## Healthy Schools in New Jersey:

# Preventing Hazards to Students, School Employees, and Construction Workers

Prepared by
New Jersey Work Environment Council (WEC)
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NJ Work Environment Council (WEC) 1543 Brunswick Avenue, Lawrenceville, NJ 08648

Phone: (609) 695-7100
Email: info@njwec.org
Web Address: www.njwec.org
Rick Engler, Executive Director



## New Jersey Work Environment Council

Safe, secure jobs and a healthy, sustainable environment

1543 Brunswick Avenue, First Floor Lawrenceville, NJ 08648-4627 Phone: 609-695-7100 Fax: 609-695-4200 www.njwec.org

The New Jersey Work Environment Council (WEC) is an independent, non-profit organization of 54 labor, community, and environmental organizations working for safe, secure jobs and a healthy, sustainable environment. WEC programs include technical assistance, training, grassroots organizing, and advocacy.

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Maria Osorio, Program Associate for Environmental Justice
Jim Young, Special Projects/Public Affairs Director

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#### INTRODUCTION

This report provides justification for new state policies in New Jersey to ensure healthy schools for students, teachers and other school employees, and construction workers.

These policies, described in Part II, focus on the following key issues:

- safe siting of new schools;
- healthy in-door air quality;
- safety during construction and renovation; and
- improving response to hazards that pose an "imminent danger."

As a first step, Governor McGreevey should issue an Executive Order establishing a *Healthy Schools Advisory Council*. A draft of this Executive Order is provided in Part III. The Council's purpose is to better focus public attention on assuring healthy schools and to facilitate cooperation of the nine state and federal agencies and numerous non-profit organizations concerned about this issue.

These policies are officially supported by 75 organizations, including the New Jersey Education Association, Education Law Center, New Jersey Environmental Federation, Plumbers Union Local 9, and many other community, environmental, religious, and labor organizations. A list of the endorsing organizations is on page 22.

#### **ACKNOWLEDGEMENTS**

Information on school facilities was taken from the web site of the Education Law Center at <a href="www.edlawcenter.org">www.edlawcenter.org</a>. Information on children's health was utilized from *Poisoned Schools: Invisible Threats, Visible Actions*; A Report of the Child Proofing Our Communities Campaign (March 2001), issued by the Center for Health, Environment, and Justice. This report is available at <a href="www.childproofing.org">www.childproofing.org</a>.

#### **PART ONE**

#### Background

Students, along with the whole school population – custodial and maintenance workers, food service workers, secretaries, security officers, bus drivers, teachers, Para educators, and administrators – are potentially exposed all day, at least five days a week, to a wide array of hidden, and not so hidden hazards. Sometimes these hazards are temporarily increased by construction and renovation work that also put building trades workers at risk. National experts say that schools are one of our most hazardous indoor environments. Every day students, teachers, and staff miss school or are less productive because exposure to hazards in the school environment affect their health.

- ➤ We spend about 90 percent of our day indoors in classrooms, in offices, in stores, and at home. One in five of us occupy a school building; the majority are children.
- > Schools are up to four times more densely occupied than many offices, putting heavy demands on ventilation, mechanical, electrical, structural, and plumbing systems and on maintenance and cleaning staff.
- New Jersey's 2,400 school buildings range in age from brand new to 141 years, with an average age of 47 years. Two percent are 100 years or older, 41 percent are older than 50 years. In six counties in the northern third of the state, more than half of their school buildings are over 50 years old. Of the 430 schools in the Abbott districts, 64 percent are over 50 years old and the average age is 62 years.
- Age itself is not the major reason for school facility problems. There have been decades of failure to properly maintain facilities, including ventilation, mechanical, electrical, structural, and plumbing systems
- There are 403 schools for which Status of the Abbott Health and Safety Scopes of Work (SOW) have been developed. This work totals \$650 million. Projects within each SOW have been determined to be critical for student health and safety and range from minor capital projects, such as replacing door hardware or exit signs, to major undertakings, such as roof replacement. It was anticipated that \$100 million in projects would commence in spring 2001, but projects totaling less than \$25 million have been completed one year later. Many projects cannot occur while schools are occupied and are now delayed to the summer 2002 recess.
- ➤ Overcrowding has been an issue in New Jersey schools and in the nation for the last decade. There are 1.3 million students enrolled in NJ schools, 25 percent of them in Abbott districts. New Jersey's enrollments follow national trends and will continue to rise well into the next decade. After 2005, New Jersey might see a slight decline in total statewide enrollment, but high school enrollments will still increase.

#### Healthy Schools During Construction, Demolition, and Renovation

New Jersey will experience an unprecedented amount of school construction and renovation in the next decade. This wave of activity will make it more difficult to ensure the safety of New Jersey students, school staff, and construction workers. Construction, demolition, and renovation work is dangerous. Hazards may change daily depending on the phase of the work. Construction remains the industry with the highest worker injury rate in the United States. Safety hazards include electrocution and falls. Health hazards involve exposure to dust and vapors from a variety of chemically formulated construction products, from flooring to roofing.

Common problems during school construction, demolition, and renovation include dangerous traffic patterns, open construction areas, unattended construction equipment, blocked exits, disabled fire alarm, detection systems, and emergency lights, reduction or cut-off of outdoor air supply, and inappropriate use of school facilities, such as student toilets, by construction personnel.

- > In 1988 the NJ Supreme Court ruled that New Jersey must pay to build or renovate schools in the poorest, largely urban districts the Abbott districts.
- > The Educational Facilities Construction and Financing Act provides up to \$6 billion for Abbott school facilities and \$2.6 billion for non-Abbott districts was enacted on July 18, 2000. This level of spending is the largest public works project in the history of New Jersey.
- All school districts in New Jersey have completed assessments of the physical conditions in school buildings, educational programs, and enrollment projections. These assessments and plans for necessary improvements are the "Long Range Facilities Plans" (LRFPs).
- > The New Jersey Department of Education is encouraging renovation over new construction and is requiring a thorough evaluation of older, historic and landmark buildings.

School renovations, often taking place during school hours, can spread noise, dust and vapors through the school building and into the community.

- The NJ Public Employees Occupational Safety and Health (PEOSH) Program has received numerous complaints from building occupants who have experienced health symptoms from renovation activities. Health effects associated with vapors and dusts generated by these activities include eye, nose and throat irritation, nausea and dizziness, lightheadedness, headache and irritability. Workers performing renovations are also at risk for these health effects.
- > Demolition and renovations may disturb asbestos, lead, and mold.
- > Painting may introduce many chemicals into the indoor environment. In addition to paints, other products such as strippers, primers, and thinners may also be used.

- Off-gassing of volatile toxics after renovations comes from new carpeting, carpet adhesives, partitions, vinyl flooring, paints, furniture, and computers. The chemicals may continue to off-gas from days to months.
- Various roofing applications all pose inhalation hazards. While older methods include applying coal-tar pitch and asphalt, newer roofing technologies use rubber or other synthetic membranes as roofing materials. Roof removal operations may release coal-tar pitch dust that contains polynuclear aromatic hydrocarbons (PAH's). Rubber or synthetic membrane applications use organic solvents in adhesives, primers, sealants and hardening agents. During the application of polyurethane roofing, isocyanates and organic solvent vapors may be released which can cause adverse health symptoms.

#### Toxic Emissions, Soil, and Water Near Schools

Environmental contamination brought inside New Jersey schools includes:

- Tracked-in water, snow, mud and dust, bringing petroleum, lead, moisture, dust and pollutants from nearby industrial or hazardous waste sites. A study issued in January 2002 found there are thirty-six schools within a half-mile of Federal Superfund Toxic Dumps in New Jersey. (CPOCC, 2002) Many more are close to other state designated waste sites.
- > Automobile and school bus exhaust, including carcinogenic diesel exhaust penetrate schools and buses. Many New Jersey schools are close to major roads and airports.
- Industrial air and soil pollution brought in through windows and ventilation systems. A study issued by the New Jersey Work Environment Council in May 2000 of Paterson, NJ, found that an average of 5,957 children attended school within one mile of one of the city's top five industrial air polluters. (NJWEC, 2000)
- A New Jersey Work Environment Council analysis in 2002 of industrial facilities emitting air toxics showed that 135 facilities regulated by the federal Toxics Release Inventory (TRI) are located within Abbott Districts. (See appendix).
- > Radon gas, a particular problem in northwest New Jersey, can be drawn into schools from soil through opening in slabs.
- > Tracked-in dust containing fertilizer, pesticides, and weed killers from playing fields and playgrounds.

#### Safely Siting New Schools

NJ School Districts face challenges to safely site new schools:

- > There is a shortage of appropriate sites for new schools in our densely populated state.
- No guidelines exist to direct school districts where to locate new schools. Schools may be built near:
  - A hazardous industrial or municipal waste disposal site.
  - A potentially hazardous facility, including chemical plants, oil refineries, mines, scrap yards, factories, and dry cleaning operations.
  - Farms, which are sprayed with pesticides.
  - Leaked gasoline or other products from underground storage tanks.
  - Concentrated electrical magnetic fields from high intensity power lines and communication towers.
  - Areas of high concentrations of vehicular traffic such as freeways, highways, industrial plants and facilities

Designation as a brownfield is being used as a real estate promotional tool. Anyone who purchases a brownfield is free of liability for any contamination that may be found. School districts may see brownfields as the only option for keeping schools in close proximity to the community served.

