

**Interstate Ozone Transport Reduction**  
**Advance Notice of Final Rulemaking**  
**Comment and Response Document**

May 16, 2000

Bureau of Air Quality  
Department of Environmental Protection

## **Interstate Ozone Transport Reduction**

### **Advance Notice of Final Rulemaking**

#### **Comment and Response Document**

The Department of Environmental Protection published a notice of public hearing and comment period on February 26, 2000 in the *Pennsylvania Bulletin* (30 PaB 1135). The public comment period closed on March 27, 2000. Three public hearings were held to receive comments on the proposed rulemaking as follow:

| March 22, 2000   | March 23, 2000   | March 24, 2000  |
|--|--|---|
| DEP<br>Southwest Regional Office<br>400 Waterfront Drive<br>Pittsburgh, PA | DEP<br>Southeast Regional Office<br>Suite 6010<br>Lee Park<br>555 North Lane<br>Conshohocken, PA | DEP<br>Southcentral Regional Office<br>Susquehanna River<br>Conference Room<br>909 Elmerton Ave<br>Harrisburg, PA |

This document summarizes the comments received at the public hearings and the written comments received during the public comment period. A response to each comment is provided. Please note, the number in parenthesis after each comment refers to the number of the commentator.

## List of Commentators

| Number | Commentator  |
|--------|--|
| 1      | <p>James T. Murphy<br/>Allegheny Energy Supply<br/>800 Cabin Hill Drive<br/>Greensburg, PA 15601-1689</p> <p>Robert W. Orchowski<br/>Duquesne Light<br/>411 Seventh Ave<br/>PO Box 1930<br/>Pittsburgh, PA 15230-1930</p> <p>Fred J. Starheim<br/>FirstEnergy Corp.<br/>76 South Main Street<br/>Akron, OH 44308</p> <p>Thomas G. Keller<br/>PPL, Inc.<br/>2 North Ninth Street<br/>Allentown, PA 18101-1179</p> |
| 2      | <p>Hon. Samuel H. Smith<br/>House of Representatives<br/>House PO Box 202020<br/>Main Capitol Building<br/>Harrisburg, PA 17120-2020</p>   |
| 3      | <p>Hon. H. William DeWeese<br/>House of Representatives<br/>423 Capitol Building<br/>Harrisburg, PA 17120</p>  |
| 4      | <p>Hon. James J. Rhoades<br/>Senate of Pennsylvania<br/>350 Capitol Building<br/>Harrisburg, PA 17120</p> <p>Hon. Peter J. Daley II<br/>House of Representatives<br/>301 South Office Building<br/>Harrisburg, PA 17120</p>  |

| <b>Number</b> | <b>Commentator</b>   |
|---------------|--|
| 5             | Douglas L. Biden<br>Electric Power Generation Association<br>301 APC Building<br>800 North Third Street<br>Harrisburg, PA 17102    |
| 6             | William Campbell<br>PO Box 7955<br>Philadelphia, PA 19101-7955   |
| 7             | Thomas B Lloyd<br>Lehigh University<br>127 Bridle Path Road<br>Bethlehem, PA 18017   |
| 8             | Howard "Pete" Shaub<br>Lancaster County Transportation<br>Coordinating Committee<br>PO Box 83480<br>Lancaster, PA 17608-3480       |
| 9             | Eugene M. Trisko<br>PO Box 596<br>Berkeley Springs, WV 25411   |
| 10            | Christopher R. Neumann<br>Lancaster County Planning Commission<br>50 North Duke Street<br>PO Box 83480<br>Lancaster, PA 17608-3480 |
| 11            | Corey A. Brandt<br>P. H. Glatfelter Company<br>Corporate Headquarters<br>Spring Grove, PA 17362                                    |
| 12            | Gary C. Furlong<br>Sunoco, Inc.<br>3144 Passyunk Ave<br>Philadelphia, PA 19145-5299  |
| 13            | William S. Kubiak<br>U. S. Steel<br>600 Grant Street<br>Pittsburgh, PA 15219-2749  |
| 14            | Tom LeCrone<br>Museum of Scientific Discovery<br>1070 Olde Forge Crossing  |

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|--|--------------------------|
|  | Lancaster, PA 17601-1736 |
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| <b>Number</b> | <b>Commentator</b>   |
|---------------|--|
| 15            | James C. Gulick<br>State of North Carolina<br>Department of Justice<br>PO Box 629<br>Raleigh, NC 27602-0629    |
| 16            | Brian J. Houghton<br>Trigen-Philadelphia Energy Corporation<br>2600 Christian Street<br>Philadelphia, PA 19146 |
| 17            | Charles Souders<br>Warner Lambert<br>400 West Lincoln Ave<br>Lititz, PA 17543-4001                             |
| 18            | Hon. Nicholas A. Di Pasquale<br>Secretary<br>Del. DNREC<br>89 Kings Highway<br>Dover, DE 19901                 |
| 19            | Robert F. Morris<br>1968 Armstrong Drive<br>Lansdale, PA 19446   |
| 20            | Dr. Michael S. Marks<br>104 Shawnee Rd<br>Ardmore, PA 19003-1629   |
| 21            | Julio Paz Y. Mino<br>100 Lincoln Ave<br>Upper Darby, PA 19083  |
| 22            | Tina Horowitz<br>4701 Pine Street<br>M8<br>Philadelphia, PA 19143  |
| 23            | Janet Spencer<br>106 Valley Dr<br>Landenberg, PA 19350   |
| 24            | Abram Rutkowski<br>64351 Hickory Road<br>Bremen, IN 46506  |
| 25            | Sally Victor Silverman<br>143 Hewett Rd<br>Wyncote, PA 19095   |

| <b>Number</b> | <b>Commentator</b>  |
|---------------|---|
| 26            | Elizabeth Albright<br>248 Lytton Ave<br>Pittsburgh, PA 15213            |
| 27            | Janet Hoover<br>624 Crescent Ave<br>Glenside, PA 19038                  |
| 28            | Christine Wittig<br>150-20 71 Ave<br>Apt 1G<br>Flushing, NY 11367       |
| 29            | Mark Krull<br>233 S 49th Street<br>Philadelphia, PA 19139               |
| 30            | Katherine Daley<br>1430 Linn St<br>State College, PA 16803              |
| 31            | Laura Byrne<br>42 Crown Ter<br>Morrisville, PA 19067                    |
| 32            | Bill Gaudelli<br>13B Riverhill<br>New Hope, PA 18938                    |
| 33            | Pat Nakayama<br>Ed Stankiewicz<br>120 Madison Rd<br>Lansdowne, PA 19050 |
| 34            | Jennifer Budinger<br>100 N Wade Ave<br>Washington, PA 15301             |
| 35            | Justin Marino<br>124 Diana Drive<br>Poland, OH 44514-3711               |
| 36            | Alberta Kateiva<br>2462 Independence Ave<br>Abington, PA 19001          |
| 37            | Joanne Sacchetti<br>487 Prospect Rd<br>Media, PA 19064                  |
| 38            | Jan ten Boom<br>1401 Lawndale Ave                                       |

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|  | Havertown, PA 19083 |
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| <b>Number</b> | <b>Commentator</b>   |
|---------------|--|
| 39            | David Eldridge<br>1458 Hampstead Rd<br>Wynewood, PA 19096            |
| 40            | Bernie Wilke<br>230 N. 5th Street, Rear<br>Indiana, PA 15701         |
| 41            | Michael Wagner<br>8 Mele Ave<br>Colmar, PA 18915                     |
| 42            | Geraldine Fruchtman<br>704 Pine Ridge Road<br>Media, PA 19063        |
| 43            | Gerard Olson<br>635 Kelly Lane<br>Glenside, PA 19038                 |
| 44            | Joan Glucken<br>214 Dudley Ave<br>Narberth, PA 19072                 |
| 45            | William Detwiler<br>721 Little Shiloh Road<br>West Chester, PA 19382 |
| 46            | Amy Gordon<br>1530 Powder Mill Lane<br>Wynnewood, PA 19096           |
| 47            | Francis Delone Jr<br>309 Crum Creek Ln<br>Newtown Square, PA 19073   |
| 48            | J J Frederick<br>9 Stoney Brook Blvd<br>Newtown Square, PA 19073     |
| 49            | Michael Sullivan<br>1530 Powder Mill Lane<br>Wynnewood, PA 19096     |
| 50            | Richard Malloy<br>191 Pine Crest Lane<br>Lansdale, PA 19446          |
| 51            | Jim Christie<br>27 Edgegrove Ave<br>Staten Island, NY 10312          |
| 52            | Latika Young   |

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|  | 500 College Ave<br>Swarthmore, PA 19081 |
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| <b>Number</b> | <b>Commentator</b>  |
|---------------|---|
| 53            | Holton Falk<br>452 Hampshire Rd<br>Drexel Hill, PA 19026            |
| 54            | Allison E Rogers<br>11 South Street<br>Lebanon, NH 03766            |
| 55            | Susan Bulsza<br>52 Chestnut Valley Dr<br>Doylestown, PA 18901       |
| 56            | Robert Parkyn<br>734 Fulmer Rd<br>Pottstown, PA 19465               |
| 57            | Randall Couch<br>423 E Allens Ln<br>Philadelphia, PA 19119          |
| 58            | Ralph Grove<br>1369 Water ST<br>Indiana, PA 15701                   |
| 59            | Christine Godshall<br>1010 Canter Cir<br>New Hope, PA 18938         |
| 60            | David Hilts<br>3114 SE McLoughlin Blvd<br>Portland, OR 97202        |
| 61            | Carolyn Gessner<br>577 Woodlawn Dr<br>Lansdale, PA 19446            |
| 62            | Gregory Hansell<br>13 S Chester Rd<br>Apt 4<br>Swarthmore, PA 19081 |
| 63            | Owen Fox<br>5023 Old Zuck Rd<br>Apt 5<br>Erie, PA 16506             |
| 64            | Jonathan Nadle<br>4221 Winterburn Ave<br>Pittsburgh, PA 15207       |
| 65            | Linda Brill<br>501 Wheatfield Ln                                    |

