COMMENTS ON THE NEW JERSEY STATE IMPLEMENTATION PLAN (SIP) REVISION FOR THE ATTAINMENT AND MAINTENANCE OF THE FINE PARTICULATE MATTER ($PM_{2.5}$) NATIONAL AMBIENT AIR QUALITY STANDARD

Submitted By:

New Jersey Environmental Justice Alliance

Environmental Research Foundation

Change to Win

International Brotherhood of Teamsters

Coalition for Healthy Ports

Date: 8/15/08

Prepared By:

Nicky Sheats, Esq., Ph.D., Director, Center for the Urban Environment, John S. Watson Institute for Public Policy of Thomas Edison State College

Peter Montague, Ph.D., Environmental Research Foundation

Kathleen Jackson-Shrekgast, Esq., Staff Attorney & Director of Externships, Eastern Environmental Law Center

Introduction

The New Jersey Environmental Justice Alliance (NJEJA), Environmental Research Foundation (ERF), Change To Win (CtW), International Brotherhood of Teamsters (IBT) and the Coalition for Healthy Ports (CHPs)[1] welcome the opportunity to submit comments on New Jersey's Fine Particulate Matter State Implementation Plan.

Urban areas in New Jersey suffer from disproportionately high levels of fine particulate matter (PM)[2] that place their residents at risk of death or serious illness due to this toxic pollutant. There is also evidence that urban neighborhoods with relatively high percentages of low-income residents and residents Of Color have the most elevated concentrations of fine PM.[3] These environmental justice (EJ) communities are also more likely than other neighborhoods to have multiple sources of pollution sited within their boundaries.[4] The fine PM State Implementation Plan (SIP) presents multiple policies to reduce fine PM concentrations in the state but fails to present a coherent, comprehensive strategy to decrease concentrations in urban areas in general or, more specifically, in EJ

[1] NJEJA is the only statewide environmental organization in New Jersey that focuses solely on environmental justice issues and is one of the few, if not the only, that has a significant number of People Of Color in both its membership and leadership. ERF publishes Rachel's Democracy & Health News and Rachel's Precaution Reporter, and provides other research services to grassroots and community oriented environmental organizations. CtW unites seven unions and six million workers to improve the quality of life of working Americans. IBT is a union representing approximately 1.4 million workers in the United States, Canada and Puerto Rico. CHPs is a coalition of unions, environmental justice organizations, environmental organizations, faith-based organizations, and academics who are attempting to reduce pollution generated from ports in New Jersey and improve the lives of truck drivers who conduct business with New Jersey ports on a regular basis.

[2] See Pg. 1-13 of Fine PM State Implementation Plan.

[3] See pg. 5-41 of EPA. 2005. Review of the National Ambient Air Quality Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information, Office of Air Quality Planning and Standards, December, 2005 *citing* Schmidt, M., Mintz, D., Rao, V. and L. McCluney. 2005. U.S. EPA Memorandum to File. Subject: Draft Analyses of 2001-2003 PM Data for the PM NAAQS Review. January 31, 2005.

[4] For example, see a study performed in Massachusetts by Krieg, E.J. and D.R. Faber. 2004. Not so Black and White: environmental justice and cumulative impact assessments, *Environmental Impact Assessment Review* 24:667-694, which shows more environmental hazards tended to be sited in neighborhoods Of Color and low income neighborhoods than in other communities.

neighborhoods that are subjected to disproportionate amounts of fine PM and other types of pollution.

These comments present policy recommendations not included in the fine PM SIP that will decrease fine PM concentrations in the state, and several of the strategies, used in combination, may form a nascent urban fine PM reduction strategy.

