

# Mineral Industry Surveys

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## SODA ASH IN NOVEMBER 2012

U.S. natural soda ash production in November was 969,000 metric tons (t), slightly lower than the previous month's production of 982,000 t.

Ending inventories for November 2012 were 313,000 t, 3% lower than the preceding month's inventories. Wyoming trona production in November 2012 was 1.57 million metric tons.

Exports and imports of soda ash in October 2012 were 522,000 t and 661 t, respectively.

The changes in soda ash statistics for October 2012, compared with those of October 2011, were as follows: production was

4% higher; imports were about 81% lower; exports were 4% higher; and apparent consumption was 11% higher. Imports fluctuate widely and are insignificant relative to exports.

The soda ash end use data for the first, second, and third quarters of 2012 are shown in table 5.

All percentages in this report were computed using unrounded data.

TABLE 1  
SALIENT SODA ASH STATISTICS<sup>1</sup>

(Thousand metric tons)

| Period           | Soda ash                |                          | Wyoming trona<br>production |
|------------------|-------------------------|--------------------------|-----------------------------|
|                  | Production <sup>2</sup> | Stocks,<br>end of period |                             |
| 2011:            |                         |                          |                             |
| January–November | 9,750 <sup>r</sup>      | 256                      | 15,000 <sup>r</sup>         |
| November         | 864                     | 256                      | 1,360                       |
| December         | 975                     | 282                      | 1,420                       |
| January–December | 10,700                  | 282                      | 16,500                      |
| 2012:            |                         |                          |                             |
| January          | 929                     | 341                      | 1,520                       |
| February         | 833                     | 306                      | 1,410                       |
| March            | 964                     | 317                      | 1,560                       |
| April            | 861                     | 298                      | 1,380                       |
| May              | 833                     | 243                      | 1,330                       |
| June             | 952                     | 265                      | 1,470                       |
| July             | 933                     | 312                      | 1,320                       |
| August           | 1,020                   | 350                      | 1,460                       |
| September        | 892 <sup>r</sup>        | 339                      | 1,130                       |
| October          | 982                     | 324                      | 1,540                       |
| November         | 969                     | 313                      | 1,570                       |
| January–November | 10,200                  | 313                      | 15,700                      |

<sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Production data include soda ash equivalent from soda liquors only. Soda ash equivalent from mine water is not included. Soda liquors are withheld to avoid disclosing company proprietary data.

TABLE 2  
U.S. EXPORTS OF SODA ASH BY COUNTRY, IN 2012<sup>1,2</sup>

(Metric tons unless otherwise specified)

