The above-entitled matter came on for notice, pursuant to call, at 9:30 a.m., in the Sutton Room of the Hilton New York, 1335 Avenues of the Americas, New York, New York, Carolyn Merritt, Chair, presiding.

PRESENT:

CAROLYN MERRITT, Chairman and Chief Executive Officer
CHARLES JEFFRESS, Chief Operating Officer
CHRIS WARNER, General Counsel
JOHN BRESLAND, Board Member
GERALD POJE, Board Member
IRV ROSENTHAL, Board Member
ANDREA K. TAYLOR, Board Member
STEPHEN SELK, Lead Investigator
JORDAN BARAB, Recommendations Specialist
C-O-N-T-E-N-T-S

Opening Statements, Carolyn Merritt.................3

Kaltech Industries Investigation
   Incident Description and Findings,
      Steve Selk....................................10
   Board Questions.................................29
   Recommendations, Jordan Barab....................42
   Board Questions..................................57

Public Comments...................................69

Board Consideration and Vote on Report...............83

Adjourn...........................................106
Good morning and welcome to this public meeting of the U.S. Chemical Safety and Hazard Investigation Board. I'm Carolyn Merritt and I'm Chairman and CEO of the Chemical Safety Board.

With me this morning, our other Board members, I'd like to introduce Dr. Irv Rosenthal, Dr. Andrea K. Taylor, Dr. Jerry Poje, and Mr. John Bresland. Also with us this morning is our General Counsel, Chris Warner, and our COO, Charles Jeffress.

And I'd like to welcome all of you here this morning. Also I'd like to welcome those who are joining us on the world wide web through our web site csb.gov. We're being broadcast live through that web page.

Right now I'd like to ask anybody in the audience who has a cell phone if you would to please turn it on vibrate or turn it off so that we're not disturbed during these proceedings.

Also, I'd like to let you know where the fire exits are. These two doors, if you would head...
straight out through the door across the hall, that leads you to the second floor foyer. And the escalators will take you down to the lobby and then out to the main street.

The CSB is an independent federal agency that does scientific investigation of chemical accidents that occur at fixed facilities. We investigate these accidents to determine their root cause and to make safety recommendations to prevent this type of accident from happening again.

It is not our place here today to place blame or to apportion liability. It is certainly to report the facts as we have investigated and found them in this event.

Our subject today is a serious chemical explosion that occurred at the Kaltech Industries Group in the Chelsea District of Manhattan on April 25, 2002. The explosion occurred during the middle of the work day and it injured 36 people.

The blast occurred in a ten-story building which is mixed use and houses professional offices and service firms as well as Kaltech which
manufactured metal signs and used a variety of hazardous chemicals in that process.

   Most of the building occupants had no idea about the life-threatening dangers that they faced from activities in the basement of this building where Kaltech Industries stored and handled hazardous chemicals.

   The explosion raises troubling questions about Kaltech's safety practices and about the layers of governmental oversight that are supposed to protect the public from this kind of hazard.

   The Chemical Safety Board team arrived shortly after the explosion on April 26th. It included Lead Investigator Steve Selk and Board member Dr. Jerry Poje. On April 15th of this year, the full Board convened here in New York for a half-day public hearing on the accident and its implications to public safety.

   Neither the U.S. Occupational Safety and Health Administration, known as OSHA nor the State of New York environmental authorities had ever inspected Kaltech despite the company's status as a large
quantity hazardous waste generator. New York City fire inspectors had inspected portions of Kaltech on an annual basis.

As we learned from the April meeting, the New York fire codes lack many modern requirements for hazardous material safety such as labeling, submission of chemical inventories, a building safety plan, separation of incompatible materials, and worker training.

Public witnesses at the hearing expressed deep concern about the adequacy of governmental rules and their enforcement. We've considered those concerns carefully in crafting the recommendations to be presented today.

This is truly a historic opportunity to prevent recurring dangerous chemical accidents. New York City fire inspectors deserve a fully updated fire code and they deserve the training, expertise, and resources to enforce that code.

Our meeting today will be divided into three sections. First we'll hear the investigators present their final report and recommendations.
After Board questions, there will be an opportunity for the public to comment. If you wish to comment, please sign up now at the entrance with Ms. Spires. Your comments should be relevant to this case and limited to three minutes. While your comments are welcome and encouraged, we can't take questions for the Board directly or of the staff.

At that point, finally the Board will consider and vote on this final report and the recommendations. At that point, we'll adjourn for a live press conference, chaired by Dr. Poje right here in this room. Anyone is welcome to attend that session as well but questions must be limited to members of the press.

Like the Board meeting, the press conference will be broadcast live over the internet. With that, I'd like to ask if there are any other Board members who have comments that they'd like to make before we begin. Dr. Poje?

DR. POJE: Madame Chair, thank you for that opportunity. I do want to thank you for recognizing that I did start the work as a Board
member in this investigation back in April of 2002. I did work carefully with the staff and the Board throughout this very detailed and exacting investigation.

And it is a matter of personal gratitude to serve in this institution in a way that returns service to my native city of New York City. I grew up in Brooklyn and Staten Island and was schooled in Manhattan in the same category as Dr. Rosenthal, both going to New York University.

I have brothers and sisters who live in this city and numerous cousins. And I think it is a mark of honor to be able to serve in an institution that would seek to bring the facts of this terrible case to light and issue pathways forward for us to be preventative in any future event. So I'm very happy to be here.

MS. MERRITT: Thank you. Well, with that I would like to recognize our Chief Operating Officer, Charles Jeffress, who will introduce the investigative team. Mr. Jeffress?

MR. JEFFRESS: Thank you, Madame Chair.
As you mentioned, Board member Poje and Steve Selk were on site of the incident in April 2002. And Steve Selk, as the Lead Investigator, will lead the presentation this morning.

I'd like to mention the other folks on the team who have contributed to this report, some of whom will help in the presentation. Steve is the Investigation Supervisor and was the lead, as I mentioned.

Other people who participated were Don Holmstrom, Kevin Mitchell, Randy, McClure, Jordan Barab, and Francisco Altemarano. Helping Steve with the presentation this morning will be Jordan Barab.

Now just a word about the two presenters if I may. Steve is the Investigation Supervisor for the Chemical Safety Board. He has almost 30 years of chemical engineering experience in the area of plant operations and design and management as well as accident reconstruction.

He's held several professional engineering licenses, is a member of the American Academy of Forensic Sciences, the Canadian Society of
Forensic Science, the American Institute of Chemical
Engineers, and the American Society of Mechanical
Engineers.

Assisting him in the presentation is
Jordan Barab. Mr. Barab joined the Agency a year ago
today as a matter of fact. Congratulations on your
anniversary.

He's been in the occupational safety and
health field for over 20 years, including three years
as a special assistant to the Assistant Secretary for
OSHA. He directed the health and safety programs for
the American Federation of State, County, and
Municipal Employees. And has worked at the AFL-CIO
health and safety department there.

Mr. Selk, if you would begin the
presentation?

MR. SELK: Good morning, Madame Chair and
members of the Board --

MS. MERRITT: Excuse me, our monitor is
not on here. Can somebody please get our monitor so
we can see? Thank you. Go ahead.

MR. SELK: -- Mr. Warner, and good
morning to the interested parties and media representatives that are here with us today.

My colleague Jordan Barab and I are ready to submit for the Board's the staff's report on the explosion that occurred on April 25, 2002 in a building in Chelsea in Manhattan here in New York City.

The report includes recommendations to New York City's administration and agencies, New York State, the Occupational Safety and Health Administration, and to Beyond Signs, Incorporated, a successor company to Kaltech Industries Group, the business where the explosion actually occurred.

The recommendations contained in the report have been specifically crafted to help prevent an incident like this from happening again. We believe the recommendations included in the report are both practicable and doable.

It's been a year and one-half since the incident happened. And I have some news footage to play to remind us what happened that day. I did have the opportunity to meet with several of the injured...
people during the course of the investigation.

The explosion in Chelsea caused dozens of injuries. Overall, 36 people, at least 36 people were injured. Some of the injuries were serious. Thirty-one were taken to local hospitals for treatment. And coming so soon after the tragic event of September 11th, the incident caused widespread anxiety amongst city residents.

These things alone seem ample justification for making recommendations. However, the investigation revealed at least three additional factors that make the incident a matter of real concern. The most important of these is the consequences could have been worse.

The explosion originated in the basement of a building. But the blast traveled up the center hall stairwell, causing it to collapse. That stairwell was the primary means of egress and entry to the basement. Furthermore, the explosion caused parts of the ceiling in the basement to collapse.

There was so much debris that the other two stairways from the basement were obstructed,
rendering them unusable, too. The significance of this is that many of the injured were trapped.

A firefighter was amongst the first to arrive on the scene. He told me that he had to go to the adjoining building and make his way to the roof, cross from one roof to another, and then descend ten stories in the damaged building to commence rescue efforts.

The explosion then precipitated a fire in the basement. Fortunately for those trapped there, only a small portion of the flammable solvents that were actually stored in the basement became involved. And in spite of the explosion damage to the ceiling, the sprinkler system retained its integrity and knocked down the fire.

Finally, the investigation revealed that the explosion was a consequence of an unintended chemical reaction. I am aware Madame Chair that mishaps caused by chemical reactions are a matter of particular interest to you and the other members of the Board.

