S. federal government can communicate better on issues related to security and counter-terrorism.

Unfortunately, many of these agencies also have other significant roles. One of the agencies moving in is the U.S. Coast Guard. Obviously, they have many functions other than homeland security. Our Federal Emergency Management Administration, does all disasters, whether they are natural or sort of manmade. The Secret Service, that was part of the Treasury Department, moves into this new organization. And it's a lot of agencies, but then when you get down to, what is the Homeland Security mission? You find that, in fact, other agencies are still going to have a significant role, and in addition to the new Department of Homeland Security and its 200,000 people, obviously, the U.S. Department of Defense will still have a significant role in homeland security, the FBI, the CIA, EPA, Health and Human Services, the Department of Energy, Commerce, even the Treasury Department will still have a fairly significant role in homeland security. So, really, this will be a U.S. government-wide operation. It isn't just going to be the new Department of Homeland Security.

What is EPA's role in this? We have a number of authorities. We have a lot of environmental statutes that are somewhat dual purpose; in other words, they are there for public health and the environment, and very often, they deal with third-party actions or accidents. In that scenario, it doesn't really matter whether something is an accident or a human-caused issue; you still have the hazardous waste or the toxic chemical spills. You still have to respond and get it cleaned up. The EPA role comes in a little more broadly. In the U.S., we have a series of essentially presidential executive orders called "Presidential Decision Directives on Security," and one of them specifically is on crisis management. The FBI will generally have a role in

crisis management, they come in and they become the instant commander any time they determine there's been a terrorist act that causes a spill of a chemical or anything else. Under that directive, they are able to call on any other federal agency to come in and help, so if it's a bomb, they call people with expertise in the government in bomb-making; if it's environmental, they call the EPA, or hazardous materials, they call on the EPA.

We also have a role in consequence management, and there is a lot of competition within the federal government between *crisis* and *consequence* management. Crisis management is looking at law enforcement coming in, getting evidence, figuring out what we need to do quickly. Consequence management is, now, what do we do to clean up this mess? The FBI will often come in, get their evidence, being the instant commander, but they don't want to be involved in consequence management, i.e., actually cleaning up the mess. So there's always some competition between the organizations as they come in.

Also, the U.S. Secret Service manages Directive 62, and it looks at special protective events, things like the Olympics in the U.S. last year. We also are given critical infrastructure protection roles, and a number of agencies throughout the federal government -- and I'll talk about that in a minute -- are given infrastructure protection roles.

Prior to 9/11, EPA had water supply, and, too, a very small portion of telecommunications as one of the critical infrastructures that we would be responsible for. We also have a number of regulatory programs that are sort of dual purpose, and I'm going to breeze through these and talk about them more in just a minute, and we have significant emergency response responsibilities. Under the National Contingency Plan, any time there's oil, waste, chemical spill, EPA becomes the lead agency for that material.

For some of the crisis management examples that EPA has been involved in -- when 9/11 happened and the Pentagon and World Trade Center and even the crash in Pennsylvania happened -- what you have is a crime scene, but you also have a disaster. That's why EPA gets pulled into these, because we have law enforcement personnel who are trained in evidence collection, but also in personal protective equipment, generally Level A, so they can go on to a site and not disturb the evidence that's there.

At the Pentagon, obviously, it's a crime scene. We want to prosecute. We want to be able to show beyond a reasonable doubt that this is what happened on the plane. Even though we all think we know, we might have to go into a court of law and prove that; and more recently, since perhaps the mastermind of this has been captured, we will have to go in and prove that a plane, in fact, went into the Pentagon with evidence and samples. We have to show who was on that plane. So if you go in an emergency response mode and you clean up everything and contaminate the evidence, we end up with a criminal trial where we're having a very difficult time coming up with our evidence and showing the chain of custody and everything else. Essentially, we want to be able to prosecute people.

It was actually EPA special agents who found the black box flight recorder at the Pentagon after going on site. We were also called out to Capitol Hill when the anthrax scare -- more than a scare -- contamination came about, and that's still ongoing today. Well, we had a very significant role in managing the cleanup of the Hart Senate Office Building. The Brentwood post office that the two letters came through has been contaminated and is just going through cleanup now, and we announced just yesterday actually that we believe it has been decontaminated. The cost of the clean up of the Hart Building and

Brentwood is tremendous. The Hart Building cost us probably more than $40 million to clean up. For Brentwood, we are not sure where all the numbers are going to come in, but I'm sure it's going to be much higher than that. It's a 1.7 million square foot building with a lot of equipment in it and it's very hard to decontaminate. We see with the other anthrax attack also at the AMI Building in Florida -- that was a commercial publishing building that ended up with anthrax contamination -- we think the cleanup costs are going to be in excess of perhaps $20 million. The building itself is worth roughly maybe $2 million, or with anthrax contaminated, it comes out to negative $18 million. Just on an interesting note, the U.S. Congress had a rider in our appropriation bill -- or I think GSA's appropriation bill -- to buy that building for a dollar and, of course, then the federal government would become responsible for cleaning it up, but it's a testament to what can happen to real estate sales when you have one of these things and how difficult it really is to go in and do the cleanups on these.

Another example was that EPA was at the Olympics with emergency response teams. Not all the work is that bad. They got to sit out by the luge run and have a good time. Actually, what we had were counterterrorism response teams on call 24 hours a day doing 12-hours-on/12-hours-off shifts in case there was any attack and in case there was any chemical containment we would have to do.

The U.S. government several months ago came out with a national strategy for homeland security. Part of that national strategy was the creation of the Department of Homeland Security, but really, what it is a comprehensive plan for all of the federal government and how all of the federal agencies are going to respond or what their role is in homeland security. And again, it does maintain EPA's roles, and in many respects actually increases a number of the roles that we have, the critical infrastructure protection mission -- and these are sectors of the economy -- sectors of the country that are given out to various federal agencies to be the lead for coming up with a way to protect its citizens.

As I mentioned earlier, EPA used to have water supply as their one critical infrastructure protection mission. In the new plan, we pick up the chemical industry and hazardous materials. As the federal government lead, you will notice the Department of Homeland Security has a number of these leads. But EPA will actually have the chemical industry and hazardous materials, which means, lo and behold, you will still have to deal with EPA on most of your stuff, it won't be the Department of Homeland Security, although, as customs is now a part of that department, obviously, it will be a joint role.