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|--|-------------------|
|  | Newtown, PA 18940 |
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| <b>Number</b> | <b>Commentator</b>  |
|---------------|---|
| 66            | Molly Smith<br>5925 Wayne Ave<br>Philadelphia, PA 19144   |
| 67            | John Roberts<br>1215 E Ridge Pike<br>Norristown, PA 19401   |
| 68            | Steve Perez<br>30A Crescent Road<br>Greenbelt, MD 20770   |
| 69            | Patrick Ketchum<br>815 NW 50th Street<br>Seattle, WA 98107-3617                                     |
| 70            | Keith Donnellan<br>4607 Spruce Street<br>Philadelphia, PA 19139                                     |
| 71            | Jonathan Weiss<br>28 Copper Beech Dr<br>Layafette Hill, PA 19444                                    |
| 72            | Gregory Pasquarello<br>122 Sunset Ave<br>Pheonixville, PA 19460                                     |
| 73            | Michael J. Winn<br>RR Donnelley & Sons Company<br>1375 Harrisburg Pike<br>Lancaster, PA 17601-2699  |
| 74            | Kris W. Knudsen<br>Duke Power<br>526 South Church Street<br>PO Box 1006<br>Charlotte, NC 28201-1006 |
| 75            | Charles Cerino<br>2655 Terwood Hill Dr<br>Willow Grove, PA 19090                                    |
| 76            | David A. Felcman<br>Duke Energy<br>5400 Westheimer Court<br>Houston, TX 77056-5310                  |
| 77            | Margaret Baumhauer<br>Graphic Arts Association<br>1900 Cherry Street                                |

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|  | Philadelphia, PA 19103-1497 |
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| <b>Number</b> | <b>Commentator</b>  |
|---------------|---|
| 78            | Sonya Wiggins Stovall<br>Merck & Co., Inc.<br>PO Box 4<br>WP20-208<br>West Point, PA 19486-0004                         |
| 79            | Vincent J. Brisini<br>Sithe Northeast<br>1001 Broad Street<br>Johnstown, PA 15907                                       |
| 80            | Thomas C. Detwiler<br>Willamette Industries, Inc.<br>100 Center Street<br>Johnsonburg, PA 15845                         |
| 81            | Jolee E. Chinchilli<br>Citizens Advisory Council<br>PO Box 8459<br>Harrisburg, PA 17105-8459                            |
| 82            | James T. Murphy<br>Allegheny Energy Supply<br>800 Cabin Hill Drive<br>Greensburg, PA 15601-1689                         |
| 83            | Nancy F. Parks<br>Sierra Club, Pennsylvania Chapter<br>201 West Aaron Square<br>PO Box 120<br>Aaronsburg, PA 16820-0120 |
| 84            | Pamela F. Faggert<br>Virginia Power<br>5000 Dominion Blvd<br>Glen Allen, VA 23060                                       |
| 85            | Mark C. Messics<br>Waste Management<br>2710 Golden Key Road<br>Kutztown, PA 19530                                       |
| 86            | Bruce Alexander<br>PECO Energy<br>2301 Market Street, S21-2<br>PO Box 8699<br>Philadelphia, PA 19101-8699               |

| <b>Number</b> | <b>Commentator</b>   |
|---------------|--|
| 87            | John M. Daniel, Jr<br>Division of Air Program Coordination<br>PO Box 10009<br>Richmond, VA 23240                           |
| 88            | Hon. John P. Cahill<br>Commissioner<br>NY DEC<br>Albany, NY 12233-1010   |
| 89            | Charles McPhedran<br>PennFuture<br>117 S 17th Street<br>Suite 1801<br>Philadelphia, PA 19103                               |
| 90            | Dana S. Lomma<br>1309 N. 22nd Street<br>Harrisburg, PA 17109   |
| 91            | Mark J Shaw<br>MacDonald Illig Jones & Britton<br>100 State Street<br>Suite 700<br>Erie, PA 16507-1498                     |
| 92            | John Elston<br>NJ Department of Environmental Protection<br>Air Quality Management<br>PO Box 418<br>Trenton, NJ 08625-0418 |
| 93            | Bart E. Cassidy<br>Manko Gold & Katcher<br>401 City Avenue<br>Suite 500<br>Bala Cynwyd, PA 19004                           |
| 94            | Mark A. Gray<br>American Electric Power<br>1 Riverside Plaza<br>Columbus, OH 43215   |
| 95            | Michael A. Kerker<br>Armstrong World Ind, Inc.<br>2500 Columbia Ave<br>Lancaster, PA 17604                                 |

| <b>Number</b> | <b>Commentator</b>  |
|---------------|---|
| 96            | Ronald Skinner<br>Air Products and Chemicals, Inc.<br>7201 Hamilton Blvd<br>Allentown, PA 18195-1501    |
| 97            | Robert W. Orchowski<br>Duquesne Light<br>411 Seventh Ave<br>PO Box 1930<br>Pittsburgh, PA 15230-1930    |
| 98            | Marilyn Skolnick<br>Sierra Club Allegheny Group<br>109 South Ridge Dr<br>Monroeville, PA 15146          |
| 99            | Charles R. Wakild<br>Carolina Power & Light Company<br>SR 1127<br>PO Box 327<br>New Hill, NC 27564-0327 |
| 100           | William Campbell<br>PO Box 7955<br>Philadelphia, PA 19101-7955  |
| 101           | Phila Back<br>Sierra Club, Berks Group<br>30 Pine Street<br>Kutztown, PA 19530                          |
| 102           | Douglas J. Webber<br>FirstEnergy Corp.<br>76 South Main Street<br>Akron, OH 44308                       |
| 103           | Mughtar Ramsey<br>PennPIRG<br>3500 Fifth Avenue<br>No. 304<br>Pittsburgh, PA 15213                      |
| 104           | W. F. McGuire<br>Reliant Energy, Inc.<br>12301 Kurland<br>Houston, TX 77034                             |
| 105           | Lynn I. Ratzell<br>PPL Electric Utilities Corporations  |

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|  | 2 North Ninth Street<br>Allentown, PA 18101-1179 |
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| <b>Number</b> | <b>Commentator</b>  |
|---------------|---|
| 106           | Douglas L. Biden<br>Electric Power Generation Association<br>301 APC Building<br>800 North Third Street<br>Harrisburg, PA 17102 |
| 107           | Norman W. Fichthorn<br>Utility Air Regulatory Group<br>Huton & Williams<br>1900 K Street, NW<br>Washington, DC 20006            |
| 108           | WV Chamber of Commerce<br>David M. Flannery<br>Jackson & Kelly PLLC<br>PO Box 553<br>Charleston, WV 25322                       |
| 109           | J. Andrew Hadley<br>Procter & Gamble Paper Products Co.<br>PO Box 32<br>Mehoopany, PA 18629                                     |
| 110           | Midwest Ozone Group<br>David M. Flannery<br>Jackson & Kelly PLLC<br>PO Box 553<br>Charleston, WV 25322                          |
| 111           | Edward L. Kropp<br>WV Office of Air Quality<br>1558 Washington Street, East<br>Charleston, WV 25311                             |
| 112           | Michael Fiorentino<br>Clean Air Council<br>135 South 19th Street<br>Suite 300<br>Philadelphia, PA 19103                         |
| 113           | Nicholas Gertler<br>Lantham & Watkins<br>Cinergy Corp<br>1001 Pennsylvania Ave, NW<br>Washington, DC 20004                      |

| <b>Number</b> | <b>Commentator</b>   |
|---------------|--|
| 114           | Judy M. Katz<br>Air Protection Division<br>US Environmental Protection Agency<br>1650 Arch Street<br>Philadelphia, PA 19103-2029 |
| 115           | Marie Kocoshis<br>GASP<br>PO Box 5165<br>Pittsburgh, PA 15206  |
| 116           | Suzanne Seppi<br>140 Oakhurst Road<br>Pittsburgh, PA 15215   |
| 117           | Jeanne K. Clark<br>PennFuture<br>5143 Fifth Avenue<br>Pittsburgh, PA 15232   |
| 118           | Frances Harkins<br>3700 Venango Ave<br>Munhall, PA 15210   |
| 119           | Derek Furstenwerth<br>Reliant Energy, Inc.<br>PO Box 1700<br>Houston, TX 77251-1700  |
| 120           | Jeannine Hammer<br>Allegheny Energy Supply<br>800 Cabin Hill Drive<br>Greensburg, PA 15601                                       |
| 121           | Debra A. Payerchin, M.S.<br>American Lung Association<br>41 Fourth Avenue<br>Pittsburgh, PA 15235                                |
| 122           | Dr. Elissa M. Weiss<br>134 Dennis Drive<br>Glenshaw, PA 15116  |
| 123           | Lynne M. Manley<br>American Lung Association   |
| 124           | Beth McConnell<br>PennPIRG<br>1334 Walnut St   |

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|  | 6th Floor<br>Philadelphia, PA 19107 |
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| <b>Number</b> | <b>Commentator</b>   |
|---------------|--|
| 125           | Valerie Sovell<br>1230 Federal St<br>Apt B<br>Philadelphia, PA 19147                                 |
| 126           | Dr. Kevin Browngoehl<br>Drexel Hill Pediatric Associates<br>5030 State Road<br>Drexel Hill, PA 19026 |
| 127           | Diane Roka<br>212 Wendover St<br>Philadelphia, PA 19128  |
| 128           | Kevin M. Stewart<br>American Lung Association<br>6041 Linglestown Road<br>Harrisburg, PA 17112-1208  |
| 129           | Jan Jarrett<br>PennFuture<br>212 Locust St<br>Suite 410<br>Harrisburg, PA 17101                      |
| 130           | Louis Zeller<br>Blue Ridge Environmental Defense League<br>PO Box 88<br>Glendale Springs, NC 28629   |
| 131           | Dr. Kent Knisley<br>RR7, Box 88B<br>Wellsboro, PA 16901  |
| 132           | Ron Girsch<br>Choices for Quality Living<br>4296 Beaufort Hunt Drive<br>Harrisburg, PA 17110         |
| 133           | Dr. Mark LaPore<br>Allergy Specialist<br>470 Central Parkway<br>Blue Bell, PA 19422                  |
| 134           | Kitty Campbell<br>4306 Terrace Street<br>Philadelphia, PA 19128                                      |

Several comments were received late. These commentators did not raise any new issues. The Department wishes to acknowledge the comments. Commentators were:

Christopher Jones  
Director  
Ohio EPA  
Lazarus Government Center  
122 South Front Street  
Columbus, OH 43215

Janis Milburn  
125 Hermitage School Rd  
Ligonier, PA 15658

William A. Hawkins, Chairman  
HATS Coordinating Committee  
Tri-County Regional Planning Commission  
112 Market Street  
7<sup>th</sup> Floor  
Harrisburg, PA 17101

Donald A. Bubb, P.E.  
York County Planning Commission  
100 West Market Street  
York, PA 17401

W. Craig Zumbrun  
South Central Assembly for Effective Governance  
777 West Harrisburg Pike  
Middletown, PA 17057

## Comments and Responses

### General Comments

1. Commentators state that the changes to the rule are significant. Additional time is needed to prepare substantive comments. A request is made for a 60-day comment period. (1, 2, 3, 4, 5)

Department response: The Department agrees that additional time should be provided for public comments. The original notice was published in the *Pennsylvania Bulletin* on January 22, 2000 (30 PaB 399). This notice provided a 30-day comment period until February 22, 2000. The Department published a notice in the *Pennsylvania Bulletin* on February 26, 2000 (30 PaB 1135) reopening the comment period and announcing three public hearings. The comment period closed on March 27, 2000. A total of 65 days were provided for comment.

