



# Environmental Information

## Controlled Trading

What it is—  
why we need it

The EPA has begun encouraging states to adopt a series of "controlled trading" steps to speed progress towards clean air with less expense and administrative hassle. Since 1970 EPA and the states have sought better air quality through rules which apply specific, uniform emission limits -- generally based on a known feasible control technology -- to every emission point within a regulated process. That approach produced large gains in many areas, because it dealt with sources that were easy targets, whose initial costs of control were relatively low. But for many urban basins and more intractable pollutants, it has left us far from attainment of ambient air standards. Now we face more difficult problems -- and the possibility that past gains may slow or be reversed.

There are several reasons for this. First, air is limited, while our population, production and industrial base will continue to grow. The atmosphere cannot expand; the more dirt we put into it, the dirtier it will get. Second, rules are general statements that can't fit every case. They leave plant managers little room to adjust broad requirements to particular situations. And they treat similar processes equally, ignoring both different impacts on air quality, and the chance that equivalent emission reductions might be more easily obtained from other processes in the same facility or area. Because some sources are undercontrolled under this approach, while many are controlled more than they need be, the result is excess costs -- and a powerful reason for industry to try to limit its obligations by resistance or delay. Finally, and most importantly, the present system discourages innovative control technology. A source that installs known controls can generally count on keeping enforcers off its back, regardless of those controls' cost or effectiveness. A source that develops more effective measures receives no reward for doing so. Worse yet, it risks making itself a target for extra regulation, since it may have shown its industry can do more. For most firms, it is simply not "profitable" to invest in innovative efforts to do more than the law currently requires. This point is critical, for in the long run only innovation can produce improved air quality at reduced -- rather than increasing -- costs.

Present regulation can deal with these threats to air quality in two ways. It can try to squeeze more emission reductions out of regulated sources, imposing much heavier costs per pound than for initial reductions. Or it can reach out to regulate smaller

sources. Both tactics mean more government intrusion and enforcement burdens, as well as smaller payoffs per regulatory action. Both mean more industry resistance and political problems. Both pose direct conflicts between growth and clean air.

Controlled trading offers a way out of this trap by putting the profit motive to work for pollution control, within the present regulatory system. Most generally, it would allow any source to meet its emission control responsibilities by securing required reductions from any points within its own or other facilities, so long as air quality and the enforceability of the resulting trade in levels of control remain equivalent. If a source can find or finance ways to remove twice the amount of a relevant pollutant at \$5 per pound either within its own plant or from neighboring plants -- it can halve the \$10 pounds it is now required to remove. In short, it can trade a relaxation of controls where control costs are very high, for increased controls where costs -- either of internal reduction or external purchase -- are relatively low.

Thus controlled trading allows a source to get someone else -- or some other process -- to meet required emission reductions. And a market for those reductions will let sources anticipate their availability and cost, creating greater certainty and more reductions.

This simple step can carry large benefits. First, as numerous studies of existing sources under the bubble indicate, it can yield savings of millions of dollars, without adverse impacts on ambient air quality. Plant managers who produce such savings by redistributing controls will continue to search for further inexpensive reductions -- and will have a personal stake in the new configuration, instead of viewing controls as an interference imposed from outside.

Second, controlled trading builds on the plant-specific expertise which control agencies can never duplicate. Instead of stopping with enforcement of a uniform rule, it encourages plant managers to tailor nationwide requirements by counterproposing a different mix of controls that will produce the same result. Since no intrasource trade will take place unless savings are realized, and no intersource trade will take place unless both parties benefit, this leaves state agencies free to focus on technical air quality while reducing wrangles over industry costs.

... Third, controlled trading makes it profitable -- for the first time -- for firms to innovate by controlling more than required. Sources which produce such extra emission reductions can benefit by using them for a cost-cutting bubble, or selling them at a profit to new plants in need of offsets. These benefits can be magnified by banking, which creates a continuous incentive for firms to control as far as possible when replacing current controls, by allowing such firms to store reductions for future use or sale.

Banking also provides innovation insurance for existing sources, which can secure offsets to make up the difference if a new method of pollution control falls short of applicable requirements.

Fourth, controlled trading encourages voluntary extra reductions by regulated and unregulated sources. The prospect of substantial savings or profits can induce many firms to install controls that would be difficult to mandate by direct regulation. The prospect can also induce effective but difficult to require process changes. And it can make further reduction feasible for those low-control-cost but low-profit sectors of the economy that have often been treated lightly under State plans.

Finally, controlled trading can ease political and administrative pressures on hard-pressed State air agencies. It injects needed flexibility into the regulatory process, enlisting industry as an ally rather than an adversary. It can sharply reduce compliance costs, without changing the way emission obligations are set and enforced. It offers a route to attainment which does not involve additional direct regulation. With banking, it can spread permit approvals over time, relieve pressures to find offsets during politically-charged new source reviews, and help communities plan for growth based on known amounts of emission credits. It gives enforcement agencies something positive to distribute, not additional obligations. And it reverses present incentives for industry to delay rather than speed negotiations. A source which can benefit from a trade is losing money each day that trade is delayed, and will do everything possible to assure a prompt resolution.

Controlled trading currently consists of the bubble, new source offsets, and banking. EPA is exploring other steps -- including marketable permits and methods of allocating the clean air increment in so-called PSD areas -- that would expand the universe of traders and trades, provided that air quality and enforceability are preserved. The important point is that these steps, like the existing ones, will give sources a range of ways to meet air pollution requirements as cheaply and efficiently as possible, and that they must reinforce each other -- and environmental goals -- alike.

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