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# Earth Island Journal

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## Aluminum's hidden costs

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*by Tom Dureka and Ann Mesrobian*

The Aluminum Company of America (Alcoa) of Pittsburgh, Pennsylvania, has run a stripmine and lignite-fueled aluminum smelter in Rockdale, Texas since 1952. Alcoa employs some 1,200 workers: about 200 in the mine, the rest at the smelter.

Lignite is a soft, low-quality coal. Alcoa's Sandow mine encompasses 14,000 acres of lignite in Milam and Lee Counties. Much of this has already been stripmined, leaving behind a virtual moonscape. Alcoa plans the same for western Lee and northern Bastrop Counties.

Required by law to "reclaim" the land it has mined, Alcoa places the churned overburden back in the hole and plants grass on it. After an aerial reconnaissance of reclaimed Alcoa lands in March 1999, Bastrop County Environmental Network (BCEN) questions whether any of this acreage can attain full productivity or biodiversity again.

Because Alcoa's Rockdale smelter began operating before the Texas Clean Air Act became law in 1971, it was "grandfathered," or exempted from the law. Texas legislators were assured by industry that grandfathered plants would either comply voluntarily or shut down within 15 years, but nearly three decades later, Alcoa has become the largest single source of grandfathered emissions in Texas. Alcoa's plant causes as much smog and acid rain as a million passenger cars, and its toxic plume reaches beyond Dallas-Fort Worth and west to Big Bend National Park.

### **A water baron surfaces**

Although it has had 28 years to comply with new air pollution laws, Alcoa claims the Rockdale plant is inefficient, and it cannot afford upgrades. Alcoa has also come up with a clever way to keep the stripmine and smelter afloat long enough to launch a new water enterprise, capitalized by the City of San Antonio and Texas taxpayers.

The lignite seam Alcoa is mining lies between two water-bearing units of the deep sand aquifer known as the Carrizo-Wilcox. The deeper unit is called the Simsboro; the shallower one, the Carrizo. The lignite seams and the sand layers dip toward the Gulf Coast at a rate of about 150 feet per mile. Today's technology allows mining to about 250 feet deep. As mining goes deeper than the aquifer, it is necessary to pump groundwater from around the pit so that the artesian pressure doesn't blow out the bottom of the pit and flood the mine.

Since 1994, Alcoa has been withdrawing some 30,000 acre-feet of water per year from the Sandow mine and discharging it into Yegua Creek, where it flows to Lake Somerville and eventually into the Brazos River.

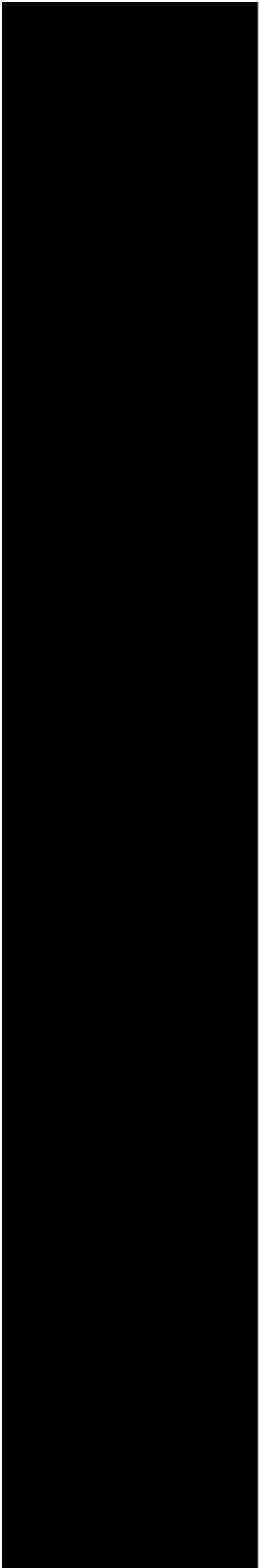
### **San Antonio over a barrel**

While Alcoa appears to be wasting this groundwater, the City of San Antonio is under state and federal mandate to find additional water sources to offset its pumping of the Edwards Aquifer.

Beginning in the 1970s, San Antonio's City Public Service (CPS) bought and leased land in northern Bastrop and southern Lee Counties, intending to mine lignite and burn it in a proposed power plant. CPS acquired some 11,000 acres outright and leased an additional 4000 acres, but local opposition and cheap western coal scuttled the project. The land has been off the tax rolls ever since, but was never mined. Thus, San Antonio owns something that Alcoa wants: additional lignite reserves.

In the last days of 1998, Alcoa, CPS, and the San Antonio Water System (SAWS) signed four contracts in a complicated deal whereby CPS assigned its lignite to Alcoa and its water rights to SAWS. Alcoa will sell additional water to SAWS from the Sandow property while SAWS finances the infrastructure for a massive new groundwater supply system encompassing Sandow mine and the CPS lands.

Half the system's cost can be covered by the Texas Water Development Board (TWDB), a tax-funded state agency, meaning that the local residents suffering from this land and water grab also pay for it. Alcoa can exempt most of the water supply system from taxation by assigning title of land and facilities to San Antonio. This enables Alcoa to mine the entire CPS property without paying a penny in property taxes. The Alcoa/SAWS contract allows Alcoa to over-build facilities and pump additional water to sell to third parties. When the Alcoa/SAWS contract expires, all the site's pipelines, pumps, and wells that San Antonio and the Texas taxpayers have paid for, and the site itself, become the property of Alcoa. The



entire project has been shrouded in secrecy, protected from public scrutiny by Alcoa's corporate veil of confidentiality. (Both SAWS and CPS forwarded BCEN's open records requests to the Attorney General's office, seeking exemption from the law.)

### **High and dry**

This sweetheart deal among Alcoa, SAWS, and CPS will dry up many private wells in Bastrop and Lee Counties. Alcoa must "mitigate" these damaged wells, either by drilling them deeper or by connecting formerly independent properties to piped-in water. The Alcoa/SAWS contract allows Alcoa to pass the costs of mitigation (and every other conceivable cost involved in this project) on to the SAWS ratepayers. If Alcoa "accidentally" dries up local water-supply corporations such as Aqua Water, residents will have no choice but to purchase water from Alcoa.

BCEN has been making progress by allying with San Antonio citizens, who understand how aquifers work. San Antonio needs new water sources - partly to heed a federal mandate to protect endangered species in its Edwards Aquifer - but may yet be persuaded that mining water in Lee and Bastrop Counties is not the best way to get it.

Big industry and the thirsty cities have a year and a half to secure every drop of groundwater in the state through contractual agreements before the next legislative session. Such a preemptive shot in the Texas Water Wars would leave everyone else high and dry.

BCEN is a citizen activist group. Neighbors for Neighbors is a group of, well, neighbors of Alcoa's mining site. Reach BCEN at [bcen@bastrop.com](mailto:bcen@bastrop.com) and Neighbors for Neighbors at <http://www.neighborsforneighbors.com>. Send a letter regarding your concerns about groundwater legislation to House Natural Resources Committee, Texas Legislature. Fax: (512) 463-5896