| Country              | January | February | March   | April   | May     | June    | July                | August  | September | Quantity | October                                  | Unit value | January–October <sup>3</sup> |                           |  |
|----------------------|---------|----------|---------|---------|---------|---------|---------------------|---------|-----------|----------|--|------------|------------------------------|---------------------------|--|
|                      |         |          |         |         |         |         |                     |         |           |          | Value <sup>4</sup><br>(thousand dollars) |            | Quantity                     | Percent of total quantity | Value <sup>4</sup><br>(thousand dollars) |
| Argentina            | --      | --       | 21,500  | --      | 25,400  | 8,000   | 27,600              | 49      | 19,400    | --       | --                                       | --         | 102,000                      | 2                         | 20,800                                   |
| Australia            | 12,300  | 14,500   | 5,800   | 12,000  | 15,200  | 7,500   | --                  | 7,030   | 14,500    | 19,000   | 4,110                                    | 216        | 108,000                      | 2                         | 23,500                                   |
| Belgium              | 13,800  | 11,100   | 12,000  | --      | 19,500  | 78      | 10,000              | 11,100  | 10,000    | --       | --                                       | --         | 87,700                       | 2                         | 11,800                                   |
| Brazil               | 36,900  | 46,500   | 98,900  | 30,200  | 83,900  | 39,600  | 42,500              | 73,200  | 70,500    | 75,000   | 15,000                                   | 200        | 597,000                      | 12                        | 121,000                                  |
| Canada               | 24,600  | 24,300   | 25,200  | 19,700  | 25,700  | 22,800  | 22,900              | 26,100  | 22,900    | 27,500   | 5,590                                    | 204        | 242,000                      | 5                         | 46,300                                   |
| Chile                | 52,000  | 9,990    | 41,300  | 8,850   | 29,600  | 40,100  | 22,200              | 34,400  | 51,900    | 22,200   | 4,870                                    | 220        | 312,000                      | 6                         | 66,900                                   |
| Colombia             | 6,710   | 11,000   | 10,200  | 29,400  | --      | 6,130   | 24,300              | 40,500  | --        | 15,700   | 3,010                                    | 191        | 144,000                      | 3                         | 27,000                                   |
| France               | 15,200  | --       | --      | 16,000  | --      | --      | --                  | 5,090   | --        | --       | --                                       | --         | 36,300                       | 1                         | 5,380                                    |
| India                | --      | --       | 22,000  | --      | 22,000  | --      | --                  | --      | --        | --       | --                                       | --         | 44,000                       | 1                         | 6,750                                    |
| Indonesia            | 17,000  | 74,500   | 16,500  | 74,500  | 32,500  | 76,000  | 33,000              | 66,000  | 103,000   | 64,900   | 14,000                                   | 216        | 558,000                      | 11                        | 118,000                                  |
| Japan                | 31,600  | 13,400   | 19,100  | 24,900  | 234     | 44,300  | 496                 | 29,800  | 13,600    | 432      | 143                                      | 331        | 178,000                      | 4                         | 34,500                                   |
| Korea, Republic of   | 15,000  | 29,700   | 24,500  | 11,800  | --      | 40,800  | 12,500              | 17,000  | 5,000     | 15,400   | 2,860                                    | 185        | 172,000                      | 3                         | 39,200                                   |
| Mexico               | 81,700  | 86,800   | 101,000 | 78,700  | 89,700  | 98,000  | 76,800              | 93,500  | 72,900    | 82,900   | 18,300                                   | 220        | 862,000                      | 17                        | 194,000                                  |
| Netherlands          | 22,700  | 14,300   | 26,500  | 23,000  | 16,100  | 39,000  | 56,000              | 25      | 12,600    | 21,000   | 3,640                                    | 173        | 231,000                      | 5                         | 37,400                                   |
| Peru                 | 3,840   | 17,100   | 7,500   | 5,000   | 13,700  | 5,610   | --                  | 8,220   | 83        | 14,500   | 3,330                                    | 230        | 75,500                       | 2                         | 16,900                                   |
| Philippines          | --      | 8,500    | --      | 11,500  | --      | 8,500   | 8,500               | --      | 36        | 11,000   | 2,440                                    | 222        | 48,000                       | 1                         | 10,600                                   |
| Saudi Arabia         | --      | 15,000   | 18,000  | --      | --      | 14,600  | 14,300              | 333     | 18,700    | 333      | 168                                      | 505        | 81,300                       | 2                         | 16,800                                   |
| South Africa         | 15,000  | --       | 14,000  | 37,400  | 4,970   | 12,000  | 11,100              | --      | 28,600    | 11,400   | 1,530                                    | 135        | 134,000                      | 3                         | 19,900                                   |
| Spain                | 10,200  | --       | 16,000  | 7,950   | 5,000   | --      | 65                  | --      | 520       | --       | --                                       | --         | 39,700                       | 1                         | 6,590                                    |
| Taiwan               | 15,700  | 68       | 28,800  | 26,100  | --      | 20,500  | 19,500              | 17,600  | 13,300    | 16,200   | 3,050                                    | 188        | 158,000                      | 3                         | 33,800                                   |
| Thailand             | 21,000  | --       | 404     | 22,500  | 20,500  | 13,000  | --                  | 23,000  | 22,500    | 24,000   | 6,270                                    | 261        | 147,000                      | 3                         | 33,000                                   |
| Tunisia              | 25,100  | --       | 12,200  | --      | 25,800  | 20,000  | --                  | 22,000  | 29,900    | 6,000    | 1,420                                    | 237        | 141,000                      | 3                         | 24,700                                   |
| United Arab Emirates | --      | 10,800   | 7,000   | --      | --      | 11,000  | 12,000              | --      | 12,000    | --       | --                                       | --         | 52,800                       | 1                         | 10,900                                   |
| Venezuela            | 4,810   | --       | 37,600  | --      | 17,200  | 25,900  | --                  | 11,300  | 11,100    | 30,200   | 7,520                                    | 249        | 138,000                      | 3                         | 34,900                                   |
| Other                | 28,800  | 15,000   | 36,400  | 33,100  | 17,800  | 14,900  | 36,800 <sup>r</sup> | 26,400  | 36,700    | 63,900   | 8,930                                    | 140        | 310,000                      | 6                         | 58,200                                   |
| Total                | 454,000 | 403,000  | 602,000 | 473,000 | 465,000 | 568,000 | 431,000             | 513,000 | 570,000   | 522,000  | 106,000                                  | 204        | 5,000,000                    | 100                       | 1,020,000                                |

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>November 2012 data were not available at time of publication.