- > NJ Department of Environmental Protection encourages remediation of brownfield pollutants to residential standards but this is not policy. Without such a policy schools could be built on sites cleaned only to commercial or industrial pollution levels.
- ➤ Often no investigation of past land use precedes construction, leaving discovery of chemical contamination until after resources are committed.
- Neighborhoods near industrial complexes are hard pressed to site a "neighborhood" school out of harm's way.
- Land speculation near Penn Station in Newark is making it difficult to purchase sites for the Ironbound neighborhood.
- All of Jersey City's proposed school sites are brownfields.
- Trenton is considering building schools on two brownfields, Magic Marker and Roebling Steel.

#### **Building Healthy New Schools**

Decisions made during school design and commissioning will have lasting effects on energy use, staffing needed for operation and maintenance, reliability, flexibility, vandal proofing, and first costs vs. life cycle costs. In New Jersey, the availability of construction dollars may lead to choosing complicated systems that school districts will not be able to afford to maintain. In particular, the following decisions are critical:

- ➤ HVAC system selection, such as the use of unit ventilators, variable air volume systems, single zone systems, multizone units, water source heat pumps, and separate ventilation air systems. Some of the lower first cost systems cost less to operate because they are simpler. Easily accessible systems are easier to maintain.
- ➤ Under window unit ventilators are easily accessible for maintenance but are noisy and provide less air filtration than central ventilation systems. If soil is contaminated they may draw in pollutants. In this case, unit ventilators can be placed above the ceiling instead of under windows.
- > Intakes for ventilation systems should be located away from potential pollution sources.
- Whether or not to provide mechanical cooling. Many districts consider air conditioning to be a luxury. If the decision is made not to include mechanical cooling, districts should select systems that allow for increasing airflows significantly above code minimums and should provide external shading for all windows.
- Whether or not to provide windows that can open.
- ➤ Whether or not to provide carpeting. If providing, choosing least toxic carpet and carpet adhesive.
- > Style and construction of roofing. Slopped roofs are less likely to leak than flat ones. White roofs are more energy efficient than black ones.
- Choice of least toxic construction materials.

Before school occupancy, it is essential that they be thoroughly inspected to assure that ventilation, mechanical, electrical, structural, and plumbing systems will operate to specifications and that airborne chemicals from building materials have dissipated.

#### Health Problems Affecting School Children

In recent years, researchers have gained far better understanding of children's special vulnerability to chemical exposure (Bearer, 1995; GBPSR, 2000; Landrigan, 1998). Scientists have found that, relative to adults, children require greater protection and that more research on children's responses to chemical exposure is critical. Researchers do not understand all of the interactions between chemical exposure and growing children, but the data clearly justify school and government action to protect children. The rising rate of childhood disease is indisputable.

- Asthma, afflicting nearly 8.6 million US children less than 18 years of age (ALA, 2001), is the primary cause of school absenteeism and hospital admission among chronic conditions (ALA, 2001a).
- ➤ Cancer is the number one disease-related cause of death in children (NCI, 1998). Approximately 8,600 US children—newborns to age 14—are diagnosed with cancer annually. The American Cancer Society estimated that 1,500 children under 15 would die from cancer in 2001 (ACS, 2001).
- ➤ Childhood learning disabilities, hyperactive behavior, and inability to maintain attention have soared nationwide. The number of children in special education programs increased 191% from 1977 to 1994 (GBPSR, 2000).
- ➤ Conservative estimates are that attention deficit hyperactivity disorder (ADHD) affects 3–6% of all school-age children. Some researchers suggest a much higher rate, near 17% (Goldman, 1998).
- Autism appears to be skyrocketing. In California, childhood autism is thought to have risen over 200% between 1987 and 1998 (CHHS, 1999).

Some scientists believe many of these diseases and learning problems may be related to children's exposure to environmental chemicals in the womb or their everyday environment, including their school (GBPSR, 2000; Needleman, 1994).

These increases in disease and disability critically impact the present and future of our nation. Making our children sick or unable to develop their full intellectual potential could devastate future generations, the economy, and our quality of life.

Children are more vulnerable to environmental chemicals for reasons including:

- > They take in more food, drink, and air per day per pound of body weight than adults do.
- > They are adding more tissue more rapidly than at any other period of their lives.
- Their systems are less able to detoxify and excrete poisons.

- > Children crawl and play on the ground and outside, exposing them to more soil contaminants.
- > Children have more hand to mouth contact than adults.
- > They have more time to develop disease.

#### **Conclusions**

All children deserve a healthy school environment and no developing child's educational potential or health status should be undermined because they attend a school with poor ventilation or environmental hazards.

All school employees and construction workers building new schools and renovating old facilities deserve a healthy work environment.

Proactive, prevention-oriented programs and efficiently coordinated efforts by New Jersey state agencies are necessary to assure safe and healthy school environments for children, school employees, and construction workers.

#### References

Needleman, H.L. and Landrigan, P.J. (1994) Raising Children Toxic Free, New York, NY: Farrar, Straus, and Giroux.

School Facilities: Condition of America's Schools. The United States General Accounting Office, HEHS-95-61, February 1995. Available at <a href="https://www.gao.gov">www.gao.gov</a>

The Healthy Schools Handbook. Norma Miller, Ed. 1995. National Education Association of the United States. NEA Professional Library. West Haven, CT. Stock No. 1863-X-00-C4.

Order at www.nea.org

Common Hazards Found in Public Schools, New Jersey Department of Health and Senior Services, Public Employee Occupational Safety and Health Program, April 1997. Available at www.state.nj.us/health/eoh/peoshweb/pubsch.htm

School Facilities: A Challenge for New Jersey. Public Affairs Research Institute of New Jersey, Inc. and New Jersey Institute of Technology. October 1997. Available at <a href="https://www.edlawcenter.org/public\_html/facilities/update.html">www.edlawcenter.org/public\_html/facilities/update.html</a>

Pesticides: Use, Effects, and Alternatives to Pesticides in Schools. The United States General Accounting Office, RCED-00-17, November 1999. Available at <a href="https://www.gao.gov">www.gao.gov</a>

In Harm's Way: Toxic Threats to Child Development, Greater Boston Physicians for Social Responsibility (GBPSR), Cambridge, MA, May 2000. Available at www.igc.org/psr/ihw.htm

Polluting Industries Operate near Schools in Paterson and Clifton, New Jersey Work Environment Council, May 2000. Available at <a href="https://www.njwec.org/pr\_wec%20schools%20report.htm">www.njwec.org/pr\_wec%20schools%20report.htm</a>

Polluting Our Future: Chemical Pollution in the U.S. that Affects Child Development and Learning. National Environmental Trust, Physicians for Social Responsibility and Learning Disabilities Association of America, September 2000. Available at <a href="http://environet.policy.net/health/neighborhood/cehfuture/contents.html">http://environet.policy.net/health/neighborhood/cehfuture/contents.html</a>

EPA Indoor Air Quality (IAQ) Tools for Schools Kit. Updated 2001. Available at <a href="https://www.epa.gov/iaq/schools/tools4s2.html">www.epa.gov/iaq/schools/tools4s2.html</a>

Poisoned Schools: Invisible Threats, Visible Actions. A Report of the Child Proofing Our Communities Campaign, March 2001.

Available at <a href="https://www.childproofing.org">www.childproofing.org</a>

Mold Remediation in Schools and Commercial Buildings, Report EPA-402-D-01-001, US EPA, March 2001.

www.epa.gov/iaq/molds/indes.html

New Jersey Policy Proposals for Safeguarding Our Workplaces, Communities, and Environment. VI. Healthy Schools for Children, School Employees, and Construction Workers. New Jersey Work Environment Council, December 2001 Available by calling 609-695-7100.

Creating Safe Learning Zones: Invisible Threats, Visible Actions. A Report of the Child Proofing Our Communities Campaign, January 2002. Available at <a href="https://www.childproofing.org">www.childproofing.org</a>

Healthy Schools for Healthy Kids; Parents' Guide for Improving School Environmental Health, Ben Davis, Vermont Public Interest Research Group, February 2002. Available at <a href="https://www.vpirg.org/campaigns/environmentalHealth/iaq/iaq\_guide\_toc.html">www.vpirg.org/campaigns/environmentalHealth/iaq/iaq\_guide\_toc.html</a>

Trends in Asthma Morbidity and Mortality, American Lung Association (ALA), ALA Epidemiology & Statistics Unit, January 2001. Available at <a href="https://www.lungusa.org/data/asthma/ASTHMA1.pdf">www.lungusa.org/data/asthma/ASTHMA1.pdf</a>

Asthma in Children Fact Sheet, American Lung Association (ALA) (2001a), ALA, Epidemiology & Statistics Unit, December 2001. Available at <a href="https://www.lungusa.org/asthma/ascpedfac99.html">www.lungusa.org/asthma/ascpedfac99.html</a>.