2. The Department has stated its intention to bring the rule to the Environmental Quality Board for adoption at the June meeting. The Department should delay adoption of the rule until the Legislature is in session. (1, 2, 3, 4, 82, 97, 120)

Department response: The Department had originally intended to submit the rule to the EQB for consideration at the June meeting. However, this schedule could not be followed with the additional public comment period and hearings. The Department now plans to submit the package to the EQB for consideration at the July meeting. The timing of the EQB action in no way impedes the Legislature from exercising its rights under the Regulatory Review Act, which allows 30 days for consideration.

3. The Department should transfer all the standard requirements that overlap with the existing Chapter 123 NO<sub>x</sub> allowance program to Chapter 145 provided that this would not prevent Pennsylvania sources from participating in an interstate trading program. These overlap areas include account representatives and alternate account representatives, account numbers, monitoring plans, and account certificate of representation. This would reduce the paperwork and administrative requirements for Chapter 145. (78)

Department response: The Department considered the approach suggested by the commentator as a means of simplifying the rule. An alternative was to modify the Chapter 123 NO<sub>x</sub> allowance regulation rather than adopt a new Chapter 145. The Department chose to adopt a new Chapter 145 using the EPA Part 96 and 97 wording. This approach eliminated the potential for regulatory wording that might conflict with other states and prevent a wide trading area.

4. The Department should reaffirm its commitment to Phase III of the OTC NO<sub>x</sub> MOU. This will serve as a back up if the Chapter 145 rule is delayed. (115, 116)

Department response: The Department has stated that the emission reductions required by the NO<sub>x</sub> SIP call and the Section 126 remedy are equivalent to the NO<sub>x</sub> MOU Phase III requirements. The Department is adopting the new Chapter 145 rule and compliance will be required in 2003. Thus, we will have met our Phase III obligation.

### **Applicability to Upwind States**

5. Commentators state that the Department does not have the authority to regulate sources located in other states. The rule would violate the Constitution's commerce clause. The Clean Air Act preempts the state from imposing rules on other states. Sections 176A and 184 specifically address interstate transport of air pollution. The U.S. Court of Appeals for the Second Circuit issued a ruling in the case *Vermont v. Thomas* the stated under Section 116 "Vermont was free to adopt within its borders air quality standards...". Commentators believe that Section 116 does not give the state the right to regulate sources outside its borders. (9, 15, 74, 76, 82, 84, 87, 94, 97, 99, 102, 107, 108, 110, 111, 113, 120)

Department response: The Department has the authority to regulate Pennsylvania air quality. When sources located in other states significantly contribute to ozone nonattainment, Pennsylvania has the authority to regulate those sources. Neither the Commerce Clause nor the Supremacy Clause preclude this regulation. Section 116 of the Clean Air Act allows Pennsylvania to regulate sources located in other states.

6. Commentators express concern that the state does not have the authority to regulate out-of-state sources. Section 126 should be the means of addressing pollution transport. Commentators support the state's Section 126 action. (79, 86, 94, 105, 109)

Department response: The Department appreciates the support for the Section 123 remedy but notes that one of the commentators, American Electric Power, is litigating in Federal Court to prevent implementation of the Section 126 remedy. See also the response to comment 5.

7. Commentators ask that a provision be included in the rule that would either delay implementation or postpone the program until all states have adopted and are implementing the same requirements. (9, 93, 96, 97, 105)

Department response: The Department has not included the requested provision. The Section 145.100 would be implemented if other states do not comply with the Section 110 requirements or if sources do not comply with the Section 126 findings. In addition, Maryland, Delaware, New Jersey, New York and Massachusetts have adopted a similar rule.

8. The commentator supports the need for a regional NO<sub>x</sub> control program. However, there is a concern that the other states could delay compliance. The Department included Section 145.100 to

provide for consistent regional controls. To prevent other states from delaying implementation or compliance, the Department should make this section nonseverable. (105)

Department response: The Department has included the Section 145.100 that would apply to upwind sources if they do not comply with the Section 126 finding or the Section 110 requirements. The Department has not added a statement making the section nonseverable. The provision is intended to be severable. The section needs to remain severable in order to protect the emission reductions and the schedule for completing those reductions in Pennsylvania. These reductions are needed to assist the Philadelphia region in attaining the 1-hour ozone standard. See also the response to comment 7.

9. The commentators support the ANFR but are concerned that the Section 145.100 may be challenged. They request that the Section 145.100 be made severable from the remainder of the rule. (83, 89, 103, 112, 117, 124, 128, 129)

Department response: The section is severable from the remainder of the rule.

10. Section 145.100 provides for a NO<sub>x</sub> emission control program in areas that have been determined by EPA to be contributing to ozone nonattainment in Pennsylvania. The Department should continue to pursue this and other mechanisms to control these sources. (79, 86, 130)

Department response: The Department thanks the commentators for their support.

11. The ANFR should be withdrawn and replaced by a proposal consistent with the NO<sub>x</sub> SIP Call rule as modified to comply with the D.C. District Court's recent ruling. (102)

Department response: The Department has revised the final rule to be consistent with the Section 126 finding and NO<sub>x</sub> SIP Call. The Department is including those smaller EGUs that were remanded by the Court in the Section 110 rule. These smaller sources are included in the Section 126 ruling and have not been remanded. The Department believes it is important to include them in the rule at this time.

## **Need for Regulation**

12. The commentators support the proposed regulation. The rule is consistent with two recommendations made by ozone stakeholders. The rule seeks to achieve two basic goals of reducing NO<sub>x</sub> emissions from large fossil-fired boilers and leveling the playing field by imposing NO<sub>x</sub> emission reductions on boilers in Pennsylvania and upwind of Pennsylvania. Pennsylvania should take the lead and be proactive in adopting these rules. Residents of Pennsylvania will benefit from these rules from healthier air. (7, 8, 10, 14, 17, 73, 77, 81, 85, 95, 96, 112, 128)

Department response: The Department thanks the commentators for their support.

13. The ozone stakeholders' analysis demonstrated that substantial reductions of NO<sub>x</sub> emission from large combustion units are essential to achieving the one-hour ozone health standard. No other measure could replace this strategy. (95, 96)

Department response: The Department agrees with the comment. The NO<sub>x</sub> reductions were the largest achievable under all control measures considered as well as the most cost effective.

14. NO<sub>x</sub> emissions are a primary component of ground-level ozone. NO<sub>x</sub> emissions from power plants are a major contributor to ozone both in Pennsylvania and downwind. Controls proposed under Chapter 145 would achieve significant emission reductions. (89, 103, 115, 116, 122, 124, 128)

Department response: The Department agrees with the comment. The emission reduction estimates are published by EPA in the October 27, 1998 and January 18, 2000 *Federal Register* notices and have been discussed with the AQTAC and public.

15. The Department should take a proactive approach to control and not wait for the federal government to adopt regulations. Pennsylvania should take the lead and adopt this program. It should not abdicate its responsibility for protecting public health. (8, 10, 81, 83, 89, 90, 95, 96, 101, 103, 112, 115, 116, 128, 132)

Department response: The Department agrees with the commentators and thanks them for their support.

16. The ANFR properly holds the polluters accountable for the ozone precursor reductions that are necessary for attainment. Ozone reductions imposed on areas without due regard to the control of polluted air from other states imposes an economic disadvantage to business and industry located within those areas. (17)

Department response: The Department agrees with the commentator and thanks them for their support.

17. The concern of industry that the proposed control puts Pennsylvania at an economic disadvantage is spurious. Even with additional air quality regulations in place Pennsylvania sources may be more marketable than Midwest sources. For example, the Homer City Generating Station was purchased for \$1.8 billion and then voluntarily agreed to spend an additional \$200 million in clean air technology. Such controls make Pennsylvania operations better positioned in a deregulated environment by being more efficient, productive and attractive for investment. The proposed regulation moves the long-term costs of pollution including health care costs from citizens to stockholders of the companies. One commentator points out that recent power plant purchases demonstrate that the new utility owners recognize that even with needed controls they will still make a profit. (81, 83, 89, 112, 116, 117, 128, 129, 131, 132)

Department response: The Department agrees with the comments. The control options contained in the Chapter 145 proposal were selected because they are cost effective.

18. The NO<sub>x</sub> emission reductions are cost effective. EPA has estimated that, in the worst case, the cost of electricity will rise 0.7 percent as a result of this program. A cost increase of this magnitude will not have an impact on electric deregulation and should not be used as an excuse to hold up the program. (95, 128)

Department response: The Department agrees with the comment. The Department has reviewed the average electric rates for Pennsylvania. This data shows that electric rates have decreased by approximately 15% over the last two years even with the imposition of tighter NO<sub>x</sub> emission rates. The Department expects that electric rates will remain stable under the new control program.

