Preliminary List of Control Measures (2015 Ozone SIP)

Below is a preliminary list of control measures that are expected to provide emissions benefits between 2017 and 2023, which are assumed baseline year and attainment year respectively for the 2015 ozone NAAQS RFP and Attainment SIPs.

Point

2008/2015 RACT control measures

DC

EGUs: HEDD Combustion Turbines emission control rule

Area

MD

Municipal Waste Combustion rule (Effective compliance date: 5/1/19) Consumer Products Phase III & IV rules (Effective compliance date: 1/1/18)

Nonroad

Nonroad Small Gasoline Engines rule - Effective December 8, 2008 requires small gasoline-powered engine equipment manufactured after August 1, 1996 to meet federal emissions standards. Small gasoline-powered engine equipment includes, for example, lawn mowers, trimmers, generators, and compressors.

Expected benefits: Small

Nonroad Diesel Engines Tier 1/2 rules effective July 18, 1994 and December 22, 1998 respectively take credit for NOx emissions reductions from emissions standards promulgated by EPA for nonroad, compression-ignition (*i.e.*, diesel-powered) utility engines such as, heavy-duty farm equipment, construction equipment, industrial equipment, etc. Expected benefits: Small

Marine Engine Standards effective December 8, 2008 controls exhaust emissions from new spark-ignition gasoline marine engines, including outboard engines, personal watercraft engines, and jet boat engines.

Expected benefits: Small

Emissions Standards for Large Spark Ignition Engines effective January 7, 2003 controls VOC and NOx emissions from several groups of previously unregulated nonroad engines, including large industrial spark-ignition engines, recreational vehicles, and diesel marine engines. Controls on the category of large industrial spark-ignition engines are first required in 2004. Large industrial spark-ignition engines are those rated over 19 kW used in a variety of commercial applications; most use liquefied petroleum gas, with others operating on gasoline or natural gas. Controls on the other engine categories are required beginning in years after 2005.

Expected benefits: Small

Railroad Engine Standards effective June 15, 1998 establishes emission standards for oxides of nitrogen, hydrocarbons, carbon monoxide, particulate matter, and smoke for newly manufactured and remanufactured diesel-powered locomotives and locomotive engines, which were previously unregulated. This regulation took effect in 2000 and affects railroad manufacturers and locomotive re-manufacturers. It involves adoption of three separate sets of emission standards with the applicability dependent on the date a locomotive is first manufactured.

Expected benefits: Small

On Road

Tier 2 Motor Vehicle Emission Regulations effective April 10, 2000 requires more stringent tailpipe emissions standards for all passenger vehicles, including sport utility vehicles, minivans, vans, and pick-up trucks. These regulations also required lower levels of sulfur in gasoline, which ensured the effectiveness of low emission control technologies in vehicles and reduced harmful air pollution. Vehicles weighing less than 6000 pounds were phased-in to this standard between 2004 and 2007.

Expected benefits: Small due to vehicle turn over.

Tier 3 Vehicle Emissions and Fuel Standards Program effective June 27, 2014 is designed to reduce air pollution from passenger cars and trucks. The program considers the vehicle and its fuel as an integrated system, setting new vehicle emissions standards and lowering the sulfur content of gasoline beginning in 2017. The vehicle standards will reduce both tailpipe and evaporative emissions from passenger cars, light-duty trucks, medium-duty passenger vehicles, and some heavy-duty vehicles.

Expected benefits: Large due to vehicle turn over.

SAFE Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks – Effective July 8, 2020

Expected benefits: Small VOC/NOx benefits due to vehicle turn over.

Phase 2 GHG Emission Standards & Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - December 27, 2016

Expected benefits: Small VOC/NOx benefits due to vehicle turn over.