1. Institute a 12.0 μg/m^3 Annual Fine PM Standard for New Jersey

Decreasing the annual fine PM standard for New Jersey from 15.0 μg/m^3 to 12.0 μg/m^3 would save lives and reduce illness in the state since there appears to be no lower threshold (other than zero) for the beneficial health effects that occur when fine PM concentrations are lowered.[5] The New Jersey Department of Environmental Protection (DEP) recognizes these facts as evidenced by its recommendation to the United States Environmental Protection Agency (EPA) that it lower the federal annual fine PM standard to 12.0 μg/m^3 and its decision to set an internal goal of decreasing New Jersey fine PM concentrations to 12.0 μg/m^3.[6] Since DEP also acknowledges that New Jersey has the legal authority to set an annual fine PM standard of 12.0 μg/m^3,[7] there is no need for the state to wait for the federal government to lower its standard. In its Fine PM SIP, DEP should include a recommendation that the annual fine PM standard for New Jersey be decreased from 15.0 μg/m^3 to 12.0 μg/m^3. If a 12.0 μg/m^3 annual standard were legally established in the state, it would provide DEP with additional legal and political power to implement policies that would lower fine PM concentrations below this level. These

[5] See pg. 1-7 of the New Jersey Fine PM State Implementation Plan (SIP) regarding a threshold for fine PM.
[6] Pg. 1-6 of Fine PM SIP.
[7] Pg. 1-6 of Fine PM SIP.

policies would also help the state attain the relatively new federal daily fine PM standard of 35.0 $\mu g/m^3$, which is currently being exceeded by concentrations in multiple counties in New Jersey.[8]

2. Establish A Moratorium On The Issuance Of Air Pollution Permits For Overburdened Environmental Justice Neighborhoods That Fail To Achieve Attainment Of The Annual Fine PM Standard By April 5, 2010

DEP acknowledges that urban areas often suffer from higher levels of PM pollution than other areas of New Jersey[9] and also asserts that the state's Fine PM SIP should address local needs.[10] Often the communities in greatest need of fine PM reductions are EJ neighborhoods, communities Of Color and low-income areas, which contain multiple sources of pollution. Vulnerable communities in New Jersey overburdened by environmental hazards should be identified and no additional air pollution permits should be issued in these neighborhoods if they have not achieved attainment of the federal annual fine PM standard by April 5, 2010, the federally mandated attainment date. These neighborhoods can be identified using the model employed by Krieg and Faber[11] in Massachusetts in which they correlated the number of environmental hazards sited in neighborhoods with the race and income of neighborhood residents.

A community-based monitoring system should be established in these overburdened communities to help determine whether the federal annual fine PM standard has been achieved (see more discussion of community monitoring below) and air pollution permits should be withheld until fine PM concentrations are decreased to

[8] Pg. XX of Fine PM SIP.
[9] Pg. 1-13 of Fine PM SIP.
[10] Pg. 1-1 of Fine PM SIP.
[11] Krieg and Faber, *supra*, note 4.

DEP's internal goal of 12.0 $\mu g/m^3$. Using the 12.0 $\mu g/m^3$ as the trigger that would allow air pollution permits to be issued once again in an overburdened neighborhood would provide a buffer against a repeat violation of the 15.0 $\mu g/m^3$ standard. If New Jersey follows the policy suggested above and institutes a 12.0 $\mu g/m^3$ annual standard, then no air pollution permits should be issued in overburdened EJ neighborhoods that fail to attain that standard and the moratorium should remain in place until concentrations are reduced to 9.6 $\mu g/m^3$ (80% of the standard). In general, we are suggesting a moratorium on the issuance of air pollution permits in overburdened EJ neighborhoods that do not attain the annual fine PM standard, whatever that may be, that remains in effect until fine PM concentrations in the neighborhood are reduced to a level that represents 80% of the standard.

The pollution control strategy suggested here is a limited, well-defined use of a moratorium policy that recognizes the possible cumulative impacts on local residents of multiple pollution sources and limits fine PM air pollution in overburdened EJ neighborhoods. The Fine PM SIP states that DEP is committed to assessing cumulative impact policies[12] and we believe the one presented here merits serious consideration. We also believe that the 1954 New Jersey Air Pollution Control Law and New Jersey Administrative Code[13] provide DEP with the legal authority to establish a moratorium on the issuance of air pollution permits under these circumstances.