19. The Department and EPA have underestimated the cost of compliance for this program. EPA estimated the cost to be approximately \$2,000 per ton of NO<sub>x</sub> reduced. The real cost will be approximately \$4,000 per ton of NO<sub>x</sub>. This additional cost will exacerbate the electric competition problem. (97)

Department response: The Department disagrees. The EPA conducted a careful cost estimate of the control program and found costs for electric generators to be approximately \$1,750 per ton of NO<sub>x</sub> reduced. The commentator provides no data to support the cost claim. The Department concludes that the program relies on highly cost effective controls.

20. The commentator point out that the U.S. Court of Appeals for the District of Columbia upheld EPA's SIP Call. Any plaintiff's further action to delay implementation of the rule will continue to threaten our public health and quality of life. (81, 112, 115)

Department response: The Department supports this comment.

21. The proposed rule is consistent with HR 182. The ANFR and the Section 126 rulemaking ensure surrounding states will implement equivalent reductions at the same time. New York and New Jersey have already adopted regulations. Delaware and Maryland are on schedule to adopt regulations. Only Ohio and West Virginia have refused to cooperate. The Section 126 rulemaking will ensure that sources in those states implement the controls. (95)

Department response: The Department agrees. The HR 182 asks the Department to ensure that there is a level playing field with neighboring states. The states are to have similar control programs and the same compliance date. The Section 110 SIP Call rule and Section 126 rules establish the compliance date of May 1, 2003. The two rules also require similar emission reductions in all the affected states. Thus, the Department can rely on the federal rulemaking to ensure that sources in other states and Pennsylvania will be treated fairly and be on the same compliance deadline. In the event the federal rulemaking is not upheld, Section 145.100 will

establish emission controls on sources significantly contributing to ozone nonattainment in Pennsylvania.

22. Pennsylvania needs to act on the ANFR as quickly as possible in order to allow sufficient time for sources to install needed controls. A delay in the installation of these controls will jeopardize the attainment demonstrations and the public's health. (95)

Department response: The Department is moving to adopt the rules as quickly as possible. Sources are on notice that the May 1, 2003 compliance deadline is applicable under Section 126.

23. The commentators' states are impacted by transported air pollution. Delaware is moving forward with development and adoption of a NO<sub>x</sub> allowance program with control implementation of 2003. New York and New Jersey have already adopted their NO<sub>x</sub> regulations. Adoption by Pennsylvania of the NO<sub>x</sub> program is necessary for these states to achieve the ozone standard and for the citizens of these states and Pennsylvania to have healthful air. (18, 88, 92)

Department response: The Department agrees that air from Pennsylvania impacts these downwind states. The Department is asking the Environmental Quality Board to adopt these rules at the July meeting.

24. The commentators disagree that emissions from certain upwind states significantly contribute to ozone pollution problems in Pennsylvania. A review of regional ozone air quality modeling shows no impact. Finally, Pennsylvania has failed to define what level of contribution is significant. (74, 87)

Department response: The Department disagrees that emissions from these two states are not significant contributors to Pennsylvania's air pollution problem. The EPA defined what is a significant contribution under the Section 110 finding. This determination was upheld by the United States Court of Appeals for the District of Columbia. In addition, the Department's analysis demonstrates a significant contribution from those states.

25. Pennsylvania is a signatory to the OTC NO<sub>x</sub> MOU. Implementation of the NO<sub>x</sub> MOU program in 1999 was successful. Sources in Pennsylvania and New York reduced emissions by nearly 158,000 tons from 1990 levels. This is an example of cooperation between the states to meet air quality goals. The ANFR is a similar program that was developed based on a cooperative effort to understand ozone formation. Pennsylvania is encouraged to adopt the ANFR as soon as possible. (83, 88)

Department response: The Department agrees with the comment.

26. Adoption of the ANFR, by Pennsylvania, would achieve emission reductions equivalent to those achieved by the Section 126 rule. This would create the option for the EPA to defer granting the relief sought by other states against Pennsylvania in their Section 126 petitions. (92)

Department response: The Department agrees. The EPA stated most recently in a letter to the Department that “If a state submits and EPA approves a SIP revision meeting all the requirements of both phases of the NO<sub>x</sub> SIP Call (including providing for control measures to be in place by 2003), then EPA will withdraw the Federal requirements for sources in that state subject to EPA’s rule responding to the section 126 petitions.”

27. The Clean Air Act Section 110 requires states to prohibit any source or other type of emissions activity from emitting air pollutants that will contribute significantly to nonattainment in or interfere with maintenance by any other state. Pennsylvania is encouraged to adopt its NO<sub>x</sub> regulation in order to meet this requirement of the Act. (92)

Department response: The Department agrees with the comment. Air leaving Pennsylvania significantly impacts the downwind states such as New York and New Jersey. Pennsylvania must do its share to clean the air.

28. The commentators support the ANFR. Pennsylvania should be a leader and adopt the regulations regardless of whether other states adopt a similar rule. (19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 75, 83, 101, 115, 118, 121, 123, 128, 131, 134)

Department response: The Department agrees with the comment. Governor Ridge has stated that Pennsylvania needs to be a leader on this issue and supports the adoption of these requirements.

29. Pennsylvania power plants are among the largest emitters of sulfur dioxide, carbon dioxide and mercury. Pennsylvania is asked to propose new standards for these pollutants. (19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 75, 89, 101, 103, 116, 117, 118, 124, 130, 134)

Department response: The Department has not proposed new rules for these pollutants at this time. The purpose of the proposed rule was to reduce NO<sub>x</sub> and ozone transport. The Department agrees that it would be ideal if a comprehensive control program for multiple pollutants were proposed allowing the sources to install needed equipment once. However, the timing and level of potential controls have not been established. The EPA is currently collecting information on mercury emissions and has the lead on carbon dioxide emissions. Phase II of the acid rain program went into effect this year, reducing SO<sub>2</sub> emissions. The Department is, however, providing an incentive program for the development of innovative technology that will reduce emissions of these pollutants along with the NO<sub>x</sub> reductions required by the final rule. The incentive provides up to 1,576 allowances from the compliance supplement pool

established in Section 145.43 to facilities to facilitate development of these innovative technologies.

30. Air pollution directly affects the health of Pennsylvanians with asthma or citizens who are active out of doors. Controls are needed to reduce the air pollution and protect the citizen's health. Hospital emissions increase on high ozone days. (50, 64, 66, 89, 90, 98, 131, 133)

Department response: The Department agrees that air pollution has a direct affect on the health of Pennsylvanians. The Department is committed to achieving the health-based ozone standard.

31. The Department should not adopt the Chapter 145 regulations because the Commonwealth is subject to the emission reduction requirements imposed by Section 126. Since these rules are already in existence, the Department does not need to adopt its own regulations. (9, 97)

Department response: The commentator is correct that the Section 126 finding and rules apply to sources located in Pennsylvania. However, it is the Commonwealth's responsibility to regulate or permit air emissions in such a way as to prevent those emissions from negatively impacting downwind areas. By adopting the Chapter 145 rules, the Department shows leadership in meeting its obligation to work cooperatively with downwind areas in achieving the air standards. The Chapter 145 rule also establishes a simplified administrative process for meeting the substantive requirements. In addition, both of these commentators are actively litigating in Federal Court to have the Section 126 remedy eliminated.

32. Commentators state that the ANFR does not comply with the wishes of the Legislature as expressed in HR 182. Commentators state that HR182 requires that the Department ensure that major fossil-fired steam electric generating units in Pennsylvania are not subject to emission control requirements more stringent than, or on a schedule soon than Phase II of the OTC MOU unless similar generating units in each state adjacent to Pennsylvania are subject to comparable controls. The ANFR does not guarantee a level playing field because the SIP Call or 126 may be delayed by legal action. Some commentators state that the Pennsylvania utilities will be unable to compete with low cost, unregulated sources outside of Pennsylvania. (9, 82, 97, 120)

Department response: The Department disagrees with the comment. First, this rule is first and foremost a rule to address the significant public health threats to millions of citizens in Pennsylvania and throughout the northeast. Without this rule, ozone pollution will continue. This is the most significant public health regulation that the Department has adopted in the air quality program since the 1990 amendments to the Clean Air Act. Competitiveness issues, while important, are not the primary focus of this rule.

The concern raised to the Legislature was that Pennsylvania's air regulations would be so much more restrictive than neighboring states that Pennsylvania sources could not economically compete. The HR 182 was passed by the Legislature as a recommendation to the Department that equity be achieved with other states. The Legislature recommended a method of achieving

equity with the other states. The Department has not adopted the specific recommendations of the Legislature. However the final goal of the Legislature is being met. The federal Section 126 rules apply to similar sources in other states as the Chapter 145 rule does to Pennsylvania sources. The EPA is moving forward to apply the Section 110 SIP Call rules to all neighboring states. Both the Section 110 and 126 rules require or recommend the same control stringency and compliance deadline. Therefore, the Department is meeting the goal of HR 182 while showing leadership to the other states by adopting our Chapter 145 rule. Maryland, Delaware, New Jersey, New York, and Massachusetts have already adopted a similar rule. In addition, because a number of Pennsylvania companies have already voluntarily complied with the requirements of this rule, Pennsylvania is likely to be able to meet the rule's requirements without difficulty.

33. The Department should not adopt the ANFR since it is not required under the SIP Call. The Court has not lifted the stay on the submission of the rules. Therefore, there is no mandate to submit this rule. When the Court does lift the stay, there is an expectation that the compliance deadline will be revised. The Department should wait for all litigation to be completed before adopting the rule. (82, 97, 120)

Department response: The Department is moving forward with the Chapter 145 rules. The EPA has recently requested that the Court lift the stay and require the state SIPs be submitted by April 27, 2000. EPA proposes to give states until September 1, 2000 to submit the SIP revisions before issuing final Federal Implementation Plans. The Department believes that it is important to move forward with this rule to protect public health.

34. The Department should amend the ANFR to condition implementation of the rule on EPA's implementation of the SIP Call, FIPs, or Section 126 in all states adjacent to Pennsylvania. This may include waiting for litigation to be completed. (9, 82, 96, 97, 120)

Department response: The Department does not agree with the comment. The end result of the comment would be for the most recalcitrant state to set the timetable for all states. This does not provide for rapidly cleaning up the air in Pennsylvania to achieve the health based standard or to reduce transported air pollutants. The Court has ruled on the technical merits of the SIP Call rule and found for EPA in all major areas. The Department anticipates a similar ruling for the Section 126 action. In either case, the Department is obligated to reduce air emissions in an expeditious manner as possible. To wait for other states to act would not show leadership. In addition, the attainment plan for the Philadelphia region includes the benefits of this program.

