

Factory Fire involving Sodium Cyanide & Hydrochloric Acid

August 14, 1985

**(Capt. Jack Fanning / FF James Oliveri / FF Larry Singletary
FF John Olewnicki / FF Kevin Smith / FF Dave Murolo
FF Rick Gimbl / FF Rich Murphy Eng. 288)**

Hazardous Materials Company #1 was specially called to Queens Box 6001 and arrived with the first-alarm units. The unit was met with the following conditions: A heavy fire and smoke condition in a 1 story factory; (15x100) with reports from factory personnel of Large Quantities of SODIUM CYANIDE and various Acids and other highly toxic chemicals. First alarm units were ordered out of and away from the fire building. Haz-Mat #1 immediately set up safety boundaries and prepared for a 10-80 Code "1" Operation with Fully Encapsulated suits. Captain Fanning, Firefighters Singletary, Gimbl, the entry team, entered the fire building in Eastwind CP-1111 Butyl Rubber Suits with carbon dioxide and dry Chemical extinguishers. With Heavy Fire in cockloft over members heads and, to their right, the Entry team conducted a survey of factory floor, extinguishing fires around vats of Acid and Drums of Sodium Cyanide: F/F Oliveri protected this team as much as possible by directing a hose stream at the main body of fire. After completing the first attack this team exited the building to be relieved by the safety Team. The Safety Team, Firefighters Oliveri, Murolo, & Singletary suited up and entered the building. They continued to extinguish Fire with CO2 and Dry Chemical Extinguishers. F/F Smith, the resource man, maintained a constant Time Check of members "IN Suit" operating time, while coordinating with members of Haz-Mat #1 and department Officials at the scene. He also suited up in Level "B" PVC Suit to make the final survey. F/F Murphy performed all the necessary Logistical Support for the members, changing of SCBA bottles, aiding in the donning, and exiting of suits, etc. throughout the operation. All these operations were performed on the Hottest day of the year (95 F) which had a very debilitating effect on the members in the Butyl Rubber suits. This operation followed Two extended operations earlier in the day. (Unit operated 10½ hours on this day tour). Despite these conditions Haz-Mat #1 succeeded in extinguishing the extending fire and in mitigating the hazard in the factory by preventing the Sodium Cyanide from mixing with the

Hydrochloric Acid. They exhibited exceptional teamwork and a high degree of technical knowledge and professionalism, bringing the operation to a successful conclusion.

Area in Queens Is Cleared Out In Toxic Threat

A Fire at Factory Raises Danger of Lethal Gas

By ERIC PACE

A fire yesterday at a Queens plant containing various cyanide compounds forced the evacuation of homes in surrounding blocks and injured 11 firefighters, officials said.

The cyanide compounds could have created a lethal gas had they been mixed with water from firefighters' hoses, Fire Department officials said.

The police and firefighters evacuated several blocks surrounding the site of the blaze — a one-story brick building at 100-15 94th Avenue in Ozone Park, a neighborhood of small houses.

At Electroplating Plant

The fire was reported at 2:08 P.M. It broke out in the roof of the 40-by-100-foot building, which houses the Liberty Heat Treating Company, a concern that does electroplating, Fire Department officials reported.

One hundred firefighters in 23 vehicles were at the scene and had the fire under control by 3:08 P.M., said a department spokesman, Firefighter Albert Brown.

The company made no comment. Its telephone was busy late yesterday afternoon, and a man at the scene who was identified by firefighters as the company's owner declined to answer reporters' questions.

There were no reports of other casualties. Firefighter Brown said the 11 firefighters suffered burns and were not injured by the chemicals in the plant. He said that the 11 had been taken to different hospitals but that none were badly burned.

Cyanide Compounds in Drums

A police spokesman, Sgt. Raymond O'Donnell, said late yesterday afternoon that the fire had not reached 74 55-gallon drums at the site containing cyanide compounds.

Fire Chief John J. O'Rourke said at the scene, however, the danger of possible toxic fumes arose not from the effect of the fire but from the possibility that water would mix with the compounds in a vat.

The vat, about 2 feet high and 2 feet in circumference, was entirely filled with a water solution of plating chemicals, 60 percent of which consisted of a mixture of sodium cyanide and potassium cyanide, according to Fire Chief O'Rourke. The two chemicals are described in pharmacology texts as "violent poisons."

Chief O'Rourke said the two chemicals could have given off a cloud of poisonous hydrogen cyanide gas, had they been mixed by water used to put out the fire.



Associated Press

Firefighters working to control a blaze at a building in Ozone Park, Queens, that contained cyanide compounds.



The New York Times/Aug. 13, 1985

Eleven firefighters were hurt, and homes were evacuated.

Hydrogen cyanide is the gas used to fumigate ships and to execute prisoners in gas chambers.

Because of the danger, Chief O'Rourke said, firefighters used carbon dioxide fire extinguishers, not water, in fighting the flames around the vat. Firefighters did use water elsewhere at the fire, the chief said.

Seven specially trained firefighters from the Hazardous Material Unit of the Fire Department, wearing protective clothing, "actually went in to put

the fire out," Firefighter Brown said.

Solutions of either potassium cyanide or sodium cyanide readily dissolve gold, silver and other metals and are therefore highly useful in the electroplating industry since gold and silver are not readily soluble in other materials.

The deputy police chief for support services, John J. Holmes, who was also at the scene, said the total number of families temporarily removed was not known. He said "police officers knocked on doors, house to house," telling the occupants to leave their houses. The residents were allowed to return after the fire was declared under control.

Mayor Comments

Mayor Koch visited the scene at about 4:30 P.M., saying, "I'm here because as soon as I heard there was the potential of hazardous material being scattered in the area, I wanted to come to see what I could do."

Chief O'Rourke and other fire officials said there would be an investigation into the cause of the blaze.

The Chief said it seemed that "the fire started in ordinary combustible materials" in the roofing and was not the result of any chemical reaction or process.

He said that "at this point" officials had no knowledge of any violations of regulations at the plant.

Police and Fire Department officials did not immediately estimate the extent of the damage.

"In an industrial society," the Mayor told reporters, "when you use chemicals, they can be hazardous."

The Mayor also said that city officials would investigate the fire, which, witnesses said, sent heavy smoke pouring from the plant.

New Subway Cars Withdrawn To Remove a Derailment Risk

By United Press International

The Transit Authority said yesterday that it had withdrawn 40 Canadian-made subway cars from service on the IRT No. 1 line because of failure to remove a coupling device that caused a risk of derailment on curves.

A Transit Authority spokesman, Donna Evans, said the device had been attached to the couplings for shipment and should have been removed before they were put into service.

A Transit Authority senior vice president, David Feeley, said the device could cause a derailment in the case of a tight turn.

The devices are expected to be removed from the cars by Aug. 20.

The cars are made by the Bombardier Company in Canada.

Another shipment of Canadian cars scheduled for arrival on Aug. 21 has been suspended pending correction of a modification the authority had ordered.