When we talk about sectors, we are really talking about a system of protecting the water supply system, not individual water supply, so we come up with comprehensive plans for how all systems will be protected. We don't send guards out to water plants, the same way we won't send guards out to chemical plants, and the same is true for the Department of Energy, who has the lead on protecting the energy section. They won't be sending out people to the various power plants, but they will be coming up with a contingency plan to make sure that the energy sector is maintained in a potential attack.

The EPA came up with our own homeland security strategic plan that follows the federal plan. It looks at basically four areas, critical infrastructure protection being one, and most of the enforcement work in EPA sits in the critical infrastructure protection, because it's really looking at how we come up with systems to prevent incidents from happening. That has a very close link obviously to accident protection, so our accident protection programs and our preparedness programs end up being really our protection preventative

programs. There's one school of thought that, you know, for a third-party action, you have to worry a lot about terrorists, and they are pretty determined, but I have seen high school students do some amazing damage and be very persistent, particularly in getting into places and playing around with water systems and controls. It's almost like it's an attractive nuance for them, so we joke that they are more of a threat than terrorists. They are just more creative.

Preparedness response recovery I mentioned before. We have an emergency response responsibility. That will be maintained. Communications and information is a big issue for us in getting out the right information on a particular incident. If there's an attack, is it a public health problem or not? Should I be concerned? This was a very large issue at the World Trade Center with dust. It was a huge issue for us on Capitol Hill with anthrax. The Hart Office Building is right in the middle of Capitol Hill, but there is also a residential area around it, so naturally the people around it are concerned with what's happening. Should they be concerned about anthrax? Should they start getting Cipro or one of the other antibiotics and taking them? It's a huge issue for us.

The last one is just protection of EPA personnel, which is kind of near and dear to me. The headquarters of EPA is two blocks from the White House, so if there's just a slight miss, it hits us. So we're sort of pretty close to what would be ground zero in any potential attack. The regulatory programs I mentioned are under a number of statutes: The Clean Water Act -- and a portion of the Clean Water Act is the Oil Pollution Act. The Oil Pollution Act requires Spill Prevention Control and Countermeasure Plans, and these are plans that any stationary, on-shore facility has to come up with that's a security plan. They have to show how, if they have storage tanks of oil or oily substances, they are protected from third-party actions, disgruntled employees, vandals, and the like, and they have to be prepared to respond to a spill, and then they actually have to have a spill response program. It doesn't take much to see that anything that is done to better prepare and to basically harden oil storage facilities will help in homeland security.

We saw a very large explosion and fire at an oil storage facility in New York City just a few weeks ago, and there, luckily, it was on Staten Island. There, the plume sort of went out into the bay out into the ocean, but the plume, based on the wind pattern, could just as easily have blown across Manhattan. So this is a very important act for us.

The Safe Drinking Water Act was recently amended to require all medium and large drinking water systems to actually go out and conduct a security vulnerability assessment. The first of these are due at the end of March, so we're going to get a number of them in to look at, but it's a comprehensive assessment where you go in and you look at all of the vulnerabilities to a terrorist attack in a public water supply. That includes not only the treatment facility, but also, obviously, the distribution system. The distribution system where you have pipes running into homes and businesses is really a delivery system, so this is a very critical new statutory regulatory provision on the U.S. side. Since the Bhopal, India, tragedy back in the eighties the Clean Air Act has required that all stationary sources with certain chemicals put together a response plan, and they have a general duty to prevent accidents and to prevent releases. Obviously, it's again not very far from there to a counterterrorism or homeland security link. The RCRA program has certain planning requirements, emergency planning requirements, and also, obviously, it has the import/export requirements. The emergency planning Community Right-to-Know Act has information requirements where

information on all chemicals stored at facilities has to be sent to local first responders so they will know what's there in an emergency, and also import/export under FIFRA and TSCA. I'll talk about that more in just a minute.

There are also some new regulatory requirements coming out. I mentioned the Safe Drinking Water Act before, which is actually the Public Health Security and Bioterrorism Response Act. It has the U.S. side putting together vaccines and antibiotics for emergencies. Tacked on the back was the requirement for all public water systems to do a vulnerability assessment.

There's a proposed Chemical Security Act in the Senate, and this I mention because it would require chemical facilities -- and the definition in this Act of a chemical facility is so broad it would include virtually any place chemicals are manufactured or stored -- essentially to do a vulnerability assessment and have a general obligation not to have a release of those chemicals. Interestingly enough, in that proposal, it also includes transportation-related facilities. It's not just stationary sources, so it would be pipelines and trains and trucks, at least under the wording of this proposed legislation.

The Chemical Safety Information Site Security was passed in 1999, and it actually asked the Department of Justice to do a comprehensive view of the security of chemical facilities and then to come up with protocol on how to do a security analysis. The reason it's important is that, if this includes transportation, you're going to be asked to do some kind of vulnerability assessment around the three basic tenets of how we do site security -- detect/delay/respond -- and this would be a whole new area for transportation.

I think, one way or the other, there will be new legislation on the U.S. side that covers some aspects of transportation, whether it's the Chemical Security Act that EPA would have or whether it will be new statutory authority from the Department of Transportation. So I think that this is something we all need to be thinking about, because, in essence, transportation is a pretty serious concern. What we're really talking about in the purview of counterterrorism is we have mobile weapons of mass destruction. If you have a large amount of a pesticide, a large amount of a toxic substance, a large amount of a hazardous waste, these are weapons of mass destruction. They can be diverted and used for a variety of purposes that we don't like.

Some of the deliberate acts we have seen and accidents: an example going way back in the early parts of the Superfund program was Times Beach, Missouri, where we had PCB-laden waste distributed along a road. There was panic in the local population, tens and tens of millions of dollars in cleanup costs, disruption -- we had to basically remove all the dirt in the whole area and move the town. That's the type of disruption you can get. Now, that was a deliberate act by somebody illegally dumping hazardous waste, but it's not very far to go to a terrorist saying, "I want to disrupt the economy. I'm going to do this more often." All they have to do is look at these examples and see that this is a way to disrupt society. That's really what our concerns are, because you can be a terrorist by disrupting society.

You don't have to kill people to cause a lot of havoc or a lot of concern. We see that in a number of other recent examples. In one of them late last year there was a dumping of a hazardous waste truck into a sewer system at night through a manhole in Hagerstown, Maryland, which is just upstream of Washington, D.C. It sits on the Potomac River, which is the water supply for Washington, D.C., and it actually disrupted the sewage treatment plant. The

sewage treatment plant shut down essentially and was discharging six, seven million gallons a day of raw sewage directly into Washington, D.C.'s drinking water supply. Again, we think that was a legal disposal. We don't think that was a terrorist act, but, again, it's not very far to go from this to what a terrorist can put together. They can disrupt the water supply of Washington fairly easily.

