

**Delaware
Division of
Air Quality**

2010

Air Toxics Strategic Plan

Mid-year Status
(January through June 2010)

Summary Report

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The Air Toxics Strategic Plan (ATSP) is a five-year plan of activities to be undertaken by Division of Air Quality (DAQ) and its partners to reduce the risk of adverse health effects caused by the inhalation of air toxics. The 2010 - 2014 ATSP, finalized on January 6, 2010, is organized within the following components.

- **Implement and grow an ongoing program to address the risks from exposure to air toxics**
- **Build a greater understanding of ambient air toxics environment**
- **Identify the potential harm from exposure to air toxics**
- **Gather information related to air toxics sources**
- **Identify options for reducing air toxics in the environment**
- **Implement appropriate actions to reduce the harm from exposure to air toxics**
- **Evaluate the effectiveness of the actions taken to reduce harm from exposure to air toxics**
- **Enhance DAQ Air Toxics Resources**

ACRONYMS

AFS	EPA - Air Facility System
ATSP	Air Toxics Strategic Plan
DAQ	Division of Air Quality
DATAS	Delaware Air Toxics Assessment Study
DEN	Delaware Environmental Navigator
DERA	Diesel Emissions Reduction Act
DPH	Delaware Division of Public Health
EPA	U. S. Environmental Protection Agency
HAPs	Hazardous Air Pollutants, as defined in Section 112(b) of the 1990 Amendments to the Clean Air Act
HMIWI	Hospital, Medical, and Infectious Waste Incinerator
I/M	Inspection and Maintenance
MACT	Maximum Achievable Control Technology
MARAMA	Mid-Atlantic Regional Air Management Association
NAAQS	National Ambient Air Quality Standard
NACAA	National Association of Clean Air Agencies
NASEO	National Association of State Energy Officials
NATA	National Air Toxics Assessment
PLUS	Preliminary Land Use Service
SIP	State Implementation Plan
TCI	Transportation and Climate Initiative
UST	Underground Storage Tanks
WILMAPCO	Wilmington Area Planning Council

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1. Implement appropriate actions to reduce the harm from exposure to air toxics

a. Key Accomplishments

- i. Awarded 88 grants and reserves totaling \$1.5 million, through the Delaware Energy Office, for implementation of renewable and advanced energy technologies programs.
- ii. Completed 11 compliance evaluations (~15% of current facilities) at perchloroethylene dry cleaning facilities.
- iii. Completed 43 consultations at auto body shops (~27% of current shops) to provide compliance assistance information on DAQ's adoption of Section 15 of Regulation 1138.
- iv. Completed 65 inspections of regulated gasoline dispensing facilities (~18% of current facilities).
- v. Tracked 185 vapor recovery tests of regulated gasoline dispensing facilities (~52% of current facilities).
- vi. Completed 90 perceptible leak tests on gasoline delivery vessels (~15% of current vessels).
- vii. Completed weekly audits of the Division of Motor Vehicle's inspection and maintenance (I/M) program; incorporated improvements in the annual I/M reporting process.
- viii. Completed the following diesel retrofit installations:
 1. Fifteen school buses in the Cape Henlopen School District.
 2. Thirteen school buses in the Capital School District.
 3. Eleven school buses in the Providence Creek School District.
- ix. Introduced the new energy efficiency program, Green4Green, which provides grants, up to \$6000, for upgrading new homes to meet the national green standard on June 10.
- x. Promoted energy efficiency programs introduced in late 2009 under the Delaware Sustainable Energy Utility.
 1. Provided three initial guidance workshops in April 2010 and an additional workshop on June 8 for submission of applications for competitive sub-grants under the "Energy Efficiency and Conservation Block Grant" program. Nearly \$10 million dollars will be available to Delaware communities through this program.
 2. Provided ongoing support for the recent implementation of the Appliance Rebate program.
 3. Provided ongoing support for the recent implementation of the Commercial Lighting Efficiency program.
- xi. Adopted an area source air toxics standard (Section 14 of Reg. 1138) in April 2010 applicable to facilities that spray apply coatings containing heavy metal hazardous air pollutants (HAPs) to miscellaneous products and parts. The newly adopted requirements are more public health protective than a similar national standard.

