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October 18, 2004

COMMENTS ON RSPA [Docket No. RSPA-2004-18730]

**IMMEDIATE ACTION NEEDED TO RE-ROUTE EXTREMELY HAZARDOUS (TIH)
RAIL CARGO**

Research and Special Programs Administration (RSPA)
U.S. Department of Transportation (DOT)
Nassif Building Room PL - 401
400 Seventh Street, SW
Washington, D.C. 20590-001

Dear Sir/Madam,

We are responding to the August 16, 2004 DOT and the Department of Homeland Security (DHS) Federal Register (FR) notice soliciting comments on the feasibility of initiating specific security enhancements for the rail transportation of hazardous materials that pose a toxic inhalation hazard (TIH).

After months of delays (see page 9), we must register our extreme concern that before the closing of this comment period we have learned from informed sources that the federal government has reached an agreement with the railroads on a rail security plan for the Washington, D.C. area. In addition, we have learned that any re-routing by CSX may be "voluntary" and that this arrangement will not be announced until mid-November. This smacks of political game playing which has no place in crucial homeland security issues.

Voluntary solutions are unworkable and unenforceable. To buckle under industry pressure on civil defense matters is unseemly. In an April 6, 2004 letter to Greenpeace Transportation Security Administration (TSA) administrator Admiral Stone said, "securing the District of Columbia rail corridor" was "the baseline for shaping national policies in the transport of hazardous materials for other high rail traffic areas" we believe any agreements or decisions regarding Washington, D.C. should not wait until after the election but should be announced immediately.

We also urge you to use your existing authority under DOT rules to immediately begin re-routing all rail shipments of TIH substances around Washington, D.C. Given the expert assessments of this vulnerability and the magnitude of such a disaster it is unbelievable that this was not done following the September 11, 2001 attacks.

Contrary to industry claims, re-routing is not difficult or burdensome for the railroads and other businesses. The best test of whether you have eliminated this potential terrorist

target is directly analogous to the success at Washington, D.C.'s Blue Plains sewage treatment plant eight weeks after September 11th. By switching to safer technologies, no catastrophic terrorist event can now occur there.

Similarly with transportation, if we re-route the daily shipments of hazardous substances (chlorine, ammonia, etc.) that can now be turned into weapons of mass destruction (WMD) we will have taken a target away from the terrorists. Unless we can honestly say publicly that terrorists would be wasting their time by attacking rail cars in the District, then we have failed to eliminate an easily preventable threat to hundreds of thousands of our citizens.

Passenger Rail Threatened

The March 11th terrorist attacks on passenger trains in Madrid, Spain further underscore the need to act quickly and decisively to protect American railroads of all kinds.

On January 23, 2004 Greenpeace wrote urged President Bush, the U.S. DOT, the TSA, Amtrak, Metro, the Maryland DOT and the Virginia Railway Express (VRE). In these letters we urge the President to immediately and permanently suspend these shipments through Washington, D.C. In the case of Washington, D.C. Metrorail, Amtrak, MARC and VRE trains routinely travel side-by-side with CSX freight trains – trains that often carry ultra-hazardous cargo such as chlorine and ammonia.

The rail lines carrying these freight trains also cross over and run adjacent to Metro stations. A December 18, 2003 CSX derailment of a train carrying hazardous materials through the Washington, D.C. metropolitan area (Northern Virginia) and the December 21, 2003 raising of the national threat level to High (Code Orange), are sobering reminders of the seriousness of these risks.

The chemical industry's standard scenario reported for a "worst-case" accident involving a 90-ton rail car of chlorine assumes a disaster zone with a fourteen-mile radius. With the D.C. freight line (four blocks from the Capitol) as ground zero, census data show that 2.4 million area residents, plus the Capitol and the White House and Department of Transportation are well within this zone.

In fact, the CSX tracks are shared with Amtrak, VRE and MARC trains and are parallel to the Metro trains. Several Metro stations are directly below CSX tracks where poison gases could travel in minutes trapping thousands of people. In the event of an attack or serious accident, the loss of life could easily exceed the losses of 9/11. Secondly, the impact on business would also be catastrophic.