How are children different from adults? Bearer, C.F., Environmental Health Perspectives 103 (Supplement 6):7-12, September 1995.

Children's health and the environment: A new agenda for preventive research. Landrigan, P.J., Carlson, J.E., Bearer, C.F., Cranmer, J.S., Bullard, R.D., Etzel, R.A., Groopman, J., McLachlan, J.A., Perera, F.P., Reigart, J.R., Lobison, L., Schell, L., and Suk, W.A Environmental Health Perspectives 106 (Supplement 3): 787-794, June 1998.

Changes in the Population of Persons with Autism and Pervasive Developmental Disorders in California's Developmental Services System: 1987 through 1998, A Report to the Legislature, CHHSA, California Health and Human Services Agency (CHHS) Department of Developmental Services, Sacramento, CA, March 1999.

Diagnosis and treatment of attention deficit disorder in children and adolescents. Goldman, L. R., Genel, M., Bezman, R.J., and Slanetz, P.J. Journal of the American Medical Association 279 (14): 1100-1107, 1998

HVAC System Selection, Larry Bullock, 1998 Available at <a href="https://www.mcgranahan.com/schoolplace/7/hvac.htm">www.mcgranahan.com/schoolplace/7/hvac.htm</a> Perception of Indoor Air Quality Associated with Ventilation System Types in Elementary Schools, M.R. Kinshella, et al. Applied Occupational and Environmental Hygiene, Volume 16 (10): 952-960, 2001.

National Cancer Institute (NCI) (1998) Surveillance, Epidemiology, and End Results (SEER) Cancer Statistics Review, 1973-1995, Reis, L.A.G., Kosary, C.L. Hankey, B.F., Miller, B.A., and Edwards, B.K. (Eds), NCI, Cancer Control Research Program, Division of Cancer Prevention and Control, Bethesda, MD.

American Cancer Society (ACS) (2001) Cancer Facts and Figures 2001, ACS, Atlanta, GA. Available on the web at <a href="https://www.cancer.org">www.cancer.org</a>.

#### PART II

#### Policy Proposals for Healthy Schools

The following recommendations are endorsed by 75 labor, community, and environmental organizations:

- 1) **Ensure safe siting of schools.** The DEP, consulting with the Economic Development Authority and the Departments of Education and Health and Senior Services, should *expeditiously* issue a policy on environmentally appropriate siting of new schools. Policies from New York and California can provide guidance. This policy should address school proximity to current and former toxic waste sites, landfills, and industrial facilities that use and emit toxic chemicals and especially those that potentially pose a threat of catastrophic release. **Action:** administrative.
- 2) Ensure healthy air for our children to breathe. DHSS, consulting with EDA, should issue requirements specifically for school ventilation systems to be included in project design specifications. This should address situating of ventilation systems and fresh air intakes away from potential pollution sources, including prohibition of under-window ventilation units if soil around the building is potentially contaminated; filtration of incoming air; whether windows can open; and year-round use of central heating, ventilation, and air conditioning (HVAC) units. Action: administrative and budget adjustment.
- 3) Ensure safety during construction and renovation. The Governor should direct EDA to require more detailed health and safety protections in project design requirements. These requirements (and contract language) should mandate that contractors explain the following points in their "safety and health plan," (required by the *Educational Facilities Construction and Financing Act*, Section 63b(4)):
- a) How they will ensure that employees working on school sites have received a minimum of 10 hours of safety and health training.
- b) How they will identify the "competent person" present on the job site with authority to stop hazardous work (as required by current construction OSHA standards).

- c) The specific measures to be taken to protect students and school personnel from all sources of toxic materials, noise, and other potential hazards during construction and renovation.
- d) Methods and a schedule to monitor for the presence of asbestos and lead before renovations begin.
- e) How they will distribute their safety and health plan to the school district, parent organizations, and relevant building trade and teacher unions.

**Action:** letter to EDA/administrative.

- 4) **Employ safety and health expertise at the EDA.** The Governor should direct EDA to hire personnel with technical expertise in environmental health and construction safety and health to help develop *and* enforce project design requirements. **Action:** letter to EDA and budget adjustment.
- 5) Ensure rapid response to imminent danger concerns. Because OSHA is so understaffed, EDA should establish a central toll-free telephone hotline to receive and document imminent danger complaints concerning school construction. The number should be prominently posted at the worksite and in the school. EDA staff or the project management firm should immediately investigate all imminent danger complaints and, if necessary, halt work until the hazard is abated. Action: letter to EDA.
- 6) Inspect new or renovated buildings before occupancy or reoccupancy. DHSS and DOL, through their PEOSH program, should develop a comprehensive plan to inspect all priority school health and safety projects and to inspect all new and renovated public schools and wing additions before occupancy. These agencies should set criteria for passing such inspections, including checking compliance with indoor air quality standards and ensuring that airborne chemicals from building materials have dissipated. Ten new DHSS staff may be required. EDA should fund this initiative. Action: administrative and budget adjustment.
- 7) **Establish a Healthy Schools Advisory Council.\*** The Departments of Health and Senior Services, through the Public Employees Occupational Safety and Health Program (PEOSH), should promptly establish and coordinate an ongoing task force to advise state government on preventing hazards to construction workers, school employees, and students. It should

hold public hearings on these issues, review proposed regulations, and provide oversight of government safety and health enforcement in schools. This task force should also evaluate the experience of New York state in implementing their law requiring schools to have facility health, safety, and environmental committees composed of teachers, administrators, and parents. The task force should include representatives of the Departments of Labor, Education, and Environmental Protection, Economic Development Authority, Rutgers University, N.J. Education Association, American Federation of Teachers, N.J. State Building and Construction Trades Council (AFL-CIO), N.J. School Boards Association, Coalition for Our Children's Schools, Education Law Center, N.J. Work Environment Council, parent and school nurse organizations, and others. The committee should also request participation by the federal Occupational Safety and Health Administration (OSHA), which enforces safety and health standards that apply to private contractors. **Action:** executive order.

\*See following section proposing creation of a Healthy Schools Advisory Council, which incorporates this specific proposal.

#### PART THREE

#### Proposed Executive Order Establishing A Healthy Schools Advisory Council

6th DRAFT - January 20, 2002

State of New Jersey
Executive Department
Executive Order No.

WHEREAS, many of physical structures of New Jersey's public schools are old and deteriorating, which has resulted in leaking roofs, crumbling plaster, rodent and insect infestation, alongside all too frequent instances of substandard plumbing, electrical, and ventilation systems; and

WHEREAS, scientific research has established that asthma is one of the leading cause of school absenteeism due to chronic illness, each year accounting nationally for more than 10 million missed school days and has further established that children with asthma and rhinitis are especially susceptible to the effects of poor heating, cooling or ventilation systems and indoor contaminants, including molds and chemical pollutants; and

WHEREAS, there is increasing scientific evidence suggesting that exposure to even relatively small amounts of toxic substances can contribute to children's developmental, learning, and behavioral disabilities; and

WHEREAS, all children deserve a healthy school environment and no developing child's educational potential or health status should be undermined because they attend a school with poor ventilation or environmental hazards, such as exposure to lead, pesticides, cleaning chemicals, asbestos, mold or other pollutants; and

WHEREAS, all school employees and construction trade workers building new schools and renovating old facilities deserve a healthy work environment; and

WHEREAS, teachers and other school personnel suffer preventable injuries and illness at work and construction remains an industry with a high worker injury rate; and

WHEREAS, New Jersey's Education Facilities Construction and Financing Act commits our state to provide children a public school education "...in physical facilities that are safe, healthy, and conducive to learning;" and

WHEREAS, proactive, prevention-oriented programs and efficiently coordinated efforts by state agencies are necessary to assure safe and healthy school environments for children, school employees, and construction workers;

NOW, THEREFORE, I, JAMES E. McGREEVEY, Governor of the State of New Jersey, by virtue of the authority vested in me by the Constitution and by the Statutes of this State, do hereby ORDER and DIRECT:

- 1. There is hereby established in, but not of, the Department of Health and Senior Services, the Healthy Schools Advisory Council ("Council").
- 2. The Council shall consist of twenty-seven (27) members as follows:
  - (a) The Commissioner of Health and Senior Services, the Commissioner of Education, the Commissioner of Environmental Protection, the Commissioner of Labor, the Commissioner of Community Affairs, and the Executive Director of the Economic Development Authority, or their designees, shall serve as ex-officio, non-voting, members of the Council.
  - (b) The Governor shall appoint the following public members: four (4) members representing public school districts, at least two of whom shall represent "Abbott" districts; two (2) members representing public school parent organizations; two (2) members representing public school student organizations; two (2) members representing teacher and public school employee organizations; two (2) members who are public school nurses; one (1) member who is a physician with expertise in pediatric health; one (1) member who is a physician with expertise in occupational medicine; two (2) members representing construction trade unions; and five (5) members representing non-profit institutions and/or organizations with expertise concerning healthy school environments.
- 3. The term of office of each public member shall be three years.
- 4. The public members of the Council shall serve without compensation but shall, subject to State appropriation, be entitled to reimbursement for all actual and necessary expenses incurred in the performance of their official duties.
- 5. A public member designated by a majority of Council members shall chair the Council.
- 6. The Council shall organize and meet as soon as practicable after the appointment of a majority of its members and shall meet monthly, whenever practical.
- 7. A majority of the membership of the Council shall constitute a quorum for the transaction of Council business. Actions may be taken and motions and resolutions adopted by the Council at any meeting thereof by the affirmative vote of a majority of the members of the Council present and voting.
- 8. The Council shall:
  - (a) Serve as an advisory body to the Governor and state agencies and may hold public meetings or hearings on the development of policies and programs, including legislation, and regulation, designed to assure safe