[12] Pg. 1-14 of the Fine PM SIP states: "The NJDEP is also committed to assessing technical and policy options to address impacts of multi-media exposure (beyond air pollution exposure) at the local level. Reducing $PM_{2.5}$ concentrations in urban areas will help address environmental justice."
[13] NJEJA is prepared to provide a more detailed legal discussion regarding this matter upon request.

3. Establish A Community-Based Fine PM Monitoring System In Overburdened Environmental Justice Neighborhoods In New Jersey

In order to implement the moratorium policy suggested above and determine which EJ neighborhoods are in non-attainment of the federal annual fine PM standard as of April 5, 2010, DEP should establish a community-based fine PM monitoring system in overburdened EJ communities. However, even if a moratorium policy is not instituted, a community-based monitoring system would still be desirable because it would be capable of providing information on fine PM concentrations on a much smaller geographic scale than DEP is currently able to produce. A community-based monitoring system could provide long-term data on a neighborhood level and would, therefore, be able to identify local pollution "hot spots" that might exist within urban areas. Such a system would also be consistent with the recommendation of the Clean Air Advisory Committee that suggests states rely less on modeling and more on ambient air monitoring.[14]

NJEJA, the Center for the Urban Environment (CUE)[15] and the New Jersey Environmental Federation (NJEF) demonstrated that lay people could successfully participate in a monitoring system when they involved high school students in projects that recorded airborne PM concentrations in Camden, Trenton and Newark.[16] DustTrak and Ptrak monitors were used in these projects to record fine and ultrafine PM concentrations. The NJEJA and CUE initiative also demonstrated that a project involving high school students could yield credible fine PM data when the organizations conducted

[14] Pg. 5-26 of the Fine PM SIP.
[15] The Center for the Urban Environment is part of the John S. Watson Institute for Public Policy of Thomas Edison State College and its defined mission is to support the EJ community of New Jersey.
[16] Sheats, N. 2005. Preliminary Scientific Report for the New Jersey Urban Air Quality Educations and Awareness Initiative, 78 pp. ; New Jersey Environmental Federation and Clean Air Fund. 2006. Diesel Hot Spots: A Snapshot of Newark, New Jersey, 16 pp.

a calibration between a DustTrak and a TEOM (tapered element oscillating microbalance) monitor using regression analyses that converted DustTrak concentrations to TEOM concentrations with a high degree of accuracy and consistency.[17] But a community-based monitoring system would not necessarily have to use DustTrak and Ptrak machines. The fact that high school students successfully used these monitors in the aforementioned projects suggests that high school-aged students would also be capable of operating other types of monitors. A student-driven fine PM community-based monitoring system could, and should, be established in overburdened EJ neighborhoods in New Jersey.

A community-based monitoring system could also be a critical part of a larger effort that produces local, community-driven solutions to the state's air pollution problems. Students involved in the monitoring, and other students that have access to the data produced by the monitoring, could be asked to use their knowledge of their own communities to create local solutions to local air pollution issues. The students could also educate local residents on air pollution issues by giving presentations on their efforts to local community groups. These sessions could also be used to obtain ideas from local residents on policies that might improve the air quality in their neighborhood.

A community-based monitoring system that is student-driven would also aid New Jersey's Pubic Schools in their attempt to provide improved science education to the state's students.[18] But, unlike most science education, it would move the students out of

[17] Sheats, N. 2007. Preliminary Report on a Calibration of a DustTrak and TEOM Performed for the New Jersey Urban Air Quality Education and Awareness Initiative, April 15, 2007, 9 pp.
[18] See Mooney, J. 2008. Plan for N.J high schoolers: More science, Newark Star Ledger, April 25, 2008, pg. 1.

the classroom and into their neighborhoods to work on an issue that is of critical importance to their communities.

4. Climate Change Policies Should Be Developed and Implemented That Decrease Emissions Of Fine PM And Its Precursors In Addition To Emissions Of Carbon Dioxide

The Fine PM SIP states that New Jersey's global warming strategies will have the positive supplemental effect of also lowering concentrations of fine PM and its precursors.[19] However, we urge the state to select and implement climate change policies that go beyond having a "supplemental" effect on fine PM and precursor concentrations: New Jersey should use climate change strategies that significantly reduce emissions of fine PM and its precursors as well as emissions of carbon dioxide. If a policy only decreases carbon dioxide emissions and does not also yield significant reductions in either fine PM, nitrogen oxides or sulfur dioxide emissions, it should not be implemented.