Since August, 2001 Greenpeace has urged the U.S. DOT to implement an immediate ban on the shipment of hazardous materials through highly populated areas, such as Washington, D.C. To date, neither the DOT or any other federal agency has taken action to permanently stop these shipments.

The anti-terrorism “Hazardous Materials Transportation Initiative,” announced by Attorney General John Ashcroft and DOT Secretary Norman Mineta on September 30, 2003 was wholly inadequate. By focusing on illegal shipments, this initiative ignores the lion’s share of risks posed by the legal transport of more than 800,000 hazardous materials shipments within the U.S. each day.

The DOT/DOJ initiative also falls far short of the recommendations of the April, 2003 General Accounting Office (GAO) report, Rail Safety and Security: Some Actions Already Taken to Enhance Rail Security, but Risk-based Plan Needed (GAO-03-435) which called for a joint plan between the DOT and the Department of Homeland Security (DHS) to address this threat. The GAO pointed out that “59 percent of the tonnage of toxic-by-inhalation gases moves by rail, representing 95 percent of the ton-miles of these gases.”

The GAO also identified specific risks such as the practice of “storage-in-transit” of rail cars loaded with hazardous materials and the need to notify local communities about the hazardous materials stored and shipped through their backyards. This practice needs to be ended when it involves TIH materials.

In December, 2003 the DOT issued a draft report to the Office of Transportation Policy and Planning of the District of Columbia Department of Transportation "Phase II Preliminary Findings of the DC Motor Carrier Management and Threat Assessment Study." It recommends that truck traffic carrying hazardous materials be prohibited from entering the District." There is no reason to exempt 90 ton rail cars of TIH substances.

Congress and the Nation’s Capitol Propose Solutions

On July 13, 2004 Representative Edward Markey (D-MA) introduced the “Extremely Hazardous Materials Transportation Security Act of 2004” (H.R. 4824). Representative Jerrold Nadler (D-NY) offered this bill in the House Judiciary Committee mark up of the 9-11 Recommendations Implementation Act on September 29, 2004 where it was unanimously accepted. Unfortunately it was taken out of the final 9/11 House bill.

H.R. 4824 would have significantly enhanced rail security and given the DHS authority to re-route shipments of extremely hazardous materials (EHMs) around areas of "concern" which would include cities such as Washington, D.C.

H.R. 4824 would require:

*** The regulation of “extremely hazardous material” (EHM), including substances that are toxic by inhalation, extremely flammable or highly explosive as designated by the Secretary of DHS.

*** Enhanced physical security and the use of as passive secondary containment on tanker valves to reduce vulnerability and minimize the release of EHMs respectively.

*** The pre-notification of EHM to federal, state and local law enforcement authorities.

*** The use currently available technologies to ensure effective communication between shippers of EHM.

*** The re-routing of shipments of EHMs going through an “area of concern” are defined by the Secretary and only if there are a safer routes available or if the shipment originates from or is destined to a location within an area of concern.

The D.C. City Council bill (B15-0525), “The Terrorism Prevention and Safety in Hazardous Materials Transportation Act of 2003,” introduced October 21, 2003 by Council members Kathy Patterson (D), Carol Schwartz (R) and David Catania (R) would prohibit the transport of large quantities of extremely hazardous substances through D.C. unless there is no safer practical alternative route, the shipment is destined for use in D.C. or an emergency requires passage through D.C. It was the first act by any governmental officials in the U.S. to address this threat.

B 15-0525 would prohibit the transport of large quantities of dangerous chemicals unless:

- There is no practical alternative route.
- The ultimate destination is a facility located within D.C.
- An emergency requires passage through D.C.

The Magnitude of the Threat

Imagine an afternoon rush hour on Capitol Hill. Thousands of people are walking home from work, heading into the Metro or caught in traffic, when suddenly they are unable to breathe or even open their eyes. An instant later they collapse, unable to even call for help -- thousands dying by the minute of pulmonary edema, drowning in their own lung fluid.

How could this happen in Washington, D.C.? Every day, freight trains are allowed to bring 90-ton tank cars of hazardous chemicals through the middle of the city, just four blocks from the U.S. Capitol. Greenpeace and other groups have documented the shipment of dangerous materials slowly rolling through the city. The transport of extremely toxic chemicals such as chlorine, ammonia, phosphoric acid and molten sulfur has been witnessed first-hand.