In mentioning these things, I don't mean
to understate the impact that the event did have on those who were actually injured. I know for a fact that many of them suffered considerably, undergoing surgery to reset broken bones and healing from burns.

But what I do want to emphasize is that they actually could have perished. We need only look back to the tragic events that happened in Chicago and in Rhode Island this past year to remind ourselves how serious fires in buildings can be.

The principal means for fire and explosion prevention in buildings is the application of fire and building codes. Therefore, the investigation included a review of the codes that are currently in place in New York City. Other codes such as model fire codes and those in effect in other cities were considered, too. Our findings in this regard are reflected in the report in its recommendations.

You will recall, Madame Chair, that the Board met in session here in New York last April. At that time, I reported on the midterm status of the investigation. The Board was advised that the
explosion was the result of inadequate chemical handling practices.

At the hearing, you also heard from a distinguished panel of fire code experts. These experts from the National Fire Protection Association and the International Code Council testified about some of the ways that model fire codes, such as the Uniform Fire Code and the International Fire Code, deal with hazardous materials.

City officials also testified. Fire department officials stated that model fire codes appear to be more complete in scope and breadth than the city's current fire code.

Finally at the hearing, you also heard from concerned members of the public.

In a few moments, I'll describe the staff's conclusions about the root and contributing causes of this incident. And then my colleague, Mr. Barab, will go over the specifics of the reports recommendations.

Before we do that, let me briefly restate some of the details of the explosion as I described...
them last April. The building on West 19th Street held a variety of tenants. There were professional offices on some floors, service firms on others. Kaltech Industries Group was the only manufacturing concern in the building.

Kaltech was in the business of making architectural quality metal signs. Panels for the signs were cut from steel, brass, zinc. Then the letters were engraved into the signs by means of a photochemical etching process. And then polished and coated with lacquer or paint.

Various chemicals were in use at Kaltech. These included a strong solution of ferric chloride and hydrochloric acid was used to etch the pattern into the signs. Flammable solvents such as alcohol and lacquer thinner were also present as were petroleum mineral spirits. And there was a container of nitric acid.

In the course of its day-to-day operations, Kaltech generated hazardous waste. It consisted primarily of paint, dirty solvent, and spent waste-etching solution. The waste was removed
every few months by a licensed hazardous waste
transporter.

But over time, as the business grew
larger, the volume of hazardous waste being produced
occasionally exceeded a metric ton per month. At
that point, Kaltech had become a large quantity
generator as classified by the Environmental
Protection Agency regulations. That's a status
expected to require a high level of waste handling
proficiency.

On the day of the explosion, employees
were cleaning up. That morning, several drums of
waste had been taken to the street level and removed
from the building by the hazardous waste transporter.
And that proceeded without incident.

However, later that morning, further
clean up was underway. A container believed to
contain waste-etching solution was leaking. The
foreman asked the workers to transfer the contents of
that container to a 55-gallon drum.

The workers proceeded to transfer the
contents of that container and about a dozen to 15
others to drums. And they used an electric pump to do that.

But the investigation revealed that the workers also transferred over the contents of the nitric acid container. And, in fact, that was the last material to be pumped over. Workers weren't aware that the container held nitric acid because it wasn't labeled.

Even then, had it been labeled, they had not received training on the hazards of nitric acid. They were unfamiliar with material safety data sheets. And they spoke many different languages. In such circumstances, it is important for them to have a communication program. But workers at Kaltech had never learned about the information contained in material safety data sheets.

I mentioned earlier that the last material to be pumped over was nitric acid. Nitric acid is an extremely reactive substance. It is reputed to be the chemical most often implicated in unintended chemical reactions.

A minute or so after the workers finished
pumping the nitric acid to the drum, a noise was
heard coming from one of the drums. It started as a
hissing sound. It quickly rose to become a roar.
Liquid began to spray upwards from the drum.
Employees started to flee from the basement. But
before many could escape, the drum exploded.

Now the basement of buildings is a
confined environment. Consequently, when an
explosion happens in a basement, the gases produced
aren't readily dissipated.

The explosion in Chelsea vented wherever
it could. It traveled up the center hall stairwell.
And that's what caused that part of the building to
collapse. It also traveled up an elevator shaft.
The walls of the elevator shaft were blown out of the
basement, mezzanine, and first-floor levels.

Windows shattered all the way up to the
fifth floor sending shattered glass onto 19th Street.
Large portions of the masonry ceiling in the
basement collapsed. And walls on the mezzanine level
fell over.

Members of the Board, the team has
identified two root causes for this incident. The team concludes that the root case was that Kaltech did not have a chemical hazard training program for its employees as required by federal safety and health standards applicable to businesses that handle hazardous materials.

Kaltech never compiled a list of the hazardous materials it had at hand. There were unlabeled containers in the workplace, also contrary to federal standard. And no formal training was provided to employees.

A second root cause was that Kaltech did not comply with all of EPA's hazardous waste requirements. Again, training was inadequate. Appropriately trained and overseen workers would have known that waste should have been fully identified and characterized for hazards before they were mixed.

Now while the root causes of this accident clearly reside at the firm where it happened, public and workers' safety is also effected by government oversight and enforcement. As there are speed limits and safety standards for motor
vehicles, there are federal, state, and local
regulations describing how hazardous materials should
be handled.

The investigation team recognizes that
Kaltech was a small business. And smaller businesses
sometimes don't have the resources and the ability
for becoming aware of all the practices, codes, and
standards they need to adhere to in what is an
increasingly complex business environment.

The investigation team believes that
oversight and enforcement by various government
authorities is an important component of public
safety. While legal obligations clearly place the
responsibility for maintaining a safe workplace on
the employer, a vital benefit of enforcement and
oversight is the incentive that it provides business
to educate themselves.

Consequently the staff's report also
identifies several contributory causes. These are
systems that had they been in place could have served
to prevent the incident from happening.

First, we note that in New York City, as
is often the case elsewhere, it is the fire
department that approves applications for the storage
and use of hazardous materials. And it's the fire
department that issues permits for these materials.

Fees are collected whenever a permit is
issued. These funds support the program. Consistent
with this authority, the New York City Fire
Department's Bureau of Fire Prevention inspects
businesses in the city on a regular basis to ensure
that those entities are in compliance with the fire
code.

At this local level, practices for
storage and use of hazardous materials are dictated
by the code that is in place. The fire code
currently in place in New York City is almost 100
years old. It probably served the city very well in
days past. But it has never been subject to a
substantial revision. As such, it doesn't
incorporate many recent developments in hazardous
material safety.

We have identified the outdated nature of
the code as a contributing cause of the event. Let
me explain why.

Currently, if New York City fire inspectors observe unlabeled chemical containers such as the unlabeled container of nitric acid that triggered this explosion, they have no authority under the current code to correct the situation. Likewise, they can't insure that material safety data sheets are present and available in the workplace. Other fire codes do provide for these measures.

Most importantly, the city fire code does not require users of hazardous substances to formulate and submit a hazardous materials management plan for approval prior to introducing them into a city building. Model fire codes such as those from the National Fire Protection Association and the International Code Council are much better in this regard.

The importance of the submission of a detailed code compliant hazardous materials management plan can't be overemphasized. When New York City fire inspectors did visit Kaltech, they didn't inspect the operations in the basement. They
didn't know that there was any hazardous operation
going on down there.

Had the tenant and landlord been required
to submit a hazardous materials management plan at
the outset, the basement operations would likely have
been described in that plan and then fire inspectors
would have gone there.

Another area that the model fire code
speaks strongly to is the importance of separating
incompatible materials from each other, materials
like nitric acid. The city's building code, which
does not generally speak to chemicals, does have a
clause that deals specifically with nitric acid.

But within the city's fire code, the
practice of separating incompatible materials from
each other appears only to be required of wholesale
drug distribution houses and chemical supply houses,
a somewhat archaic concept. But today's incompatible
hazardous materials could be found in many
workplaces.

Another safety system that could have
prevented this incident functions at the state level.
New York State's Department of Environmental Conservation is responsible for enforcing hazardous waste regulations. They do conduct inspections of hazardous waste generators. But their resources for doing this are limited.

They use a comprehensive checklist during inspections to ensure that waste generators are doing all the things necessary to handle waste safely. It's likely that had Kaltech been inspected by the state, deficiencies in waste-handling practices would have been corrected.

The report notes that Kaltech was a large-quantity generator of hazardous waste, defined as one that produces more than a metric ton per month. But Kaltech had never been inspected by the state. Because resources for state inspections are limited, the state has a prioritization program in place for identifying waste generators that pose the highest risks.

The current prioritization program is based on the size of the generator, its history of violations, and whether or not it has been inspected.
before. Those are all appropriate risk factors. But we've still identified that as a cause that they never got there. And we have a recommendation aimed at them.

We've identified a final contributing cause and this one resides at the federal level. OSHA regulations require businesses to have an appropriate hazardous materials communication plan. But OSHA never checked in on Kaltech either.

Like the State Department and Environmental Protection, OSHA's resources are limited. And it is unlikely they would ever inspect a business like Kaltech, absent a complaint or some incident. And we have a recommendation that aims at working around this as well.

As described earlier, in New York City it is the fire department that holds the authority for issuing permits for hazardous materials. However, the city's Department of Environmental Protection, known as DEP, also plays a role. DEP gathers information on the hazardous materials present in the city through a right-to-know law.
Any entity in possession of hazardous materials is required to self-report annually to the department what their inventories are. And like the fire department, imposes a fee at this time.