Of course, if this type of policy were adopted, the state would have to evaluate all potential climate change strategies for their ability to reduce emissions of these other toxic pollutants. It seems the state has already performed this type of evaluation, or something very similar, for NO_x reduction strategies[20] and, therefore, should be comfortable applying it to proposed climate change policies.

[19] Pg. 1-16 of Fine PM SIP.

[20] Pg. 4-14 of the Fine PM SIP states: "The OTC efforts focused on VOC and NO_x reductions for the purpose of reducing ozone. New Jersey evaluated the control measures identified by the OTC for NO_x measures that would have a $PM_{2.5}$ reduction benefit. Although the OTC efforts did not have a primary focus on control strategies for direct $PM_{2.5}$, New Jersey evaluated related direct $PM_{2.5}$ reduction strategies through its Reasonably Available Control Technology (RACT) and Reasonably Available Control Measures (RACM) analyses discussed in Sections 4.3.1.5.3 and 4.3.1.5.4, respectively."

Using climate change policies to also reduce fine PM concentrations would not only help the state achieve attainment for the current federal annual fine PM standard, it would also help DEP to realize its internal goal of driving concentrations below 12.0 $\mu g/m^3$ and fulfill its legal obligation of ensuring air quality in New Jersey meets the new 35.0 $\mu g/m^3$ federal daily fine PM standard.

5. Utilize Energy Conservation and Renewable Energy Sources Extensively In Urban Areas

A climate change strategy that should be employed in urban areas of New Jersey for multiple purposes is the extensive use of energy conservation and renewable energy sources. This strategy has the potential to decrease emissions of carbon dioxide, decrease emissions of fine PM and its precursors, and provide employment and other economic opportunities to local residents. The ultimate goal would be to make urban areas in New Jersey centers of innovation for, and the utilization of, energy conservation and renewable energy sources in a manner that will help to economically revitalize inner-city neighborhoods.

Perhaps the Fine PM SIP makes little mention of energy conservation and renewable energy sources because it is feared that it would require a time period beyond April 5, 2010 for these methods to effectively reduce fine PM concentrations. However, energy conservation methods, in particular, might show rapid results and, in any case, DEP needs to implement reduction strategies that will be effective beyond 2010 to satisfy its internal goal of reducing fine PM concentrations to 12.0 $\mu g/m^3$ and its legal obligation to attain the new federal daily 35.0 $\mu g/m^3$ standard.

6. Retrofit Or Retire Privately-Owned Pre-2007 Diesel-Powered Vehicles

The Fine PM SIP discusses the extremely toxic nature of diesel PM[21] and acknowledges that urban residents may face a disproportionately high health risk from diesel PM when it states: "Urban residents in particular are regularly exposed to greater amounts of $PM_{2.5}$ from multiple local sources, including heavy-duty truck traffic…".[22] A report released in 2005 by the Clean Air Task force supports this conclusion since it lists Trenton area residents as suffering from the fifth highest per capita mortality rate in the country due to diesel PM.[23] The most effective manner to lower the health risks posed to urban residents in New Jersey by diesel PM is by either retrofitting or retiring privately-owned diesel-powered vehicles constructed prior to 2007.[24] However, no comprehensive strategy is presented by the Fine PM SIP to accomplish this life-saving task.