The temporary suspension of shipments of hazardous chemicals through Washington, D.C. for VIP events such as the State of the Union and the September, 2003 NFL/Britney Spears show on the Mall, simultaneously shows an acknowledgment of the threat while continuing to gamble with the lives of hundreds of thousands of D.C. area residents every other day of the year.

Dr. Jay Boris a senior scientist at the Naval Research Laboratory, who testifying before the D.C. City Council on October 6, 2003 and again on January 23, 2004, estimated that more than 100,000 people are at risk within just the first 15 to 30 minutes of a catastrophic accident or attack. He warned that “lethally exposed people can die at the rate of 100 per second.”

Previously, the U.S. Army Surgeon General estimated that 2.4 million people could be killed or injured in a terrorist attack on a U.S. chemical facility. In addition, the Brookings Institute found that U.S. chemical plants represent the third highest risk of fatalities from possible terrorist attacks.

In June, 2003 an FBI specialist on weapons of mass destruction, addressing a chemical industry conference on homeland security, warned, *“You’ve heard about sarin and other chemical weapons in the news. But it’s far easier to attack a rail car full of toxic industrial chemicals than it is to compromise the security of a military base and obtain these materials.”*

In October, 2003 an alleged al Qaeda “scout” was sentenced to 20 years for planning to derail trains in or near Washington, D.C. and sever cables on the Brooklyn Bridge. The impossibility of guarding every mile of railroad is vividly illustrated by the ubiquitous presence of graffiti on railroad cars, tunnels and walls. Never has the verse to the song “Sounds of Silence” been so ominous, “the words of the prophets are written on the subway wall...”

Exotic weapons are not necessary to inflict serious damage to these cargoes. The .50-caliber rifle is a frightening example of a legal weapon that may pose a threat to these transportation targets. The Violence Policy Center has produced sobering reports (available on its web site, www.vpc.org) showing not only that this rifle has the ability to penetrate fuel tanks but that al Qaeda may also have purchased them.

The U.S. Environmental Protection Agency (EPA) and chemical industry standard scenario for a “worst-case” accident involving a 90-ton rail car of chlorine assumes a disaster zone with a fourteen-mile radius. With the Capitol Hill freight line as ground zero, U.S. Census data show that 2.4 million area residents, plus the Capitol and the White House, are within this zone.

This scenario mirrors the 1984 tragedy in Bhopal, India, in which 8,000 people were killed within three days by a catastrophic leak at a Union Carbide plant. A terrorist attack of the magnitude and scope of September 11th on multiple rail cars could result in far more casualties.

In fact, of the 110 worst-case disaster scenarios submitted to the U.S. EPA by chemical facilities, 68 percent involve 90-ton tank rail cars of chlorine. These 110 facilities in 24 states each threaten a million or more people.

Chlorine was also the first chemical weapon used in modern warfare, killing tens of thousands in World War I. According to a December 2000 Argonne National Laboratory report, there are more than 100,000 rail shipments of chlorine in the U.S. every year. The Argonne report warned the DOT: “...*the failure to identify and evaluate opportunities to reduce the risks from these types of relatively rare accidents could ultimately lead to thousands of fatalities, injuries, and evacuations.*”

To understand what chlorine gas can do to people, we don't have to refer to laboratory tests on animals. Chlorine was the first chemical used in warfare in World War I. The Germans used it against the French in Belgium on April 22, 1915 with horrific effect resulting in as many as 5,000 casualties. The following is an excerpt of an account of that attack from the Methodist Recorder:

“a greenish grey cloud had swept down upon them, turning yellow as it traveled over the country, blasting everything it touched, shriveling up the vegetation...[the soldiers] were blinded, coughing, chests heaving, faces an ugly purple colour – lips speechless with agony, and behind them in the gas choked trenches we learned that they had left hundreds of dead and dying comrades...It was the most fiendishly wicked thing I have ever seen.”

According to the U.S. government, by the end of World War I, poison gas had inflicted 1.3 million casualties and 90,000 deaths.

More recently, in Bhopal India shortly after midnight on December 3, 1984, a Union Carbide pesticide factory had a catastrophic chemical leak (42 tons of methyl isocyanate – equal to half a rail car) that killed 8,000 people within days and has claimed as many as 20,000 dead in the years since, making it by far the worst industrial accident in history.

