

# DRAFT

## Air Quality Multi-Pollutant Process (AQMP) Control Strategy Evaluation Process

The North Carolina Division of Air Quality (NCDAQ) will use several tools to evaluate potential control strategies for the air quality multi-pollutant process (AQMP). Some of the key variables for consideration for the control strategies are feasibility of implementation, cost benefits, pollutants impacted, environmental justice, amount of emissions changed and air quality impacts. The major focus when considering potential control strategies are their multi-pollutant benefit at a reasonable cost and ease of implementation. The control strategy evaluation process is flexible and dynamic and driven by the needs of a particular area.

One of the challenges in evaluating potential control strategies is prioritization. It can be difficult to prioritize or rank multi-pollutant control strategies because of the potential adverse effects of local vs. regional impacts in areas of emission decreases, i.e., local air quality benefits to meet air quality standards vs. benefits to reduce health risk. For example, toxic air pollutants are a locally specific issue, criteria air pollutants are generally source sector driven, and regional haze and greenhouse gases (GHG) are broader issues. When prioritizing potential control strategies, any particular control strategy may cause regional, multi-state reductions in one pollutant and an increase in another pollutant. Additionally, when considering potential control strategies, important variables are the area of influence the control strategy covers, implementation and desired air quality benefits. One of the components to consider when evaluating control strategies is the technology penetration rate, which takes into account the probability of technology implementation within an affected industry segment or emission source category. Another key variable in the evaluation process is determining an acceptable “balance” when weighing the benefits and possible detriments of a given control strategy. When evaluating the control strategies, part of the evaluation process will be to determine the suite of options that work synergistically to achieve the most multi-pollutant reductions feasible while still meeting the overall air quality goals.

Another variable for consideration during the evaluation process is the cost benefit. The cost per tonnage of pollutant reduced should be reasonable. High cost per tonnage may cause a high financial burden on industry that yields minimal reductions or air quality benefits. However, the cost benefit analysis should include the gains from lower health costs. Improving air quality typically has a direct correlation with improving overall health benefits because of the decrease in health costs that are associated with health issues resulting from poor air quality.

The stakeholders will be given the information and tools needed to evaluate potential control strategies. During the control strategy evaluation process, the NCDAQ will engage in open dialogue with the stakeholders. The NCDAQ will encourage feedback and input from the stakeholders throughout the process.

The following tables will be provided as evaluative tools to assist stakeholders in prioritizing and ranking potential control strategies.

**Table 1.1a: Parameters for Evaluating Potential Control Strategies**

Control Strategy	Pollutants Reduced		Emission Reduction	GHG Reduction	Air Quality Impacts	Other Environmental Impacts	Area Covered
	NAAQS	HAPs					
Heavy Duty Engine OBD Program	NO <sub>x</sub> , PM <sub>2.5</sub>						

**Table 1.1b: Parameters for Evaluating Potential Control Strategies**

Control Strategy	EJ Issues	BENMAP Risk Assessment	Implementation Concerns	Cost Benefit	% of Affected Population	% of Emission Contribution	Voluntary vs. Regulatory
Heavy Duty Engine OBD Program	N/A						Regulatory

**Table 1.2: Parameters for Evaluating Implementation of Air Quality Rules**

Rule	Compliance Rate	Enforcement	Public Awareness & Outreach	Overseeing Agency
Anti-Idling	N/A	NC DAQ will establish a hotline for citizens to report violators	Stakeholder meetings, posters & signage	NC DAQ