NJEJA, CUE, ERF, NJEF, Greenfaith, and the New Jersey Work Environment Council[25] have developed, and are developing, policies intended to retrofit or retire discreet portions of the privately-owned diesel-powered fleet in New Jersey. For example, the groups recommended that an executive order be issued requiring the

[21] Pp. 1-8 and 1-9 of the Fine PM SIP state: "In New Jersey, exposure to diesel PM poses the most cancer risk statewide by an order of magnitude; formaldehyde, which is also emitted by engines, poses the next most cancer risk."
[22] Pg. 1-13 of Fine PM SIP.
[23] See pg. 8 of Schneider, C.G. and L.B. Hill. 2006. Diesel and Health in America: The Lingering Threat, Clean Air Task Force, February 2006, 21 pp.
[24] We focus on diesel-powered vehicles manufactured prior to 2007 because the federal government requires diesel engines constructed during or after that year to significantly reduce their air toxic emissions. [40 CFR 69, 80, 86; 66 Fed. Reg. 5001 (January 18, 2001) – available at http://www.epa.gov/otaq/regs/hd2007/frm/frdslpre.pdf] We focus on privately owned diesel powered vehicles because a significant portion of the publicly owned pre-2007 diesel powered fleet in New Jersey is due to be retrofitted pursuant to the Diesel Risk Reduction Law enacted in September 2005 (P.L. 2005, c. 219).
[25] GreenFaith is a New Jersey based interfaith coalition for the environment. The New Jersey Work Environment Council is an alliance of 70 organizations that work together to improve the environment while ensuring that jobs are safe, secure and healthy.

retrofitting of all privately-owned, publicly contracted, diesel vehicles and equipment. These organizations are also part of, or work with, the Clean and Healthy Ports Coalition, which is developing policy that would result in the thousands of trucks that travel through or near residential neighborhoods every day to service the ports in Northern New Jersey[26] either being retrofitted or retired (see more discussion of the port, below). However, the leadership and authority of the DEP and the state are needed for these efforts to be successful.

7. DEP Should Develop And Implement A Plan To Address Fine PM Emissions Generated By The Ports Operated By The Port Authority Of New York and New Jersey In Newark and Elizabeth

The ports in Northern New Jersey are a significant source of PM air pollution.[27] Fine PM emissions from port machinery, trucking associated with the ports, and ships that operate in and around the ports on a regular basis are most likely having a detrimental health effect on many citizens in our state but especially on residents who live in neighborhoods that are in close proximity to the ports. The Fine PM SIP contains some discussion concerning efforts to reduce emissions from the port in South Jersey but says little or nothing of plans to address PM pollution generated by the larger ports in Newark and Elizabeth.

[26] See pp. II-4 and II-1 of Vollmer Eng-Wong & Associates, Stump/Hausman, New Jersey Institute of Technology and Stevens Institute of Technology. 2006. Port Authority Marine Container Terminals Truck Origin-Destination Survey 2005, Prepared for: The Port Authority of NY & NJ, November 2005, Revised 2/27/06. Pg. II-4 states that: "New Jersey is the predominant origin and destination of trucks arriving and leaving the container terminals in the Port of New York and New Jersey. Approximately 75 percent of all trucks arriving at the container terminals originated from New Jersey and about 79 percent of trucks leaving the container terminals have a destination in New Jersey." Although it is not stated that most of these trucks pass through or near residential neighborhoods, given the crowded conditions in Northern New Jersey it is difficult to imagine that this is not the case. Pg. II-I states that approximately 7,490 trucks enter and exit Port Newark and Elizabeth Port Authority Marine Terminal daily.

[27] See executive summary of Bailey, D., Plenys, T., Solomon, G.M., Campbell, T.R., Ruderman Feuer, G., Masters, J. and B. Tonkonogy. 2004. Harboring Pollution, Strategies to Clean Up U.S. Ports, Natural Resources Defense Council, August 2004.

Perhaps the first air pollution issue connected to the ports in Northern New Jersey that should be addressed is the diesel PM emitted by the thousands of trucks that move items every day to and from the port near or through residential neighborhoods.[28] Pre-2007 trucks that conduct business with the port on a regular basis need to be retrofitted with the most effective pollution control device possible or retired and replaced by trucks manufactured after 2006.