1. Implement appropriate actions to reduce the harm from exposure to air toxics

a. Key Accomplishments

- xii. Completed SmartWay public outreach programs at the following:
 - 1. New Castle County's "Platinum Picnic" on June 9 (500 attendees).
 - 2. Wilmington Blue Rock baseball game on June 30 (4500 attendees).
- xiii. Provided open burning guidance, outreach and educational materials to the poultry industry during March and April 2010 on eradication of chicken houses that collapsed due to heavy winter snowfalls.
- xiv. Completed energy efficiency/conservation educational and outreach program at the Great Green Expo on March 20.
- xv. Provided three residential and commercial energy codes training workshops under the Home Performance program.
 - 1. Training provided on May 18 and 19.
 - 2. Training provided on May 25 and 26.
 - 3. Training provided on June 6 and 9.
- xvi. Completed the Department's largest air toxics outreach and education program to date. This program provided nearly 200 Delaware facilities that spray apply coatings to motor vehicles and mobiles equipment with information on planned air toxics regulations, as well as, instruction on the safe and proper use of spray painting equipment and personal protection equipment through
 - 1. Three industry workshops (one in each county) in January 2010,
 - 2. Three regulatory workshops (one in each county) in February 2010,
 - 3. Several informational mailings in January 2010,
 - 4. Facility visitations, and
 - 5. A special "Auto-body" webpage of relevant information.

This air toxics outreach and education program drew upon resources across the Department, as well as, EPA. By example,

- 6. The Small Business Ombudsman worked with EPA to design, fund, and facilitate the three industry-oriented "Collision Repair Training Workshops" in January 2010; as well as, participated in other aspects of this program, such information mailings and the three regulatory workshops in February 2010.
- 7. The Air Toxics, Greenhouse Gas Emissions & Mobile Source Group provided regulatory guidance at all six workshops, timely information through a special "auto-body" webpage, continued accessibility for questions, and tools to simplify compliance.
- 8. The Area Source Compliance Group attended all workshops and visited auto-body shops to further support this educational program by providing one-on-one guidance, where needed.
- 9. EPA Region 3 provided partial funding for the "Collision Repair Training Workshops", worked to customize the agenda for Delaware's needs, arranged for coating experts from the collision repair sector to present relevant information during three industrial workshops covering the safe and proper use of spray application equipment, and presented information on potential energy saving programs.

1. Implement appropriate actions to reduce the harm from exposure to air toxics

a. Key Accomplishments

- xvii. Provided pertinent and timely information to the public and regulated community during DAQ's adoption of Section 14 of Regulation 1138 on a special regulatory web page. Although Section 14 was completed in April 2010, this information, including the compliance assistance tools, remains on that DAQ web page to assist the regulated community.
- xviii. Completed the stringency determinations that demonstrate Delaware permits or regulations are at least as stringent as or more stringent than federal area source air toxics standards. These determinations are a prerequisite for requesting delegation of Delaware permits or regulations in lieu of federal air toxics rules.
 - 1. Existing Title V permits for municipal solid waste landfills subject to Federal Subpart AAAA in June 2010.
 - 2. Section 13 of Regulation 1138 for methylene chloride paint stripping operations subject Federal Subpart HHHHHH in March 2010.
 - 3. Section 14 of Regulation 1138 for miscellaneous product and part spray coating operations subject Federal Subpart HHHHHH in April 2010.
 - 4. Section 15 of Regulation 1138 for motor vehicle and mobile equipment spray coating operations subject Federal Subpart HHHHHH in March 2010.
- xix. Submitted negative declaration and requested EPA to withdraw Delaware's Hospital/Medical/Infectious Waste Incinerator (HMIWI) Plan on June 17 following the review of a recently promulgated federal amendment to the national HMIWI incinerator standard. This request was made as there were no affected HMIWI incinerators in Delaware
- xx. Identified the known and potentially affected Delaware sources that would be subject to the area source prepared feeds standard promulgated by EPA on January 5 (Federal Subpart DDDDDDD).