DEP then compiles all the hazardous materials information that it has into a unified database. And that database is transferred to the fire department who uses it for emergency response purposes. So they know what hazardous materials they might have to contend with in an emergency.

This slide describes the process where the user self-reports to the Department of Environmental Protection. Of course, they also have to apply for a permit to the Bureau of Fire Prevention. So we've got information flowing to two places. And that information makes its way to the firefighters.

But the information gathered by DEP, which is really separate information, never makes it to the Bureau of Fire Prevention.

It seems logical that this hazardous materials information be shared. If the data was
shared completely, it could be useful as a cross reference to ensure that those who had self-reported having materials also would have a permit.

When we met recently with the Department of Environmental Protection, they estimated that the city's right-to-know law is actually capturing about 50 percent of the hazardous materials believed to be present in the city.

Yet when the Bureau of Fire Prevention issues a hazardous materials permit, that information doesn't travel to DEP. DEP would like to have that information.

So those are the root and contributing causes as determined by the team of investigators, Madame Chair. I'll welcome any questions you or the other members of the Board may have about the investigation.

MS. MERRITT: Yes, at this time, I would open the floor to the Board members. If you would ask to be recognized so we can get that recorded properly. Dr. Taylor?

DR. TAYLOR: Mr. Selk, I have a couple of
questions. One is you mentioned that the Kaltech management had not trained its employees on the hazards of the work site. There was no labeling on containers. The workers did not have access to material safety data sheets. Nor did they manage hazardous waste properly.

So right off the bat, it sounds like to me there was a blatant disregard for any OSHA, EPA law. Now, when small businesses are set up, like this one, aren't they given information? Does OSHA or EPA provide them with information regarding the rules and regulations that they are required to follow:

MR. SELK: I think these organizations do make some attempt to provide information. You know it is available on the internet, for example. But does small business necessarily go looking for it on the internet?

DR. TAYLOR: But there's no entity that gives them this information when they are setting up their business?

MR. SELK: We didn't find that to be in
place in New York City. And we did note in one other major city, one of the ones that we looked at, that there was a licensing system, a bona fide licensing system in place that I think would more or less force the situation in terms of local compliance.

DR. TAYLOR: So there is a licensing system?

MR. SELK: Well, there does not appear to be a licensing system for manufacturing concerns in New York City. But we did one in place in one of the other cities that we looked at. We only looked at two or three other cities.

DR. TAYLOR: Because I'm still trying to understand, you know, if you are setting up your new business and you know that there are certain requirements under the law -- well, it seems like that somehow this information would automatically be given so that they could understand.

MR. SELK: I think, again, it is self-awareness that really sets the system. And that's where government can help by pointing out to small business what the requirements actually are.
DR. TAYLOR: Okay. My second question goes to the large quantity versus the small quantity generator. You said that Kaltech reported that it was a large quantity generator. To whom do they report? And then what happened in the system of identifying Kaltech continually as a small-quantity generator once they became a large-quantity generator?

MR. SELK: Well, Dr. Taylor, the investigation found that whenever a generator ships hazardous waste, a manifest travels with the shipment. A copy of that manifest is transferred to the Department of Environmental Conservation, the state offices. And the data from those manifests goes into the state system and that's how firms are identified as being large-quantity generators.

Now when we met with state authorities, you know they are picking up many of the large-quantity generators but they're not quite 100 percent there in identify them all. But I think they will be there soon.

DR. TAYLOR: So the state is changing
their system for identifying which ones are large quantity versus small quantity?

MR. SELK: Well, I think they have a system in place but it may not be 100 percent. But they have the information. And we have a recommendation that suggests something that they could do with that information.

DR. TAYLOR: Okay. Those are my two questions.

MS. MERRITT: Are there other questions from members of the Board? Dr. Poje?

MR. SELK: Steve, I'm very interested in the aspects of fire codes. I've had a chance to review the New York City fire code. And we did receive, as you pointed out, information in April from experts on other codes.

A wise sage once told me you've got to plan your plan and then you work your plan and then you follow through if you really are going to succeed. You mentioned model codes having an aspect of a hazardous materials management plan.

How fleshed are those provisions in these
model codes? Either the Uniform Code or the International Fire Code?

What kind of substance would they have?

And how would they educate presumably smaller businesses as Dr. Taylor has referred in what is an appropriate approach for hazardous materials management?

MR. SELK: Well, I'm glad you asked that question. Model fire codes are under continuous development. And I was looking this week at the Uniform Fire Code published by the National Fire Protection Association.

And it has a very comprehensive requirement for the submission of a plan. The business is going to submit this plan at the outset. The plan contains things like the quantity of material. First, the identification of everything, then the quantity. Where it is, so a site plan is required as is a floor plan.

And one has to demonstrate that workers are training in normal procedures and the emergency procedures. You know there should be both, day-to-
day procedures and normal procedures for the
materials that are hazardous.

The model fire codes have forms, custom-
designed forms that are designed to walk the
submitter through the process so that the submitter,
being the business, picks up on all the things that
it is expected to do. Materials are to be classified
as to their chemical character and so on.

I think one of the interesting things
about that system is that the burden is imposed on
the private sector to get it done. It's the entity
that wants to have the hazardous materials that has
to submit the plan. And the plan covers all the
things that they should be doing. And that is just
not present in the existing New York City fire codes.

MS. MERRITT: Are there other questions?

Mr. Bresland?

MR. BRESLAND: Thank you, Madame Chair.

One question again about the fire codes. In the
actual report itself, and I don't think you mentioned
this this morning in your abbreviated presentation on
the report, you talk about New York State having
adopted one of the uniform fire codes. But that
doesn't apply to New York City.

Can you expand on that a little bit as to
why that would be the case? And what would be
required for New York State to require New York City
to have a similar fire code?

I wish I could. I'm not sure why it is
that way. You have described accurately, Mr.
Bresland, a situation that it was more than ten years
ago that New York State adopted the International
Fire Code and its provisions for all municipalities
in the state. But those with a population of greater
than one million were exempted. There is only one
with a population of greater than one million and
that's this city.

I suppose the state could exercise its
authority and force the adoption. But my response to
that is you really ought to want to do it. And New
York City wanted to do it in 1918 when it came out
with what was in its day a very fine code I'm sure.
But they haven't done it in the 85 years that have
gone by since.
So I don't know enough about the
governmental process in New York State to
specifically answer your question but I think they
ought to do it.

MR. BRESLAND: Thank you.

MS. MERRITT: Are there any other
questions? I have one. You mentioned that there are
permit fees or fees that are levied for inspections
in the city by the fire department. What is that
for? And are there other fees that are charged for
licensing or inspections for chemical handlers?

MR. SELK: In New York City, there is no
licensing system per se as we did note there was in
place elsewhere. A fee is collected when the permit
is issued. When the fire department issues a permit
saying okay, you're going to have this quantity of
hazardous materials, a fee is levied.

It is not a trivial fee. It is a
substantial fee. And I mentioned I believe it
supports the program. And the program is a program
of inspections.

So we understand that the Bureau of Fire
Prevention, which is the arm of the fire department that issues these permits conducts in excess of 100,000 inspections per year in the city that are related to hazardous materials. And, of course, that is a big program and one that requires funding.

But one source of the funding is the permits themselves.

MS. MERRITT: Okay.

MR. SELK: If not the entire source.

DR. POJE: If I could just --

MS. MERRITT: Dr. Poje?

DR. POJE: -- get one clarification on that very point again? We know from your investigation that the largest -- the entity with the largest reach in penetrating into the community in New York City that they handle hazardous materials is the city's fire department, the Bureau of Fire Prevention.

Comparatively speaking, how does that look in relationship to the DEC, the state-based agency that has responsibilities for hazardous waste enforcement and the federal Occupational Safety and
Health Administration which has responsibilities for
the administration of the Hazard Communication
Standard?

MR. SELK: All right. Well, I think the
difference, Dr. Poje, is that it is hard for the
state to be everywhere. The state programs are not
funded to the degree to allow every workplace to be
inspected. And neither is the Occupational Safety
and Health Administration.

And I'm not sure that that is the intent
of the legislature in formulating the regulations.
These bodies do formulate the regulations. They
formulate what the good practice is but their main
purpose is not enforcement.

You know the difference is that the fire
department do get to all these places every year and
they are very well positioned to exercise control
over the materials and I would suggest that their
requirements ought to be no less stringent than the
state and federal requirements.

MS. MERRITT: How many inspectors does
the State of New York have for Manhattan?
MR. SELK: The state has divided the realm into a number of regions. Each region has two inspectors. Region 2, which covers the New York City area and beyond, has two inspectors. They currently inspect I think it is 78 hazardous waste generators per year. They would have to double that number if they wanted to hit all the large-quantity waste generators. They'd have to double their resources.

MS. MERRITT: And OSHA, how many inspectors does OSHA have?

MR. SELK: I'm afraid I don't know the answer to that question. But as I did say, it is unlikely that OSHA would ever get to a small business like Kaltech. But, again, I emphasize those organizations promulgate standards that describe what business needs to do.

And that is one of their primary roles certainly. I mean they do engage in prosecutions. But why not exercise the content of those standards at the local level as well? Because we do have local enforcement, too.

MS. MERRITT: Okay, thank you very much.
At this time, I'd like to -- oh, Irv? Dr. Rosenthal?

DR. ROSENTHAL: You've known me long enough to call me Irv.

MS. MERRITT: Okay, Irv?