We also had an incident just the past few weeks at the Treasury Department in Washington, D.C. The Treasury Department sits immediately next door to the White House, and my office is then another block and a half away. In this case, there was a smell of gasoline coming up out of the sewer lines right in the Treasury Department. We actually responded to that relatively quickly along with a gaggle of Secret Service agents -- more than you could shake a stick at being right next door to the White House -- and again, we think it was somebody dumping something into a sewer line that happens to be a main point, but when you get the smell of gasoline, you know, a collection system is a conveyance system. It's a way to get a weapon of mass destruction to be put out throughout a whole area. We have had some evidence of this in Louisville, Kentucky, or 15 years ago where we had a spill of essentially gasoline, about 5,000 gallons, into a sewer system. Luckily, it was at night. It exploded and blew up several blocks of downtown. It looked like Kosevo. I mean, it was the complete destruction of the downtown of Louisville, Kentucky, from 5,000 gallons of gasoline going in. Luckily, it exploded about four in the morning and there was no one on the street -- thank God for middle America. No one was actually hurt, which was a miracle when you look at these pictures and the entire street has been exploded, you know. You say, that's a tanker truck full or less. It's not massive quantities.

So again, any diversion of transportation-related things, whether they are trucks or trains, can be a pretty serious problem. I'm going to talk for just a minute about an initiative we have within EPA with the U.S. Customs Service, or what is now the Bureau of Customs and Border Protection. I want to get one of their T-shirts. You know they have to have a T-shirt. They were the first federal agency, you know, tax collection, 1789, so I'm sure they have a shirt that says "1789-2003." I mean, you know it's there.

Our initiative is another way to break the stovepipe. It's how to share information, how to work together. I think we had always worked together with the customs program on some level. As with any large federal agencies, we had times where we disagreed or didn't play as well together as we needed to. I think, post-9/11, we all understand that we need to do a better job of this, and one of the areas that we don't do very well in is information exchange.

So we have a new initiative. We signed a Memorandum of Understanding with Commissioner Bonner, who is now going to be Deputy Undersecretary Assistant Bonner or something, and the Administrator of the EPA, Governor Whitman, to come up with a way to share information that protects its confidentiality. There obviously are very legitimate business confidentiality issues, but it gives the EPA the information it needs to do its protection job.

Essentially, we're looking at the President's policy on borders where we have to have secure borders, but we also know that they have to be highly efficient and open to trade and travel or the whole system falls apart. So our information exchange is really in the area of chemicals of concern, things under TSCA, the Toxic Substances Control Act, pesticides, hazardous waste, even ozone depleting, we put in there, even though ozone is not really a homeland security thing. It looks good and nobody understood it in the agreement, but it is actually a very important area for us also to maintain

that data sharing with the customs service.

We will also be looking at increasing the EPA border presence. One of the internal proposals we're looking at is coming up with a series of teams to spend more time at borders and to look at what's coming over and to be looking at the TSCA certifications on chemicals, to be looking at the FIFRA notices of an arrival; to fully have teams that can sample, similar to my Canadian counterpart earlier; to have a team that can go in and look at compliance, sample, if necessary, and make sure that what's coming across is what we think is coming across and that it's not going to be diverted for other purposes.

In conclusion, I can say that EPA is still going to be a very major player in homeland security. We're going to be changing the focus to better address homeland security, both in our regulatory programs and our emergency response, and important border issues are going to receive a lot more attention. There's no question about it, that as we look at this, we have determined that EPA has not put enough attention here.

We don't want to be a barrier to legitimate trade. We want to do this efficiently; hence that is why we are coming up with this initiative that will be seamless to people in this room, and that is getting information from a sister agency so we don't have to ask it of you, and if the information is anywhere in the government, then we should go there first for our legitimate information needs, rather than more burdensome imposition on individual importers. However, that said, there's no question that there's tension between doing more oversight work and costing time and effort at the border, so we're going to have to carefully balance those issues as we go forward.

So with that, I'll take any questions.

AUDIENCE: In the mid-nineties the chemical manufacturing industry was forced to submit risk management plans under the elements of the Clean Air Act. EPA, in turn, made those public documents -- open to the public. In essence, they were industry's perspective on how to deal with catastrophic events for certain stored chemicals. Under your vulnerability assessment direction here, are those documents going to be held within strict confidence between the industry and emergency personnel, or are we going to go back to some type of public release of these?

MR. MAAS: That's a difficult issue. One, I'll say in the drinking water vulnerability assessment, different than the risk management plans, the statute makes it not public information. It's exempt from any Freedom of Information Act request. We are going to be keeping very, very tight security on these. In essence, what you're talking about in this day and age is coming up with a roadmap for terrorists. We don't want that information to get out. We are going to guard it very, very closely. You know, the problem you always run into is: You want action on these things. You want something to happen. You want the security to get better, so there's a tendency to want to get that information, share it with at least the facility, talk to the facility about it, make sure that they are aware and are trying to make changes. On the other hand, you don't want it out in the general public where it's available to bad people. In the Chemical Security Act, there is a similar provision for something that would be very close to an RMP. Again, that's proposed legislation. I'm not sure how it ends up.

We have taken certain actions, and this is a painful thing for EPA, because we are a public information agency and the basis of the EPA is to get information to the public so they can evaluate risk for themselves. That's in direct

tension with our mission to make sure that we protect critical infrastructure like the chemical industry. So we have actually taken steps to limit public access to the RMP data. We used to have some of it up on a web site. Most of that has been taken down now. The law makes it public information.

What we have are reading rooms where somebody has to come in, show ID in a specific location and they can't take it out. They can look at it while it's there, so it's not a perfect solution, but I think it's a step in the right direction, you know, understanding there will always be tension between public awareness and attention and security.

AUDIENCE: Thanks.

AUDIENCE: Being a transporter of radioactive materials, what's your expectation for the transportation industry? Obviously, I see this as a huge juggernaut, all the issues and what-ifs that could happen. What is your expectation or the Department's expectation of transporters on, let's say, the caliber of people we have -- no pun intended -- driving these units?