<sup>3</sup>May include revisions to previously published data.

<sup>4</sup>Free alongside ship values at U.S. ports.

Source: U.S. Census Bureau.

TABLE 3  
U.S. IMPORTS OF SODA ASH BY COUNTRY, IN 2012<sup>1,2</sup>

(Metric tons unless otherwise specified)

| Country                         | January         | February | March          | April | May   | June | July | August          | September | Quantity | October                                     |               | January–October |                                 |   |
|---------------------------------|-----------------|----------|----------------|-------|-------|------|------|-----------------|-----------|----------|---|---------------|-----------------|---------------------------------|---|
|                                 |                 |          |                |       |       |      |      |                 |           |          | Value <sup>3</sup><br>(thousand<br>dollars) | Unit<br>value | Quantity        | Percent<br>of total<br>quantity | Value <sup>3</sup><br>(thousand<br>dollars) |
| Canada <sup>4</sup>             | (5)             | 1        | 425            | 874   | 866   | --   | --   | --              | 3         | --       | --  | --            | 2,170           | 20                              | 260   |
| China                           | --              | --       | 229            | 8     | 444   | 18   | --   | --              | 20        | --       | --  | --            | 719             | 7                               | 272   |
| Dominican Republic <sup>4</sup> | --              | 225      | 252            | --    | --    | --   | --   | --              | --        | --       | --  | --            | 477             | 4                               | 74  |
| France                          | 208             | 1        | 1              | --    | --    | --   | --   | --              | --        | --       | --  | --            | 211             | 2                               | 49  |
| Germany                         | 1               | 210      | 3              | (5)   | (5)   | (5)  | 3    | --              | 144       | --       | --  | --            | 361             | 3                               | 151   |
| Greece <sup>4</sup>             | 60              | --       | --             | --    | --    | --   | --   | --              | --        | --       | --  | --            | 60              | 1                               | 23  |
| Hong Kong                       | --              | --       | --             | (5)   | 2     | --   | --   | 102             | --        | --       | --  | --            | 105             | 1                               | 24  |
| Italy                           | 701             | 54       | 760            | 36    | 61    | 54   | 36   | 325             | 870       | 368      | 59  | 160           | 3,270           | 31                              | 703   |
| Japan                           | --              | --       | --             | 346   | 1     | 3    | --   | --              | --        | 101      | 14  | 139           | 450             | 4                               | 82  |
| Mexico                          | 19              | 19       | --             | 51    | 173   | 78   | 256  | 275             | 153       | 96       | 31  | 323           | 1,120           | 10                              | 341   |
| Poland                          | 22              | 22       | --             | --    | 22    | --   | 22   | --              | 22        | --       | --  | --            | 111             | 1                               | 44  |
| Turkey                          | --              | --       | --             | --    | --    | 300  | --   | --              | --        | --       | --  | --            | 300             | 3                               | 111   |
| United Kingdom                  | 108             | 90       | 57             | 145   | 160   | 55   | 128  | 165             | 193       | 93       | 53  | 570           | 1,190           | 11                              | 629   |
| Other                           | -- <sup>r</sup> | --       | 4 <sup>r</sup> | --    | 3     | --   | --   | 62 <sup>r</sup> | 52        | 4        | 6   | 1,500         | 128             | 1                               | 70  |
| Total                           | 1,120           | 622      | 1,730          | 1,460 | 1,730 | 508  | 445  | 929             | 1,460     | 661      | 162   | 245           | 10,700          | 100                             | 2,830                                       |

<sup>r</sup>Revised. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>November 2012 data were not available at time of publication.

<sup>3</sup>Cost, insurance, and freight values at U.S. ports.

<sup>4</sup>Not a soda-ash-producing country, material transshipped or possible erroneous data, according to the Journal of Commerce PIERS trade data.

<sup>5</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4  
U.S. APPARENT CONSUMPTION OF SODA ASH<sup>1</sup>

(Metric tons)