DR. ROSENTHAL: Just curious, the one difference between OSHA, EPA, and the fire department is, of course, OSHA regulations are designed primarily to protect workers who presumably voluntarily take a job and get some compensation, and have some idea what is going on in the workplace.

Presumably the fire department inspects every facility because all of the tenants are at risk and they are at risk by actions that they themselves may be no party to. Am I correct on this score?

MR. SELK: I think so.

DR. ROSENTHAL: Yes, so that I think there has to be a distinction between those hazards which pose serious risks to what we call other occupants of buildings and facilities and those which pose risks only to the employees of that particular entity. And I just wanted to make that point.
MR. SELK: Well, I think that is a very useful clarification, Dr. Rosenthal. Thank you for that.

MS. MERRITT: Thank you. If there aren't any other questions, then at this time, I'd like to ask you to introduce Mr. Barab for our recommendations.

MR. SELK: Well, thank you Madame Chair. That's the important part. And Mr. Jeffress already described to you Jordan's background. He's just one member of the team but has participated with us extensively in the development of recommendations. And he'll describe to you the specifics of what we recommend be done to increase the layers of protection in New York City.

MS. MERRITT: Thank you.

MR. BARAB: Thank you, Madame Chairman, Board members, Mr. Jeffress, Mr. Warner, and members of the public.

I'm here to present the recommendations for this report. I will take a moment to explain for the benefit of the public the recommendations
process. Recommendations are the primary tool used by the Chemical Safety Board to motivate implementation of safety improvements and to prevent future incidents that may endanger lives, communities, or the environment. Recommendations are made to businesses, trade associations, labor unions, and other organizations.

The CSB's independent accident investigation process identifies trends and issues that may otherwise be overlooked. The CSB not only identifies specific issues that may have prevented this specific incident but also identifies changes in management systems that could prevent other similar incidents as well.

In developing this report, the CSB researched issues, consulted with experts on industry best practices, government regulations, and fire codes, and held hearings, as you heard, in the City of New York last April where we heard from city officials, experts on fire codes and hazardous materials management, and members of the public that were effected by this incident.
Recommendations are issued and closed by a vote of the Board.

I will now describe the recommendations and I'll read the text of the recommendations. The first three recommendations go to the Mayor and the Council of the City of New York. The three recommendations deal with the revision of the fire code, the safety of buildings with mixed occupancies, and information exchange between the agencies.

The first recommendation derives from the conclusion of the report, that unlike model fire codes that are enforced in many cities and states around this country, the 85-year old New York City fire code does not address many recent developments in hazardous materials management. These include chemical identification, labeling and training, and prohibitions against mixing incompatible substances.

The Mayor and the City Council have the authority to revise or to issue a new fire code. Therefore, because of the clear gaps in the New York City fire code, we are making the following recommendation to the City and the Council of the
City of New York.

I'll read the recommendation:

Revise the fire prevention code, Title 27, Chapter 4 of the New York City Administrative Code to achieve more comprehensive control over the storage and use of hazardous materials such as nitric acid that could cause a fire or explosion when inadvertently mixed with incompatible substances.

Base these revisions on model fire codes such as the International Code Council's International Fire Code and the National Fire Protection Association's Fire Protection Code.

Require that all hazardous materials be identified and labeled;

That hazardous materials permit applications include a submission of a management plan and an inventory statement;

The material safety data sheets be accessible to the workforce;

The personnel working with hazardous materials be trained on the hazards and safe handling techniques in languages understood by the workforce;
That incompatible chemicals be adequately
separated to improve safety in manufacturing
facilities;

That New York City fire inspectors
receive sufficient training to meet the skills and
knowledge to verify code compliance and recognize
problems regarding storage, handling, and use of
hazardous material.

Include in the training hazard
communication requirements, identification of
hazardous materials storage and use areas, safe
storage and handling practices such as the need to
separate incompatible chemicals and to limit
quantities.

The second recommendation to the Mayor
and the Council of the City of New York addresses the
problem of mixed occupancy buildings. By mixed
occupancy, we mean buildings that may have retail
establishments, commercial establishments, and
businesses with what we call hazardous occupancy,
which means businesses that use and store dangerous
amounts of hazardous chemicals.
The object of this recommendation is to find a way on a building-wide basis to address the potential dangers presented by the use and storage of hazardous materials in mixed use buildings and to assure the tenants have the information they need to protect themselves.

Therefore, we are making the following recommendation to the Mayor and the Council of the City of New York:

Amend the New York City Administrative Code, paragraph 27-4267 to require that the owner or other person having charge of a mixed-occupancy building with a hazardous occupancy be required to develop a building hazardous material safety plan and designate a responsible individual to ensure that the plan is implemented;

A building hazardous material safety plan -- incorporate information from the hazardous materials management plans, inventory statements, right-to-know facility inventory forms, and fire prevention code permits of any tenants who use hazardous materials;
The building hazardous material safety plan be distributed to all tenants.

The third recommendation to the Mayor and the Council of the City of New York addresses information exchanged by the fire department and the Department of Environmental Protection, which administers the New York right-to-know law.

As Mr. Selk detailed, the Department of Environmental Protection or DEP gathers information on facilities that use or store hazardous materials. DEP requires submission by these businesses of annual facility information forms.

DEP compiles this information on the location, quantity, and identification of hazardous materials and shares this information with the Fire Department of New York. But only with the part of the fire department that is concerned with emergency response, not, as Mr. Selk said, with the Bureau of Fire Prevention, which conducts more preventive inspections as part of their permit process.

Therefore, the third recommendation that we are making to the Mayor and the Council of the
City of New York reads as follows:

Ensure that the New York City Fire Department and the Department of Environmental Protection establish a program to exchange facility information regarding hazardous chemical inventories to enhance inspection and enforcement activities.

Our next group of recommendations go to the New York Department of Environmental Conservation. As Mr. Selk related, the New York Department of Environmental Conservation administers the state's RCRA program. RCRA stands for the Resource Conservation and Recovery Act.

RCRA requires businesses to deal safely with their hazardous wastes and requires that all hazardous waste generators properly identify, store, mix, and treat their hazardous waste. RCRA also requires that hazardous waste generators train their workers in safe working procedures.

As I said, EPA confers RCRA authority on the states. And in the State of New York, the Department of Environmental Conservation administers the RCRA program.
Kaltech, as the report indicated, was never inspected by DEC despite the fact that periodically over the last ten years, Kaltech was a large-quantity generator and the fact that it is located in a mixed-occupancy building in a densely populated area.

As Mr. Selk said, DEC is divided into nine regions throughout New York State. Each region has only two inspectors. That includes Region 2 which covers the whole City of New York, all five burroughs of New York. To inspect each large-quantity generator at least once every five years, Region 2 of the DEC would have to double the number of inspections that it does every year.

The report, therefore, recommends to the New York State Department of Environmental Conservation that the agency, and I'll read the recommendation, raise the priority of inspections of large-quantity generators located in mixed occupancy facilities within densely populated areas.

The second recommendation to the Department of Environmental Conservation addresses a
common theme that we've talked about already of information exchange, in this case provision of Department of Environmental Conservation information from Region 2 to the city Department of Environmental Protection and the Fire Department of New York.

I will read the following recommendation to the Department of Environmental Conservation:

Share Region 2 data such as the Resource Conservation and Recovery Act by annual report with the New York City Fire Department and the Department of Environmental Protection concerning the identity, location, and hazardous waste inventories of large-quantity generators within the city to enhance inspection and enforcement activities.

The next recommendations go to Kaltech Industries Group, Incorporated, and its successor business Beyond Signs, Incorporated. As the report indicated, the root causes of this incident were the failure of Kaltech to implement an effective hazard communication program as well as the failure of Kaltech to implement an effective hazardous waste management program.
The Board, therefore, recommends to Kaltech Industries Group and Beyond Signs, Incorporated that they develop and implement a written hazard communication program that includes the following requirements:

- Maintenance of a list of hazardous materials used in the workplace;
- Labeling of hazardous materials;
- Maintaining and making material safety data sheets available to the workforce;
- Training of employees on chemical hazards and their safeguards in languages understood by the workforce.

Two, implement hazardous waste management practices that include the following:

- Characterization of unknown waste materials prior to mixing or disposal;
- Labeling of all waste containers with the words "Hazardous Waste" or any other language necessary to communicate the specific hazards associated with the material; and
- Implementation of a formal hazardous
waste management training program.

Our next recommendations go to the Occupational Safety and Health Administration, OSHA Region II. As the reported stated, Kaltech workers spoke a variety of different languages. In fact, to conduct our interviews, our investigators required the services of translators in Spanish, Polish, and Swahili.

Our investigation revealed that none of the Kaltech workers were aware of OSHA's hazard communication standard nor were they aware of role of OSHA in safeguarding workplace safety and health.

In order to facilitate communication about safe handling of hazardous chemicals, the report recommends that Region II of the Occupational Safety and Health Administration, and I'll read the recommendation:

Disseminate information on the requirements of the hazard communication standard, 29 CFR 1910.1200, in the major languages spoken by workers in New York City with limited or no English-speaking proficiency.
I'll go on to the second recommendation to OSHA. As the report indicated, OSHA had never inspected Kaltech. And as the report indicated, absent any major event such as the one that occurred that caused numerous injuries, or absent a fatality, or in the unlikely event in this case of a worker complaint, it is highly unlikely that OSHA ever would have visited Kaltech or a business as small as Kaltech despite the obvious hazards present as well as the low level of compliance with OSHA standards.