MR. MAAS: I can say that EPA will not have a significant role in this area. That's not something that's generally within our regulatory area. Customs and the Nuclear Regulatory Commission will be looking very closely at that. I have certainly attended meetings where there are discussions about this issue, and hence why you're going to start seeing it. There are radiation detectors at most ports of entry, and customs is very, very serious about the training and caliber of people they are using on it. There's been some talk about looking at how well is it regulated, who are the drivers, where they are going, but I can't tell you where it's going to at this point.

AUDIENCE: Thanks.

MR. MAAS: Thank you.

MR. HEISS: Thank you very much, Brian. Joe will be on in a minute. We just have to load the machine.

The Transboundary E-Xperience:

MR. WITTWER:: Good afternoon to everyone. As I was saying yesterday, I think in Canada we're living in interesting times, and this is one of the things that actually makes it an exciting time. What I'm going to be talking about this afternoon is what we are doing in Canada at the Transboundary Movement Branch to move us forward into a paperless environment.

What we see right' now is that we're extremely paper-driven with the export and import of hazardous waste regulations. We have what's called the CNMTS, the Canadian Notification and Manifest Tracking System. We created that back in about 1989, and we have made a number of evolutionary steps in that particular tracking system. So that is running right now. We have a large database in which we store export and import information, as well as transit information, all the manifest information, all the certificates of disposal or certificates of recycling. It's all stored in the manifest or in the CNMTS. Right now, I think we are handling a little bit over 80,000 pieces of paper a year, and we have three notification officers that are working on this, and we've got four manifest officers.

And what we were hoping to do was improve the regulatory process to streamline it, to make it more efficient, to make it more responsive. The way we are

going to do that is by enabling this process through new technologies. Unfortunately, 9/11 was a tragedy; however, it resulted in our security budget being issued by our finance minister in December of 2001. That was Mr. Paul Martin. He's not related to Guy Martin, as I said earlier, but he has given us money now for the next five years to investigate this particular area to ensure that we have enhanced security at the borders, but to ensure that the borders are still open to the flow of goods.

Now, with our electronic endeavors, there are four components to the present undertaking. What we have is the EDE component, which stands for the Electronic Data Exchange, we've got the E notice, we have got the E manifest component, and last of all, the Smart Card process.

Now, the EDE component will allow Environment Canada to communicate electronically with our partners, and that means the provinces that review the notices, the provinces that provide consent, it allows us to communicate electronically with our regional offices, with our inspectors in the field. In the future, it will allow us to communicate electronically with the U.S. EPA when we are exchanging export and import information.

With the E notice, it will allow industry -- our clients essentially -- to submit the notice electronically to us. It will assist in the completing of the notice, and I'll go through the notice in a moment that we have put up on the web site on the Internet actually.

With the E manifest, industry can electronically submit the manifest and complete the manifest, as well. There will be a data linkage between what you submit in the notice and the manifest so that the manifest can automatically fill itself out essentially.

Then last, but not least, it's the Smart Card process. We will be issuing Smart Cards to the transporters or the generator to start with so that they will have the Smart Cards with them as they cross the border. This should enhance the clearance time for them. It will provide enhanced security to assure that the carrier is who they say they are and it will provide a linkage for us to what the notice contains and what should be on the manifest.

Now, when we got this money in December of 2001, we started off in the three-phase type process. Phase one was to do a feasibility study, and we completed the feasibility study early in 2002, and that study identified some of the inefficiencies that we see in the documentation process that we have now. Bear in mind that what we are doing now is all manual input. There's delay in the processing of the inspections. This links back to what I was talking about yesterday with problems with the IWIC code, the correlation between the codes, missing information, things like that, delays in issuing the permits, the administrative burden, both on ourselves as the regulatory agency, and with the industry and our partners as well, and the paper-based system that the study indicated was an inefficient system and we could do things better. Now, since that time, we have had input from industry and our partners to ensure that everyone's concerns were addressed and insure that the E system suits your needs as the people that would have to use that.

We ran a pilot project on the E notice last summer with five companies, and they were very pleased with the entire process. They found some bugs in the system. They made some very constructive suggestions to us, and since then, we have been making some further programming changes to enhance the entire E notification process. We also worked with the provinces to make sure that the information that we were providing to them electronically met their needs as

well, and it was presented in a readable, usable format that would make their consenting process much faster.

Now, as I was saying, the objective of these four activities is to create an efficient, paperless process that we're going to be managing for the transboundary movements of hazardous waste and hazardous recyclable materials. We are trying to improve the efficiency for the transboundary shipments, both at the initial notification end and with the Smart Card process at the back end to make sure you can get across the border a lot faster, and that we have that improved security at the border crossings to satisfy our needs and the U.S. government's needs as well. Added to this, it would provide real-time tracking of shipments.

As I was talking about the process yesterday, we have three points of control right now. We have the manifest completed at the generator site as the shipment crosses the border, we get a copy of the manifest, and at the receiver's end, we get another copy of the manifest to say the shipment has arrived. So those are three pieces of documents that we would have to deal with, but it's after the fact. If the manifest is sent to us three days or three working days after the shipment left, we may receive it in the mail sometime down the road unless it’s been faxed to us, and the manual data entry is done after the fact in many cases. So with this electronic system, we're hoping to move more towards a real-time tracking. With the automated paperless process, we feel that it should improve the productivity for industry as well as for ourselves in the regulatory process.

The Smart Card and the E notice: the E manifest has security features and inscription features built into it so that there will be a security built into the entire process regarding the transport and eventually the disposal of the hazardous waste. By using the Smart Card and electronic information or electronic communication, we feel that the public's safety would be enhanced in case there's an accident or a spill. Ultimately, with the E process, the control and management of the movements of the hazardous waste would definitely be improved.

So, regarding the first step, in order to get a permit, many people were commenting yesterday using the terms “letter to proceed” or “written confirmation.” Under the new Act -- under CEPA 1999, the term is "permit." All those letters are regarded as permits now. So in order to get a permit, the first step would be to submit a notice. Well, the E notice that we are going to be using is a web-based application that's on the Internet, so if you have an Internet software application like Netscape, for example, you can get on to the E notice site. But before you get access into the system, you have to identify yourself, so there's the security point built in. In other words, you have to get yourself a key, and you have to submit certain information to us and we do the security checks, the verification that who you say you are is, in fact, true before we give you that key that allows you into the system. I have one of those keys on my laptop, and so long as I have a telephone line, I can get on to the system wherever I am because it knows that I am who I am with that particular key to that laptop, and I take responsibility for that, so that if I pass on my laptop to someone else to get on to the system, I'm responsible for that.

