State-of-the-Art (SOTA) Manuals

- SOTA Manual for Asphalt Pavement Production Plants
  - Reviewed data that was the basis for the NO\textsubscript{x} limits in N.J.A.C. 7:27-19.9 “Asphalt Pavement Product Plants”
  - Gathered stack test data and emission limits from other jurisdictions, such as the South Coast Air Quality Management District
  - Several meetings held with New Jersey Asphalt Pavement Association
State-of-the-Art (SOTA) Manuals

• Limits for NO\textsubscript{x}, CO, VOC based on whether the equipment is new or modified

• For modified equipment
  – NO\textsubscript{x} limit is consistent with N.J.A.C. 7:27-19.9
  – VOC and CO limits consistent with prior SOTA Manual

• For new equipment,
  – NO\textsubscript{x}, CO, and VOC limits are provided for natural gas only
  – Any other fuels or dual fuel scenarios, case-by-case; insufficient data
State-of-the-Art (SOTA) Manuals

- TSP limit is 0.020 gr/scf
- Opacity limit is no visible emissions
- Sulfur dioxide is to meet N.J.A.C. 7:27-9
- Public notice is being prepared for management review/signature
- Draft Asphalt Pavement Production Plant SOTA Manual expected in NJ Register for comment Spring, 2011
State-of-the-Art (SOTA) Manuals

• SOTA Manual for Aboveground VOC Storage Tanks
  – Reviewed data that was the basis for the limits and guidelines in N.J.A.C. 7:27-16.2 “VOC Stationary Storage Tanks”
  – Gathered recent data from other jurisdictions
  – Nine revisions made to prior draft based on comments received from 3 stakeholders
    • Clarifications
    • Additional compliance options included
State-of-the-Art (SOTA) Manuals

• Final version of the SOTA Tank Manual has been drafted
  – Requirements for floating roof tanks are established based on whether it is an existing tank being modified or it is a new tank
  – All subject fixed roof tanks have the same requirements
State-of-the-Art (SOTA) Manuals

• New floating roof tanks
  – Install cable suspended roofs to eliminate emissions from landing leg sleeves OR install a welded floating roof to eliminate emissions from deck seam losses AND
  – Implement one of the following
    • Vapor collection system;
    • Bottom of roof deck can be lowered to <6 inches; or
    • Limit in-service landings
State-of-the-Art (SOTA) Manuals

• Modified floating roof tanks
  – Install cable suspended roofs to eliminate emissions from landing leg sleeves or install a welded floating roof to eliminate emissions from deck seam losses
State-of-the-Art (SOTA) Manuals

• Newly constructed or modified fixed roof tanks
  – Install an internal floating roof system or vapor control system AND
  – Install vapor tight covers on all tank gauging or sampling devices

• Draft Aboveground VOC Storage Tank SOTA Manual expected in NJ Register for comment Spring, 2011
State-of-the-Art (SOTA) Manuals

• New Manual for Landfill Gas Venting Equipment and Landfill Gas Treatment being developed. First effort to develop such a Manual
• Addresses emissions of methane (an air contaminant, which has been classified as a greenhouse gas)
  – Need to install methane control device will be based on flowrate and methane concentration
  – A spark ignited flare, or equivalent, will be required where there is enough methane for combustion to occur, but not enough to sustain a standard enclosed flare (methane conc >20% and flowrate >5 cfm)
State-of-the-Art (SOTA) Manuals

• Being written to address the many landfills being developed which now are installing venting equipment
• Also, limits for products of combustion (CO, NO\textsubscript{x}) also have been incorporated
• Three sets of comments received on initial draft of manual, not very supportive
• Recent stack test data support draft limits
• Manufacturer supports more stringent limits; arranging a meeting with company