- (b) and healthy school environments for children, teachers and other school employees, and construction workers.
- (c) Review and, if necessary, recommend changes to state policies addressing: (i) siting of new schools involving locations potentially contaminated by toxic materials and/or proximate to facilities releasing hazardous substances; (ii) initial design of schools to promote healthy learning environments; (iii) in-door air quality and school ventilation systems; (iv) procedures involving construction safety and health, such as employee training requirements, government response to imminent danger situations, protection of students and school personnel from exposures to toxic materials, such as asbestos, lead, pesticides, volatile organic compounds, and mold during construction, renovation, and occupancy; (v) purchase of products, such as cleaning supplies, that may help promote healthy school environments; (vi) promotion of student, parent, and employee notification and participation concerning these issues; and (vii) adequacy of state agency expertise, data collection, enforcement, and resources concerning matters pertaining to healthy schools.
- (d) Review relevant occupational and environmental health and safety research and statistics, including governmental inspection data, concerning healthy schools; and
- (d) Review and evaluate state and federal policies concerning healthy schools.
- 9. The Council is authorized to call upon any department, office, commission, authority, or agency of the State government to provide such information, resources or other assistance deemed necessary to discharge its responsibilities under this Order. Each department, officer, division, commission, authority, and agency of this State is hereby required to cooperate with the Council and to furnish it with such information, personnel, and assistance as is necessary to accomplish the purposes of this Order.
- 10. The Council shall seek participation in its activities by the U.S. Environmental Protection Agency, the Occupational Safety and Health Administration of the U.S. Department of Labor, and other relevant federal agencies.
- 11. This Order shall take effect immediately.

Attest: /s/

GIVEN, under my ha	and and seal,
This day of	, in the year
of our Lord Two Tho	ousand and Two,
and of the Independe	nce of the United
States, Two Hundred	l
/s/ James E. McGree [seal]	vey, Governor

#### Questions and Answers about the Proposed Executive Order

## • Is the new Council necessary? Would it be better just to implement the actual policies recommended by this report?

The council is not a substitute for policy development and implementation. However, seven state agencies and two federal agencies have major responsibilities for aspects of healthy schools (see next page). These agencies do not meet together. We believe the council is a prerequisite for effective policy development and ongoing government coordination.

Many non-profit organizations are also involved with healthy schools. These include parent groups, unions, the school nurse association, the organization of school facility managers, as well as health, community, environmental, and advocacy organizations. They also do not meet together.

In a period of declining resources for government, it makes sense to promote much greater public participation.

#### The state is facing a fiscal crisis. How can staff support for the Council be funded?

WEC estimates that staffing the council requires 50% of the time of one professional staff member in the Department of Health and Senior Services. In 2001, the U.S. Department of Labor's Occupational Safety and Health Administration approved New Jersey to receive significant federal funds -- \$1.7 million in that year alone -- for its *Public Employee Occupational Safety and Health State Plan.* A legitimate use of this ongoing federal support is for consultation and education programs, including staff for the council.

## • Can the Council delay or block funding for school site acquisition, renovation, or construction?

No. The Council is an advisory body. However, by helping to develop pro-active environmental and occupational health policies and programs, it will help prevent hazards that often cost millions of dollars for remediation if not anticipated.

## State and Federal Agencies with Responsibilities Concerning Healthy Schools

State Agencies	Responsibilities
Department of Health	Occupational health compliance inspections and consultation in
and Senior Services	public sector workplaces, right to know training/labeling.
Department of Labor	Occupational safety compliance inspections and consultation in
	public sector workplaces, workforce training for school construction trades.
Department of	Site remediation, environmental impact assessment, regulation of
Environmental	industries using extremely hazardous substances.
Protection	
Department of	Approves school districts five year plans and project
Education	applications. Oversees student health and school nurses.
Economic	Distributes money to school districts under the Educational
Development	Facilities Construction and Financing Act, including site
Authority	acquisition and construction. Issues bidding specifications,
	"health and safety" plan requirements, etc.
Department of	Coordinates community development and monitors adherence to
Community Affairs	building codes. Issues certificates of occupancy.
Department of	Oversees childcare centers, including in preschools.
Human Services	
Federal	Responsibilities
Agencies	
Occupational Safety	Occupational health and safety compliance for private sector
and Health	construction and other contractors.
Administration	
Environmental	Indoor air quality education, e.g. Tools for Schools programs
Protection Agency	

WEC has also developed an extensive list of non-profit advocacy, health, community, environmental, and labor organizations with concerns about healthy schools.

#### PART IV Endorsing Organizations

As of January 24, 2002, the following organizations have officially endorsed these proposals:

NEW JERSEY WORK ENVIRONMENT COUNCIL

#### Environmental, Consumer, Community, and Religious Organizations

AFFORDABLE HOUSING AND COMMUNITY DEVELOPMENT NETWORK OF NJ ASBURY PARK CONSORTIUM

ASSOCIATION OF NEW JERSEY ENVIRONMENTAL COMMISSIONS

**BLACK MINISTERS COUNCIL** 

CHILDHOOD LEAD POISONING EMERGENCY RESPONSE

**COALITION AGAINST TOXICS** 

COMMUNITY HEALTH & ENVIRONMENTAL COALITION OF NEW BRUNSWICK

CONSUMERS FOR CIVIL JUSTICE

**EDISON WETLANDS ASSOCIATION** 

EL CENTRO HISPANOAMERICANO

**EDUCATION LAW CENTER** 

FAMILY CIRCLE BAPTIST CHURCH

GREATER FAITH CHURCH OF THE ABUNDANCE

HACKENSACK RIVERKEEPER

HISPANIC DEVELOPMENT CORPORATION

IRONBOUND COMMUNITY CORPORATION

JERSEYANS UNITED - JUST

KINGDOM OF MIGHT MINISTRIES

METUCHEN-EDISON NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF COLORED PEOPLE (NAACP)

NATURAL RESOURCES DEFENSE COUNCIL

NEW JERSEY CITIZEN ACTION

NEW JERSEY ENVIRONMENTAL FEDERATION

NEW JERSEY ENVIRONMENTAL JUSTICE NETWORK

NEW JERSEY ENVIRONMENTAL LOBBY

NEW JERSEY PUBLIC INTEREST RESEARCH GROUP CITIZEN LOBBY

PATERSON TASK FORCE FOR COMMUNITY ACTION

PLAINFIELD NAACP

PUBLIC INTEREST LAW CENTER OF PHILADELPHIA, ENVIRONMENTAL

PROJECT (Representing residents in Camden, New Jersey)

RAHWAY NAACP, HEALTH & ENVIRONMENT COMMITTEE

SCHOOL OF AFRICAN PHILOSOPHY

SIERRA CLUB - NEW JERSEY

#### **Labor and Worker Organizations**

AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS, RUTGERS COUNCIL

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES DISTRICT 2

AMERICAN FEDERATION OF STATE, COUNTY, AND MUNICIPAL EMPLOYEES COUNCIL 1 (AFSCME)

AFSCME – NATIONAL UNION OF HOSPITAL AND HEALTH CARE EMPLOYEES – 1199J

AFSCME - NEW JERSEY

BERGEN COUNTY CENTRAL TRADES AND LABOR COUNCIL, AFL-CIO

BROTHERHOOD OF MAINTENANCE OF WAY EMPLOYEES

BURLINGTON COUNTY CENTRAL LABOR UNION, AFL-CIO

CATA (COMITÉ DE APOYO A LOS TRABAJADORES AGRÍCOLAS) – FARM WORKERS SUPPORT COMMITTEE

COMMITTEE OF INTERNS AND RESIDENTS, SERVICE EMPLOYEES – INTERNATIONAL UNION

COMMUNICATIONS WORKERS OF AMERICA (CWA) DISTRICT 1

CWA LOCAL 1031

CWA LOCAL 1034

CWA LOCAL 1037

CWA LOCAL 1040

CWA LOCAL 1081

COUNCIL OF NEW JERSEY STATE COLLEGE LOCALS, AMERICAN FEDERATION OF TEACHERS (AFT)

HEALTH PROFESSIONALS AND ALLIED EMPLOYEES, AFT

INTERNATIONAL BROTHERHOOD OF TEAMSTERS LOCAL 877

INTERNATIONAL FEDERATION OF PROFESSIONAL AND TECHNICAL ENGINEERS LOCAL 195

LABORERS INTERNATIONAL UNION OF NORTH AMERICA LOCAL 300, NATIONAL POSTAL MAIL HANDLERS UNION (LIUNA)