35. Pennsylvania and other states should coordinate closely with the electric generating industry to implement new rules. It is important that uniform regional control standards are adopted and implemented in order to prevent high emitting sources in another state from increasing production over a controlled, low emitting source in Pennsylvania. (79)

Department response: The Department agrees that the states should be working closely together to address this issue.

36. The commentator supports a regional strategy to NO<sub>x</sub> emissions. The EPA Section 126 rule is supported. (79, 83, 86, 104, 112, 119)

Department response: The Department agrees with the comment.

37. The Department has not presented a technical justification for the level of control or timing of control. The Department bases its justification on EPA findings under Section 126 and 110. However, both of those EPA actions are under litigation and may be overturned. The SIP for Philadelphia and Pittsburgh do not require the controls envisioned by the ANFR. The Department should develop the needed technical justification independent of the EPA action. (82, 91, 97, 120)

Department response: The Department disagrees with the comment. The EPA Section 110 and 126 findings clearly and explicitly explain the technical justification for the control program envisioned in Chapter 145. The Court has already upheld the Section 110 rule. The SIP attainment demonstration for Philadelphia and Pittsburgh requires the control program similar to the SIP Call be implemented by the states.

38. The commentator states that the SIP for Philadelphia includes the benefit of the SIP Call rule. The Department needs to adopt Chapter 145 to meet the requirement of the SIP. (83)

Department response: The Department agrees with the comment.

39. EPA has determined that controlling sources it identified in Section 126, the ozone transport resulting will not cause downwind states to violate the ozone NAAQS. (91)

Department response: The Department points out that the Section 126 rule would reduce or eliminate transported ozone problems. The Section 126 rule does not guarantee that a region will attain the ozone standard. There may remain the need for local control measures. However, the commentator's point is that the Section 126 control program will provide significant emission reductions and may reduce or eliminate the need for some future control programs.

40. Pennsylvania monitored 512 exceedances of the 8-hour ozone standard during 1999. This is the fourth highest number of exceedances in the nation. North Carolina had 540 exceedances of the 8-hour ozone standard. (103, 116, 117, 124, 126, 128, 130)

Department response: The Department agrees that there were a number of exceedances of the ozone standard during 1999.

41. Ozone caused health effects in Pennsylvania include 5000 premature deaths; 370,000 asthma attacks triggered by smog; 9,600 respiratory visits to emergency rooms; and 3,200 respiratory hospital admissions. The data does not include the thousands of occasions of ozone-related minor symptoms such as cough, sore throat, etc. Eleven percent of Pennsylvanians suffer from one or more chronic lung diseases. The Department should adopt the new regulations. (103, 116, 117, 121, 123, 124, 128, 131, 133)

Department response: The Department acknowledges these data. The data indicate that air pollution does contribute to respiratory symptoms. Pennsylvania must do as much as possible to reduce air emissions in order to provide healthful air for all citizens.

42. The Department should specify an age that a power plant must be closed and replaced or retrooled using cleaner fuels. (116)

Department response: The Department disagrees that a date should be specified as recommended by the commentator. The Department has a responsibility to implement rules that achieve healthful air for all. Older sources may have the ability to be retrofitted with new control equipment and meet stringent emission standards. The source owner should have the option to continue to operate a source as long as it meets the applicable emission standards and does not cause health problems.

43. The state should stop air pollution because of the negative impact on jobs. For many Pennsylvanians, acid rain from power plant pollution destroys their livelihood. More than 500,000 Pennsylvanians are employed in the tourism industry bringing in more than \$30 billion to the economy. The proposed regulations would create jobs through the need to install and maintain control equipment. (117)

Department response: The Department agrees that the secondary impacts of air pollution are not often examined. These secondary impacts are difficult to quantify but do include such things as air pollution impacts on vegetation, waterways, visibility and tourism. The proposed Chapter 145 rules will provide significant emission reductions with anticipated benefits in these secondary areas.

44. The Department should not trade NO<sub>x</sub> controls to reduce air pollution for water pollution from disposal of ash and sludge. (117)

Department response: The Department agrees that the disposal of ash and sludge from control equipment should be carefully reviewed. The Bureau of Air Quality will work with the Bureau of Waste Management to ensure that controlling one pollution problem will not result in another problem.

45. Ambient air pollution is an important trigger of asthma attacks in children. Air pollution is of special significance because it is preventable. Recent epidemiological data indicate that ozone, oxides of

nitrogen and fine particulates are the components of urban outdoor air pollution most directly associated with pediatric asthma. Asthma mortality doubled in children between 1976 and 1993. Asthma mortality increased 2 to 3 1/2 fold for the elderly in the same period. The financial burden of asthma nationwide is estimated to be \$14 billion dollars. DEP's primary responsibility is to protect public health. Prompt action is needed to adopt the NO<sub>x</sub> rules. (122, 126, 131)

Department response: The Department agrees with the commentator.

46. The commentator supports the need for the NO<sub>x</sub> emission controls and the Section 126 findings. However, the commentator does not support emission trading as a compliance mechanism. (130)

Department response: The Department understands the concerns of the commentator. The Department will be conducting a thorough review of the trading program to ensure that no local problems are created.

47. Electric industry emissions are a major cause of urban and rural ozone pollution. Coal-fired electric power stations built before 1980 generate half the nation's electricity and 85% of the NO<sub>x</sub> emissions from utilities. The commentator supports an 80% reduction in NO<sub>x</sub> emissions from coal-fired power plants in North Carolina. This is affordable and will raise the average North Carolina household electric bill about \$1.20 per month. (130)

Department response: The Department agrees that the control program envisioned in Chapter 145 is based on highly cost-effective control measures.

### **Consistency with Federal Rules**

48. The final regulation should be consistent with the Section 126 rule published on January 18, 2000 in the Federal Register. Some commentators recommend that the rule be consistent with Federal regulations in general. (11, 80, 91, 105)

Department response: The Department has crafted Chapter 145 to be consistent with the substantive requirements of the federal rules. However, several procedural changes have been made to either clarify the rules or to fit the requirements into Pennsylvania's existing program. These changes are discussed in the Pennsylvania Bulletin preamble.

49. The ANFR has been developed to be consistent with the Section 126 rule. However, the program is not entirely consistent with the Part 97 regulations. In the Section 126 preamble, EPA provided states with the choice of complying with a rule similar to Section 110 or EPA could impose the Section 126 rule. The commentator questions why the state wants to adopt a rule similar to Section 126 if EPA intends to enforce its rule anyway. (78)

Department response: The commentator may be misinterpreting the EPA statement. EPA intends to enforce the Section 126 Part 97 rules until such time that a state has an adopted and approved State Implementation Plan. At that time, EPA would stop enforcement of its Section 126 in favor of the state rule. In the meantime Pennsylvania sources are subject to direct federal enforcement.

50. The commentator recommends that the rule incorporate NO<sub>x</sub> budget specific compliance guidelines rather than contain references to federal regulations. (16)

Department response: It is unclear which guidelines should be referenced. The Department has referenced the appropriate federal regulations. No changes are necessary.

## **Definitions**

51. The commentator supports defining allowances as a limited authorization to emit and that these are not property rights. (83)

Department response: The Department agrees with the comment.

52. One commentator stated that the definition of “construction” should be the same as in Section 121.1. Other commentators state that the definition of “construction” is unnecessary to this program and should be deleted. One commentator stated that the definition of “construction” is vague and recommended that the definition of “modification” and “construction” should be made consistent with new source review rules. (13, 78,79, 82, 86, 91, 97, 106)

Department response: The Department has deleted the definition as unnecessary.

53. The definition of “CEMS” has been changed to be consistent with the electronic data report. This change is supported. (79)

Department response: The Department thanks the commentator for the support.

54. The definition of “commence” is not included in Part 97. It is recommended that this definition be deleted. (78, 79, 82, 91, 97, 106)

Department response: The definition has been deleted.

55. The definitions of “commence commercial operation” and “commence operation” are completely inconsistent with Part 97. In addition, these definitions conflict with Section 145.4(b) that fixes a source's classification. The definitions use the terms “modified”, “reconstructed” and “repowered” without defining them. (78)

Department response: The definitions proposed by the Department did not contain a reference to those sources that take a 25-ton per season exemption. This reference has been added to the definitions.

56. The definition of “emissions” is inconsistent with Part 97. The definition should be revised to use the phrase “measured, recorded, and reported to the Administrator”. (78)

Department response: The Department has not made the recommended change. The proposed definition required emissions to be determined in accordance with the subchapter. The subchapter provides details about measuring, recording and reporting of data.

57. The definition of “fossil fuel” should exempt coke oven gas and blast furnace gas. (13)

Department response: The definition of “fossil fuel” does exempt blast furnace gas. However, coke oven gas is directly derived from coal and is a fossil fuel under this definition.

58. The current definition of “fossil fuel fired facility” found in Chapter 121 is supported. The proposed definition in Chapter 145 is ambiguous. Except for conformance with federal preferences, there is no benefit to changing. (80)

Department response: The definitions in Chapter 145 are being adopted to ensure that the rules are consistent with trading rules in other states. While the Chapter 121 definition is simpler, the Chapter 145 definition accurately identifies sources used by EPA in determining the class of cost-effective controls.

59. The definition of “fossil fuel-fired” should be revised to reflect fuel combusted during the ozone season not the entire year. (97)

Department response: The Department has not made the change. The use of the full year of data is consistent with how EPA analyzed the emission inventory. This EPA data was used to develop the cost-effective analysis supporting the SIP Call and Section 126 findings.

60. The term “heat input” is inconsistent with Part 97. The definition should be revised to be consistent with Part 97. (78)

Department response: The difference between the two definitions is the exact wording of how heat input is monitored and reported. The Part 97 definition uses the phrase “as measured, recorded, and reported to the Administrator by the NO<sub>x</sub> authorized account representative and as determine by the Administrator in accordance with subpart H of this part.” The Chapter 145 definition uses the phrase “as determined in accordance with this subchapter.” Since the subchapter discusses how the heat input is measured, recorded and reported, there is no need to include the EPA phrase in this definition.