On the other hand, as the report indicated, the Fire Department of New York conducts frequent inspections in small businesses as part of their hazard permit process.

Because the Fire Department of New York is in a position to identify possible workplace safety and health hazards which may be outside their specific jurisdiction, we are recommending a referral process between OSHA and the Fire Department of New York. This would work in the following way:

Where the Fire Department of New York, in the course of its regular inspections, happen to
notice there are possible violation notice standards
or possible workplace health and safety hazards, they
would make a referral to Region II of the
Occupational Safety and Health Administration.

I will read the actual recommendation:

Establish a complaint and referral system
with the New York City Fire Department to provide for
a coordinated enforcement effort that addresses the
following issues:

Policy and practice for referring to OSHA
possible safety and health violations or unsafe
conditions observed by the Fire Department personnel
in the course of conducting inspections but outside
of Fire Department responsibility;

Periodic training programs for Fire
Department personnel on how to recognize and refer
serious workplace safety and health problems.

The report also contains an identical
mirror recommendation for the New York City Fire
Department, which I will not read.

Finally, it is our custom in order to
facilitate broad communication of our investigations
to recommend that certain organizations communicate
the findings and recommendations of this report to
their membership.

Because of the significance of the
recommendations made in this report, we are making
these recommendations to both local and national
organizations.

The local organizations, in alphabetical
order, are the New York City Central Labor Council,
AFL-CIO, the New York Committee for Occupational
Safety and Health, the New York State Conference of
Mayors and Municipal Officials, the Real Estate Board

The national organizations, again in
alphabetical order, are the Association of State and
Territorial Solid Waste Management Officials, the
Building Owners and Managers Association, the
National Conference of Mayors, and the National
League of Cities.

Board Members, this completes the package
of recommendations we are proposing at this time and
I would be glad to entertain any questions.
MS. MERRITT: Thank you, Mr. Barab. At this time, I'd like to open the floor for Board members to be recognized with any questions they might have. Dr. Taylor?

DR. TAYLOR: Thanks, Jordan, for that presentation. And I really like the extent of the recommendations and where they are going. But the question I have for you as well as for our recommendation staff is now that you've proposed these recommendations, what would be your plan for following up to ensure that these recommendations are implemented?

MR. BARAB: Okay, as part of the recommendations process, we work with the recommendations recipient to assist them in adopting the recommendations and closing out the recommendations eventually. We will notify them of the recommendations. We will explain to them what we are talking about. And, again, we'll work with them to comply with our recommendations.

DR. TAYLOR: And do we give them a time frame or something?
MR. BARAB: We'd like them to close these recommendations as quickly as possible. We, of course, realize that there are different types of recommendations. In other words, the recommendations that we have to the City Council and the Mayor of New York for a new fire code is a rather large recommendation.

Some of the recommendations, for example, to Kaltech where we are asking them to adopt a hazard communication program and a hazardous waste program are things that they can't accomplish very quickly if they haven't accomplished them already.

DR. TAYLOR: Okay. Thank you.

MS. MERRITT: I have a question about recommendations to Kaltech and to their Beyond Signs successor. Could you explain to me what that relationship is? I mean Kaltech I understood -- do they still exist?

MR. BARAB: Kaltech at this point does not exist. Kaltech, again, has gone out of business.

Mr. Kahlfan, who was the owner of Kaltech, now works with his son who is the owner of Beyond Signs, a
similar business which we consider to be a successor business.

And so we made our recommendation to Kaltech should it ever resurrect itself as well as to Beyond Signs which is currently in existence.

MS. MERRITT: Is that in the City?

MR. BARAB: Yes, that is in the City. It is in Queens, I believe.

MS. MERRITT: And if Beyond Signs goes out of business and they open up a business somewhere else, do we sort of follow them along in order to see that this is implemented?

MR. BARAB: We will attempt to make sure that this information is communicated to whatever successor businesses follow out of Kaltech and out of Beyond Signs. This is a frequent occurrence among these companies. They often change ownership and we do try to follow the recommendations throughout the ownership.

MS. MERRITT: Okay. Thank you. Are there other -- Mr. Bresland?

MR. BRESLAND: Just as an aside. Does
Kaltech have any plans to relocate its activities to Washington, D.C.?

(Laughter.)

MR. BARAB: We didn't ask if they were expanding to that.

MR. BRESLAND: Okay, good. A question about recommendation No. 2 to the Mayor and the Council --

MR. BARAB: Yes?

MR. BRESLAND: -- which is the recommendation having to do with the safety plan and the designation of a responsible individual. The people who were in the building who didn't work for Kaltech, who would be the people on the upper floors --

MR. BARAB: Right.

MR. BRESLAND: -- do we know if they were aware of the materials that were being used in the building by Kaltech? The hazardous materials?

MR. BARAB: We don't believe so. And this would not be uncommon for people not to necessarily be aware of what other business are
happening in the rest of the building. In fact, as you heard, none of the agencies that provided oversight were even aware, for example, that there were chemicals present in the basement of the building.

MR. BRESLAND: So in this building there were flammable materials and nitric acid? What sort of people worked in the upper floors of the building? What types of businesses were there?

MR. BARAB: I'm not sure. I don't know — Mr. Selk if you could help me there?

MR. SELK: Well, there was an architectural firm I remember. There was a firm that serviced the theater industry in New York. A costume firm that held their inventory of costumes there. Yahoo.com had their offices in that building.

So there was a real variety of tenants. There was one other hazardous occupancy and that was a piano refinishing service business. I believe it was located on the fifth floor. We may have with us some of those tenants today in the audience.

MR. BRESLAND: So they were apparently
ignorant or innocent of the fact that there were
hazardous materials being used in the building?

    MR. SELK: Well, right. And this
recommendations aims at taking the information from
the hazardous materials management plan and
incorporating that into a building-specific plan so
people in the building know what to do if there is an
emergency.

    MR. BRESLAND: Okay. Thank you.

    MS. MERRITT: Are there other questions?

    Dr. Poje?

    DR. POJE: Yes, thank you Jordan and
Steve. I appreciate the difficulty of trying to
practically figure out what could be done to be
improving of the preventative approaches in this
community.

    We have federal responsibilities, we have
state responsibilities, we have local responsibility.
And I think you've -- and private sector business
responsibilities -- and I think you've apportioned
them correctly.

    I do want to return though and just seek
some clarification about the two elements of training that are encompassed within the first recommendation to the Mayor and City Council. Could you just review with me once again who the audience is for those two training aspects? And any reflection you have about the effectiveness of well-run training programs in leading to a more preventative approach.

MR. BARAB: Yes, there are two levels, at least two levels of training that we've been addressing in our recommendations. As we related, we are recommending fairly extensive revisions to the fire code of New York, if not a new fire code should they deem that necessary.

The main focus of those recommendations is to significantly beef up their ability to address hazardous materials issues within the City. In order to do that, the staff at the Bureau of Fire Prevention or whatever entity actually has responsibility for that would obviously need to be trained to carry out those new responsibilities.

And we're talking about if you look at the existing model fire code, you look at some of the
systems in place in cities around the country, we're
talking about some fairly extensive training in order
to, again, address these hazardous materials issues
within the revised fire code.

Now there are actually two other levels
of training. Hazardous waste generators need to
receive training on how to deal with hazardous waste
and there are a variety of points within the
recommendations where workers also need significant
amounts of training in hazard communication, in other
words to deal safely with the chemicals that they are
working with in their workplace as well as to deal
with the hazardous waste that are in their workplace.

DR. POJE: If I can interrupt on that
point? Do you or Mr. Selk know of any training
opportunities on the hazardous waste management
issues that were afforded to this company? And what
actions took place as the result of that?

MR. BARAB: Yes, actually the hazardous
waste carrier, the company that actually picked up
Kaltech's hazardous waste did provide a training
program to its clients and it had offered that
training to Kaltech. They declined to take the
training. So they had it available to them but they
did not avail themselves of that opportunity.

   DR. POJE: And as far as you know under
current circumstances, that's not a mandatory
requirement?

   MR. BARAB: Well, actually, I mean RCRA
does require, again, hazardous waste generators to be
trained and requires that they train their workers.
So, yes it is a requirement under RCRA and,
therefore, a requirement that should be enforced by
the State Department of Environmental Conservation.
So that is a requirement. And they did not avail
themselves of that.

   MS. MERRITT: Actually signing the
manifest is a certification that you've been trained.

   DR. POJE: And then the last point is
more of a point of clarification.

   You are seeking in one recommendation to
have the OSHA federal agency work with the City of
New York's fire department, presumably the Bureau of
Fire Prevention, to develop a referral system. Is
this a -- give me some scope about how rare or unique such a recommendation would be. Has it ever occurred before?

    MR. BARAB: Well, it's a rare -- this is the first time we've made such a recommendation. However, these referral programs between OSHA and -- usually between OSHA and other government agencies are fairly common. OSHA has a number of these around the country. And even has several of these within this region.

    They deal with such common subjects, for example, one of the ones I'm most familiar with is OSHA has a -- I believe in New Jersey -- it has a referral program with the Highway Patrol where the Highway Patrol will, when they observe workplace health and safety problems in highway construction projects, they will refer that to OSHA. And there are many examples of that throughout the country.

    DR. POJE: Thank you.