LIUNA LOCAL 1030

MERCER COUNTY LABOR UNION COUNCIL, AFL-CIO

MONMOUTH AND OCEAN COUNTIES CENTRAL LABOR UNION, AFL-CIO

NEWARK TEACHERS UNION - AFT LOCAL 481

NEW JERSEY EDUCATION ASSOCIATION

NEW JERSEY INDUSTRIAL UNION COUNCIL

NEW JERSEY JOBS WITH JUSTICE COALITION

PAPER, ALLIED-INDUSTRIAL, CHEMICAL, & ENERGY WORKERS (PACE) REGION 1

PACE LOCAL 1-149

PACE LOCAL 2-380

PACE LOCAL 2-397

PACE LOCAL 2-943

PASSAIC COUNTY LABOR COUNCIL, AFL-CIO

PHILADELPHIA AREA PROJECT ON OCCUPATIONAL SAFETY AND HEALTH (including members in Southern New Jersey)

PLUMBERS AND PIPE FITTERS LOCAL 9

SERVICE EMPLOYEES INTERNATIONAL UNION (SEIU) – 1199 NEW JERSEY

SOUTHERN NEW JERSEY CENTRAL LABOR COUNCIL, AFL-CIO

UNION OF NEEDLETRADES, INDUSTRIAL AND TEXTILE EMPLOYEES (UNITE!), NEW JERSEY STATE COUNCIL

UNITED AUTO WORKERS (UAW) COMMUNITY ACTION PROGRAM

UNITED AUTO WORKERS AMALGAMATED LOCAL 2327

UTILITY WORKERS UNION OF AMERICA LOCAL 534

The following are some letters of endorsement urging Governor McGreevey to issue an Executive Order establishing a *Healthy Schools Advisory Council*.

Schools Memo Final Edition

Eileen R. Fox 1715 S.H. 45 Mullioa Hill, NJ 08062 (856) 478-6907

January 10, 2002

Mr. Mitchell Ostrer
Office of the Governor-Elect - State of NJ
240 West State Street
P.O. Box 022
Trenton, NJ 08625-0022

RE: Creation of Healthy Schools Advisory Committee

Dear Mr. Ostrer,

Please accept this letter as to my support for an Executive Order by Governor-Elect McGreevey creating a "Healthy Schools Advisory Committee". This Committee, as outlined by Rick Engler, N.J. Work Environment Council, would be extremely beneficial in keeping our children safe while in a school environment.

As parents of sick children due to their exposure to chemicals in their elementary school, we know first hand the importance of establishing such a Committee. As a Senator, Governor-Elect McGreevey also saw the importance of protecting our children by Co-Sponsoring legislation on our daughters behalf. This legislation (S-246 - Parent/Student Right To Know Law) was signed into law by Governor Christine Todd Whitman in January 1998. Flowever, this law does not cover the many aspects that a Healthy Schools Advisory Committee would be undertaking. I believe that this Committee would only benefit and enhance the existing laws now protecting our children.

It is also note worthy to mention that among the members of this Committee a consideration should be made to medical professionals who are knowledgeable in Pediatric Medicine. This would enhance the Committee greatly in advising them of possible effects based on children. Most if not all information is based on the adult male, not children.

Thank you for taking time away from your busy schedule to consider this letter of support. I hope that Governor-Elect McGreevey will also support the establishment of this Committee.

Eileen R. Fox

Very truly yours.

Parent



**New Jersey Education Association** 

180 West State Street, P.O. Box 1211, Trenton, New Jersey 08607-1211 (609) 599-4561 FAX: (609) 392-6321

January 24, 2002

Mr. Mitchell Ostrer Governor's Policy Counselor The State House P.O. Box 001 Trenton, N.J. 08625

Dear Mr. Ostrer

On behalf of the New Jersey Education Association, which represents more than 170,000 employees in public schools throughout New Jersey, I strongly urge you to support the Work Environment Council (WEC) proposal for a Healthy Schools Advisory Council.

This council would serve as an advisory body to the Governor and to various state agencies that deal with health-related issues. WEC has proposed it as part of a solution to address the problems of structural and environmental conditions in many of the state's public schools. As a member of WEC, NJEA fully supports the draft of the attached proposal for an Executive Order by Gov. McGreevey. This document clearly underscores the need for a sharp focus on construction and repairs as well as on prevention-oriented programs that would protect the health of school employees and of the state's most valuable asset for the future – our children.

Once again, I strongly urge your support of the proposed Executive Order and would be more than happy to discuss with you further this important matter.

Sincerely,

Edithe Fulton President

EF/BKB/ep



Winner of the NJ Governor's Award for Outstanding Achievement in Pollution Prevention

January 14, 2002

Mr. Mitchell Ostrer Office of the Governor-Elect State of New Jersey 240 West State Street P.O.Box 022 Trenton, NJ 08625 – 0022

Re: Creation of Healthy Schools Advisory Committee

Dear Mr. Ostrer:

I am writing in support of an Executive Order by Governor Elect McGreevey creating a "Healthy Schools Advisory Committee". This Committee, as outlined by Rick Engler of NJ Work Environment Council, would provide sound policy for keeping NJ's school children in a safe environment while they are in school.

With the ambitious renovation and school construction projects planned for NJ's more than 600 school districts, the possible exposure to hazards from these projects to school children looms large. Exposure to lead, dust, asbestos, pesticides, volatile organic compounds, noise, and other hazards must be minimized, yet there is no coherent state policy to protect children in school from "occupational" exposure.

The NJ Environmental Federation has assisted some schools in identifying and reducing pesticide exposures, and in doing so we note the deficiency in state policy to address these exposures. Whether it be from indoor pesticide spraying for roaches and ants, athletic fields sprayed with weed killers and insecticides, or arsenic contaminated soil on school sites that used to be apple orchards, children can be subject to pesticide exposures that could easily be prevented if the proper policies and practices were in place.

The NJ Environmental Federation looks forward to working with Governor McGreevey in implementing policies to make children safer from environmental hazards. Creating the "Healthy Schools Advisory Committee" is a positive step towards that end.

Sinderely,

dane Mogaki

Pesticide Program Coordinator



### PLUMBERS AND PIPEFITTERS LOCAL UNION NO. 9

CENTRAL NEW JERSEY



#### 2 IRON ORE ROAD AT ROUTE 33, ENGLISHTOWN, NJ 07726

Telephone: (732) 792-0999 · Fax: (732) 792-1999



Business Manager Secretary-Tressurer MICHAEL F. CANTWELL Business Agents

MICHAEL K. MALONEY, Assistant Business Manager
JOSEPH M. DELISA THOMAS J. MATUSZ
JOHN LOUTH, JR. ALBERT W. PITMAN
ORLANDO R. CANDELORI, Air Conditioning Division

Special Organizers
JOSEPH J. DILL, JR.
THOMAS P. TIGHE
DEAN FEASEL

February 21, 2002

Mr. Mitchell Ostrer Governor's Policy Counselor The Statehouse PO Box 001 Trenton, NJ 08625

Dear Sir:

I am writing this letter as an endorsement of creating a Healthy Schools Advisory Committee.

In my position as President of the New Jersey State Association of Pipe Trades and Business Manager of Plumbers and Pipefitters Local Union No. 9, I represent over 14,000 members and their families.

New Jersey's Education Facilities Construction and Financing Act has committed our state to provide educational facilities that are healthy, safe and conducive to learning.

Our children, school employees, teachers and construction workers deserve a healthy environment both to learn or to earn a living.

The state needs prevention oriented programs and proficient agencies to assure safe and healthy school environments.

I firmly believe developing the Healthy Schools Advisory Council would be a giant step forward for New Jersey.

Sincerely,

Michael F. Cantwell

Business Manager, Secretary-Treasurer

MFC/val

C: Rick Engler



## HEALTHY SCHOOLS NETWORK, INC.

773 Madison Avenue • Albany, NY 12208 • Tel: 518-462 0632 • Fax: 518-462-0433 www.healthyschools.org

Mitchell Ostrer, Office of the Governor-Elect State of New Jersey 240 West State Street PO Box 022 Trenton, NI 08625-0020

January 4, 2002

Re. Healthy Schools Executive Order

Dear Mr. Ostrer:

I am writing on behalf of Healthy Schools Network, Inc. (HSN) to voice our support for a New Jersey Executive Order creating a Healthy Schools Advisory Committee.

The set of issues comprising any healthy schools agenda is complex, and involves expertise in health, environment, education, child environmental health and adult occupational health. As such, it is a set of issues that would benefit from executive leadership across several agencies and many constituency groups, each of which must play an important role. Start with children: shouldn't New Jersey design, build, and operate schools in ways that protect children's environmental health?

My organization started by offering information and technical assistance to parents of 'sick kids in sick buildings', and now also helps groups in other states develop initiatives to solve school facility environmental problems. At their root, many of these problems are about *indoor environmental quality* and occupational exposures. And most are preventable with the adoption and enforcement of best environmental management practices in facility siting, design, construction, and operations.

