Citizens Guide
to
Urban Community Air Toxics Monitoring Project, Paterson City, NJ

Introduction
USEPA awarded $495,242 to NJDEP to develop tools so that the NJDEP and the community can better understand the types and sources of air toxics in typical NJ urban settings. Paterson was chosen for this study because it is a good example of an urban setting in which industrial, mobile, commercial and residential areas are in close proximity and NOT because of observed or suspected air quality problems. The study set out to measure 132 common air toxics that were expected to be found in a typical mixed land use urban area. The measurements were made at three sites in Paterson and one background site in Chester, NJ about every six days between November 2005 and December 2006, using the same sampling schedule followed at other air toxics monitoring locations throughout the state. The draft Final Technical Report was submitted to USEPA late in 2009.

Why was Paterson selected for this study?
Paterson City was chosen because it represents an urban community with mixed land use; commercial, industrial, mobile and residential, not because of concerns that air quality in Paterson is worse than in other New Jersey urban communities.

What are the results?
Out of the 132 air toxics that were looked for, only p-dichlorobenzene was elevated at one of the three monitoring location in Paterson above the other monitoring locations in Paterson and around the state. There was an increase and then decrease in concentrations of p-dichlorobenzene over a two month period. The concentrations returned to levels that were observed during the other twelve months of monitoring in Paterson and at the other sites around the state.

Is the air quality in Paterson dangerous?
The air quality in Paterson is similar to the rest of New Jersey. Air quality in New Jersey needs improvement and NJDEP is dedicated to reducing air toxics with numerous initiatives and programs such as the states new anti-idling laws, diesel regulations, etc.

Given the results, what are the health risks to residents of Paterson?
If yearly concentrations of p-dichlorobenzene stayed the same over a lifetime of exposure, the cancer risk calculated at the one site in Paterson where the elevated concentrations occurred would be 205 in a million. This is above the 1 in a million cancer risk guideline used by the NJDEP. In addition, nine other air toxics measured in Paterson were above the 1 in a million cancer risk guideline. However, the levels for these other toxics are consistent with those observed at the four other NJDEP air toxics monitoring locations around the state. There were no short term (24 hr) and long term (lifetime) noncancer risks.
Why are the results in Paterson different than in Chester?
Chester, New Jersey is the NJDEP designated rural background air monitoring location. It was chosen for comparison to Paterson because it was not expected to show the influence of urban activities. Therefore, as expected, levels of some air toxics were lower in Chester than in Paterson.

Are my children at greater risk as it relates to the study results?
Air samples were collected outdoors at two schools in Paterson. Levels at these sites were similar to those found throughout other areas of the state.

Is there any specific actions I should take with respect to the study results as a resident of Paterson?
There are no specific protective measures residents of Paterson need to take with respect to the study results. However, because the levels of some air toxics are elevated throughout the state, there are actions all New Jerseyans can take to reduce health effects from elevated air toxics. Some of these include: take mass transit, maintain your car properly, drive and less. For other suggestions on how to improve air quality go to: www.nj.gov/dep/airtoxics/youcan

What is being done about p-dichlorobenzene?
The NJDEP Enforcement Program is working to identify the sources that caused elevated concentrations of p-dichlorobenzene. In addition, NJDEP is requesting funds from USEPA for additional monitoring in Paterson to confirm that levels remain low. (Shouldn’t this section follow immediately on the other sections dealing with p-dichlorobenzene?)

What is being done to reduce concentrations of air toxics statewide?
The NJDEP, USEPA and local agencies have numerous programs to reduce risk from exposure to air toxics. For example, maximum achievable control technology requirements, risk assessment screening, dry cleaning rule, diesel retrofits, anti-idling legislation and education, legal action against dirty coal-fired power plants, restrictions on wood burning, etc.

Why did it take so long to make the study results available to the public?
Studies such as this one typically can take anywhere from two to three years to complete because of the detailed sampling, analysis, and review of the data that is required. At no point during the sampling and analysis of the data collected from the study did the results indicate a public health threat that required immediate action. When analysis of the data revealed the elevated p-dichlorobenzene, NJDEP proceeded to identify the source and that investigation is ongoing. Given the lack of results indicating the need for immediate action, the completion of the final report proceeded along the normal scientific course.

Where can I get more information about air toxics?
Linda please fill this in--thanks