    DR. ROSENTHAL: Have you ever -- just as a kind of rhetorical question -- tried to list all the regulations and provisions that a small business
owner needs to be familiar with in order to legally
carry out his business in full compliance with the
law?

MR. BARAB: I have not personally done
that although I've heard stories of it.

DR. ROSENTHAL: That was just in passing.

A factual question -- am I correct that the firm
that was licensed and actually performed the removal
of the waste from the Kaltech site did offer a
service by which they would collect the individual
wastes and composite them off site?

MR. BARAB: Yes, I believe so. That's
correct, yes.

DR. ROSENTHAL: I have some comments on
that I'll make later. Thank you.

MS. MERRITT: One last question, I guess,
is you used the term between these two companies,
Kaltech and Beyond Signs as successor company. That
has a specific legal meaning. Could you describe
what the relationship is between these two companies?

MR. BARAB: Yes, again, I'm not an
attorney so I can't speak to this legally. But I
mean in the broadest sense Beyond Signs is owned and operated by the son of the owner of Kaltech.

MS. MERRITT: So they're not common businesses?

MR. BARAB: No, no. Kaltech, itself, does not exist at this point.

MS. MERRITT: But they do the same --

MR. BARAB: Yes, it's a sign-making thing. And Mr. Kahlfan, who owned Kaltech, also works in his son's business at this point.

MS. MERRITT: All right. Are there any other questions at this time?

(No response.)

MS. MERRITT: Well, then if there are no other questions, I'd like to open -- thank you Jordan very much for your presentation. I'd like to open the floor to public comment. I would again like to remind you to please keep your comments germane to this particular case and incident. And also to keep your comments to three minutes or less.

And when you come to the podium up here which is the microphone we've provided, would you
please state your name and your affiliations so that our recorder properly get your name and who you are affiliated with.

Our first person who has registered is Jeremy Hoffman. He is a Legislative Director with Councilwoman Christine Quinn's office.

MR. HOFFMAN: Good morning. I appreciate the opportunity to share our thoughts in response to this report and we appreciate the hard work of this Board.

And I apologize. I don't have too many comments but I did want to kind of show some quick thoughts. This explosion April 25th, I would imagine that none of the members of the Board were in New York and the investigators came quickly thereafter.

I was actually by chance several blocks from the explosion at a meeting. And quickly after hearing the sirens and getting a lot of emergency calls on my cell phone, I immediately rushed to the scene actually kind of at the same time the responders did. So it actually hadn't been secured.

It was a truly horrific and terrifying
sight. And coming on the heels of other events in New York City was a lot to deal with and a lot to see.

And I want to say that our first responders within the fire department and the police department really did a tremendous job responding to that horrific scene when information was not clear what was going on. Nobody knew what was in that building. Nobody knew if it was an accident or some other means.

And true to their obligation to their work, that did not restrain the fire department and police department from rushing in and getting the situation under control. Thankfully there were no fatalities.

And I'd also like to say that the Board quickly set investigators up and they did a very tremendous and prompt job of communicating with myself and Council Member Quinn who, unfortunately, isn't able to be here this morning.

And I'll be honest, I was not familiar with the work of this Board or, frankly, its
existence. And it took a while to figure out who you
were and what you did. But on behalf of the Council
Member and really on behalf of our constituents who
include the rest of Chelsea really thank the hard
work and the detailed kind of follow up that you've
been doing.

In Councilman Quinn's district does
include Chelsea. It goes all the way up to 55th
Street and down to Canal Street and includes Chelsea,
the village, midtown, Hell's Kitchen, other
neighborhoods. This explosion was a real wake up
call for, I think, those of us in city government.

Chelsea is a community that has gone
through a transformation from what used to be a
manufacturing district to now mixed use and
increasingly residential and, frankly, increasing
affluent residential. So there are a lot of
different uses in that community. So this is
particular important information for us.

I've just seen the report. I just was
reviewing it when I was sitting down. The
recommendations of the Board, I think, are very
intriguing and I think very important. Some of them
-- I'd spoken with your investigator earlier in the
process.

So we pledge to you and really, frankly,
the residents of our district in New York City to
look at and begin to work very quickly and promptly
on the implementation. We hope to collaborate with
the administration. We hope to work closely with the
officials at the fire department as well as the
experts within the unions that represent both the
firefighters and the fire officers.

I would like to ask -- and I'm not sure
what the procedure is -- but I'd like to be able to
continue the dialogue with the Board and frankly your
investigators to kind of continue to draw upon their
recommendations because I think they are particularly
timely and important.

Changing the fire code is a huge
undertaking. And I'm not even sure how long it is
going to take. I think the investigators alluded to
this. So I can't give you a firm time line.

I know the city has been going through a
very extensive and exhausting review of the building codes. In areas, as was mentioned, the City of New York is given a large restriction of fire code as it is in many issues of state public policy.

But it is something we will look at, something we will look at in as aggressive a time line as we can. That's going to be a matter of months, not weeks. And requires a lot of input from a lot of experts, continued input from the Board, but as well as a variety of stakeholders.

The fire code, you would know better than I, really impacts a tremendous community of entities in New York City that are all going to want to review it and have input on it. So it is a lengthy process but one that we want to get started and one that we have begun to start on.

We were going to move -- originally we were going to move very quickly on trying to review this process but really thought that it made sense to let the Board do its investigation, get some real technical expertise. That's why we kind of slowed up a little bit. And now, I'm happy to have this
information and to continue forward.

And those really are my thoughts but I once again really did want to thank the diligence of your Board and your investigators who did a tremendous job in communicating with us in City Hall, at least to the Council. And I imagine you did as well on the Mayor's side of City Hall.

If there are questions, I'm happy to answer them.

MS. MERRITT: Thank you very much.

Appreciate it.

MR. HOFFMAN: Sure. Okay. Thank you.

MS. MERRITT: Next we have Victoria Lamb, Parsons-Meares. And if I'm not pronouncing these correctly, please correct me. It doesn't hurt my feelings.

MS. LAMB: Thank you for allowing me to speak. And thank you for the hard work of the investigative team.

I am Victoria Lamb and I represent Parsons-Meares. We were located on the sixth floor of 121 West 19th Street. We are a costume shop. We
produce costumes for many of the productions and
films that I hope you've all seen or will see soon.

We were not aware of the activities of
Kaltech. They entered a separate entrance. We never
saw the workers that we saw on TV after the
explosion.

We were aware of the hazardous materials
on the seventh floor where the piano company was
located. We smelled fumes, et cetera, and we were
able to work with these people to bring that under
control. And we think they abided by any rules.

What happened on the 25\textsuperscript{th}, we were lucky
we had a small staff that day, able bodied. And with
the help of subcontractors in the building, our
people were able to break through a locked, gated
window, and were assisted in jumping to another
building and exiting that way.

All of these recommendations are valid.

That the fire code has to be updated is clear. What
happens after an explosion, however, is unclear.
Despite requests to everyone, every governmental
agency that we could come up with, the only agency
that responded to us in writing was one that said,
"If we had information, we wouldn't give it to you
because there is a criminal investigation."

We understand that this is a hazardous
chemical site, a hazardous explosion. I have 26
employees who don't know today whether they were
contaminated or not, whether they will suffer future
health problems.

There must be some sort of resource for
us to get information post explosion. Thank you.

MS. MERRITT: Thank you very much. The
next person registered is Robert Young, I believe, of
Florham Park Fire Official.

MR. YOUNG: Good morning.

MS. MERRITT: Good morning.

MR. YOUNG: My name is Robert A. Young.
I'm the fire official for the Borough of Florham
Park. I have 35 years of experience in the fire
service. I've been a firefighter and I've been a
chief of the department. I'm also a licensed
building inspector in the State of New Jersey, a
state that does have the International Building Codes
and Fire Codes.

I'm here to talk about -- I didn't hear you talking about what happens to the first responders and the fire department who show up on the scene knowing about these incidents. I'm a member of the International Fire Chiefs Association and been to several cities throughout the country.

And what I would like to see typical to the building at Kaltech and other buildings like this is the building be posted with the DOT placard showing corrosive, health, flammability, and water hazards, too, with the numbers on the building.

In the City of Indianapolis and St. Louis, they've gone about posting these buildings. It makes it aware to the first responders and people going into these buildings if they are trained about these chemicals, they'll know what these signs mean. And we could be aware of to our first responders and medical personnel as well so they may be prepared for these incidents.

Also in your plan, I'd like to see an evacuation plan for the buildings included in your
recommendations to the people who are handling the hazardous chemicals.

Thank you very much.

MS. MERRITT: Thank you very much for your comments. Next is Jeff Glances, Glancer, I'm sorry, I'm not pronouncing that right, a business owner.

MR. GLANCE: Hi, my name is Jeff Glance. And I had Jeff Glance Photography on the tenth floor of 121 West 19th Street.

I would like to thank the Board and I'd like to thank -- I didn't remember her name, the woman from Parsons-Meares. She brought up a lot of good points. I'd also like to thank Mr. Rosenthal and Mr. Bresland for bringing up about problems with the tenants, or the effects to the tenants.

At the last hearing I went to, and this hearing doesn't seem to be much in the way of how it really effects the people involved in the building that weren't working for the company where the explosion happened.

I personally have had emotional trauma
and financial, major financial troubles from this. I
know that some people have gone completely out of
business that have been effected by this.

I may be preaching to the choir on this
but it seemed that the landlord was probably aware of
some of these problems and the people in the building
-- some of the people in the building were aware of
these problems. And that the inspections should have
some teeth to them to that people conform to the
standards.