Over the last few years, we have provided long-distance information or assistance to over 150 individuals and groups in New Jersey. Recently, the American Public Health Association has urged all its local members and state affiliates to support healthier school facility efforts; US EPA has established a Schools WorkGroup; and in December, Congress adopted Healthy and High Performance School provisions into the new USD Education budget. This modest record suggests that the issue is ripe for executive action.

If you have any questions, please call.

Sincerely

Claire L. Barnett Executive Director

cc: R. Engler, WEC





## CENTER FOR CHILDREN'S HEALTH AND THE ENVIRONMENT

MOUNT SINAI SCHOOL OF MEDICINE

MOUNT SINAL SCHOOL OF MEDICINE

January 9, 2002

Mitchell Ostrer
Office of the Governor-Elect – State of New Jersey
240 West State Street
P.O. Box 022
Trenton, NJ 08625-0022

Dear Mr. Ostrer:

I am a Pediatrician and Director of the Center for Children's Health and the Environment at the Mount Sinai School of Medicine. I am writing you to urge Governor-Elect McGreavey to issue an Executive Order early in his term creating a Healthy Schools Advisory Committee for New Jersey. Creation of such a Committee would be an important measure for the protection of children's health, and it would signal the Governor's strong commitment to health, environment and education.

Schools are a potentially important source of toxic and hazardous exposures for children. Many schools in New Jersey and across the United States contain asbestos and lead. Many schools make excessive use of pesticides and these pesticides pose health hazards to children. A number of schools use pressure-treated lumber for their playground equipment, and this lumber can be a significant source of arsenic. Some schools have antiquated water systems that are potential sources of exposure to lead. Certain school laboratories use benzene or other toxic chemicals that pose carcinogenic and toxic hazards. Many arts and crafts materials that are available in schools in New Jersey and across the United States contain toxic products.

The creation of a Healthy Schools Advisory Committee would signal the commitment of the State of New Jersey to address and resolve these problems. It would mobilize public opinion and direct appropriate attention to these issues.

Sincerely

Philip J. Landrigan, M.D., M.Sc.