As I was mentioning, there are advanced security features built into the web-based application. There are a number of firewalls built into the web-based application and encryption features built into the entire system. Essentially, when you're into the system, you're into a VPN. It's a virtually private network. In the E notice, there are automated processes built in to

help fill in those forms. A lot of people were talking about the IWIC code, how difficult it is to complete. Well, there are pull-down menus in there that will help you complete that. There's historical data in our database already that will help you select your carriers. There are pull-down menus that say, "These are all the carriers you have used over the last ten years. Which ones would you like to use?" You can click on that and pull it in. There are a lot of nice, automated features built into it to really assist the process.

Now, when you finally get your key and you get into the notice, this is a screen shot of what you see. We have used Java script actually for this particular picture here, and we have laid out the notice as the paper notice would look like. It's to give that warm fuzzy feeling to people that they are familiar with now for the last ten or eleven years, so it looks essentially the same. There's a little hand cursor upon import, so at the very beginning, you can select whether you want to do an import or export, and then it gives the appropriate code for that particular transaction.

Box one, option one is still the same. You select whether it's a disposal or recycling operation, then you fill yourself in. Actually, with your PKI key to get in, it should already know who you are by your code and it should fill in your address, your name. You can modify it, if you want. For your identification numbers, it allows to you look up the provincial ID or country numbers if they are already in the database system. If not, you can enter them and they will be in there for future use. Further down, when you get into the shipping details, you can enter in your number of exports in Box 6.

For the customs office that you plan on using, we've got all the customs offices fed into the database right now with their appropriate numbers according to CCRA's information that they have provided to us. I didn't know that Dave was going to make a presentation this morning and use Kuntz, Alberta as an example, but Kuntz, Alberta and Sweet Grass is actually highlighted up there as a border crossing. Sweet Grass is in Montana on the American side and Kuntz is on the Canadian side. So you can pick the customs offices that you plan on using as you cross the border, and it will automatically identify them as the appropriate code.

There are also transit countries you can pull out. We've got the United Nations country codes built into this whole thing so you can scroll down through the menu and find out if there's any transit countries you need to identify.

It even gets better when you try and renew a notice, because all of this information will already be there. You can push one button and just say "Submit for Renewal."

This is where it gets interesting when you get into the hazardous waste codes. The first one is the International Waste Identification Code, the IWIC code, and as I said yesterday, it's a six-part alphanumeric code, so you can select Q-1 and Q-2, and if you click on the letters themselves, it will tell you what all of the different Q codes are, so you can select which one is most appropriate. As well with the DNR codes, under the DNR codes, too, it will not allow you to select a recycling operation if, in Box 1, you've indicated you're going for disposal, so right away, we have made a correction for you automatically so that the disposal or recycling option in Box 1 is linked to the DNR code and the IWIC. That eliminates one common mistake we see on a lot of the notices. Again, the pull-down menu will give you what each of the DNR codes mean.

Then you get into the physical state of the material, the LPS&G that I was talking about yesterday. It pulls down all of those codes for you and you select whichever is appropriate, whether it's a liquid, whether it's a paste or sludge, whether it's a solid or a gas, and under the C category for contaminants, you can enter into three possible contaminants. Again, it will pull down the entire menu of 51 possible contaminants. You don't have to go to the Users' Guide. You can just select which contaminants you feel are present that will contribute to the hazard itself. And then under the H category, the hazards are there, all the different hazard codes and they're explained so you can complete that. Again, you can have two hazards identified, and then the A code for the activity that generated it. That will also pull that down.

Under the CEPA ID number, it will actually pull down all of Schedule 3, Parts 1, 2, 3 and 4, for you so you can pick the appropriate CD or CR code. We actually loaded in all of the TDGR PIN numbers that were in the schedules of TDG, so you can pick the appropriate one. Unfortunately, we are showing NA 0007 in there. We should have removed all the NA numbers to reflect the latest changes made to clear language, as Edgar was explaining this morning.

Once you've picked the appropriate PIN, it automatically fills in the hazard class for you because we have linked the two together.

For the quantity of each waste, we have again only two choices, kilograms or liters, and as the cursor shows, you can pick your packing group, and there are a number of combinations there that you can select as well.

Being an electronic notice, we are not limited to three lines on this, so you can have one notice number and waste streams under the one notice number. I was talking to a number of people over lunch and they said, "Well, we have a file number." We do have dossier and file numbers as part of administrative controls behind the scene, but one dossier for one company may have two, three hundred notices in it, and because we are limited to only three lines on the notice, those two hundred notices may represent 600 waste streams, but when you go to transpose the correlation to the manifest, you have to know which of those notices you're taking your waste from and which line it's on. In this case, it's one notice number. You just tell us which number the waste is -- on which electronic line that waste is. So that was the electronic notice. What you won't see is what goes on behind the scenes. As soon as we get an electronic notice and we pull it in from the other side of the firewall entire system, it kicks out an e-mail message to our provinces or to the province of destination, and it says, essentially, "You've got mail. Check for your notices."

This is where the EDE comes in, the Electronic Data Exchange. It provides us the ability to communicate electronically with our partners. We are also investigating a mechanism by which, for exports from Canada and the United States, we can send electronic notices to Bob's office, and we're working on that capability right now. In this case, it should give a faster time to process the notices by the provinces. They can look at the information right away. They can run queries on it. They can compare it to their own databases, as well. As I said, last spring we tried it out with four provinces to see how they liked it, and we made some improvements based on their suggestions as to how we can display the information and what would be relevant for them. By using this particular system, we feel that it should go much faster to issue permits.

Now, this is the screen that the province would see behind the scenes, and it

allows them to identify which notices are pending and require their revision. It also gives them an ability to see which notices they have consented to, those that they have objected to, which ones they have conditional consents on. A province can actually go through a notice and pick those waste streams that they consent to immediately and the other ones that they may have to have further deliberations on and do some further background checking. They can say we temporarily object to this particular notice, so they have a number of options that they can go through, and they can also see what they have done in the past -- all from this particular site -- and all they need is the web browser application that they are in.

Now, this is what they see from a mock-up notice of information that we have sent. The first code is just a tracking code for the particular province, and then it gives them the IWIC code, the CEPA ID code, the hazard class, the TDG PIN and the tonnages or quantity of the material that is being proposed to be imported into their particular jurisdiction, and it gives them a number of options to select for each waste line on that particular notice. They can actually write in conditions and comments where they may say that a particular carrier cannot handle this kind of waste, but it can handle the other ones on the notice. If they are not terribly happy with the summary information, they have access to the full notice as well.