In his latest book, Dominique Lapierre (author of *City of Joy* and *Is Paris Burning*) recounts the Bhopal tragedy in *Five Past Midnight*:

“The horrific, the unspeakable, was happening. Driven by the wind, the wave of gas was catching up with the flood of humanity trying to escape. Out of their minds with terror, people were running about in all directions, with shredded clothes and torn veils, trying to find a pocket of breathable air. Some, whose lungs were bursting, rolled on the ground in awful convulsions. Everywhere the dead with their greenish coloured skins lay side by side with the dying, still wracked with spasms and with yellowish fluid coming out of their mouths.”

Greenpeace intervened in the aftermath of the train tunnel fire that paralyzed Baltimore for almost a week in July, 2001. In August, 2001 we called upon the DOT and the EPA to establish a multi-agency task force to implement a two part prevention program to first halt the transport of these materials through densely populated and ultimately to phase out their use and shipment anywhere.

Following the May, 2003 indictment of an alleged al Qaeda scout who was accused of plotting to derail trains near Washington, D.C., FBI chief Pasquale D'Amuro said the arrest "serves to remind us there are still terrorists in our midst." Ominously, on June 20, 2003, the day after this announcement, a freight train broke loose and rolled out of control for 30 miles before destroying two houses in the Los Angeles area. On June 13, 2003 a CSX freight train derailed just north of D.C. in Jessup, Maryland.

However industry was still only lobbying for their own short-term interests. In comments to the DOT on July 3, 2002 the Chlorine Institute, opposed new regulations proposed by the DOT. Instead they proposed a voluntary industry program even though they conceded that: *"it is clear beyond doubt that no plan, no matter how well-conceived and well implemented, can 'assure' that terrorists will be prevented from carrying out their acts of terror."*

On July 1, 2003 Greenpeace asked the DOT for clarification on federal railroad and other DOT policies regarding the transport of hazardous materials, particularly TIH substances through Washington, D.C. and other highly populated areas. In September we also urged the U.S Secret Service to take action to protect the President and other national leaders by rerouting these shipments around the District.

To verify whether these chemicals are shipped through the District we began watching trains, taking notes and shooting video and still photos. As reported in the January 23, 2004 Wall Street Journal, we also sought assistance from local graffiti artists on access to tracks to discreetly observe trains, their cargo and their exact routes. Like the tunnels, bridges and walls some tank cars also have graffiti on them.

On August 7th, 2003 Washington residents were briefly reminded of these threats when a tank car on a CSX train leaked just six gallons of sodium hydroxide and only tied up rush hour traffic on Capitol Hill. The futility of relying solely on emergency response was also underscored in an August 2003 report that found that a majority of the D.C. fire and EMS departments' hazardous-materials teams had failed an exam testing their competency in responding to emergencies, including chemical or biological attacks.

Even without additional terrorist attacks, we are gambling with the lives of millions nationwide. According to the U.S. Coast Guard's National Response Center, there have been more than 3,000 chemical accidents involving more than 10,000 pounds of hazardous materials since 1987.

The Solution:

The August 16th FR notice correctly warns that "a terrorist attack against the rail transportation of TIH materials in an urbanized area could endanger significant numbers of people." However, this notice goes on to say that "TIH materials play a vital role in our society..." This is a gross overstatement. Virtually all TIH materials have safer available substitutes and while those substitutes are acquired existing TIH materials can be shipped in smaller quantities and on less populated routes.

Shortly after the September 11th attacks, Washington, D.C. recognized that the Blue Plains sewage treatment plant posed a threat to hundreds of thousands of residents. The plant manager said he couldn't sleep at night worrying about the facility's vulnerability to terrorists. He knew there were seven 90-ton rail cars of chlorine stored on site. As a result, Blue Plains expedited the substitution of chlorine with safer chemicals within eight weeks. For only \$.50 more per customer per year, Washington, D.C. eliminated the possibility of such a tragedy.