Professor and Chair, Department of Community and Preventive Medicine

Professor, Pediatrics Department

Director, Center for Children's Health and the Environment

cc: Rick Engler, Director

New Jersey Work Environment Council

## U.S. EPA Toxic Release Inventory (TRI) Facilities within Abbott Districts,1999

Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.	District	County	Facility Name	Air Releases in Lbs.*
Burlington City Burlington Colorite Specialty Resins Burlington City Burlington Geon Co. Burlington City Burlington Geon Co. Burlington City Burlington Rimtec Corp. Burlington City Burlington Camden Cogen L.P. Camden City Camden Camden Cogen L.P. Camden City Camden Camden Cogen L.P. Camden City Camden F. W. Winter Inc. & Co. Camden City Camden State Metals Inds. Inc. Elizabeth Union Apex Chemical Corp. Elizabeth Union Contact Inds. Elizabeth Union Magruder Color Co. Inc. Elizabeth Union Phelps Dodge Specialty Garfield Bergen O'Neil Color & Compounding Garfield Bergen Primex Plastics Corp. Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Cambell Fndy. Co. Hoboken Hudson Cambell Fndy. Co. Hoboken Hudson Cambell Fndy. Co. Hoboken Hudson Essex Bleema Mfg. Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Alpha Metals Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Miliville Cumberland Whaden Silverton Marine Corp. Miliville Cumberland Whaden Silverton Marine Corp. Miliville Cumberland Whaden Silverton Marine Corp. Miliville Cumberland Wheaton USA Inc. Glass Ops. New Brunswick Middlesex Delphi Energy & Chassis Sys. New Brunswick Middlesex Alphagary Corp. Newark Essex Alphagary Corp. Newark Essex Alphagary Corp.	Burlington City	Burlington		12,250
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Camden City Camden F. W. Winter Inc. & Co. Camden City Camden State Metals Inds. Inc. Elizabeth Union Apex Chemical Corp. Elizabeth Union Contact Inds. Elizabeth Union Contact Inds. Elizabeth Union Magruder Color Co. Inc. Elizabeth Union Ogden Aviation Ser. Co. of NJ Elizabeth Union Ogden Aviation Ser. Co. of NJ Elizabeth Union Phelps Dodge Specialty Garfield Bergen O'Neil Color & Compounding Garfield Bergen Primex Plastics Corp. Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Indco Inc. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Hudson Generating Station Jersey City Hudson Hudson Generating Station Jersey City Hudson Hudson Generating Station Miliville Cumberland Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Miliville Cumberland Silverton Marine Corp. Miliville Cumberland Silverton Marine Corp. Miliville Cumberland Silverton Marine Corp. Miliville Cumberland Wheaton USA Inc. Glass Ops. New Brunswick Middlesex Pero Ind. Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alphagary Corp. Newark Essex Alphagary Corp.		Camden	Camden Cogen L.P.	36,659
Camden City Camden State Metals Inds. Inc. Elizabeth Union Apex Chemical Corp. Elizabeth Union Contact Inds. Elizabeth Union Cycle Chem. Inc. Elizabeth Union Magruder Color Co. Inc. Elizabeth Union Ogden Aviation Ser. Co. of NJ Elizabeth Union Phelps Dodge Specialty Garfield Bergen O'Neil Color & Compounding Garfield Bergen Primex Plastics Corp. Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Indco Inc. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Hudson Generating Station Jersey City Hudson Hudson Generating Station Jersey City Hudson Hudson Generating Station Jersey City Hudson Metallix Inc. Jersey City Hudson Durand Glass Mfg. Co. Millville Cumberland Milville Cumberland Durand Glass Mfg. Co. Millville Cumberland Milville New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Perro Ind. Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Alexander Cop. New Brunswick Middlesex Alexander Cop. Newark Essex Alphagary Corp. Newark Essex Alphagary Corp.	Camden City	Camden	Camdett Corp.	16,340
Elizabeth Union Apex Chemical Corp.  Elizabeth Union Contact Inds.  Elizabeth Union Cycle Chem. Inc.  Elizabeth Union Magruder Color Co. Inc.  Elizabeth Union Ogden Aviation Ser. Co. of NJ  Elizabeth Union Phelps Dodge Specialty  Garfield Bergen O'Neil Color & Compounding  Garfield Bergen Primex Plastics Corp.  Gloucester City Camden Amspec Chemical Corp.  Gloucester City Camden Indco Inc.  Gloucester City Camden Koch Petroleum Group L.P.  Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1  Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2  Harrison Hudson Campbell Fndy. Co.  Hoboken Hudson Cognis Corp.  Irvington Essex Bleema Mfg. Corp.  Irvington Essex Richards Mfg. Co. NJ L.P.  Jersey City Hudson Adriex Inc.  Jersey City Hudson Hudson Generating Station 3.5  Jersey City Hudson Hudson Generating Station 3.5  Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Metallix Inc.  Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Wheaton USA Inc. Glass Ops.  New Brunswick Middlesex Akoros Chemicals America  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Akoro Chemical Co.  New Brunswick Middlesex Allence Chemical Inc.  New Brunswick Middlesex Allence Chemical Inc.  New Brunswick Middlesex Allence Chemical Inc.  New Brunswick Middlesex Alphagary Corp.  Newark Essex Alphagary Corp.	Camden City	Camden	F. W. Winter Inc. & Co.	10,317
Elizabeth Union Cycle Chem. Inc. Elizabeth Union Cycle Chem. Inc. Elizabeth Union Magruder Color Co. Inc. Elizabeth Union Ogden Aviation Ser. Co. of NJ Elizabeth Union Ogden Aviation Ser. Co. of NJ Elizabeth Union Phelps Dodge Specialty Garfield Bergen O'Neil Color & Compounding Garfield Bergen Primex Plastics Corp. Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Indco Inc. Gloucester City Camden Roch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Apha Metals Inc. Jersey City Hudson Hudson Generating Station Jersey City Hudson Hudson Generating Station Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Wheaton UsA Inc. New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Acco Chemical Co. New Brunswick Middlesex Alphagary Corp. Newark Essex Amerada Hess Corp.	Camden City	Camden	State Metals Inds. Inc.	-
Elizabeth Union Cycle Chem. Inc.  Elizabeth Union Magruder Color Co. Inc.  Elizabeth Union Ogden Aviation Ser. Co. of NJ  Elizabeth Union Phelps Dodge Specialty  Garfield Bergen O'Neil Color & Compounding  Garfield Bergen Primex Plastics Corp.  Gloucester City Camden Amspec Chemical Corp.  Gloucester City Camden Indco Inc.  Gloucester City Camden Koch Petroleum Group L.P.  Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1  Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2  Harrison Hudson Campbell Fndy. Co.  Hoboken Hudson Cognis Corp.  Irvington Essex Bleema Mfg. Corp.  Irvington Essex Max Marx Color Corp.  Irvington Essex Richards Mfg. Co. NJ L.P.  Jersey City Hudson Acrilex Inc.  Jersey City Hudson Elemnetis DPC Inc.  Jersey City Hudson Metallix Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton Usa Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Alphagary Corp.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.	Elizabeth	Union	Apex Chemical Corp.	-
Elizabeth Union Magruder Color Co. Inc.  Elizabeth Union Ogden Aviation Ser. Co. of NJ  Elizabeth Union Phelps Dodge Specialty  Garfield Bergen O'Neil Color & Compounding  Garfield Bergen Primex Plastics Corp.  Gloucester City Camden Indco Inc.  Gloucester City Camden Koch Petroleum Group L.P.  Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1  Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2  Harrison Hudson Campbell Fndy. Co.  Hoboken Hudson Cognis Corp.  Irvington Essex Bleema Mfg. Corp.  Irvington Essex Richards Mfg. Co. NJ L.P.  Jersey City Hudson Acrilex Inc.  Jersey City Hudson Elemnetis DPC Inc.  Jersey City Hudson Metallix Inc.  Miliville Cumberland Durand Glass Mfg. Co.  Miliville Cumberland Wheaton USA Inc. Glass Ops.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Alphagary Corp.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.	Elizabeth	Union	Contact Inds.	-
Elizabeth Union Ogden Aviation Ser. Co. of NJ  Elizabeth Union Phelps Dodge Specialty  Garfield Bergen O'Neil Color & Compounding  Garfield Bergen Primex Plastics Corp.  Gloucester City Camden Amspec Chemical Corp.  Gloucester City Camden Indco Inc.  Gloucester City Camden Koch Petroleum Group L.P.  Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1  Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2  Harrison Hudson Campbell Fndy. Co.  Hoboken Hudson Cognis Corp.  Irvington Essex Bleema Mfg. Corp.  Irvington Essex Max Marx Color Corp.  Irvington Essex Richards Mfg. Co. NJ L.P.  Jersey City Hudson Acrilex Inc.  Jersey City Hudson Alpha Metals Inc.  Jersey City Hudson Hudson Generating Station 3.5  Jersey City Hudson Metallix Inc.  Jersey City Hudson Metallix Inc.  Jersey City Hudson Metallix Inc.  Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex Rhodia Inc.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.	Elizabeth	Union	Cycle Chem. Inc.	•
Elizabeth Union Ogden Aviation Ser. Co. of NJ Elizabeth Union Phelps Dodge Specialty Garfield Bergen O'Neil Color & Compounding Garfield Bergen Primex Plastics Corp. Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Indco Inc. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Alpha Metals Inc. Jersey City Hudson Hudson Generating Station 3. Jersey City Hudson Hudson Generating Station 3. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Pero Ind. Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alliance Chemical Inc. Newark Essex Alphagary Corp.	Elizabeth	Union	Magruder Color Co. Inc.	-
Garfield Bergen O'Neil Color & Compounding Garfield Bergen Primex Plastics Corp. Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Indco Inc. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Elemnetis DPC Inc. Jersey City Hudson Hudson Generating Station Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alliance Chemical Inc. Newark Essex Alphagary Corp.		Union	Ogden Aviation Ser. Co. of NJ	2,260
Garfield Bergen O'Neil Color & Compounding Garfield Bergen Primex Plastics Corp. Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Indco Inc. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Elemnetis DPC Inc. Jersey City Hudson Hudson Generating Station Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alliance Chemical Inc. Newark Essex Alphagary Corp.		Union	Phelps Dodge Specialty	5
Garfield Bergen Primex Plastics Corp. Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Indco Inc. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Alpha Metals Inc. Jersey City Hudson Hudson Generating Station Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Perro Ind. Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alphagary Corp. Newark Essex Alphagary Corp.				-
Gloucester City Camden Amspec Chemical Corp. Gloucester City Camden Indco Inc. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Elemnetis DPC Inc. Jersey City Hudson Metallix Inc. Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Alco Chemical Inc. Newark Essex Alphagary Corp.			Primex Plastics Corp.	-
Gloucester City Camden Indco Inc. Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Elemnetis DPC Inc. Jersey City Hudson Hudson Generating Station 3,1 Jersey City Hudson Metallix Inc. Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alphagary Corp. Newark Essex Alphagary Corp.				510
Gloucester City Camden Koch Petroleum Group L.P. Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Elemnetis DPC Inc. Jersey City Hudson Hudson Generating Station 3,9 Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Perro Ind. Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alphagary Corp. Newark Essex Amerada Hess Corp.		<u> </u>		-
Gloucester City Camden PRC-Desoto Intl. Inc Loc. 1 Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Alpha Metals Inc. Jersey City Hudson Hudson Generating Station Jersey City Hudson Metallix Inc. Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Perro Ind. Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Essex Alliance Chemical Inc. Newark Essex Alliance Chemical Inc. Newark Essex Amerada Hess Corp.				45
Gloucester City Camden PRC-Desoto Intl. Inc Loc. 2 Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Alpha Metals Inc. Jersey City Hudson Hudson Generating Station 3, Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Perro Ind. Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alphagary Corp. Newark Essex Amerada Hess Corp.		<del></del>		-
Harrison Hudson Campbell Fndy. Co. Hoboken Hudson Cognis Corp. Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Alpha Metals Inc. Jersey City Hudson Elemnetis DPC Inc. Jersey City Hudson Hudson Generating Station 3, Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Perro Ind. Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Alliance Chemical Inc. Newark Essex Alphagary Corp. Newark Essex Amerada Hess Corp.				3,112
Hoboken Hudson Cognis Corp.  Irvington Essex Bleema Mfg. Corp.  Irvington Essex Max Marx Color Corp.  Irvington Essex Richards Mfg. Co. NJ L.P.  Jersey City Hudson Acrilex Inc.  Jersey City Hudson Elemnetis DPC Inc.  Jersey City Hudson Hudson Generating Station 3,4  Jersey City Hudson Metallix Inc.  Jersey City Hudson Metallix Inc.  Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Alliance Chemical Inc.  Newark Essex Alliance Chemical Inc.  Newark Essex Amerada Hess Corp.				45
Irvington Essex Bleema Mfg. Corp. Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Alpha Metals Inc. Jersey City Hudson Elemnetis DPC Inc. Jersey City Hudson Hudson Generating Station 3,5 Jersey City Hudson Metallix Inc. Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Delphi Energy & Chassis Sys. New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Essex Alliance Chemical Inc. Newark Essex Alliance Chemical Inc. Newark Essex Alliance Chemical Inc. Newark Essex Amerada Hess Corp.				9,268
Irvington Essex Max Marx Color Corp. Irvington Essex Richards Mfg. Co. NJ L.P. Jersey City Hudson Acrilex Inc. Jersey City Hudson Elemnetis DPC Inc. Jersey City Hudson Hudson Generating Station 3,5 Jersey City Hudson Metallix Inc. Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Delphi Energy & Chassis Sys. New Brunswick Middlesex Ferro Ind. Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Rhodia Inc. Newark Essex Adco Chemical Co. Newark Essex Alliance Chemical Inc. Newark Essex Alphagary Corp. Newark Essex Amerada Hess Corp.		<del></del>		-
Irvington Essex Richards Mfg. Co. NJ L.P.  Jersey City Hudson Acrilex Inc.  Jersey City Hudson Alpha Metals Inc.  Jersey City Hudson Elemnetis DPC Inc.  Jersey City Hudson Hudson Generating Station 3,9  Jersey City Hudson Metallix Inc.  Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Rhodia Inc.  Newark Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				40
Jersey City Hudson Alpha Metals Inc.  Jersey City Hudson Elemnetis DPC Inc.  Jersey City Hudson Hudson Generating Station 3,4  Jersey City Hudson Metallix Inc.  Jersey City Hudson Metallix Inc.  Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Aliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				
Jersey City Jersey City Hudson Jersey City Hudson Hudson Generating Station Jersey City Hudson Hudson Generating Station Jersey City Hudson Metallix Inc.  Jersey City Hudson Metallix Inc.  Jersey City Hudson Nicholas Galvanizing Co. Inc. Millville Cumberland Durand Glass Mfg. Co. Millville Cumberland Silverton Marine Corp. Millville Cumberland Wheaton USA Inc. Glass Ops. Neptune Monmouth Lambda EMI New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Delphi Energy & Chassis Sys. New Brunswick Middlesex Ferro Ind. Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Middlesex Adco Chemical Co. Newark Essex Alliance Chemical Inc. Newark Essex Alphagary Corp. Newark Essex Amerada Hess Corp.				250
Jersey City Hudson Elemnetis DPC Inc.  Jersey City Hudson Hudson Generating Station 3,5  Jersey City Hudson Metallix Inc.  Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Rhodia Inc.  Newark Essex Adco Chemical Co.  Newark Essex Aljangary Corp.  Newark Essex Amerada Hess Corp.				60,000
Jersey City Hudson Metallix Inc.  Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				24,700
Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				3,502,580
Jersey City Hudson Nicholas Galvanizing Co. Inc.  Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				0,002,000
Millville Cumberland Durand Glass Mfg. Co.  Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				392
Millville Cumberland Silverton Marine Corp.  Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				332
Millville Cumberland Wheaton USA Inc. Glass Ops.  Neptune Monmouth Lambda EMI  New Brunswick Middlesex Akcros Chemicals America  New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				129,241
New Brunswick Middlesex Akcros Chemicals America New Brunswick Middlesex Delphi Energy & Chassis Sys. New Brunswick Middlesex Ferro Ind. Inc. New Brunswick Middlesex New Brunswick Plating Inc. New Brunswick Middlesex Rhodia Inc. New Brunswick Essex Adco Chemical Co. Newark Essex Alliance Chemical Inc. Newark Essex Alphagary Corp. Newark Essex Amerada Hess Corp.				315
New Brunswick Middlesex Delphi Energy & Chassis Sys.  New Brunswick Middlesex Ferro Ind. Inc.  New Brunswick Middlesex New Brunswick Plating Inc.  New Brunswick Middlesex Rhodia Inc.  New Brunswick Middlesex Rhodia Inc.  Newark Essex Adco Chemical Co.  Newark Essex Alliance Chemical Inc.  Newark Essex Alphagary Corp.  Newark Essex Amerada Hess Corp.				313
New Brunswick       Middlesex       Delphi Energy & Chassis Sys.         New Brunswick       Middlesex       Ferro Ind. Inc.         New Brunswick       Middlesex       New Brunswick Plating Inc.         New Brunswick       Middlesex       Rhodia Inc.         Newark       Essex       Adco Chemical Co.         Newark       Essex       Alliance Chemical Inc.         Newark       Essex       Alphagary Corp.         Newark       Essex       Amerada Hess Corp.				1,922
New Brunswick       Middlesex       Ferro Ind. Inc.         New Brunswick       Middlesex       New Brunswick Plating Inc.         New Brunswick       Middlesex       Rhodia Inc.         Newark       Essex       Adco Chemical Co.         Newark       Essex       Alliance Chemical Inc.         Newark       Essex       Alphagary Corp.         Newark       Essex       Amerada Hess Corp.				10,276
New Brunswick       Middlesex       New Brunswick Plating Inc.         New Brunswick       Middlesex       Rhodia Inc.         Newark       Essex       Adco Chemical Co.         Newark       Essex       Alliance Chemical Inc.         Newark       Essex       Alphagary Corp.         Newark       Essex       Amerada Hess Corp.				33,700
New Brunswick       Middlesex       Rhodia Inc.         Newark       Essex       Adco Chemical Co.         Newark       Essex       Alliance Chemical Inc.         Newark       Essex       Alphagary Corp.         Newark       Essex       Amerada Hess Corp.				33,700
Newark       Essex       Adco Chemical Co.         Newark       Essex       Alliance Chemical Inc.         Newark       Essex       Alphagary Corp.         Newark       Essex       Amerada Hess Corp.				70.041
Newark     Essex     Alliance Chemical Inc.       Newark     Essex     Alphagary Corp.       Newark     Essex     Amerada Hess Corp.				70,941
NewarkEssexAlphagary Corp.NewarkEssexAmerada Hess Corp.	<del></del>			6,139
Newark Essex Amerada Hess Corp.				2,621
	<del></del>	<del></del>		
INOWARK IECOV IAMFOR COM				5,099
	Newark	Essex	Amrod Corp.	6,330
NewarkEssexAnheuser-BuschNewarkEssexAtla Refy. Inc.				8,350

