

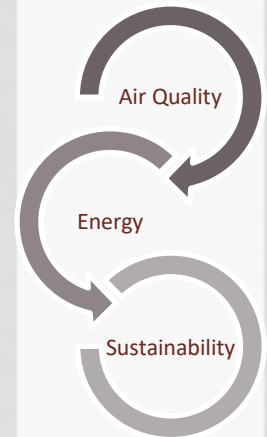


DIVISION OF AIR QUALITY

AIR QUALITY, ENERGY, AND SUSTAINABILITY

GUIDANCE FOR PRECONSTRUCTION PERMIT
MINOR SOURCES WITH CANCER RISK > 1 IN A
MILLION, BUT < 10 IN A MILLION ...

ISG MEETING, JUNE 4, 2021



Greg John, Bureau of Evaluation and Planning

TECHNICAL MANUAL 1003

- Guidance on Preparing a Risk Assessment for Air Contaminant Emissions, 2018

New Jersey Department of Environmental Protection
Division of Air Quality

Technical Manual 1003
Guidance on Preparing a Risk Assessment for Air
Contaminant Emissions

GUIDELINES FOR AIR TOXICS

NEW OR MODIFIED SOURCES

Cancer Risk

Risk \leq 1 in a million (1×10^{-6})	Negligible risk
1 in a million < Risk < 100 in a million	Case-by-case review by Risk Management Committee

Non-cancer Risk

Hazard Quotient (HQ) \leq 1	Negligible risk
Hazard Quotient (HQ) > 1	Case-by-case review by Risk Management Committee

GUIDELINES FOR AIR TOXICS

FACILITY WIDE RISK ASSESSMENT

Cancer Risk

Risk \leq 10 in a million (1×10^{-5})	Negligible risk
10 in a million $<$ Risk $<$ 100 in a million	Case-by-case review by Risk Management Committee

Non-cancer Risk

Hazard Quotient (HQ) \leq 1	Negligible risk
Hazard Quotient (HQ) $>$ 1	Case-by-case review by Risk Management Committee

RISK MANAGEMENT COMMITTEE

Items for consideration that are helpful to know going into the committee meeting:

- Uncertainties associated with calculated risk
- Maximum concentrations & risks at sensitive receptor(s)
- Has a reduction in emissions or operation been investigated?
- Has modifying stack parameters or location been investigated?
- Are there plans or commitments to shutdown or replace the source(s) within the next few years?

RISK MANAGEMENT COMMITTEE



RISK MANAGEMENT COMMITTEE

Committee considerations on a case-by-case basis:

- Maximum concentration and risk at the property line
- Type of surroundings – e.g. industrial sector
- Maximum concentration at the nearest receptors – sensitive vs. non-sensitive
- Compliance history
- Previous efforts by the facility
- New and pending regulations

RISK MANAGEMENT COMMITTEE

Mitigation Actions:

- **Reduce Emissions**
- **Increase Stack Height**
- **Risk Minimization Plan**

QUESTIONS