Now, this assumes you've got your permit, what was formerly the letter to proceed or written confirmation. So now you're ready to ship. We've got the E manifest on the same web site. Now, with your key, you can get in and you can access the web-based application that we have put in. Again, we've got the same security features built into it, and the automated system which links back to the permit or the notice will actually automatically complete the form for you. So by identifying your notice number up front, it then will populate what is relevant in Box K. Again, this is for the generator or the consignor, if you will. By punching in the notice number, those particular fields and data elements should be completed, except for the waste information for the shipping name and all the other appropriate codes, because you need to identify what line on the notice the waste is actually found, so you have to know what the notice number is and on what line the waste stream is located, and once you've identified that in the waste line number right there, then it will populate that field for you as well.

AUDIENCE: Is this not a link to Ontario's HWIN system, or how is that going to work?

MR. WITTWER:: That's what we are looking at right now. The HWIN system is up and running on a different platform from ours, but we are trying to avoid duplication as much as possible. With Ontario collecting information electronically already, we’re looking at means of how we can exchange the information, because what we'll also be controlling, export and import information, they now get in paper format as well, and we'll be controlling the provincial movements for which we will be using the manifest as well, so we are looking at ways to exchange the information to make it more efficient.

AUDIENCE: Where does this go for rail, as well?

MR. WITTWER:: We are working with the rail association right now. They are very interested in what we're doing electronically, but they already have the EDI system. We were looking at making use of their EDI system and our EDE system back in about 1996, but the EDI system -- the Electronic Data Interchange -- was very rigid in its application, and we have retooled ours to be a little bit more flexible and be web-based at the same time. So right now

they have made advances and we have made advances, although the Y2K situation held us back a little bit because we had to do some reprogramming, and whatnot, at that time, but we are working with them right now.

We have a meeting with the rail association in about two weeks' time. We are looking at what data elements they capture and what data elements we need, so "They may not necessarily need this," but how we could exchange that information. Then there are separate pull-downs or linkages on the web page for Part B of the manifest, which contains the carrier information, and ultimately, Part C, the receiving site or the consignee portion of the manifest. Again, we structured these pages to look as much like the paper copy as possible so people are still comfortable with it and understand what information we are looking for. Here, there's a look-up feature in the carriers. You can identify which carrier has been approved and find out what their name is, and it will populate these fields for you as well. Again, the carrier in this case would have to have their own PKI-type key, in order for them to sign for this electronically, and at the other end, the consignee would have their key, and they would complete and sign that. What would be nice with this is that, once it's completed, rather than having to mail this to us, you would just push "Send" and the information would be sent to us electronically. So in this case, we would know as a shipment leaves to expect it at the border or expect it to be coming towards Canada or leaving Canada, as far as that's concerned.

Now, that was the electronic system, the EDE, E manifest, E notice system. With the security money that we've got, we are also asked to look at other technologies, such as the Smart Card technology, and make the linkage to our EDE system with the Smart Card. So what we have been doing is reprogramming the system so that we have a secure access into the Transboundary Movement Branch's E systems right now. With the Smart Card, we are hoping to have more real-time tracking data to have the ability for the generator, for the carrier, for the receiver all to digitally sign the forms themselves, do it electronically, and we are trying to make it easy to use. Now, a Smart Card is no bigger than a credit card. It has what's called a chip -- a microchip base -- on it, and it can hold about 32K worth of memory.

So this is the format that we are working with right now, and that would have encrypted codes on it that would be related to the driver identity, related to the notice information, the permit information and the manifest information. What we have done here is we have stylized the Smart Card actually for our particular uses. We took the design off of the Canada/U.S. agreement publication. Some people thought when they saw this that it looked like a bunch of rockets aimed at Canada, but I would like to point out that, in fact, is not the case. If you look carefully enough, they are the four modes of transport there. The top one in blue is an airplane, the second one underneath is a train or an engine coming my direction, the one under that is a truck, and underneath that is a ship to represent the four modes of transport. You've got air or rail, road and marine. They are not rockets, although maybe this is rocket science.

As I was saying, the Smart Card is just a credit-card size device, has a microprocessor memory chip embedded on it. You can put a number of directories into it as well. It can store the data that we need, and there are certain programs on there, and it's all encryption protected.

AUDIENCE: Do you issue this card?

MR. WITTWER:: That is what our pilot is going to determine. We will be

issuing the card, yes. As for the logistics of the process, we are planning on running a pilot, which I'm going to get into in a minute, starting in April to see if it works.

AUDIENCE: Regarding this particular card, you talk about two things that interest me right now: first, the number of notices will be encrypted or put in memory, but secondly and most importantly, customs is beginning to have some cards with the names of drivers and companies and all the data. Do we duplicate that, or will this card work together with customs?

MR. WITTWER: I'm glad you asked that, because that is the direction that we're going, and as I go through the presentation, you're talking about the future.

AUDIENCE: On the manifest system, when they come up with the HWIN system, we really tried to use it. What happened was that the system was not compatible with our computer system, and every item which was grey shaded on the manifest came out pitch black. We got together with them and our IT group to resolve the differences, and since then, we have been using paper manifests. Is there any way to resolve the differences to make it more user friendly? If it is all black, there is no way of entering anything. Then the system is pretty much useless for some people right now.

MR. WITTWER:: Our system would probably work, but -- I don't want to put Ontario down -- we have tested ours out, and they are both web-based applications, HWIN and our E manifest system. We haven't seen any problems with the printout at our end, but your company might be an ideal candidate to run in this pilot to see if there are the same problems, to let you on and see what the printing problems are.

AUDIENCE: Same thing. Some companies got Macintosh, some have Microsoft Windows, Microsoft NT, Explorer; they are not compatible. The systems sometimes don't speak to each other.

MR. WITTWER:: That's right, and that's the kind of information that we are looking for feedback on with the present pilot, and our IT specialists have taken a lot of these things into consideration when they are designing this, but I'll definitely mention that to them to make sure it's built into the system.

AUDIENCE: This system eventually is going to supersede the HWIN system and make it vertical?

MR. WITTWER:: We don't intend to supersede the Ontario HWIN system at this point, no. This is for the federal needs, and, as I said, we are trying to work with Ontario to see where we can do a tradeoff of the two systems, so that we are not duplicating what we are trying to do.