b. Significant Current Activities

- i. Continued to implement the grant to install heavy duty diesel engine replacements on off-road diesel equipment at the Port of Wilmington. (Est. completion – 10/10)
- ii. Continued to implement the grant to install a truck stop electrification project at the Smyrna Rest Stop. (Est. completion – 12/10)
- iii. Monitored the installation of the truck stop electrification project at Delaware's I-95 Rest Stop. (Est. completion – 12/10)
- iv. Implemented the grant to install diesel retrofits for . . .
 - 1. City of Wilmington garbage trucks. (Est. completion – 8/10)
 - 2. City of Dover municipal trucks. (Est. completion – 12/10)
- v. Continued to incorporate electric arc furnace requirements in Federal Subpart YYYYYY during the renewal of Evraz Claymont Steel's Title V permit. (Est. completion – 10/10)

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1. Implement appropriate actions to reduce the harm from exposure to air toxics

b. Significant Current Activities

- vi. Continued to adopt two area source air toxics standards under Regulation 1138, in lieu of one all encompassing standard similar to the federal “Paint Stripping and Miscellaneous Surface Coating Standard” (Federal Subpart HHHHHH).
 - 1. Section 13 applicable to paint stripping operations. (Est. completion – 10/10)
 - 2. Section 15 applicable to motor vehicle or mobile equipment spray applied surface coating operations. (Est. completion – 10/10)
- vii. Began adoption, as Section 16 of Regulation 1138, of an area source air toxics standard applicable to asphalt processing and asphalt roofing products manufacturing operations. (Est. completion - 1Q11)
- viii. Began development of new energy efficiency programs under the Delaware Sustainable Energy Utility.
 - 1. Finalized the development of a Residential Energy Efficiency program. (Est. introduction – 3Q/10)
 - 2. Finalized expansion of the Commercial Efficiency program into other applications. (Est. introduction - 3Q/10)
- ix. Began preparations for the Delaware State Fair educational and outreach program to include school bus anti-idling and SmartWay Transportation programs. (Est. completion – 7/10)
- x. Began preparations for upcoming energy efficiency/conservation educational and outreach programs:
 - 1. Delaware State Fair from July 22 – July 31. (Est. completion – 7/10)
 - 2. Delaware Electric Cooperative’s Annual Meeting on August 10. (Est. completion – 8/10)
 - 3. Delaware Coast Day on October 3. (Est. completion – 10/10)
- xi. Continued to provide the public and regulated community with pertinent and timely information, including compliance assistance tools, for DAQ’s adoptions of the following area source air toxics regulations.
 - 1. Section 13 applicable to methylene chloride paint stripping operations at <http://www.awm.delaware.gov/Info/Regs/Pages/Section13.aspx>. (Est. completion – 12/10)
 - 2. Section 15 applicable to spray applied coatings at motor vehicle or mobile equipment operations at <http://www.awm.delaware.gov/Info/Regs/Pages/Section15.aspx>. (Est. completion – 12/10)
 - 3. Section 16 applicable to asphalt processing and asphalt roofing products manufacturing operations at <http://www.awm.delaware.gov/Info/Regs/Pages/1138Section16.aspx>. (Est. completion – 1Q/11)
- xii. Continued to provide compliance assistance in meeting annual testing and permitting requirements to gasoline delivery vessel fleet owners. (Ongoing activity)

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1. Implement appropriate actions to reduce the harm from exposure to air toxics