61. The definition of “maximum design heat input” should be revised. There is uncertainty in determining this for non-electric generating units. The NSPS definition in subpart GG is recommended. Changes should be made to Section 145.2 and 145.4 to clarify this issue. (76)

Department response: The Department has not made the recommended change. The definition is clear that the maximum amount of fuel on a steady state basis is used to determine the heat input.

62. The term “nameplate capacity” is too broad. It does not reflect the seasonal variations in the capacity ratings of generators. Simple cycle combustion turbines may be subject to the rule because of the winter rating rather than a summer rating. The definition should be revised to use the ISO standard to better represent the seasonal nature of the program. One commentator suggested that the summer net electric generating output be used. (79, 86, 97, 104, 105, 106, 119)

Department response: The Department has not made the recommended change. The EPA used the nameplate capacity information when determining the class of sources that could be economically controlled. This is the class of sources that EPA found “contribute significantly” to the ozone transport problem. The Department has retained the nameplate capacity definition.

63. The definition of “NO<sub>x</sub> allowance” should include the first two sentences of the same definition found in Part 97. In addition, the definition does not provide explicit authorization to emit in accordance with the Section 126 rules. (114)

Department response: The Department revised the rule to be consistent with the Part 97 rules.

64. The definition of “NO<sub>x</sub> budget emission limitation” should conform to the Part 97 requirements. (114)

Department response: The Part 97 definition references two additional paragraphs in Section 97.54 that are not included in the Chapter 145 definition. The Department has revised the Chapter 145 definition to include the additional references.

65. The definition of “NO<sub>x</sub> allowance transfer deadline” should be corrected to be consistent with Part 97. The definition should be revised to use the word “must” instead of “may”. (78)

Department response: The Department has made the suggested change.

66. The definition of “NO<sub>x</sub> authorized account representative” should use the word “person” instead of “natural person”. (78)

Department response: The Department has not made the suggested change. The definition of “NO<sub>x</sub> authorized account representative” was adopted to be consistent to the Part 97

requirements. The use of “natural person” was selected by EPA to ensure that a corporation could not be considered a “person”.

67. The definition of “Percent monitor data availability” assumes the units are on-line the entire control period. There are times when a unit is down and data is not collected. The definition should account for this. (78, 79, 97, 109)

Department response: The Department agrees. The proposed definition assumed that a source operated at all times during the ozone season. The definition has been changed to refer to actual operating hours and quality assured hours.

68. The definition of “state trading program budget” is not contained in Part 97 and should be deleted. (78)

Department response: The Department has deleted the definition from the final rules.

69. The definitions of “unit load” and “utilization” are not in Part 97. EPA replaced utilization with heat input. A similar change should be made to Chapter 145. (78, 97, 114)

Department response: The Department has made the changes as recommended.

## **Affected Sources**

70. The Department is proposing to regulate sources that are not regulated by the SIP Call rules. This violates the Air Pollution Control Act, the EQB authority, and Executive Order 1996-1. (91, 113)

Department response: The Department disagrees with the comment. The SIP Call establishes a total NO<sub>x</sub> cap for all NO<sub>x</sub> emissions in the state. The state has the flexibility to adopt differing control programs for each source category so long as the total NO<sub>x</sub> emissions do not exceed the cap. Therefore, the rules do not violate the Air Pollution Control Act, EQB authority or Executive Order 1996-1.

71. The commentator supplied emission inventory data and requests that this data be used for the baseline instead of the EPA compiled inventory. (12, 97)

Department response: The Department will publish a list of the affected sources, the inventory and allocations in the near future. Sources will have an opportunity to comment on the data at that time.

72. The Section 126 rule exempts process heaters. The ANFR should be revised to clearly exempt process heaters. (12)

Department response: The definition of “unit” is a fossil fuel-fired stationary boiler, combustion turbine or combined cycle system. The regulation does not address process heaters. No change is necessary.

73. The ANFR should be revised to exempt pollution control devices. The refining industry uses CO boilers to minimize the release of CO from the fluid catalytic cracking units. Control devices should not be included in the program. (12)

Department response: The Department has not made any revision to the regulation. If a CO boiler meets the definition of “unit” then it should be regulated as a source that contributes to the transport of ozone.

74. Units that commenced operation before 1995 that had a maximum design heat input of less than 250 mmBtu/hr should be exempt even if they are modified to be above 250 mmBtu/hr. If this were not done, the rule would penalize these sources by requiring them to determine their baseline for a year before being included in the program. This requirement would impede needed changes at a facility. (12)

Department response: Section 145.4 defines the applicability of the rule to sources. Paragraphs (a)(1) and (2) establish the criteria for existing sources. Section 145(a)(1)(i) states that sources that commenced operation prior to 1997 had to have a maximum design heat input greater than 250 mmBtu/hr. If an existing source had a maximum design heat input of less than 250 mmBtu/hr prior to 1997 and then were modified to be above 250 mmBtu, the source would not be covered by the rule. The exception would be if the source were modified so extensively that it would be subject to the PSD or NSR programs. In this case, the source would be a new source subject to the program.

75. Iron and steel mills that combust byproduct fuels such as blast furnace gas and coke oven gas should be exempt from the rule. The EPA has determined that these fuels are “by-product” fuels and are not fossil fuels under NSPS. (13)

Department response: The Department has not made any changes to the regulation in response to this comment. The Part 97 and 96 regulations clearly apply to boilers located at iron and steel mills. EPA determined that coke oven gas is a fossil fuel. The Department maintained this determination in the Chapter 145 rule in order to be consistent with EPA and other states.

76. Units that combust byproduct fuels are penalized under the allocation system. The allocation system assumes a 60% reduction in emissions from the baseline. The low emitting sources that burn byproduct fuels would be penalized. These sources are currently permitted to burn 100% fossil fuel. However, the allocation system would prevent this from happening by limiting the emissions. A source should not have to purchase allowances for fuels that they are permitted to burn. (13)

Department response: The Department disagrees with the comment. The allocation system provides allowances based on the actual operations of a source over a period of time. The average seasonal heat input, during this time period, is multiplied by 0.17 lb/mmBtu (non-EGU units) to calculate the basic allocation. The allocation is then adjusted to maintain the budget. If the unit is combusting the byproduct fuels and is emitting at less than 0.17 lb/mmBtu, then the unit should receive more allowances than it actually needs. The source is effectively rewarded for being a clean emitter. The commentator is confusing the methodology for developing the budget with the allocation system. When EPA calculated the budget, the base year emission rate was reduced by 60%. However, the allocation does not require a percent reduction. No change has been made to the rule.

77. Units exempted under Section 145.4(c)(2) report hours of operation. This assumes that all units are operated at full capacity. The section should be revised to allow reporting of heat input to be more reflective of actual operations. (78)

Department response: The referenced section is part of the exemption cap for low emitters. The section requires that the maximum emission be determined based on the maximum emission rate and hours of operation. The source then need only report hours of operation eliminating the need for a complex monitoring system. No change has been made to the regulation.

78. Section 145.4(c) does not conform to Section 97.4(b)(4) on restricting hours of operation. In addition, there is no reference to the exceptions, which include provisions under Sections 145.40-62. (114)

Department response: The Department has revised the section to be consistent with the Part 97 rules.

79. The retired unit exemption does not include the requirements found at 97.5(c)(7) and (8). These should be included in the rule. (78)

Department response: The section has been revised to include the recommended paragraphs.

80. The requirement in Section 145.4 related to the exemption of small sources should be revised to use the monitoring requirements of Section 123.108 to calculate the tonnages associated with the exemption. These provisions were developed with industry input and, while conservative, are not unreasonably conservative. (79)

Department response: The Department has not made the suggested change. The monitoring for the exemption section references the Part 75 monitoring requirements in order to be consistent with other states. The EPA has stated that a change to Part 75 will be proposed to provide greater flexibility in monitoring for small sources. The Department will continue to work with EPA to affect this change.

81. Section 145.4 does not provide that new units will obtain allocations from the existing source budget after five years as specified in Section 97.40. Section 145.4(b) should be deleted as unnecessary and could be interpreted to preclude new unit allocation after the set-aside allocation period. (79, 82, 91)

Department response: The Department has removed the proposed Section 145.4(b) as unnecessary and renumbered the section. Section 97.40 does not require that new sources be allocated from the existing source budget after 5 years. Section 97.40 states that allowances to existing units will be done as specified in Section 97.41 (timing) and Section 97.42 (b) or (c). Section 97.42(b) provides an allocation to existing electric generating units while Section 97.42(c) provides an allocation to existing non-electric generating units. The allocations for new sources are specified in Section 97.42(d). This section does not move new sources into the existing source category after 5 years as the commentators contend. Rather it describes how allocations will be made and states that new sources must have a period of operations during a base time frame to be included in the existing category.

82. A similar NO<sub>x</sub> allowance rule in New Jersey clearly exempts direct-fired non-electric generating units. Pennsylvania should revise Section 145.4 to clearly exempt these sources. (76)

Department response: The Department has not revised the rule. However, the trading program does not cover direct-fired units. The trading program applies to boilers, turbines and combined cycle systems. The proposed Subchapter B for stationary internal combustion engines would set separate standards for direct-fired units meeting the definition.

83. The NO<sub>x</sub> affected sources should be consistent with federal rules and rules in other states. (80)

Department response: The Department agrees with the comment. No change is necessary.

84. The Department should revise the rules to encourage cogeneration units. (80)

Department response: No change in the rule is needed. The rule is worded to be neutral to the type of source. Unit owners and operators may choose the type of operation. The more efficient operations will end up with excess allowances. This is the type of encouragement is provided in the rule.

85. The ANFR revision to cover sources greater than 25 megawatts is supported. (86, 91, 106, 109)

Department response: The Department thanks the commentators for their support.

86. Emergency diesel generators should be exempted from this rule. (86)

Department response: Diesel generators are not covered by the trading rule. These units would be regulated by the Subchapter B Stationary Internal Combustion Engine rule.

87. The commentator states that the Department is planning to use the EPA inventory for the development of a list of affected sources and budget. However, the rules proposed by the Department are different from EPA. This means that the Department will be using the emission inventory for a purpose that was not intended by EPA. (91)

Department response: The conclusion of the commentator is incorrect. EPA used the emission inventory to determine highly cost effective controls and to evaluate the effect control would have on the emission inventory. The Department's regulation is based on the EPA model rule and uses the same highly cost effective controls. Therefore, the emission inventory will be used appropriately.