There is now no reason to ship chlorine into D.C., but still chlorine and many other substances are routinely shipped through the District to facilities elsewhere. For a listing of safer alternatives to other hazardous chemicals see The Safe Hometowns Guide at: www.safehometowns.org

Within a month following the September 11th attacks, U.S. and Canadian railroads imposed a moratorium on shipping TIH chemicals such as chlorine. Unfortunately, that moratorium lasted only 72 hours. To date, no DOT regulations prohibit the routine shipment of these materials through Washington, D.C. or other highly populated areas.

While safer alternatives exist for chlorine and virtually all other TIH chemicals, the most immediate solution to the current transportation risk is to permanently re-route these shipments around densely populated cities.

For the long-term, chemical facilities must also begin an orderly conversion from obsolete hazardous chemicals to safer available materials which should not take more than a decade. There are a host of interim options such as, smaller storage and transport containers, buffer zones and just-in-time inventories that can be implemented quickly that will dramatically reduce, if not eliminate, large scale catastrophes.

Although the chemical industry vigorously lobbies against replacing dangerous chemicals with safer technologies, some industry veterans have been promoting safer technologies for a while. Retired Rohm and Haas engineer, Dennis Hendershot advised, "The first solution to a process safety problem should always be to get rid of the hazard, not control it." Trever Kletz, formerly with Imperial Chemical Industries (ICI) says, "The very best way to prevent an explosion is to simply replace the material that explodes with one that does not or at least keep the stock down so low that it hardly matters if it all leaks out."

It is unconscionable and self serving for industry to place millions of Americans at undue risk, while claiming that 100-year-old obsolete chemicals are "necessary" in a 21st century world. The chemical industry has developed safer chemicals but chooses to continue marketing inherently dangerous substances in disregard of public safety and their own long-term liability. The railroads have a conflict-of-interest in not wanting to give up business to competing lines that run around D.C.

Chlorine use in sewage treatment is actually one of the smaller uses of chlorine (only approximately 4 percent). However sewage treatment is one of the main reasons that chlorine is so widely shipped by rail around the U.S. Its alternatives include sodium hypochlorite (what Blue Plains in D.C. is now using), ozone and ultra-violet (UV) light (what Wichita, Kansas is using).

Environmental Defense produced a report in December, 2003, "Eliminating Hometown Hazards: Cutting Chemical Risks at Wastewater Treatment Facilities." That report documents how 12 of wastewater facilities that put 100,000 or more people at risk have converted their use of chlorine gas since 1999. The full report is at: www.environmentaldefense.org

Unacceptable Delays

Following the January 23rd hearing by the D.C. City Council on the astounding vulnerability of hazardous cargo shipments to terrorist attacks in Washington, D.C., your agency convened a multi-agency "working group" on February 18th. In an April 6th letter to Greenpeace from TSA Administrator, Admiral David Stone, he stated that this working group was "established to explore and determine solutions in securing the District of Columbia rail corridor" and that a "written report" would "serve as the baseline for shaping national policies in the transport of hazardous materials..." As a result, the D.C. City Council agreed to temporarily postpone action on re-routing legislation while the federal government explored options.

DHS Working Group Work Completes Three Reports

By early May the working group had completed a "vulnerability assessment," a "buffer zone protection plan," and a "Hazard Analysis of Control Points (HACC)." At a June 29th meeting with the working group we were told that funding sources were now being identified and an "implementation" target date of September 1st was established for recommendations, including possible "regulations" and/or "directives." As we have pointed out re-routing is the only immediate and cost-free option available to government with minimal cost to industry. However, we have NOT been assured that this option is still on the table.

Threat(s) Still Imminent?

Keeping in mind Secretary Ridge and Attorney General Ashcroft's warnings of new domestic terrorist attacks by the end of the year, possibly before the November elections, it is all the more critical that your agency make a policy decision as soon as possible. With no written report or public recommendations until nearly the third anniversary of the September 11th attacks, it is only reasonable to request an immediate clarification of your agency's next steps.

Delays Have Jeopardized Legislation

The failure to produce a “written report” or recommendations before the D.C. City Council’s July 15th to September 15th recess has delayed and possibly jeopardized the City Council’s legislation (B15-0525) for this year (Congress has 30 legislative days to approve DC laws). This failure also undermined the quality of debate in Congress where H.R. 4824 was ultimately stripped from the 9/11 Commission recommendations bill.