The Port Authority of New York and New Jersey (hereinafter referred to as the Port Authority), which operates the ports in Northern New Jersey, is a quasi-public organization with a large budget[29]that has an obligation to protect the health of New Jersey citizens and therefore should ensure that the trucks referred to above are either retrofitted or retired. The Coalition for Healthy Ports is advocating that all trucking associated with the port should be handled by a trucking company that pays drivers a living wage with benefits and that is primarily responsible for utilizing trucks that are either manufactured after 2006 or emit no more air pollution than a post-2006 truck. Under this plan the other responsible party for ensuring that port-associated trucks are emitting low levels of air pollution would be the Port Authority. This responsibility would include a financial contribution and the development of an enforcement system that would guarantee trucks that conducted business on a regular basis with the ports meet the requirement of producing no more air pollution than post-2006 trucks.

Other port-related fine PM air pollution issues that need to be addressed include:

- Retrofitting, repowering or retiring diesel-powered equipment such as cranes. Retrofitting or repowering should be performed using the best available technology.

[28] See Vollmer Eng-Wong & Associates et al., *supra*, note 26.
[29] The Port Authority's website shows that in 2008 its revenues reached nearly six billion dollars.

- Retrofitting, repowering or retiring diesel-powered ships and boats, such as tugboats,[30] that operate near a port on a regular basis. Retrofitting or repowering should be performed using the best available technology.

- Requiring that all ships and boats that operate within a certain distance of the coast utilize low-sulfur fuel.[31]

8. DEP Should Institute An indirect Source Review

Instituting an Indirect Source Review (ISR) may help provide DEP with the authority to establish policies that will reduce fine PM emissions from the ports in Northern New Jersey, and more specifically from diesel-powered vehicles and other sources that are difficult to regulate. Under the Clean Air Act (CAA), indirect sources of pollution may be regulated pursuant to 42 U.S.C. § 7410(a)(5). The CAA defines an indirect source as a "facility, building, structure, installation, real property, road, or highway, which attracts, or may attract, mobile sources of pollution."[32] This definition would include a number of the pollution sources in New Jersey that introduce a significant amount of fine PM into the air. Indirect sources of pollution in New Jersey attract multiple trucks, ships, and/or airplanes, and are largely located in urban areas, posing a disproportionate health threat to people who live nearby. Some examples of indirect sources of fine PM in New Jersey include the ports, the New Jersey Turnpike, the airports, and the warehousing complexes across the state, each of which attract mobile sources of fine PM, primarily from diesel-powered trucks, large ships and airplanes.

[30] A new study found that tugboats are a larger source of fine PM than previously thought. See Lubick, N. 2008. Surprise soot from ship emissions, Environmental Science & Technology, July 30. 2008.
[31] California recently passed a regulation requiring large ships operating within 24 miles of the coast to use low sulfur fuel. See Wald, M.L. 2008. California Orders Low-Sulfur Fuel for Ships, New York Times, pg. A-12, July 25, 2008.
[32] 42 U.S.C. § 7410(a)(5)(C)

Regulation of indirect sources may be included in a SIP.[33] Indeed, it is within the state's discretionary authority to include an indirect source review program within the SIP. Given the primacy of EJ concerns to New Jersey and its citizens, New Jersey should assume a leadership role for the nation and institute its own ISR program via the Fine PM SIP.

Some states have already taken the opportunity to regulate the large quantities of pollution caused by mobile sources congregating in distinct areas, or "indirect sources." Oregon, Wisconsin and the region of San Joaquin Valley, California all have ISR programs. These ISR programs allow the states to reduce emissions in an efficient manner. By encompassing mobile sources such as diesel-powered trucks and large ships within the non-mobile source regulatory scheme, emissions may be drastically reduced.

For example, in Oregon, construction of an indirect source requires a permit. A construction permit may be denied if:

> (a) The Indirect Source will cause or contribute to a violation of the Clean Air Act Implementation Plan for Oregon;
> (b) The Indirect Source will cause or contribute to a delay in the attainment of or cause or contribute to a violation of any National Ambient Air Quality Standard;
> (c) The Indirect Source causes or contributes to any violation of any National Ambient Air Quality Standard by another Indirect Source or system of Indirect Sources;
> (d) The applicable requirements for an Indirect Source Construction Permit application are not met.[34]

[33] 42 U.S.C. § 7410(a)(5)
[34] Or. Admin. R. 340-254-0070(5)

Were New Jersey to adopt similar measures, it could ensure that air quality is kept within an acceptable and healthy range in the face of new development, even when that development includes mobile (and therefore difficult to regulate) sources of pollution.