AUDIENCE: Thank you.

AUDIENCE: Talking about duplication, companies are managing a lot of different customers and a lot of imports. Our commuter system has been programmed, and we have to manage quantity for each waste stream. We have to manage information that will be there to renew everything. Will it be possible for our computer guy to talk with your computer guy so we can transfer the information that is in our system into yours, because retyping everything will be a duplication and we cannot just afford to add employees to retype information already existing?

MR. WITTWER:: We are not trying to create more work, we are trying to go towards a paperless environment, and if you've got the information electronically already, I think that might be a good match there as well. You've got my name and number, and, at the end, I'll tell you who to contact in our office, who is our IT guy.

AUDIENCE: Thank you.

MR. WITTWER:: The other thing that we are planning on building into the system, too, is sort of a biometrics-type control where you can control things through a fingerprint, when you come up to the customs office, and whatnot, and these are things that we're discussing right now. Right now, this is a picture of a Smart Card reader. It's not a very big device at all, and we could use these. They are very portable at various key points through the entire shipping process. That could be at customs crossings, it could be at weight stations along the way. Our inspectors can carry these with them along with their laptop. They would have access to the database and access to the Smart Card readers. It's just to put some checks and balances into the system, and with the Smart Card readers, they could be used to update our database to say that shipment has left, shipment has crossed the border, shipment has been received. With the inscription on there, they could be used to access and sign our electronic forms that are on the web site.

So what lies ahead? This is all the concept that we have laid out through our feasibility study and through our contacts with our partners and with industry; and, as I was saying, we have done the programming. We've got the system up and running right now, and we are hoping to run some E pilot projects this spring. Out of these projects, we are hoping to get some feedback on how we can make further improvements to the entire E system, and in the future, once the programs are completed, we can expand the Smart Card program to more companies and make it function even better.

Right now, with the E project, we are trying to run a six-month pilot, and that's going to be making use of the E notice, the E manifest and issuing the Smart Cards themselves. Under the improvements of the E system, as I was mentioning, we are going to be monitoring the pilot project itself very carefully to identify where the system's efficiencies are; see if there are any bugs in it; see if we need to do any more programming changes; see what enhancements we can build into the system; and, with the examples that I was just giving, of companies that already have an electronic system, see how we can link up; and then have a full deployment of the electronic systems in time for the new regulations when they come out.

Again, we need to have the enabling clauses in the regulations in order to make this a reality. We are also working closely with other government departments at this time to expand the use of the Smart Card program in the future. We are also working with the U.S. EPA, and also through the NAFTA CEC to see if we can come up with an E tracking process for North America. We're also working with Canada Customs.

Right now, we have identified the Smart Card to be used for hazardous wastes and to meet our needs and our purposes. We were actually asked last fall to provide input. I don't know if you recall, but our Prime Minister, Jean Chretien, met with the U.S. President George Bush in Detroit last October. There were 30 items on their Smart Border and Security agenda, and we were asked to put our Smart Card proposal on that agenda as well, as an agenda item. So there's a lot of interest in this particular activity.

With Canada Customs, we are looking at them. As far as the NEXUS is concerned, as I mentioned earlier, there are a number of directories you can put on in here. We are speaking with Canada -- well, Citizenship and Immigration Canada, and looking at Canada Customs and Transport Canada, to see if we can put information on here under different directories to make the card multipurpose and not make it just for hazardous waste, to make the border crossings all the more efficient. This is essentially what's under NEXUS and under the Across system and what CCRA is looking at right now, and they have essentially a bar code that they pass the wand across, and it's a green light/red light-type mechanism to say the driver has been identified and it's the appropriate driver, and it's supposed to reduce the border crossing time. Now, we've got a swipe card stripe on there as well, in case one of the other government departments needs that sort of information.

This is what we have, as I showed you here. It's an Environment Canada Smart Card. It's got the microchip on there with the security and encrypted codes on there, and it's going to provide us with what we hope is real-time tracking for hazardous wastes and hazardous recyclables.

Now, combining the two, you have what CCRA has now -- what Environment Canada has now, and with the microchip, as you can see on the far, right-hand side, you can have a number of directories put on to the Smart Card with information for different departments. You can have Environment Canada information, CCRA information, immigration and citizenship information, other government departments that might be interested. You can have biometric identification, such as fingerprinting put on there, government building or network access codes and other secure applications on the chip itself. Now, there's a photo on there as well, and that could be the driver identification with their name printed on the Smart Card, and as I was mentioning, actually, that's a picture of our IT specialist, so that's the guy to go after if you want to contact us on this. He was going to make this presentation, but I'm doing it instead.

AUDIENCE: What verification will there be for Canada Customs to make sure that it is that driver, though? Is there still going to be a guy at the booth looking at this information or transaction?

MR. WITTWER:: We are looking at that right now. We are developing a discussion paper that we're working on with CCRA with their application specialists, as well. They have their latest system in place at the present time, that bar code reader and working with that, but they will probably have to upgrade their system in about three to four years. So we're hoping that we can integrate the two systems by that point in time.

AUDIENCE: So they will still be asked to surrender their --

MR. WITTWER:: Yeah, the Smart Card won't do that. Over the last two days, we have shown you where we have been, where we are planning on going, and this is a future application to move us into a paperless environment. I would like to thank you very much for your attention and sticking it out to the very end, and hopefully, we have given you a nice overview of what's going on in Canada right now. Thank you.

Additional Questions and Answers:

MR. HEISS: At this point, a couple of things. Thank you all for your attention during this two-day program. I have a few items that I did not manage to convey before that I might take the opportunity to do, and then we do have some additional time for questions and answers before we close out.

One that I thought you might find it of interest from the U.S. side is the trend in notices on our import side, and our exports out of the United States. I don't know whether Joe happens to have some of this data available. This is with recognition that there are definitional differences that cause the statistics to come out differently for the two countries. For the most recently completed calendar year of 2002, the number of notices on our *import* side from Canada was actually 416, and our number of waste streams was 1,679 among all those notices. Obviously this reflects the fact that there were multiple waste streams per notice -- an average of about four per notice. The significance of this, actually, if you ignore the number of notices, which is down from past years, is that the number of waste streams has been fairly constant since 1997.

Now, if you look at the U.S. traffic outbound to Canada--our *export* side-- the number of notices was 867 for 2002 and the number of waste streams was 6,931. Here, the number of notices has gone up significantly since 1997, and in particular, the number of waste streams has increased by more than 200 percent over that period. So it is a strongly discernible upward trend.