There were several instances where we had
telephone repairmen in the building that had to go in
the basement to work on the phones. And they came
back up and they said that they refused to work down
there because of the fumes, ventilation problems in
Kaltech and the basement area.

We also got -- as far as what she was
bringing up about environmental problems from the
explosion -- we seem to get different stories from
the landlord and the EPA months after the explosion.
First there was contamination up to the fifth floor.
Then there was an environmental cleaning of the
building that went on for quite a while.

Then we were told it was all clean and it was fine and we could enter the building to retrieve personal items from our businesses. Then we were told by the landlord that there was major contamination and that we would have to have our floors environmentally cleaned.

I was on the top floor. They had told us there was only problems up to the fifth floor. Then they changed their minds and said no, major contamination on the ninth and tenth floor. And then they changed their minds and said no, everything is fine. So we never had an idea of what has been involved there.

Thank you very much.

MS. MERRITT: Thank you very much. Next is Stacey Horton, Launch Radio.

MS. HORTON: Hi there. I was on the second floor that day so I was, in fact, a tenant. And just in reference to a question that was brought up. We were absolutely unaware that there was anything in the basement of the office that I worked
in. I only knew that I worked next door to a sign shop.

And someone else had mentioned there was chemical used on the seventh floor regarding a piano company. I also was unaware that they used chemicals above us as well.

So I just wanted to, in reference to your point, I had absolutely no idea. And wish I had known.

MS. MERRITT: Thank you very much. At this time, is there anyone else in the audience who would like to speak. You certainly are welcome to. Would you please come to the microphone and give us your name and your affiliation?

MR. SCHUFRO: My name is Joel Schufro. I am Executive Director of the New York Committee for Occupational Safety and Health, NYCOSH.

In 1988, the City of New York passed its city right-to-know law which gives residents and community members the right to request information about the toxic substances used by facilities that are stored in the community.
This is a very potent law, we think, that allows community members to express concern and to put in the public's sphere information about the hazardous substances being used.

Since 9/11, the city has -- or shall I say the police department -- has redacted all information on requests filed by its residents. My organization recently filed a right-to-know request to get information about toxic substances used by a facility in Brooklyn.

We received a response from the city which gave us the name of the facility and every other piece of information about the toxic substances stored by that facility was withheld because they were concerned that it would be used by an organization, I assume, that's considered to be a terrorist organization, and might use it for whatever purposes.

We think that this is unfortunate. We think that there is a need for citizens to know what substances are being used in the communities in which they work and live. And we would hope that the
Chemical Safety Board would, in its recommendations, consider developing a -- or recommending to the city that a balanced policy of information release be adopted.

Thank you.

MS. MERRITT: Thank you. If there are no other comments, then I'd like to open the floor to the Board for questions or comments about the vote. Are we ready to --

DR. TAYLOR: There were a couple of things.

MS. MERRITT: Yes?

DR. TAYLOR: Madame Chair, there were a couple of things that were raised during public comment. I just was wondering if I could get the staff?

MS. MERRITT: Yes, Dr. Taylor?

DR. TAYLOR: Mr. Selk, regarding the recommendation about DOT placards? Or evacuation plans in the building? And then the last recommendation for communities to be reminded of the city right-to-know law and that there be a balanced
policy.

Has there been any thought by our recommendation staff or by the investigative staff on any of those issues that were raised during our --

MR. SELK: Well, Dr. Taylor, regarding the second one, no, which is the right-to-know law. Current policy about acknowledging to an inquirer about what materials are there, no, we haven't investigated that matter so we can't comment on it.

Regarding placarding, it was the position -- we didn't consider it. The position of the report was that they have a system in place here. And that system is that the right-to-know data is gathered, combined into the database, and then that database is available to the responders when they are on the way to the scene.

And they get the information, as we understand it, as to what is in the building when they are on route or they can make an inquiry from the office as to what they may have to contend with.

So that's the system and we didn't venture into distinguishing if that system was any
better than any other system.

DR. TAYLOR: Okay.

MR. BARAB: Let me just add one thing to the first part of the question regarding the right-to-know law. Again, as Mr. Selk said, we didn't investigate the effectiveness or the city's compliance with the city's right-to-know law. I do want to turn you though to one recommendation we did make again, that dealt with information that we recommended be provided to building tenants.

And that was in our second recommendation to the City of New York, the Mayor and the Council of the City of New York.

DR. TAYLOR: Okay.

MR. BARAB: And let me just read that one more time.

DR. TAYLOR: All right.

MR. BARAB: We recommended that each building have a hazardous material safety plan. This hazardous material safety plan would incorporate information from the hazardous materials management plans, inventory statements, right-to-know facility
information forms, and the fire prevention code
permits of any tenants in the building that use
hazardous materials.

And then we are recommending that this
hazardous material safety plan be distributed to all
tenants. Now it doesn't quite say that the raw
materials be -- I mean the raw information be
delivered directly to the tenants. But be
incorporated in the building safety plan and that
that plan then be communicated to the tenants in the
building.

MR. SELK: And just to clarify, that
hazardous material safety plan would only to apply to
buildings that had a hazardous occupancy.

DR. TAYLOR: Okay.

MS. MERRITT: Mr. Bresland?

MR. BRESLAND: I have a question of
clarification on the first two recommendations.

The recommendations to the Mayor and the
Council of the City of New York in general deal with
the issue of what we call in here hazardous
materials. The recommendations to NYDEC refer in
general to hazardous waste.

And I just want to make sure that it is your feeling that the term hazardous materials in the recommendations on the fire code and the recommendations to the City of New York would also apply in the generic sense to hazardous waste?

MR. SELK: Well, we have advised the city to make reference to model fire codes when it formulates its plans or its regulations. The Uniform Fire Code does specifically speak to the need to identify what materials are wastes and to characterize them accordingly. That's the 2003 version of the Uniform Fire Code.

So if the city refers to the good work that has been done, they should capture it.

MR. BRESLAND: I guess the point I'm trying to make here is if you have a container of, in this case it was nitric acid, that's being used in their process, that would be, in your term, that would be a hazardous material that would be covered by the fire code.

If the same nitric acid is being deposed
of, it's still nitric acid and it would now be called its waste. But it's still a hazardous material and the regulations should still apply to it.

MS. MERRITT: Yes.

MR. SELK: Well, absolutely, and that is our intent. And I believe that the Uniform Fire Code specifically speaks to it.

MS. MERRITT: I believe also definition under the regulations, just because it is designated as a hazardous waste does not remove it from hazardous substance category.

MR. BRESLAND: Yes, yes, okay.

MS. MERRITT: Are there other questions?

(No response.)

MS. MERRITT: Then what I would like to do is offer this. I think there have been some really excellent points raised. One of the things that we do -- our recommendations while I know people who have been impacted would often like these to be viewed as regulation, they are not. They are non-binding.

But while we have the weight of the
incident and the weight of our investigation and kind
of the bully pulpit behind us with regard to these
recommendations, and we have a very high percentage
of people who respond in a positive way to them, I
would strongly recommend that people who have
concerns about regulation concerning public buildings
and other items that were mentioned here, should work
with your City Councilmen and the City of New York
and possibly even the State of New York to make sure
that these elements are included in state and city
regulation.

Even if we have included some of these in
our recommendations, they would be non-binding over a
long period of time. And even though I'm concerned
about lack of enforcement on the regulations that
already exist, these actually would be voluntary
issues.

And I think that working with your city
and state governments to have these become part of
the code is certainly going to have a stronger impact
than if we were to include them as recommendations.

The other thing is is I would like to
offer that -- and often we have very excellent ideas that are raised and concerns that are raised for which people who have contacted agencies have gotten little or no response, and certainly not satisfied, what I have done in the past and I would like to propose to do here is we have recorded your requests. And what I would do is write a letter to the head of OSHA or the head of the EPA and other people who have authority over these issues to request that they communicate with you concerning your questions.

And I will be happy to write that letter under the authority of the Agency and the Board. And also to copy you so that you know that that letter has been sent. I would ask that communication be made directly to you so that we don't become a middle man in between you and actual information.

So unless the Board feels that some of these ideas should be modified into our recommendations, I would offer to do that at this time.

Dr. Poje?
DR. POJE: Yes, Madame Chair, I think that is an admirable recommendation on how to proceed with this newer information. I just would like to elevate the testimony from Mr. Schufro.

This is a matter that we had discussion with the Department of Environmental Protection in April about this new tension to be had between preparing effectively for emergency response and having full access to knowledge about the hazards that you must be capable of responding to.

And the need to be shielding such information from people whose knowledge of it and use of it could precipitate a problem for those people who are innocents in the situations.

This is not unique to New York City. It is a problem across the whole country right now. And I think we are, as a nation, trying to grapple with the most effective approach.

Clearly we have to have residents in mixed-use buildings fully armed and effective for responding during emergencies and ways to protect themselves, their coworkers and the surrounding
community. And that requires more than just that the
information is had somewhere else under lock and key.

MS. MERRITT: Yes. Then if there are no
other comments, I guess I would ask the question as
to whether or not the Board is ready to bring the
report and the recommendations for a vote. And if
there is a motion so stating?

DR. TAYLOR: Madame Chair, I move that we
approve the CSB staff investigative report and
recommendations regarding a chemical waste mixing
incident on April 25, 2002, at Kaltech Industries
Group, Incorporated, Report No. 200202-1NY.

