MAY 2015

ANY STATES AND STAKEHOLDERS have called on the U.S. Environmental Protection Agency (EPA) to enable states to adopt "trading-ready" 111(d) plans that allow power plant owners the option to use allowed tons or allowances from other states for compliance purposes. States could adopt trading-ready plans without entering into formal agreements or coordinating program details

with other states. Indeed, a state would be trading ready as long as the state meets a basic set of minimum compatibility requirements established by EPA. Any power plant owner in a trading-ready state could use allowed tons or allowances from any other trading-ready state. The table below describes how to establish and administer such a trading-ready program.

ESTABLISHING THE TRADING-READY PROGRAM			
STEP 1	Determine State's Mass Emissions Budget	Possible options for determining mass emissions budget: (1) EPA may prescribe mass budgets for all states similar to rates; (2) state may choose from several budgets deemed equivalent by EPA; or (3) state proposes a rate-to-mass conversion, shows it is equivalent and gets EPA approval.	
STEP 2	How much flexibility? Regulate at the utility level or plant level?	Every state must regulate the "affected units" at either the plant/unit level or utility level. Plant - or unit-level regulation obligates owners to hold enough allowed tons (allowances) to match actual emissions and owners may sell extra or acquire additional allowances, providing maximum flexibility to find lowest cost reductions (A-2).* Utility level regulation gives each utility some flexibility to manage allowed tons across only their fleet (A-1). It is possible for the state to regulate at the utility level and leave the trading decision to the utility (A-3).	
STEP 3	Determine how shares of the state's mass emissions budget will be allocated	The emissions budget is made of allowed tons, or allowances. States can distribute allowed tons to each utility or other plant-owning entity based on baseline emissions, electricity output (in baseline or going forward), or other metric; or the allowances can be distributed to other entities or sold at auction. Allowed tons have value and states can use distribution of allowed tons to allocate shares of the overall burden for delivering emissions reductions or reward specific actions.	
STEP 4	Develop Rulemaking Language	Rulemaking language for emissions budget trading (A-2) already exists and is in place in many states under current programs (CAIR, CSAPR). States can use this rulemaking language as a starting point and adjust for utility-level regulation (A-1) or utility level with optional trading (A-3). Legal review of the components of the draft rule should be undertaken to determine whether legislation would be needed.	
STEP 5	Establish Tracking System for Emissions and Allowed Tons	The tracking system is where emissions information is stored for each affected unit, along with an account for holding allowed tons, or allowances. These systems already exist at both the federal level and in some states. A state could engage a vendor to create a new tracking system or it could adapt and use an existing system. EPA could also provide a tracking system for states to use on an optional basis. A utility-specific program that does not allow optional trading may not require electronic tracking, because the utility could just demonstrate it is under the budget in a compliance filing.	
STEP 6	Require emissions Reporting	Affected units already report verified emissions under 40 CFR Part 75. This information can be reported to the state tracking system established as part of the budget trading program under 111(d).	
STEP 7	Finalize Rulemaking	In states where legislation is needed or desired, the legislation must precede proposal and final issuance of the rule language. This will depend on a legal review in each state. Some states may desire or have a tradition of getting legislative approval even where it is not needed to grant authority to the environmental agency.	

^{*} References to A-1, A-2 and A-3 are to the approaches outlined in appendices A-1, A-2 and A-3, respectively, in the paper, *Choosing a Policy Pathway for State 111(d) Plans to Meet State Objectives*, by Franz T. Litz and Jennifer Macedonia, April 2015. These trading-ready program elements are a companion to that paper.

	ADMINISTERING THE TRADING-READY PROGRAM		
STEP 8	Administer Tracking System	To administer the tracking system, the state (or authorized administrator): Maintains emissions accounts for each affected unit to track emissions during each compliance period; Maintains allowance accounts; Deposits allowed tons/allowances into allowance accounts; and Allows for transfers between account holders.	
STEP 9	Compliance Assessment	At the end of each compliance period (1 or more years) the state checks emissions for each unit against allowances in the unit's compliance account (A-2 & A-3). Units with sufficient allowances to cover emissions are in compliance. For the utility-focused approach, the state reviews the compliance filing against emissions reports (A-1).	
STEP 10	Enforcement	In the event that a unit does not surrender enough allowances to cover its emissions (A-2 & A-3), or the utility cannot demonstrate its emissions are within its prescribed budget (A-1), then the state must enforce. Typically, noncompliance requires surrender of allowances at a penalty rate (e.g., at a ratio of 2 or 3 to 1), and/or imposes a monetary penalty on sources. Noncompliance has been rare with these types of self-correcting programs.	
	ALLOWING INTERSTATE TRADING		
STEP 11	Accept Allowed Tons from other States with Mass-Based Programs	A state can connect to other states by allowing its sources to use allowed tons from another state for compliance purposes. No formal agreement should be necessary as long as EPA allows trading between states that meet minimum compatibility requirements, such as a common unit of allowed tons (e.g., 1 metric ton of ${\rm CO_2}$) and compatible tracking of such allowances. States that begin with a simple utility budget approach (A-1) could later decide to issue allowances and allow participation in interstate trading (A-2 & A-3).	
STEP 12	Connect Tracking Systems or Use One System	Ideally, to move allowances from one state to another, both states would use the same allowance tracking system, but separate tracking systems can work. In the case of a multistate utility, it is conceivable that transfers of allowed tons could be "tracked" manually through utility reports, but affected states would have to coordinate to make sure allowed tons are not used twice.	
STEP 13	No MultiState Plan	EPA's proposal discusses multistate plans where states file jointly. Many states and stakeholders have requested that EPA allow states to file separate plans that include multistate coordination. In addition, stakeholders have asked EPA to decide what minimum compatibility requirements will apply for one state to accept the allowances from another state.	

ready programs to meet 111(d) requirements and give power plant owners the option to use allowed tons or allowances from another state for compliance purposes. This simple, mass-based approach to trading can be accomplished without formal agreements between states and without much coordination between states, so long as EPA clearly establishes minimum compatibility requirements for a state to qualify as "trading ready."

Importantly, states can make the decision to allow plant owners to use allowances from another state at any time. This allows each state to follow its unique process, consult with stakeholders and adopt regulations. With the option to trade preserved, states can decide to trade when and if the state is ready.



