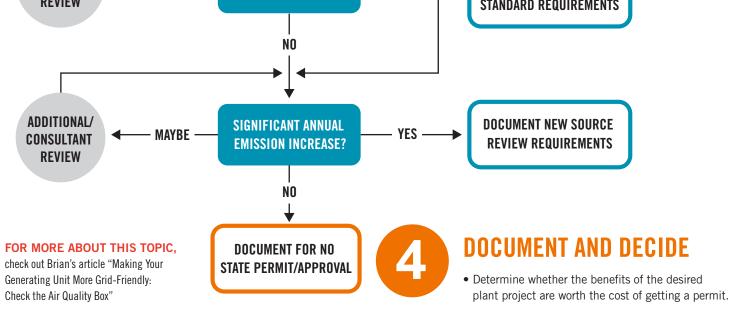


HOW TO ASSESS AIR QUALITY IMPLICATIONS FOR GENERATING PLANT IMPROVEMENT PROJECTS

Today, many electrical generating utilities are striving to improve the efficiency and operating flexibility of their existing plants through implementation of various changes. These projects may trigger air permitting requirements, which need to be identified and budgeted prior to initiation. This flow chart can serve as a guide for the steps needed to determine the air quality permitting implications for your next project.

DEFINE THE PROJECT BEING CONSIDERED • Obtain a written overview of the proposed project. · Meet with plant staff to discuss the project details and the purpose of the assessment. **DETERMINE IF EMISSIONS ARE** AFFECTED • Eliminate the project as a modification if it is routine **PHYSICAL CHANGE** ADDITIONAL/ maintenance repair and MAYBE **OR CHANGE IN METHOD** NO CONSULTANT replacement (RMRR) or has **OF OPERATION?** REVIEW no effect on emissions. Non-RMRR physical or YES operational changes that result in an emission increase are considered a modification and may require a permit. Proceed to Step 3 to ADDITIONAL/ **EXCLUDED ACTIVITY?** determine whether a MAYBE YES CONSULTANT **RMRR OR OTHER** permitting review process REVIEW is triggered and to estimate the cost implications. NO ADDITIONAL/ **DOCUMENT FOR NO POSSIBLE EMISSION** MAYBE NO CONSULTANT **INCREASE? STATE PERMIT/APPROVAL** REVIEW YES **DEFINE THE EMISSION INCREASE** CONDUCT A DETAILED ANALYSIS TO DETERMINE: • Additional costs to the project for controls or monitoring • Whether the modification will trigger major permitting • Permitting schedule • The level of permitting triggered • Options (and associated drawbacks) to avoid the permitting process and costs. • Requirements for the permitting process

ADDITIONAL/ CONSULTANT REVIEW MAYBE MAYBE MAXIMUM HOURLY EMISSION? YES SOURCE PERFORMANCE STANDARD REQUIREMENTS



• Document all steps for utility's records.

LET'S TALK AIR PERMITTING BRIAN PETERMANN | Senior Air Quality Project Manager (913) 402-4217 | brian.petermann@powereng.com