MS. MERRITT: Thank you, Dr. Taylor. Do
you have any or would you like -- is there a second
please?

DR. POJE: Second it.

MS. MERRITT: And would you have any
comment or do you have any discussion you would like
to begin?

DR. TAYLOR: Well, for me there are
really no additional comments other than your
proposal for the public comments that we received. I
believe it was a good route to go. I think that the report that we have before us is very good. A lot of research and a lot of time was spent in getting this report. And I applaud the investigators and the staff, the recommendations staff.

And my hope from this point is that based on the recommendations, that they will be implemented.

MS. MERRITT: Thank you. Is there any other discussion?

DR. ROSENTHAL: Yes.

MS. MERRITT: Dr. Rosenthal?

DR. ROSENTHAL: Yes, I also would like to commend the staff for a very excellent job. And barring any last minute comments from my fellow Board members, I think I will vote that we move this report as completed.

However, there is one issue that I would like to bring up as part of not the official record of the report but at least hopefully to the attention of the various authorities for future consideration beyond what transpires in the report.
As I said, the report is very good. We're dealing with a hazard, that is materials that are both flammable and reactive.

And this particular incident is related to a scenario in which two hazardous materials that are incompatible were mixed together during disposal and they reacted. That is only one particular way in which these hazards could be expressed and cause injury.

And it's not the most common thing in the world because these incidents aren't occurring every day. But the consequences are potentially extremely serious.

The reaction of these types of materials is not something that is easily known by many people. As best as a record I can see developed, the Kaltech owners were ignorant, not malicious. It was not a question of someone knowing that this danger existed in doing it. It was ignorance.

And there were problems with the agencies due to the lack of resources and authorities. And this is a fairly general problem. And whereas if the
recommendations of the staff are followed, the authorities will be increased.

Unless the world changes dramatically, inevitably there will be a period of time in which the resources will be decreased again. And the report's recommendations, if fully implemented and if fully funded, would go a long way towards addressing this problem.

However, based on past history, it is likely that this problem will reoccur with lack of inspection again. And I would like to suggest that the city in its longer-range plans consider an inherently safer approach to addressing this problem.

This particular accident occurred when two incompatible materials were mixed on site prior to being disposed of. And it lead to a chemical reaction, whose consequences were the explosion.

There are presently means for reducing the likelihood that this mixing will occur. And that is to have an ordinance or practice by which the person who is a large waste disposer in a mixed-use building be required to have the compositing done off
the site.

And the firms that presently dispose of the wastes, presently offer the service of taking the waste in their initial containers without compositing and mixing them off site. And during the time that I worked at a fairly sophisticated chemical company, we did not think we were knowledgeable enough in the research laboratories to mix on site. And we had the mixing done off site.

But in any case, this would be an inherently safer approach. The means of doing this presently exists. The firms would be anxious to do the business. And lots of firms now utilize it. And so I just suggest that somehow either privately or by means of this comment, we ask the city to in the longer run think about this possibility.

Thank you.

MS. MERRITT: And at this time, do you want to change something in the recommendations or are these your observations and comments?

DR. ROSENTHAL: No, I believe that the recommendations in place are in order. And I believe
that the further delays in issuing this report are
not warranted. And I think that we can go ahead and
just append this in a letter or something for them to
consider outside of the report.

MS. MERRITT: Okay. Dr. Poje?

DR. POJE: Yes, just as a short epilogue
to Dr. Rosenthal's comment, I think he makes
important ones. But we did just two weeks ago also
review in session at the Board, in public session, a
report about an incident in the city of Cincinnati
which involved a waste disposal company for whom
vigilance also needs to be observed.

If they are doing it off site, they must
be doing it in a way that is also carefully measured,
monitored, fully equipped with a plan for doing it
safely because in that incident, they took off site
waste materials and started to process them in a very
inappropriate portion of that facility. And caused
an incident that could have been quite deadly for an
individual worker in that workplace.

So the training must be observed with the
same degree of oversight and vigilance to bring about
the actions that we would like to have. But I think Dr. Rosenthal raises a very important point about this longer term issue of how to manage when we know the way of the world will be quite difficult for all regulatory agencies and administrative bodies.

DR. ROSENTHAL: I think the issue of inherently safer can be extended to all aspects of the waste disposal practice. The reason I think it requires special attention is that we're dealing in the -- our friends who had this waste disposal plant with workers who were able bodied and presumably knowing that they are dealing with hazardous materials even though they are not fully instructed.

But in a mixed-use building, as some of our commentators pointed out, there may be people who are not physically able and certainly many who are not in any way being compensated for being exposed to the added hazard of these materials.

And so I think there is an even deeper reason for going to inherently safer measures where you are exposing a mixed public whose physical condition and whose stake in the outcome of the
operations is reduced.

DR. POJE: Very fair point, I just meant
to emphasize that even as they go off site, we want
to retain the highest degree of vigilance about
safety matters to ensure the protection of people in
those communities be they workers or surrounding
neighbors.

MS. MERRITT: Thank you, Mr. Bresland?

MR. BRESLAND: Yes, I'd also like to
commend the staff on a very complex investigation.
The incident itself, I guess, was relatively
straightforward in terms of what happened. But the
ramifications, the political ramifications, the
complexity of your recommendations are duly noted.
And you've certainly done an excellent job.

Dr. Poje was kind enough to bring along a
copy of the New York City Fire Law Handbook, which
is, I guess, the New York City Fire Code. And I was
just glancing at it here and I see subchapter 16
refers to the control of calcium carbide.

Calcium carbide, for those of you who
don't know or who may be younger than me, is the
chemical that when you mix it with water, it forms acetylene and was used in acetylene lamps back in the older days.

I don't imagine that anybody is using calcium carbide to light their homes or their businesses these days. So it's just an interesting example of how quite out of date the fire code is.

Well, I guess it might have been useful during the electrical blackout a few weeks ago.

(Laughter.)

MS. MERRITT: Thank you. And if there are no other comments or any other amendments to be raised with regard to the motion that has been made and seconded, I will read the question. The motion is approve the CSB's staff investigative report and recommendations regarding the chemical waste mixing incident on April 25, 2002 at Kaltech Industries Group, Incorporated, Report No. 200202-1NY.

I'd like to take a roll call vote if I have properly read that. I have? Then Dr. Taylor?

DR. TAYLOR: Approved.

MS. MERRITT: Dr. Rosenthal?
DR. ROSENTHAL: Approved.

MS. MERRITT: Dr. Poje?

DR. POJE: Approved.

MS. MERRITT: Mr. Bresland?

MR. BRESLAND: Approved.

MS. MERRITT: And I also approve. With that, the motion is carried unanimously.

Thank you staff and thank you Board for your attention through this entire matter from beginning to end. And Dr. Poje for your guidance also when this event occurred and following.

With that vote, we're to the end of the planned agenda for today's meeting. And many thanks go to Steve Selk and Jordan Barab for their outstanding work on this complex and important issue.

In a few moments, we will adjourn to convene a press conference to be chaired by Dr. Poje, the Board member who was on scene at that incident back in 2002.

In the mean time, I have a few closing observations. As a nation, we have a great many safety regulations on the books, state, local, city,
and federal. The regulations range from simple to complex.

As a society, we should have confidence that enforcement of these regulations will protect us from preventable hazards as we go about our daily lives. We invest a great deal of our tax dollars and civic effort to ensure that these rules are followed and that workers and the public are protected.

Most responsible companies do follow these regulations, whether or not they ever get inspected. But some do not comply. The Chemical Safety Board has plenty of opportunities and examples that we've investigated as the result of these companies' failure to comply and follow good business practice.

I have a growing concern and we have expressed here on this Board about how many of our investigations involve small companies, those who don't either know about the laws the govern their businesses or don't recognize the hazards of the many chemicals that they are actually dealing with.

Here is a case where a company operated
for many years seemingly oblivious to some of the
most basic chemical safety rules and employees'
rights. The company was inspected by some
authorities and yet continued to do business until
its operations nearly destroyed a building filled
with people.

This same situation could exist in many
other buildings right now as we speak. As citizens,
we're right to be concerned.

We're right to be concerned that other
state and federal authorities never visited this
company. We're right to be concerned that some local
authorities visited this site many times but did not
detect or correct existing safety conditions.

As we heard back in April, New York City
conducts more than a 100,000 fire inspections every
year that relate to hazardous materials. Fire
inspectors visit every site in the five burroughs
where regulated hazardous chemicals are used or
stored.

New York City fire inspectors are
handicapped by an antiquated fire code that was last
overhauled in 1918. And yet there are rules that are on our books that have requirements for notification and safety procedures, some of them issued in 1984 with regard to material safety data sheets and employee right to know.

Fire inspectors not only need a stronger code, they also need better knowledge of the overlapping requirements of state and federal safety and environmental rules. This is time for change.

It is a time for change before another event happens where people may be killed.

At the end of the April hearing, I stated that the Kaltech accident challenges us to do a better job as government safety agencies of which I call ourselves one. The recommendations we adopted today offer an opportunity to better protect the public from chemical hazards in their midst.

I urge the Mayor and the Council of the City of New York to move forward swiftly, to update the fire codes. And I urge all those who receive recommendations to act quickly as well.

Now if there are no other comments from
any other members on the Board, then I call this
meeting adjourned. Thank you.

(Whereupon, the above-entitled meeting
was concluded at 11:24 a.m.)