c. Pending

- i. The adoption of a priority area source air toxics standard was put on hold. This measure was taken as EPA recently proposed federal amendments to the federal standard applicable to area source gasoline dispensing facilities, making adoption inappropriate at this time. In the interim, DAQ commenced adoption of an area source air toxics standard applicable to asphalt processing and asphalt roofing products manufacturing operations, which had been planned for 2012. The rescheduling of the delayed adoption will be addressed during the development of the 2011 ATSP this fall.
- ii. The adoption of another priority area source air toxics standard was put on hold. This measure was taken as EPA also recently proposed federal amendments to the federal standard applicable to area source gasoline distribution operations, making adoption inappropriate at this time. In the interim, DAQ will commence adoption of the residual risk standard applicable to halogenated solvent cleaning operations in August 2010; its adoption had been planned for 2011. The rescheduling of the delayed adoption will be addressed during the development of the 2011 ATSP this fall.
- iii. The priority amendment of two air toxics infrastructure standards have also been put on hold. These measures were taken as anticipated federal amendments to the General Provisions and for Case-By-Case Control Technology Determinations have been delayed, making the amendment of Section 3 and 4 of Regulation 1138 inappropriate at his time. The rescheduling of the delayed adoption will be addressed during the development of the 2011 ATSP this fall.
- iv. The amendment of Regulation 1131 has been put on hold pending the finalization of the ozone NAAQS. The rescheduling of the delayed adoption will be addressed during the development of the 2011 ATSP this fall.
- v. Evaluation and improvement of Delaware's open burning website and educational materials remained on hold due to lack of available funding.

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2. Implement an ongoing program to address the risks from exposure to air toxics

a. Key Accomplishments

- i. Issued the 2009 Division of Air Quality Air Toxics Strategic Plan Year-End Status Report on March 9. This report summarized the key accomplishments during 2009 and identified the significant ongoing activities continuing into 2010.
- ii. Completed evaluation of Area Source Compliance's air toxics assignments, expanded cross-tasking assignments between auto body, dry cleaning and asbestos programs, and provided training to better address these risk-based air toxics programs.
- iii. Solved potential problems for affected Delaware facilities, especially small businesses, by developing tools by March 2010 that simplify compliance with the notification and reporting requirements of Sections 13, 14, and 15 of Regulation 1138, as well as, their federal equivalent – Federal Subpart HHHHHH.

b. Significant Current Activities

- i. Continued to actively participate in the National Association of Clean Air Agency's (NACAA) air toxics, monitoring, mobile source, and outreach committee programs. (Ongoing activity)
- ii. Continued to actively participate on local, regional, and national committees, including the following, to identify energy issues, develop strategies/solutions, and implement Delaware's Energy Program.
 1. Clean State Program (Alternative Fuels). (Ongoing activity)
 2. National Association of State Energy Officials (NASEO). (Ongoing activity)
 3. Delaware Tech Applied Energy Education Advisory Committee. (Ongoing activity)
- iii. Reviewed Engineering and Compliance's air toxics assignments and the time restraints amongst the staff to better address these risk-based air toxics programs. (Est. Completion – 7/10)
- iv. Participated in the design of the multi-state Transportation and Climate Initiative (TCI) to reduce the emissions from of greenhouse gases from the transportation sector. Mobile sources are now the largest source of air toxics emissions and reductions of these emissions are expected to occur under the implementation of the TCI. (Ongoing activity)

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3. Build greater understanding of ambient air toxics environment

a. Key Accomplishments

- i. Continued to monitor air toxics at the Wilmington [carbonyls, metals, and volatile HAPs] and Delaware City [volatile HAPs] monitoring stations. These air toxics monitoring data are being used to enhance our knowledge of air toxics in Delaware's environment. (Ongoing activity)
- ii. Identified and resolved a modeling anomaly in the individual exposure results generated by the emissions process module for air toxics emissions associated with airports.

b. Significant Current Activities

- i. Continued the "Community Air Toxics Study" monitoring project that utilizes a gas chromatographic/mass spectrometer to measure concentrations of multiple hazardous air pollutants (HAPs) at various sites, including schools, in Wilmington. This data will provide insights on the spatial variation of HAP concentrations compared to the existing HAP monitoring results at Wilmington monitoring station. (Est. completion – 2012)
- ii. Continued to provide support for the University of Delaware's special project on near real time organic aerosol speciation at Wilmington monitoring station. This data will provide greater insights on the temporal variation of selected HAP concentrations compared to the existing HAP monitoring results at Wilmington monitoring station. (Ongoing activity)

4. Identify potential harm from exposure to air toxics

a. Key Accomplishments

- i. Used the Division of Air Quality's modeling capabilities (for the first time) to estimate the potential public exposure for site specific emissions during the development of operating permit.
- ii. Coordinated the reassessment of risk by DPH following revision of the DATAS modeled concentrations.