88. Erie Boiler No. 21 is not listed as an affected source in the May 1999 EPA emission inventory because the fuel combusted in 1995 was less than 50% fossil. The Department's regulations should be revised to clarify that the rules do not apply to this unit. Suggested wording is provided for the definition of "fossil fuel-fired". (91)

Department response: The definition has not been revised as suggested. The applicability section sets forth the criteria to determine if a source is covered by the rule. If the Erie Boiler No. 21 burned more than 50% wood during 1995, it would not be covered by the rule.

89. The Section 145.4(c) that allows sources to take a 25-ton cap is supported. (91)

Department response: The Department thanks the commentator for their support.

90. Section 145.4(c)(1) should be revised to require records to be maintained no more than 5 years. (91)

Department response: The Department has revised the section to be consistent with the EPA Part 97 requirements. The rule now requires records to be kept for a period of 5 years.

91. The commentator supports a 25 megawatt cutoff as long as the nameplate capacity is determined based on summer rating. (97, 105)

Department response: The Department has a 25 megawatt cutoff. However, the determination is based on the nameplate capacity. Nameplate capacity is based on the maximum electrical generating output over a time period when not restricted in some manner. The EPA used the nameplate capacity that represented the maximum rating. EPA used this data to determine the sources that could be cost effectively controlled. These cost effective controlled sources are required to reduce emissions to reduce transport problems. Therefore, the Department has retained the EPA definition.

92. The commentator opposes raising the megawatt cutoff to 25 rather than 15. The rule should be expanded to cover any NO<sub>x</sub> source located in a nonattainment area. (83)

Department response: The Department has not made the suggested changes. The cutoff was raised to 25 megawatts to accurately identify those sources that could be cost effectively controlled. The Department will retain the 25 MW cutoff.

93. The Department should confirm that two facilities, Philips and Brunot Island, will be considered as new sources and will receive allocations from the new source set-aside when they are reactivated. (97)

Department response: The Department has not made a determination on these sources. Such a determination would be made based upon the method of reactivation and permit status of the sources. The Department will review the application when it is submitted by the company.

94. Sections 145.4(a)(1)(i) and (ii) and 145(a)(2) should be revised to delete the word “a” from the sentences referring to electricity for sale under a firm contract to the electrical grid. (114)

Department response: The Department has not made the suggested change. The wording for those two paragraphs is taken from the EPA rules. Section 97.4 uses the word “a”. The Department has retained the same wording in order to be consistent with the EPA rule.

95. Section 145.4(b) concerning “new unit classifications may not change” should be clarified. This does not reflect how allocations will be made. (114)

Department response: The Department has deleted the section.

## **Budget**

96. The Department should include in Section 145.40(d) the timing or schedule for finalizing the budget. (78, 86)

Department response: The Department has revised Section 145.40 to list the budgets. No timing is necessary.

97. Section 145.42(a)(1)(i)(B) references the Administrator. However, it is unclear whether this is the NO<sub>x</sub> Budget Administrator or the EPA administrator or the Department. (78)

Department response: The section references the EPA administrator.

98. The Department should list the budgets for electric and non-electric generating units. (82)

Department response: The Department has made the suggested change.

99. The commentator supports the change that eliminates the use of old emission statement records previously submitted to the Department. (93)

Department response: The Department thanks the commentator for the support.

100. The commentator supports the use of the EPA compiled inventories. However, because of the possibility of error by EPA, the Department should provide an opportunity for all sources to review and challenge the inventory data before the Environmental Hearing Board. (93)

Department response: The Department will use the EPA emission inventory. EPA's inventory and data is subject to judicial review under Section 307(b) of the Clean Air Act.

101. There is an error in the budget calculation formula for non-electric generating units. The ANFR divides by the control efficiency. The correct formula should include division by 1 minus the control efficiency. (89)

Department response: The commentator is correct. However, the Department deleted the ANFR wording and is now listing the final budgets.

102. The commentator questions why the Department would calculate the budget rather than use the budgets provided by EPA. (114)

Department response: The Department has deleted the calculation of the budgets and is now listing the budgets.

## **Allocations**

103. The initial allocations are based on the average of the two highest of four control periods. Subsequent allocations are based on the average of 5 control periods. The allocations for all control periods should be based on using the average of the highest two control periods from the appropriate base. One commentator suggested that the averaging time should take into consideration the possible outages needed for the installation of control equipment. (78, 82, 97)

Department response: The initial allocation is based on the average of the control periods as proposed in the ANFR. This allocation will address the concern of sources that the some of the control periods may not represent normal operations. The allocation method provides for the two highest heat inputs be used. Since sources were not installing control equipment during this time period, there should not be a concern about impact the installation of control equipment had on the heat input.

104. Section 145.42(g)(2) states that certain allowances will be placed in a set-aside account. There should be more information on what the set-aside account is and how it will be used. (78)

Department response: The allocations that would be set-aside are allowances that were mistakenly allocated to units that do not meet the affected unit definition. These are allowances that should have been provided to either existing or new sources. The section requires the NO<sub>x</sub> Budget Administrator transfer the allowances to a set-aside. The Department will use the set-aside for new sources if the new source set-aside is over subscribed. If the new source set-aside is under subscribed (not fully used), then the allowances in the Section 145.42(g)(2) set-aside will be returned to the existing sources as provided in Section 145.42(f).

105. Section 145.42(i) states that the allocations will be published in the Pennsylvania Bulletin. This section should be revised to provide for timing and a schedule for incorporating comments. (78, 82, 105)

Department response: The timing will also be published in the Pennsylvania Bulletin.

106. Section 145.41 should be revised to state that the Department shall submit the initial allocations to EPA no later than April 1, 2001. (91)

Department response: The revision has not been made. The allocations will be submitted to EPA as soon as they are finalized.

107. The allocations for each affected source should be listed in the rule. (16)

Department response: The Department disagrees with the comment. Listing the allocations in the rule would require a regulatory revision each time the allocations are updated. Instead, the provisions of the rule provide the formula for calculating allocations. The source will be aware of its allocation since the number of allowances will be included in the appropriate permit.

108. Section 145.42 (2) found on page 83 should be clarified. It seems to be conflicting with the permitting of new sources. (16)

Department response: The section referred to by the commentator has been proposed for deletion. No additional change is necessary.

109. The 1% set-aside should be eliminated. The Department should allocate 95% of the budget to existing sources. (82, 97, 105)

Department response: The Department has made the suggested change. However, the Department can use the 5% set aside to correct allocation errors.

110. The commentator supports the use of multiple year baselines as proposed in the ANFR. (86)

Department response: The Department thanks the commentator for the support.

111. The commentator recommends that all five years of the initial allocation be recorded in the tracking system. (86)

Department response: The EPA tracking system will record three years of allowances. The allocations will be issued in 5 year blocks and included in the appropriate permit. The source will have the allowances for the full five years, but will need to wait for the appropriate year's allowances to be posted before recording transactions. The Department will discuss with EPA the possibility of recording 5 years of allowances on the tracking system.

112. The allocation of 0.15 or 0.17 lb/mmBtu for all existing sources is supported. (93, 112)

Department response: The Department thanks the commentator for the support.

113. The allocation method chosen should provide for and encourage developing and innovative new technologies both to achieve greater environmental benefits and the most cost-effective emission reductions. (97)

Department response: The Department believes that the proposed allocations system does encourage new sources by providing allocations at the 0.15 and 0.17 lb/MMBtu level. Existing sources emitting below these levels receive allowances that they can sell, trade or bank for future years.

114. The allocation method for non-EGU sources should be revised to be consistent with EGUs when determining base heat input. The reference to the Administrator's finding should be deleted. (109)

Department response: The recommended change has not been made. The allocations are based on an appropriate baseline determined after public input. The baseline developed by the Administrator has been subject to three public comment periods and has been upheld by the US Court of Appeals for the District of Columbia Circuit.

115. The commentator supports the allocation methodology providing 5 year block allocations. (109)

Department response: The Department thanks the commentator for the support.

116. The commentator supports an allocation system that sets a uniform control requirement across Pennsylvania. This eliminates the inner and outer zones established in the NO<sub>x</sub> MOU program. (86)

Department response: The Department thanks the commentator for the support.

117. Section 145.42(e) should be revised to add the terms ‘lesser of’ and “or the unit’s most stringent State or federal NO<sub>x</sub> emission limitation” in the calculation of allowance deductions. (114)

Department response: The Department has made the recommended changes.

118. The commentator states that Section 145.53 should be revised to include the requirement that allowances be recorded three years in advance for the 2004-2006 compliance years. (114)

Department response: The section has been revised to require the recording of allowances in a manner consistent with the Part 97 rules.

119. The commentator questions why the default provision of Part 96 to use the same allocation from a previous year was removed. Inclusion of this provision provides protection for sources in case the allocations are not made on time. (114)

Department response: This section is not necessary. It is the Department’s responsibility to complete the allocation process in a timely manner. The Department is committed to allocating in a timely manner.

### **New Source Set-Aside**

120. The commentator questions if the new source set-aside will be large enough beginning in 2003. (16)

Department response: The new source set aside was developed based on a grown NO<sub>x</sub> inventory. The growth is the expected emissions from the new sources. The EPA projections show anticipated actual use of the new source set-aside of 4.7% per year. The Department anticipates that sufficient allowances will be available.

121. The commentator supports the 5% set-aside for new sources. (83, 112)

Department response: The Department thanks the commentator for the support.

122. Section 145.42(b)(2) should be revised to move under-subscribed existing source allowances to the new source pool if they are needed. Unused new source set-aside allowances should be retained in the new source set-aside for future use and should not be returned to existing sources. The set-aside should be allowed to grow to a maximum 15% of the budget. Any allowances over that level should be returned to the existing sources. Another commentator stated that unused new source set-aside allowances should be retired and not returned to existing sources. (79, 83)

Department response: The Department has not made the recommended changes. The allocation system is designed to provide a pool of allowances to new sources and the remaining pool to existing sources. Taking allowances away from the existing sources will require them to control more than is necessary. Allowing the set-aside to grow will ensure that a certain number of allowances won't be used, again requiring existing sources to overcontrol. The comment to retire unused allowances also results in existing sources overcontrolling. The Department has proposed an allocation scheme that balances the needs of new and existing sources.