People can make of these statistics what they may reflecting various trends, regulatory differences – who knows what all is involved – but I thought you might find that of some interest.

I wanted to share with you my e-mail address, and I welcome your e-mails, questions, comments, so forth. I did not provide that on the slide. It is heiss.robert@epa.gov.

We also are very interested in getting the transcript out on the web. I do not have all the details of that. The website is basically epa.gov. You need to go into the program office site, the Office of Enforcement and Compliance Assurance. Beyond that, I don't have it all worked out yet.

One practice hint in terms of those of you who send us export notices: my staff has been getting a tremendous number of duplicate notices. They tend to be sent two ways, both by fax and in hard copy, and actually one will suffice. Now, maybe you're doing that in a redundant fashion in case one doesn't get through. We are spending a tremendous amount of time trying to match the copies, and when we do get a fax from you, that's generally all that we need, so you don't actually have to do a duplication like that. Hopefully, nothing gets lost that way, because we are getting it the one way and you get a confirmation back that the fax was sent and received.

So those are a few comments. Did you have anything? Let's open it up to any questions at this point.

AUDIENCE: Bob, I know in Canada, there's a policy where they want to see less waste being exported out of the country. Does the U.S. have a similar mandate for RCRA?

MR. HEISS: RCRA does. In fact, in the annual reports, there are requirements to report waste minimization efforts and results in connection with exports. That is an indication of EPA's policy. Now, in practice, there seems to be a growing business in exports, so I don't know what to make of that. It's an issue for our policy and regulatory office, the Office of Solid Waste. I don't know what steps they might take. Our governments have regular dialogues. Another one is coming up about our Bilateral Agreement, and waste minimization is an issue we've discussed in the past and may well want to discuss again. Anything else?

AUDIENCE: Are there similar efforts to what Canada is doing in the U.S. going on that you might be able to tell us about?

MR. HEISS: Canada has been bold in its identification and evaluation of new information technologies. We're really in a position now of taking a look at what Canada has proposed to us, and, indeed, the Smart Card is receiving serious consideration in EPA right now. We have an Office of Environmental Information, which is also involved in this process along with those of us in the enforcement program. You also heard the customs presentation about the other kinds of tracking that their C-TPAT partnership proposes, which is more elaborate with transponders, and so forth. To try to sort out all these technologies is a daunting task for both of our countries. That is what we've got to come to grips with. Which way are we going? Will we have both a Smart Card and transponders? What kind of mix will work? What will work with industry as well as government? So there is consideration underway of various technologies in the EPA as well.

AUDIENCE: A question for Joe again: In regard to the Smart Card, is there any way of applying the NAFTA certificate to that card, given the NAFTA certificate? At least our business practice is to match the time the notice or permit is good for. Is that possibly a vehicle to use as well, so we can minimize some customs requirements? I understand the customs invoice will always need to be there, but NAFTA certificates are pretty generic, once you have filled one out.

MR. WITTWER:: I don't know. We haven't envisioned using it for that particular purpose. Right now, the Smart Cards were designed so they would enhance and speed up the border crossings. I'm not sure about the NAFTA certificates. I'm not familiar with them, whether they are a requisite for crossing the border or not, but this is what the Smart Card was designed for.

AUDIENCE: I just have a quick question. Recently we received our notice. We exported a load of batteries to Canada and our driver actually went to the wrong border crossing, so he was turned away. He returned to the facility and he submitted an amendment letter to Environment Canada and they added an additional border crossing. Is this something that EPA needs to know about, as well, or is it sufficient to receive approach from Canada?

MR. HEISS: You’re talking about lead acid batteries. Since you did not need to submit a notice to us in the first place, you would not need to notify us of the amendment. Your contacts would be strictly with Environment Canada.

AUDIENCE: I did cc the EPA just as a precaution. I just didn't hear anything back, so no news is good news.

AUDIENCE: If the future is to replace paper in the notification and the approval process, and likewise with the transporters, they are going to carry these in lieu of paper, how do we deal, in the States, with the Department of Transportation inspectors, and issues like that? For example, if we use materials we are receiving in the States and Canada comes across and the inspector wants to take a look at the first DOT paperwork, this is not going to do. How are we going to deal with that?

MR. HEISS: This suggests a need to have integration among governments. We need a buy-in from everybody.

MR. WITTWER: In the format that we have been proposing, it's basically in the direction of Canada right now for imports into our jurisdiction, because that

would contain all the information that we need to move the shipment through. In the other direction, we're still working at looking at other means so that U.S. Customs would accept this and other means to make it applicable for the direction into the U.S., as well, so there's still some work to be done, but in our case, we were looking at it from an import perspective from this point.

AUDIENCE: Are we able to have multiple crossings? I know in British Columbia, we have more than one border crossing that we would use. Does this electronic form allow us to set up two or three crossings?

MR. WITTWER: That mechanism already exists under the notice, so, as you submit your notice, the border entries or the border crossings that you identified up front would already be linked into the Smart Card with the notice number, so that identifies your border crossings. If you cross at one that you haven't notified for, this will tell us right away.

AUDIENCE: I think the advancements with this E system are really exciting. However, until we get to that point, is there a location on the Environment Canada web site or the EPA web site that gives an overview of administrative procedures, such as where to deposit copies of manifests, and that sort of thing -- those administrative procedures?

MR. WITTWER: Well, on our web page for the Transboundary Movement Branch, there are a number of Users Guides that are on there, and they help you with waste classification, how to complete the manifests, the notice itself and the entire process under the export/import regulations, so those are there, and it also gives the phone numbers of everyone in our branch with whom you can communicate for further information.

AUDIENCE: Thank you.

Closing Remarks:

MR. HEISS: Any other questions?

I would just like to thank you again for your interest and your questions -- which help us -- and we hope we were helpful to you in terms of responses. I would also like to express appreciation to all the other presenters of the program. Also, in particular, I would like to recognize the major assistance that I have received in the development and the execution of this program, Will Damico from EPA Region 5 office, Anne Patton for all her help in putting this together, and most particularly, Joe Wittwer, my co-chair.

I hope, if this is a useful type of presentation, we'll give serious consideration to doing it again perhaps in a different place in the future. We would be interested in any feedback about whether it's helpful to you and whether doing a transcript is helpful.

Again, thank you. (Whereupon, the above proceedings were adjourned at 2:45 o'clock p.m.)