## U.S. EPA Toxic Release Inventory (TRI) Facilities within Abbott Districts,1999

District	County	Facility Name	Air Releases in Lbs.*
Newark	Essex	Automatic Electro-Plating Corp.	-
Newark	Essex	Benjamin Moore & Co.	3,015
Newark	Essex	Bennett Heat Treating and Brazing	-
Newark	Essex	BP Exploration & Oil Inc.	335
Newark	Essex	Cardolite Corp.	9,000
Newark	Essex	CDI Dispersions Inc.	590
Newark	Essex	Chem-Fleur/Firmenich Inc.	3,948
Newark	Essex	Chemical Compounds Inc.	1,655
Newark	Essex	Criss Cross Inc.	514
Newark	Essex	Crompton & Knowles Colors Inc.	115
Newark	Essex	CWC Ind. Inc.	1,510
Newark	Essex	Deleet Merchandizing	2,507
Newark	Essex	E.J. Brooks Co.	
Newark	Essex	Elan Chemical Co.	1,194
Newark	Essex	Equistar Chemicals L.P.	291
Newark	Essex	Fairmount Chemical Co. Inc.	1,802
Newark	Essex	Federal Bronze Casting Ind.	255
Newark	Essex	G.J. Chemical Co. Inc.	7,360
Newark	Essex	General Chemical Corp.	2,681
Newark			3,201
	Essex	Getty Terminals Corp. Heraeus Inc.	3,201
Newark	Essex	Indol Color Co. Inc.	
Newark	Essex		
Newark	Essex	Marchem Dublon Inc.	11 621
Newark	Essex	Motiva Newark Terminal	11,631
Newark	Essex	New Jersey Galvanizing	1,500
Newark	Essex	Newark Bay Cogeneration Plt.	64,335
Newark	Essex	Newark Indl. Spraying Inc.	7,298
Newark	Essex	Novick Chemical Co. Inc.	-
Newark	Essex	OMG Fidelity Inc.	29
Newark	Essex	Penick Corp.	20,685
Newark	Essex	Reichhold Inc.	28,241
Newark	Essex	Seton Co. Leather Div.	10,674
Newark	Essex	Sherwin-Williams Co.	26
Newark	Essex	Sun Chemical Corp. New. Plt.	68,000
Newark	Essex	Tenax Finishing Prods. Co.	1,757
Newark	Essex	Troy Chemical Corp.	18,728
Newark	Essex	W.A.S. Terminals Corp.	6,338
Orange	Essex	Tryco Tool & Mfg. Co. Inc.	1,300
Passaic City	Passaic	Baltic Dye & Finishing Co. Inc.	1,000
Passaic City	Passaic	Barito Packaging Inc.	
Passaic City	Passaic	Ethan Allen Mfg. Co.	-
Passaic City	Passaic	Hercules Chemical Co. Inc.	500
Passaic City	Passaic	Sunbrite Dye Co. Inc.	1,000
Passaic City	Passaic	Unifoil Corp.	2,540
Paterson	Passaic	Cardinal Color Inc.	-
Paterson	Passaic	Crown Roll Leaf Inc.	40,950
Paterson	Passaic	Custom Laminations	1,000
Paterson	Passaic	Daicolor-Pope Inc.	10
Paterson	Passaic	Empire Inds. Inc.	900
Paterson	Passaic	Fabricolor Mfg. Corp.	308

<sup>\*</sup>Entries with "-" indicate facilities with undisclosed releases.

## U.S. EPA Toxic Release Inventory (TRI) Facilities within Abbott Districts,1999

District	County	Facility Name	Air Releases in Lbs.*
Paterson	Passaic	Facile Holdings Inc.	33,249
Paterson	Passaic	Galaxie Chemical Corp.	30
Paterson	Passaic	Heterene Chemcial Co. Inc.	20
Paterson	Passaic	Kirker Enterprises Inc.	1,157
Paterson	Passaic	Kramer Chemicals Inc.	2,096
Paterson	Passaic	Lipo Chemicals Inc.	-
Paterson	Passaic	Mona Inds. Inc.	795
Paterson	Passaic	Morton Intl. Inc Rohm-Haas	52,135
Paterson	Passaic	National Rack Co.	-
Paterson	Passaic	Okonite Co.	255
Paterson	Passaic	Polaris Plating Inc.	-
Paterson	Passaic	Royce Associates L.P.	-
Perth Amboy	Middlesex	Amerada Hess Corp.	18,755
Perth Amboy	Middlesex	Chevron Prods. Co.	57,100
Perth Amboy	Middlesex	Co-Steel Raritan	27,308
Perth Amboy	Middlesex	Crompton Corp.	1,251
Perth Amboy	Middlesex	Englert Inc.	3,930
Phillipsburg	Warren	Atlantic States Cast Iron Pipe Co.	139
Phillipsburg	Warren	Ingersoll Dresser Pump Co.	500
Phillipsburg	Warren	Mallinckrodt Baker Inc.	73,218
Plainfield	Union	National Starch & Chemical Co.	-
Trenton	Mercer	American Standard Inc.	1,187
Trenton	Mercer	Congoleum Corp. Plt. 2	7
Trenton	Mercer	Custom Processing Corp.	-
Trenton	Mercer	Eastern Wire & Cable	5
Trenton	Mercer	Homasote Co.	18,793
Trenton	Mercer	Kayline Processing Inc.	36,660
Trenton	Mercer	Mobil Oil Trenton	7,300
Trenton	Mercer	Rhein Chemie Corp Loc. 1	-
Trenton	Mercer	Rhein Chemie Corp Loc. 2	_
Trenton	Mercer	Trane Co.	-
Trenton	Mercer	Trenton Metal Decorating Inc.	68,468
Trenton	Mercer	Trigen Trenton Energy Co.	1,100
Union City	Hudson	U.S. Castings Corp.	-
Vineland	Cumberland	Kimble Glass Inc.	1
135 TRI Facilities		11 (11 (11 (11 (11 (11 (11 (11 (11 (11	4,833,117

<sup>\*</sup>Entries with "-" indicate facilities with undisclosed releases.