| Period           | Production             | Imports | Exports   | Net stock |          | Apparent consumption <sup>2</sup> |
|------------------|------------------------|---------|-----------|-----------|----------|-----------------------------------|
|                  |                        |         |           | Increase  | Decrease |                                   |
| 2011:            |                        |         |           |           |          |                                   |
| January–December | 10,700,000             | 26,900  | 5,470,000 | 61,800    | --       | 5,220,000                         |
| January–October  | 8,890,000 <sup>†</sup> | 24,200  | 4,450,000 | 58,500    | --       | 4,400,000 <sup>†</sup>            |
| October          | 941,000                | 3,570   | 502,000   | 11,800    | --       | 430,000                           |
| November         | 864,000                | 1,120   | 507,000   | --        | 22,800   | 381,000                           |
| December         | 975,000                | 1,560   | 517,000   | 26,100    | --       | 434,000                           |
| 2012:            |                        |         |           |           |          |                                   |
| January–October  | 9,200,000              | 10,700  | 5,000,000 | 41,900    | --       | 4,170,000                         |
| January          | 929,000                | 1,120   | 454,000   | 58,600    | --       | 418,000                           |
| February         | 833,000                | 622     | 403,000   | --        | 34,600   | 465,000                           |
| March            | 964,000                | 1,730   | 602,000   | 11,100    | --       | 352,000                           |
| April            | 861,000                | 1,460   | 473,000   | --        | 19,100   | 409,000                           |
| May              | 833,000                | 1,730   | 465,000   | --        | 55,000   | 425,000                           |
| June             | 952,000                | 508     | 568,000   | 22,000    | --       | 362,000                           |
| July             | 933,000                | 445     | 431,000   | 47,100    | --       | 455,000                           |
| August           | 1,020,000              | 929     | 513,000   | 38,400    | --       | 468,000                           |
| September        | 892,000 <sup>†</sup>   | 1,460   | 570,000   | --        | 11,700   | 336,000 <sup>†</sup>              |
| October          | 982,000                | 661     | 522,000   | --        | 14,800   | 476,000                           |
| November         | 969,000                | NA      | NA        | --        | 10,600   | NA                                |

<sup>†</sup>Revised. NA Not available. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Production plus imports minus exports plus or minus stock changes.

TABLE 5  
REPORTED CONSUMPTION OF SODA ASH IN  
THE UNITED STATES BY END USE, BY QUARTER<sup>1</sup>

(Thousand metric tons)

| NAICS <sup>2</sup><br>code | End use                                 | 2011   | 2012           |               |               |                            |
|----------------------------|---|--------|----------------|---------------|---------------|----------------------------|
|                            |   |        | 1st<br>quarter | 2d<br>quarter | 3d<br>quarter | 1st quarter–<br>3d quarter |
| 3272                       | Glass:                                  |        |                |               |               |                            |
| 327213                     | Container                               | 1,260  | 322            | 321           | 312           | 956                        |
| 327211                     | Flat                                    | 973    | 219            | 226           | 240           | 685                        |
| 327993                     | Fiber                                   | 132    | 29             | 28            | 29            | 86                         |
| 327212                     | Other                                   | 122    | 27             | 29            | 26            | 82                         |
|                            | Total                                   | 2,480  | 597            | 604           | 608           | 1,810                      |
| 32518                      | Chemicals                               | 1,510  | 373            | 375           | 368           | 1,120                      |
| 325611                     | Soaps and detergents                    | 430    | 104            | 92            | 96            | 292                        |
| 322                        | Pulp and paper                          | 85     | 21             | 20            | 23            | 64                         |
| 221310                     | Water treatment <sup>3</sup>            | 58     | 16             | 16            | 17            | 48                         |
| 56221                      | Flue gas desulfurization                | 160    | 38             | 30            | 49            | 117                        |
| 422                        | Distributors                            | 282    | 71             | 72            | 70            | 213                        |
|                            | Other                                   | 138    | 33             | 49            | 53            | 135                        |
|                            | Total domestic consumption <sup>4</sup> | 5,150  | 1,250          | 1,260         | 1,280         | 3,790                      |
|                            | Exports <sup>5</sup>                    | 5,470  | 1,410          | 1,430         | 1,450         | 4,290                      |
|                            | Canada                                  | 249    | 63             | 56            | 56            | 175                        |
|                            | Total industry sales <sup>6</sup>       | 10,600 | 2,670          | 2,680         | 2,740         | 8,080                      |
|                            | Total sales from plants                 | 15,800 | 2,670          | 2,720         | 2,780         | 8,170                      |
|                            | Total production                        | 10,700 | 2,730          | 2,650         | 2,750         | 8,120                      |

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>North American Industry Classification System.

<sup>3</sup>Includes soda ash equivalent from soda liquors and purge liquors sold to powerplants for water treatment. Sales of mine water are excluded.

<sup>4</sup>Imports reported by the producer/importer have been distributed into appropriate end-use categories listed above.

<sup>5</sup>As reported by producers; includes Canada. Data may not necessarily agree with those reported by the U.S. Census Bureau for the same periods.

<sup>6</sup>Represents soda ash from domestic origin (production and inventory changes) and imports and exports. Includes soda ash sold by coproducers and distributed by purchasers into appropriate end-use categories.