MEMORANDUM

TO: Local Public Agencies Section - All LPA Sub-recipients

FROM: Beverly Chenausky, Air & Noise Program Manager

CC: Paul O'Brien, Environmental Planning Director

DATE: May 4, 2016 Revised January 3, 2018, Revised June 5, 2019


On March 10, 2006, EPA published a final rule establishing transportation conformity requirements for analyzing the local PM air quality impacts of federally funded transportation projects (71 FR 12468). Under this rule, all new PM hot-spot analyses for applicable projects must be quantitative.

PM hot-spot analyses are only required for projects of local air quality concern, which include certain highway and transit projects that involve significant levels of diesel vehicle traffic and any other project identified in the PM SIP as a localized air quality concern. No PM hot-spot analysis, even a qualitative one, is required for projects that are not of local air quality concern. Examples of projects requiring a quantitative hot-spot analysis can be found in Attachment A.

In PM10 and/or PM2.5 nonattainment and maintenance areas, ADOT Environmental Planning determines when a quantitative PM hot-spot analysis is needed at the project-level, utilizing the "Project Level PM Quantitative Hot-Spot Analysis – Project of Air Quality Concern Questionnaire" to facilitate interagency consultation requirements. If the project requires a quantitative hot spot analysis, the "Project Level PM Quantitative Hot-Spot Analysis Consultation Document for Project of Air Quality Concern", will be completed and circulated to gain consensus from consulting parties on the modeling assumptions and inputs needed to perform a quantitative hot-spot analysis.

In CO maintenance areas, ADOT Environmental Planning determines when a quantitative CO hot-spot analysis is needed at the project-level, utilizing the “CO Project Level Hot-Spot Analysis Questionnaire”, because the federal regulations clearly state when CO modeling is required, interagency consultation occurs only when modeling is required, using the “Project Level CO Quantitative Hot-Spot Analysis Consultation Document”.

A general process for project level conformity is shown in Attachment B, with more specific instructions found in the ADOT documents described. The process has been vetted through interagency consultation and modified to reflect changes in authority under CE Assignment 23 U.S.C. 326, effective January 3, 2018, and full NEPA Assignment 23 U.S.C. 327, effective April 16, 2019.

For more information, including a listing of current nonattainment and maintenance areas and guidance documents, visit the ADOT air quality web page at http://www.azdot.gov/business/environmental-planning/air-quality.
EXAMPLES OF PROJECTS THAT REQUIRE PM HOT-SPOT ANALYSES

EPA noted in the March 2006 final rule that the examples below are considered to be the most likely projects that would be covered by 40 CFR 93.123(b)(1) and require a PM2.5 or PM10 hot-spot analysis (71 FR 12491).

Some examples of projects of local air quality concern that would be covered by 40 CFR 93.123(b)(1)(i) and (ii) are:
• A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic;
• New exit ramps and other highway facility improvements to connect a highway or expressway to a major freight, bus, or intermodal terminal;
• Expansion of an existing highway or other facility that affects a congested intersection (operated at Level-of-Service D, E, or F) that has a significant increase in the number of diesel trucks; and,
• Similar highway projects that involve a significant increase in the number of diesel transit busses and/or diesel trucks.

Some examples of projects of local air quality concern that would be covered by 40 CFR 93.123(b)(1)(iii) and (iv) are:
• A major new bus or intermodal terminal that is considered to be a “regionally significant project” under 40 CFR 93.101; and,
• An existing bus or intermodal terminal that has a large vehicle fleet where the number of diesel buses increases by 50% or more, as measured by bus arrivals.

A project of local air quality concern covered under 40 CFR 93.123(b)(1)(v) could be any of the above listed project examples.

EXAMPLES OF PROJECTS THAT DO NOT REQUIRE PM HOT-SPOT ANALYSES

The March 2006 final rule also provided examples of projects that would not be covered by 40 CFR 93.123(b)(1) and would not require a PM2.5 or PM10 hot-spot analysis (71 FR 12491).

The following are examples of projects that are not a local air quality concern under 40 CFR 93.123(b)(1)(i) and (ii):
• Any new or expanded highway project that primarily services gasoline vehicle traffic (i.e., does not involve a significant number or increase in the number of diesel vehicles), including such projects involving congested intersections operating at Level-of-Service D, E, or F;
• An intersection channelization project or interchange configuration project that involves either turn lanes or slots, or lanes or movements that are physically separated. These kinds of projects improve freeway operations by smoothing traffic flow and vehicle speeds by improving weave and merge operations, which would not be expected to create or worsen PM NAAQS violations; and,
• Intersection channelization projects, traffic circles or roundabouts, intersection signalization projects at individual intersections, and interchange reconfiguration projects that are designed to improve traffic flow and vehicle speeds, and do not involve any increases in idling. Thus, they would be expected to have a neutral or positive influence on PM emissions.

Examples of projects that are not a local air quality concern under 40 CFR 93.123(b)(1)(iii) and (iv) would be:
• A new or expanded bus terminal that is serviced by non-diesel vehicles (e.g., compressed natural gas) or hybrid-electric vehicles; and,
• A 50% increase in daily arrivals at a small terminal (e.g., a facility with 10 buses in the peak hour).