

NESHAPs



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Blue Skies Delaware; Clean Air for Life

Couple of Key Words

NESHAP – National **E**missions **S**tandards
for **H**azardous **A**ir **P**ollutants

Hazardous Air Pollutants – Alias

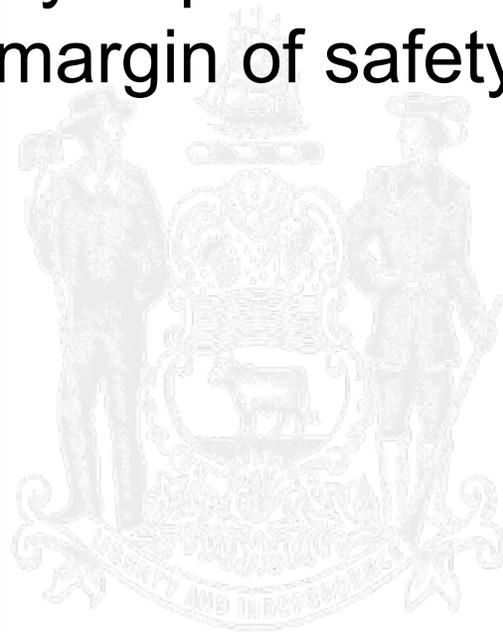
- **HAPS**
- Air Toxics
- Toxic Air Pollutants



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Objective of the NESHAP Process

- To control the emissions of **HAPs** to the extent necessary to protect the public's health with an ample margin of safety



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Chronology of NESHAP Development

- **Risk-based NESHAPS by Chemical (1973 - 1992)**
- **NESHAPS by Source Categories**
 - **Maximum Achievable Control Technology (MACT) standards (1993 →)**
 - **Residual risk standards, if needed (2006 →)**
- **NESHAPS for Area Sources (2007 →)**
(**Small** facility or **small** operation at large facility)



Risk-based NESHAPS by Chemical (1973 - 1992)

- EPA Issued **only 21** NESHAPs (Enclosed)
 - **Asbestos**
 - **Benzene**
 - Beryllium
 - Inorganic Arsenic
 - **Mercury**
 - Radionuclides
 - **Vinyl Chloride**
- 40 CFR Part 61
- A slow, litigious, and arduous process



Risk-based NESHAPS by Chemical (1973 - 1992)

- Delaware AQM adopted NESHAPs into **Reg. 21**
- Except for Asbestos, **NESHAP requirements were included in the State air permit** prior to Title V program



NESHAPS by Source Categories

- **MACT standards (1993 →)**
 - Congress identified ~**189** HAPs
 - Congress identified the rule making schedule to be completed by **2000**
 - Congress specified the emission limitations
 - **New** sources – Equal to best existing source
 - **Existing** sources – Average of top 12%
 - EPA identified more than **180** source categories



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NESHAPS by Source Categories

- **MACT standards (1993 →)**
 - EPA issued ~ **107** NESHAPs in 40 CFR Part 63 (Enclosed)
 - MACTs Focused on **major** sources (**10/25 rule**)
 - Sources subject to **Title V permit** requirements
 - But touches upon a few “**area**” sources
 - Most were **exempted** from Title V permits



NESHAPS by Source Categories

- **Residual risk** standards, if needed (2006 →)
- **Eleven Source Category NESHAPs Assessed**
(Enclosed)
- Assessments focused on carcinogens using
“**Benzene NESHAP**” process
 - < 1 in million – acceptable risk
 - > 100 in million – unacceptable risk



NESHAPS by Source Categories

- **Residual risk standards, if needed (2006 →)**
 - **Three** residual risk standards finalized
 - **Solvent Degreasers & Dry Cleaners**
 - **Permitting** same as under MACT standard
 - No further action for **Eight** NESHAPs
 - **Gasoline Distribution & Synthetic Organic Chemical Manufacturing (HON)**



NESHAP Recap

1973 – 1992

**One Step
Risk-based
Standards**

**Acceptable risk with
margin of safety
Major source focus**

Beginning 1992

**Two Step
Risk-based
Standards**

- **MACT**
- **Residual Risk**



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NESHAPS for Area Sources (2007 →)

A New Breed of Federal Air Toxics
Regulations under **112(k)** of the CAA

Addresses RISK,
But not risk-driven



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NESHAPS for Area Sources (2007 →)

- **Addresses Risk**

- Under Section 112(k) of the CAA, Congress mandated EPA to reduce cancer caused by small **area sources** by at least 75%
- Area sources < 10/25 rule



NESHAPS for Area Sources (2007 →)

- **Still Congress - Driven**
 - EPA to identify **30+ HAPs** that present the greatest threat to public health
 - EPA to identify source categories of **small operations that emit 90%** of the identified HAPs
 - EPA to **issue regulations** to reduce cancer incidences



NESHAPS for Area Sources (2007 →)

- EPA identified **33 HAPs** (Enclosed)
- EPA identified over **50 additional** Area Source Categories bringing the total to **nearly 70 NESHAPS** (Enclosed)
- **All but 21** Area Source NESHAPs have been finalized



NESHAPS for Area Sources (2007 →)

- **Generally Available Control Technology Standards or GACT Standards**
 - If control devices are **prevalent**, requires all to use control devices (lead acid battery mfg)
 - If generally available equipment out performs other options, requires all to use **best equipment option** (surface coatings)
 - Otherwise, provides best work practices (ETO sterilizers)



NESHAPS for Area Sources (2007 →)

- **GACT Standards – Cont.**
 - **Same requirements** for new and existing sources
 - **Tendency to bundle** multiple source categories into a single NESHAP (9 fabricated metal products)
 - Usually **exempt** sources from Title V permits



For More Information on NESHAPS

- **Your Engineering & Compliance Contact**

- **EPA Websites**
 - **Air toxics – In general**
www.epa.gov/ttn/atw/
 - **Area source standards/program**
www.epa.gov/ttn/atw/area/arearules.html

- **Jim Snead 323-4542**

