



CREATING SUSTAINABLE COMMUNITIES A GUIDE FOR DEVELOPERS AND COMMUNITIES

SITING TO REDUCE AIR TOXICS IMPACTS FROM STATIONARY SOURCES

Residents in New Jersey are exposed to a variety of air toxics from industrial, commercial and other stationary sources. Air toxics include a broad range of pollutants that are not classified as “criteria pollutants” under the federal Clean Air Act but still may be emitted into the air in quantities that can cause adverse health effects¹. Reducing exposure to these pollutants can help reduce health risks for many diseases such as cancer, birth defects and asthma. Exposure can be avoided or reduced by implementing strategies to reduce pollutants emitted from air toxics sources or by appropriately locating sources and residents to avoid impacts.

APPLICABLE NEW JERSEY GOALS AND TARGETS

There are currently no health-based air quality standards for these pollutants. Air toxics from stationary sources are regulated by a combination of control technology standards and risk assessment requirements for permitted sources. The New Jersey Department of Environmental Protection (DEP) currently requires any new or modified source of air toxics to conduct a risk assessment prior to receiving a permit. Any risk predicted to exceed 100 in one million is considered unacceptable and the source must implement risk reduction measures. Risk of 1 in one million is considered negligible. Risks between these ranges are considered on a case by case basis by the DEP’s Risk Management Committee. Current risk assessment procedures do not consider cumulative impacts from multiple sources that may affect the same area. Strategies to consider cumulative impacts are currently being assessed by DEP.

SUGGESTED ACTIONS AND STRATEGIES

Inventory existing sources of pollution: The first step to reducing potential impacts from air toxics is to know where existing sources are located and how far their impacts may extend. The NJDEP has information on many of the state’s larger sources of air toxics that can be obtained through [DEP’s Data Miner website](#). Locations of these sites can also be obtained using DEP’s web-based environmental mapping tool [IMap](#). Additional information can be obtained from the [United States Environmental Protection Agency’s \(EPA\) Toxic Release Inventory](#).

Local sources of pollution: The DEP and EPA do not regulate all sources of air toxics. It is likely that local governments have information on smaller sources that may still be important sources of air toxics. It may be useful to conduct a “micro inventory” to capture sources not regulated by or not known to state and federal regulators.

Sensitive receptors: Sensitive receptors should include schools (public and private), daycares, hospitals, convalescent homes or other facilities where there is a high density of vulnerable residents. It is useful to consider the location of sensitive receptors compared to sources of air toxics.

Buffer distances: New Jersey currently has no established minimum buffer distances for separating air toxics sources from residences or other sensitive receptors. One exception is for dry cleaning facilities. The EPA prohibits the siting of new dry cleaning facilities that use the chemical tetrachloroethylene (often referred to as “perc” or perchloroethylene) in co-located residential buildings (apartments above commercial activities). Other states have developed guidance for use in local siting decisions. For example, in its “Air Quality and Land Use Handbook: A Community Health Perspective,” California recommends that sensitive land uses be sited a minimum of 1,000 feet from distribution centers and chrome platers or 300 feet from dry cleaners using perc or large gas stations.

1. See www.nj.gov/dep/aqpp/risk.html for lists of air toxics that DEP evaluates during the permit process



STATE TECHNICAL/FINANCIAL ASSISTANCE

- [DEP Data Miner](#)
- [DEP Interactive mapping tool - IMap](#)
- [Abbott District Maps](#)
- [DEP Air Toxics Web site](#)

FURTHER INFORMATION

[California Air Resource Board's
Air Quality and Land Use Handbook: A Community Health Perspective](#)

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