In good faith, Carol Schwartz (R), the D.C. City Council member who chaired the January 23rd Public Works Committee hearing agreed to postpone action while the newly formed “working group” assessed the issue. She strongly favors re-routing but wanted to reach a cooperative solution with the federal government. These on-going delays has abused that good will.

Government Experts Not Consulted

At our June 29th meeting with the federal working group we were also informed that independent experts at other government agencies had NOT yet been consulted. Although CSX railroad has been consulted extensively by the TSA, we urged the working group to consult experts at agencies such as:

*** U.S. Naval Research Laboratory. The lab previously testified at the January City Council hearing. They warned that more than 100,000 people are at risk of death or injury within the first 15 to 30 minutes of an attack and estimated that “lethally exposed people can die at the rate of 100 per second.”

*** National Transportation Safety Board which has just completed a report finding the majority of hazardous materials rail cars do NOT meet industry safety standards;

*** U.S. Environmental Protection Agency (EPA) which receives thousands of accident scenario report from industry, most of which involve 90 ton rail cars;

*** Argonne National Laboratory which produced a report on hazardous materials transport for the Department of Transportation in December, 2000;

*** U.S. Chemical Safety and Hazard Investigation Board which has recently investigated fatal chemical accidents.

Another concern that we expressed to the working group is the Bush administration’s opposition to re-routing prior to the completion of its recommendations. The Federal Railroad Administration’s opposed re-routing at the January 23rd D.C. City Council hearing and Deputy Administrator McHale of the Transportation Security Administration opposed it in testimony before the May 12th House Select Committee on Homeland Security.

Unfortunately this is consistent with the Bush administration’s 2002 about-face on chemical security at the EPA and in Congress. This stubborn resistance to regulation

combined with the unwillingness to take action until there is an attack fails to incorporate key lessons learned from the September 11th attacks.

Re-routing's Impact on Commerce is Minimal

Unlike airline travel, the shipping of ultra-hazardous chemicals through highly populated cities such as Washington, D.C. is unnecessary and completely preventable. In the case of D.C. we know that there are safer routing options (eg., the Norfolk Southern rail line). If there are any cities where there are no safer routing options, smaller quantity shipments and non-toxic substances are also available for most chemicals. In fact, Washington, D.C. converted its sewage treatment plant from chlorine within eight weeks following the September 11th attacks.

CSX has estimates that 8,500 rail cars of hazardous materials pass through Washington, D.C. each year. Based on a December, 2000 Argonne Laboratory report for the Department of Transportation, only 10 of the 150 most shipped hazardous materials are toxic-by-inhalation (TIH). These are the most likely substances (chlorine, ammonia, hydrogen fluoride, etc.) to be turned into WMD and the most important shipments to re-route.

There is no reason why there couldn't be an even trade of TIH rail cars for other hazardous cargo between CSX and Norfolk Southern that would eliminate the catastrophic risk of a terrorist attack on freight rail in D.C. and simultaneously avoid increasing traffic or accident risks on the Norfolk Southern line.

Do Not Remove Hazardous Materials Placards

In their May 7, 2004 letter to DHS Secretary Thomas Ridge, the International Association of Fire Chiefs correctly opposed the removal of hazardous materials placards saying:

"It is imperative that emergency responders be able to quickly and accurately identify these materials in order to safely clean up the hazard and protect themselves, local citizens, nearby property, and the environment...Firefighters and other emergency responders do not have universal access to sophisticated electronic and software programs to identify hazardous materials. Most fire departments, especially small and rural departments which are mostly volunteer, still rely on visual placards for their own safety and protection of the citizenry. This is not an issue that can be appropriately decided by administrative fiat."

The Re-routing Solution

Representatives Markey and Nadler's bill (H.R. 4824) would give the DHS authority to re-route certain substances around "areas of concern" both to be determined by the Secretary.

The D.C. City Council bill (B15-0525) introduced in October, 2003 by Council members Kathy Patterson (D), Carol Schwartz (R) and David Catania (R) would prohibit the transport of large quantities of extremely hazardous substances through D.C. unless there is no safer practical alternative route, the shipment is destined for use in D.C. or an emergency requires passage through D.C.

Thank you for your prompt attention to this urgent matter.

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