



## Chapter 5: Program Compliance

This analysis shows how ARP and CAIR allowances are used for compliance under the trading programs in 2013. Because SO<sub>2</sub> allowances from the ARP are used by sources to comply with the CAIR SO<sub>2</sub> annual program, compliance results for both programs are displayed together.

### Analysis and Background Information

2013 was the fourth year for compliance with the CAIR SO<sub>2</sub> program. Under this program, allowances are used to cover emissions based on the vintage year of the allowances, with pre-2010 vintage allowances used at 1 allowance for 1 ton of SO<sub>2</sub> emissions, and 2010 - 2013 vintage allowances used at 2 allowances for 1 ton of SO<sub>2</sub> emissions. For facilities covered by both CAIR and the ARP, reconciliation is a two-step process. First, ARP deductions are made. Then, any additional deductions to comply with the CAIR SO<sub>2</sub> program are made. The additional deductions under CAIR could be used to cover the 2 for 1 use of 2010 - 2013 allowances or to cover emissions for units that are subject to CAIR, but not the ARP.

Because of variation in rounding conventions, changes due to resubmissions by sources, and allowance compliance issues at certain units, the compliance summary emissions number cited in Key Points may be lower than the sums of emissions used for reconciliation purposes shown in the Allowance Reconciliation Summary tables. Therefore, the allowance totals deducted for actual emissions in those tables differ from the number of emissions shown elsewhere in this report.

### Key Points

#### ARP and CAIR SO<sub>2</sub> Programs

- The reported 2013 SO<sub>2</sub> emissions by CAIR and ARP sources totaled 3,241,593 tons (see Analysis section).
- Over 30.1 million SO<sub>2</sub> allowances were available for compliance under both programs (9 million vintage 2013 and over 21.1 million banked from prior years).
- Just over 3.2 million allowances were deducted for ARP compliance and an additional 2.4 million allowances were deducted to complete reconciliation for CAIR. After reconciliation for both programs, over 24.5 million ARP SO<sub>2</sub> allowances were banked and carried forward to the 2014 compliance year.
- One ARP and CAIR SO<sub>2</sub> facility was out of compliance with both programs in 2013 and had excess emissions of 4 tons.

#### CAIR NO<sub>x</sub> Annual Program

- The reported 2013 annual NO<sub>x</sub> emissions by CAIR sources totaled 1,174,853 tons (see Analysis section).
- All covered facilities were in compliance with the CAIR NO<sub>x</sub> annual program and held enough allowances to cover their NO<sub>x</sub> emissions.



<http://www.epa.gov/airmarkets/progress>

## **CAIR NO<sub>x</sub> Ozone Season Program**

- The reported 2013 NO<sub>x</sub> ozone season emissions by CAIR sources totaled 474,232 tons (see Analysis section).
- One facility was out of compliance with the CAIR NO<sub>x</sub> ozone season program and had one ton of excess emissions.

## **More Information**

Allowance Markets <http://www.epa.gov/airmarkets/participants/allowance/index.html>

Air Markets Business Center <http://www.epa.gov/airmarkets/participants/business/index.html>

Air Markets Program Data <http://ampd.epa.gov/ampd/>



## Figures

CAIR and ARP SO <sub>2</sub> Allowance Reconciliation Summary, 2013			
<b>Total Allowances Held (1995–2013 Vintage)</b>	<b>30,142,693</b>	Held by Affected Facility Accounts	<b>20,819,014</b>
		Held by Other Accounts (General and Non-Affected Facilities)	<b>9,323,679</b>
Allowances Deducted for Acid Rain Compliance*	-3,217,365		
Penalty Allowance Deductions	4		
<b>Banked Allowances (after ARP Compliance)</b>	<b>26,925,324</b>	Held by Affected Facility Accounts	<b>17,601,645</b>
		Held by Other Accounts (General and Non-Affected Facilities)	<b>9,323,679</b>
Acid Rain Program Allowances Deducted for CAIR	-2,418,304		
<b>Banked Allowances (after ARP and CAIR SO<sub>2</sub>)</b>	<b>24,507,020</b>	Held by Affected Facility Accounts	<b>15,183,341</b>
		Held by Other Accounts (General and Non-Affected Facilities)	<b>9,323,679</b>
<b>ARP and CAIR SO<sub>2</sub> Programs Compliance Results</b>			
Reported emissions (tons)			<b>3,241,593</b>
Compliance issues, rounding, and report resubmission adjustments (tons)			<b>-34,035</b>
Emissions not covered by allowances (tons)			<b>-4</b>
Additional vintage 2010 - 2013 allowances deducted for CAIR			<b>+2,418,304</b>
Total allowances deducted for emissions (includes some 2 for 1 CAIR deductions)			<b>5,625,858</b>