In Wisconsin, the Department of Natural Resources has proposed a revision to the state's ISR, expanding it to include control of particulate matter, diesel exhaust, nitrogen oxides (NO_x), and volatile organic compounds (VOC), through regulation of indirect sources required to obtain operation and construction permits.[35] The Draft Rule will require that certain older heavy-duty diesel-powered trucks that will operate at the indirect source obtain software upgrades to decrease harmful emissions.[36] Likewise, in New Jersey, a properly formulated ISR would allow the state to require retrofits on older trucks that operate in mass numbers at the ports, warehousing facilities, etc. Because these indirect sources of pollution are located in areas overburdened by EJ problems, the ISR would help alleviate those issues.

The San Joaquin Valley Air Pollution Control District in California recently adopted an ISR program. The program aims to reduce both NO_x and particulate matter.[37] The program requires indirect sources to reduce emissions based on its "operational baseline."[38] The operation baseline is defined as "the baseline NO_x or PM10 emissions, including area source and mobile emissions, calculated by the [Air Pollution Control Officer (APCO)] approved model, for the first year of buildout for that project, or any phase thereof, in tons per year."[39] The San Joaquin Valley ISR requires a 50% reduction

[35] Draft Rule Wis. Admin. Code NR 411.01(1), (2), *available at*, http://www.dnr.state.wi.us/air/pdf/NR411revruledraft.pdf (last visited July 30, 2008).
[36] Draft Rule Wis. Admin. Code NR 411.08, *available at*, http://www.dnr.state.wi.us/air/pdf/NR411revruledraft.pdf (last visited July 30, 2008)
[37] Rule 9510-1.1, 2.2
[38] Rule 9510-6.2
[39] Rule 9510-3.27

of the indirect source's operational baseline for PM, and 33.3% of the indirect source's operational baseline for NO_x.[40] New Jersey could adopt similar measures, requiring a reduction in operational emissions through on-site emission reduction measures.[41]

Any adoption of an ISR in New Jersey would help DEP and the New Jersey Department of Transportation to meet its mandate from Executive Order #96, i.e., developing "a coordinated strategy for reducing the public's exposure to fine particulate pollution in affected communities, particularly from diesel emissions from stationary and mobile sources." Further, as the most egregious indirect sources of fine PM are located in urban areas, an ISR would help address EJ concerns while moving the state toward compliance with the federal fine PM standards.

Conclusion

These comments have presented several policies that could reduce fine PM concentrations in a manner that will tend to benefit all areas of the state equally. They include lowering the annual fine PM standard in New Jersey and developing climate change policies that will reduce *both* fine PM *and* carbon dioxide emissions. Other policy suggestions are more directed at overburdened EJ communities in urban areas and, used in combination, could form the basis for a comprehensive urban fine PM reduction strategy. These include instituting a moratorium on the issuance of air pollution permits in overburdened EJ neighborhoods that do not attain the federal annual fine PM standard by April 5, 2010, implementing a community-based fine PM monitoring system in overburdened EJ neighborhoods, developing a strategy to retire or retrofit diesel-powered

[40] Rule 9510-6.2.1; Rule 9510-6.2.2
[41] See Rule 9510-6.3

vehicles constructed prior to 2007, developing a strategy to significantly reduce fine PM emissions from the ports in Newark and Elizabeth, instituting an Indirect Source Review Program, and utilizing energy conservation and renewable energy sources extensively in urban areas. We urge DEP to use these policy suggestions as a springboard to fully develop a coherent urban fine PM reduction strategy that will protect urban residents from the detrimental health effects caused by this dangerous air pollutant.

Contact person:

Nicky Sheats, Esq., Ph.D.
Director, Center for the Urban Environment,
John S. Watson Institute for Public Policy of Thomas Edison State College,
Member of the New Jersey Environmental Justice Alliance
609-777-4351 ext. 4280