b. Significant Current Activities

- i. Reviewed EPA's initial draft release of the 2005 National Air Toxics Assessment (NATA) and found one anomaly with 1,1,2 trichloroethane that is currently under investigation; the 2005 NATA release should be issued in September 2010. (Est. completion – 12/10)

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5. Identify options for reducing air toxics in the environment

a. Key Accomplishments

- i. Submitted 2010 Diesel Emissions Reduction Act (DERA) grant application, which has been approved, but not yet awarded.

b. Significant Current Activities

- i. Continued to participate and worked to improve flow of information at monthly WILMAPCO meetings for New Castle County and biannual workgroup meetings for Kent and Sussex Counties. (Ongoing activity)
- ii. Continued to review and make significant comments on Preliminary Land Use Service (PLUS) applications. (Ongoing activity)
- iii. Continued to maintain open communication with the Claymont Community Coalition on air toxics and other issues. (Ongoing activity)
- iv. Continued to meet with MARAMA and EPA Region 3 on development of the concept and path forward for an outreach program for the Clean Diesel Campaign. (Ongoing activity)
- v. Began review of EPA's June 4 proposed Boiler MACT rule, area source boiler rule, and commercial and industrial solid waste incinerator rule. (Est. completion – 8/10)

6. Gather information related to air toxics sources

a. Key Accomplishments

- i. Submitted the Underground Storage Tanks (UST) Semiannual Activities Report to EPA in April 2010.
- ii. Submitted only point source HAPs information with National Emissions Inventory in June 2010, as limited resources were prioritized on submittal of the 2007 SIP Modeling Inventory. The HAPs inventory submittal will be updated this fall. (Est. completion – 10/10)

b. Significant Current Activities

- i. Continued to identify new and previously unpermitted dry cleaners, auto-body shops, and gasoline delivery vessel owners. (Ongoing activity)
- ii. Began an audit of the frequency and duration of venting from the ships to be lightered during controlled lightering operations in February 2010; initial semiannual venting report is due in August 2010. (Ongoing activity)

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6. Gather information related to air toxics sources

c. Pending

- i. Continued to experience problems with DEN's data entry systems that prevent inclusion of area source air toxics facilities into AFS. (Under investigation; est. completion – 12/10)
- ii. Emission inventory activities to track the emissions of air toxics of concern from significant sources are currently on hold pending identification of the key air toxics of concern, their overall level of risk, and their geographic sensitivity. (On hold)

7. Evaluate the effectiveness of the actions taken to reduce harm from exposure to air toxics

a. Key Accomplishments

- i. Continued to monitor air toxics at the Wilmington [carbonyls, metals, and volatile HAPs] and Delaware City [volatile HAPs] monitoring stations. These air toxics monitoring data are being used to enhance our knowledge of air toxics in Delaware's environment. (Ongoing activity)
- ii. Completed an assessment of the compliance performance by school bus operators with anti-idling requirements of Regulation 1145, Excessive Idling of Heavy Duty Vehicles, at various schools throughout Delaware in June 2010 and reported the findings to the Department of Education. This assessment will be used to revise, if necessary, and to refocus the anti-idling outreach program.

b. Significant Current Activities

- i. Began to reevaluate of the content and focus of the current anti-idling outreach program for schools with the intent to revise the school bus outreach program, as appropriate. (Ongoing activity)

c. Pending

- i. Emission inventory activities to track the emissions of air toxics of concern from significant sources are currently on hold pending identification of the key air toxics of concern, their overall level of risk, and their geographic sensitivity. (On hold)

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8. Air toxics resources development

a. Key Accomplishments

- i. Completed the assessment of a process that will provide for multiple-agency sharing of information for new and existing sources. Commenced the implementation of this process for the for automobile body shop sector.

b. Significant Current Activities

- i. Continued to provide DAQ personnel with information and access to EPA's air toxics webinar broadcasts. Five recently promulgated area source air toxics standards that were offered during the January to June 2010 period. (Ongoing activity)

c. Pending

- i. Funds for travel for training have continued to be limited in 2010. However, there were no air toxics training opportunities requiring travel offered during the January to June 2010 period. (Ongoing)