Source EPA, 2014  
Last updated: 04/2015

Notes:

- \*Allowance Deducted for ARP Compliance includes 9,811 allowances deducted from opt-ins for reduced utilization.
- Compliance emissions data may vary from other report sections as a result of variation in rounding conventions, changes due to resubmissions by sources, or allowance compliance issues at certain units.
- Reconciliation and Compliance data as of June 2014, and subsequent adjustments of penalties are not reflected.

**Figure 1. CAIR and ARP SO<sub>2</sub> Allowance Reconciliation Summary, 2013**



CAIR NO <sub>x</sub> Annual Allowance Reconciliation Summary, 2013			
<b>Total Allowances Held (2009–2013 Vintage)</b>	<b>2,314,310</b>	Held by Affected Facility Accounts	<b>2,047,627</b>
		Held by Other Accounts (General, State Holding, and Non-Affected Facilities)	<b>266,683</b>
Allowances Deducted for CAIR NO <sub>x</sub> Annual Trading Program	<b>1,175,069</b>		
Penalty Allowance Deductions	<b>0</b>		
<b>Banked Allowances</b>	<b>1,139,241</b>	Held by Affected Facility Accounts	<b>872,558</b>
		Held by Other Accounts (General, State Holding, and Non-Affected Facilities)	<b>266,683</b>
<b>CAIR NO<sub>x</sub> Annual Program</b>			
Reported emissions (tons)			<b>1,174,853</b>
Compliance issues, rounding, and report resubmission adjustments (tons)			<b>+216</b>
Emissions not covered by allowances (tons)			<b>0</b>
Total allowances deducted for emissions			<b>1,175,069</b>

Source EPA, 2014  
Last updated: 04/2015

Notes:

- Compliance emissions data may vary from other report sections as a result of variation in rounding conventions, changes due to resubmissions by sources, or allowance compliance issues at certain units.
- Reconciliation and Compliance data as of June 2014, and subsequent adjustments of penalties are not reflected.

**Figure 2. Affected Units in the CAIR and ARP Programs, 2013**



CAIR NO <sub>x</sub> Ozone Season Allowance Reconciliation Summary			
<b>Total Allowances Held (2003–2013 Vintage)</b>	<b>1,147,408</b>	Held by Affected Facility Accounts	<b>942,100</b>
		Held by Other Accounts (General, State Holding, and Non-Affected Facilities)	<b>205,308</b>
Allowances Deducted for CAIR NO <sub>x</sub> Ozone Season Trading Program	<b>-474,566</b>		
Penalty Allowance Deductions	<b>-3</b>		
<b>Banked Allowances</b>	<b>672,839</b>	Held by Affected Facility Accounts	<b>467,531</b>
		Held by Other Accounts (General, State Holding, and Non-Affected Facilities)	<b>205,308</b>
<b>CAIR NO<sub>x</sub> Ozone Season</b>			
Reported emissions (tons)			<b>474,232</b>
Compliance issues, rounding, and report resubmission adjustments (tons)			<b>+335</b>
Emissions not covered by allowances (tons)			<b>-1</b>
Total allowances deducted for emissions			<b>474,566</b>

Source EPA, 2014  
Last updated: 04/2015

Notes:

- Compliance emissions data may vary from other report sections as a result of variation in rounding conventions, changes due to resubmissions by sources, or allowance compliance issues at certain units.
- Reconciliation and Compliance data as of June 2014, and subsequent adjustments of penalties are not reflected.

**Figure 3. CAIR NO<sub>x</sub> Ozone Season Allowance Reconciliation Summary**