123. If the new source set-aside is under-subscribed, the unallocated allowances should be returned to the existing sources. (105)

Department response: The Department thanks the commentator for the support.

124. The regulations should make explicit that new, lower emitting and more efficient, electric generation facilities and other new sources initially receive and keep allowances from the set-aside and become a part of the "existing source" budget after five years. This will encourage the turn-over of the existing sources to new, clean sources. The proposed ANFR would encourage control equipment installation. Section 145.40 should be revised to allow new sources to move to the existing source category as soon as possible. Suggested language is provided. An alternative is to use the allocation methodology suggested in the Section 110 rule. (79, 104, 119)

Department response: The Department has revised the regulation to allow a new source to become an existing source earlier than currently provided. The suggestion for new sources to retain unused allowances has not been made. The allocation method balances the needs of existing and new units. Allowing new sources to retain unneeded allowances requires existing sources to overcontrol.

125. New sources should receive allowances at the 0.15 rate rather than allowable, if lower. This will prevent new sources from seeking higher allowable limits so that they are not disadvantaged. (79, 104, 119)

Department response: The Department does not believe that new sources should receive allowances from the set-aside at a rate higher than they are allowed to emit. The allowable emission rate is determined based on NSR, PSD or BAT requirements and not on a source's desire to receive extra allowances.

126. New sources should be allocated at the lower of 0.15 lb/mmBtu or allowable. (105)

Department response: The Department thanks the commentator for the support.

127. There should be a set-aside for renewable energy and efficiency. EPA suggested such a program. This would encourage cleaner energy production. This set-aside should be at least 5 to 15%

of the total NO<sub>x</sub> budget. One commentator would restrict projects to be initiated by consumers and not source owners. One commentator suggested a 10% set-aside. (83, 89, 112, 115, 129)

Department response: The Department has not included a set-aside for renewable energy and efficiency projects. The commentator is correct that EPA has encouraged states to adopt such a provision. The Department will continue to review the concept and may recommend inclusion of this set-aside in the future. However, the rule does encourage cleaner energy production. Sources that exceed the emission limitation established in the rule will have excess allowances to sell or trade.

### **Compliance Supplement Pool**

128. The commentator suggests that if the compliance supplement pool is not fully utilized that the state distribute the remaining allowances as needed to new sources and then to the existing sources. (78)

Department response: The Department has not made the suggested change. The compliance supplement pool is designed to provide a smooth transition from the existing NO<sub>x</sub> allowance program to the new Chapter 145 program. Existing sources are allowed to use the compliance supplement pool to transition to the new control levels. Based on the first year of the NO<sub>x</sub> allowance program, the Department anticipates that applications for the compliance supplement pool will fully utilize the pool.

129. The state should try to convince EPA to eliminate the cap on the number of allowances that can come forward into the program from the existing Chapter 123 NO<sub>x</sub> allowance program. This will encourage and reward the installation and operation of control equipment. One commentator stated that all banked allowances should be brought into the new program. (79, 82, 86, 93, 97, 104, 105, 106, 109, 119)

Department response: The Department disagrees with the comment. The compliance supplement pool was developed by EPA to provide a smooth transition for existing sources into the new program. The pool was distributed to states based on the additional controls needed at coal fired power plants. The Department disagrees that either additional controls will be installed or that existing controls will be operated based solely on the availability of the compliance supplement pool. Sources are and will be investing millions of dollars in the equipment and are not basing these investments on the acquisition of allowances valued at \$1,500. In addition, a larger compliance pool would result in additional emissions and dilute the public health benefits of the rule.

130. The compliance supplement pool requirement that data be measured with 90% monitor availability and percent valid data capture should be revised to correct the “valid data capture” issue of down time. (79)

Department response: The recommended change was not made. The sources currently covered by the Chapter 123 NO<sub>x</sub> allowance program are required by Chapter 123 to meet a certain monitoring quality. The Chapter 145 provisions assumes that the sources meet the Chapter 123 monitoring quality and allow these sources to apply for early reductions based on their NO<sub>x</sub> bank. The monitoring quality issue in Chapter 145 is directed toward sources that are not currently covered by Chapter 123. These sources should install and operate the monitoring equipment to demonstrate that emission reductions have occurred.

131. The early reduction requirements state that a source must meet the monitoring specifications in the proposed Chapter 145. However, many of the sources are subject to the monitoring requirements of Chapter 123. The rule should be revised to state that sources meeting the monitoring requirements of Chapter 123 will be eligible to apply for early reductions. (93)

Department response: The suggested change has been made for the 2000 control period. Section 145.43 provides that any banked allowance under the Chapter 123 NO<sub>x</sub> allowance program may be applied toward the compliance supplement pool. Sources will have been in compliance with the Chapter 123 requirements will be allowed to obtain early reductions.

132. The Department should revise Section 145.43(c)(9) relating to banking of the compliance supplement pool. This provision conflicts with Section 145.55(b) that states that progressive flow control doesn't start until 2005. (82)

Department response: The Department has not made the suggested change. The final rule Section 145.43(e)(9) states that the early reductions will be considered as banked beginning in 2004. This does not mean that flow control will start in 2004. Section 145.55(b) states that flow control will not start until 2005.

133. Section 145.43(b) allows for banked allowances under the Chapter 123 NO<sub>x</sub> allowance program to be considered as early reductions. However, the wording of the section implies that Pennsylvania must have allocated the allowances. Under the Chapter 123 program, allowances may be purchased from any participating source in any participating state. The section should allow for any banked allowances to be considered for the compliance supplement pool regardless of which state allocated the allowances. (86)

Department response: The section looks at the number of banked allowances in a unit's account. It does not require that the Department have allocated them.

134. The rule should be structured to value excess emission reductions resulting from over compliance rather than reduced utilization or acquisition of allowances from out-of-state. (105)

Department response: The Department agrees with the commentator. Section 145.43 has been modified to provide an incentive program for installation and operation of control

technology. Ten percent of the compliance supplement pool is specifically set aside for facilities that over comply through the operation of control technology beginning with the 1999 control period.

135. The commentator opposes the compliance supplement pool. These allowances should be retired and not distributed to sources. (83)

Department response: The Department has retained the compliance supplement pool. It provides an appropriate transition mechanism.

## **Bank**

136. Section 145.55 should be revised to eliminate the flow control requirements. The number of allowances that are available in the proposed program are very small due to the stringent control level. Another commentator supported the flow control requirements. (79, 83)

Department response: The Department has retained the flow control requirement. The regulations must be similar to other states in order to have a wide trading area. Elimination of the flow control would result in a different trading and tracking system than any other state. Therefore, the flow control requirements are necessary and are being retained.

137. The flow control requirements should be increased. There should be a daily cap established on each source. Sources should be restricted to emitting a maximum of 105% of the allocation during each ozone season regardless of the flow control requirement. (112)

Department response: The Department has not made the recommended changes. The concern of the commentator is that sources will emit at higher rates on hot summer days in order to generate electricity. The commentator wants a daily cap placed on sources to prevent overloading of the environment on hot days. After the program has started and data has been collected, the Department will review monitoring data to assess if this is a problem and will propose rules to address this issue as necessary.

138. The flow control requirements of Section 145.55 should be moved to Section 145.54 to clarify how flow control interacts with the compliance process. (114)

Department response: The suggested change has been made.

## **Compliance**

139. The proposal to change the NO<sub>x</sub> allowance transfer deadline from December 31 to November 30 is opposed. Sources need the extra thirty days to compile and incorporate all relevant data. The

December 31 deadline provides greater flexibility. Other commentators suggest that the current Chapter 123 rule uses December 31 and there should be no change. (11, 79, 86, 97, 105, 106)

Department response: The Department disagrees with the comment. It is appropriate to have a rule consistent with other states. The EPA model rule uses November 30 as the allowance transfer deadline. This date is 60 days after the end of the control period. A sixty-day period is also contained in the Acid Rain program. The Acid Rain program has been successful and sources have not had a problem meeting that compliance deadline. Therefore, the sources should be able to meet this deadline.

140. The compliance certification deadline should be changed to December 31 as currently contained in the Chapter 123 NO<sub>x</sub> allowance regulation. (86, 91, 97, 105, 106)

Department response: The Department has not made the recommended change. The due date should be the same for all sources in all states covered by the program.

141. The compliance provisions contained in Section 145.54(d) are overly stringent and are not authorized by law. The assumption that every day of the summer may be a violation is not valid. Sources should be able to demonstrate a lesser number of days of violations. The three to one allowance penalty is excessive and should be replaced with a lower value. (11, 82, 97, 105, 106)

Department response: The Department disagrees with the comment. The compliance provisions are the same as contained in the Chapter 123 NO<sub>x</sub> allowance program. These provisions provide incentive to sources to comply and let them know, up front, how noncompliance will be addressed.

142. The commentator suggests that the number of days of violations should be determined by exhausting all available NO<sub>x</sub> allowances and then determining the number of days remaining in the ozone season for which no allowances are available. A commentator suggests wording for Section 145.54(d)(3)(i) that provides an example for sources to demonstrate a lesser number of days of violations. Another commentator states that the Department should work with other states to specify the number of days for which insufficient allowances are available and specify that number to represent the number of violations. (79, 91, 93)

Department response: The Department has not made the suggested change. See also the response to comment 141.

143. The penalty provisions of Section 145.6(d) are overly onerous and should contain explicit references defining the exact nature and cost method for determining the fine. (78)

Department response: The Department disagrees with the comment. The commentator intended to reference Section 145.54(d). This section states that penalties would be consistent with the Clean Air Act and Air Pollution Control Act.

144. The revision of Section 145.6 to allow records to be retained at a central site is supported. (79, 86, 97, 106)

Department response: The Department thanks the commentators for their support.

145. The provision of Section 145.6 allowing records to be retained at a central site is opposed. These records should be kept on site in order to facilitate inspections and audits. (114)

Department response: The Department disagrees with the comment. The rule does not prohibit a source from maintaining records on site. It does allow an owner/operator with multiple remote sites to maintain centralized record storage. The records are still available for review by the Department.

146. The reporting and recordkeeping requirement for non-acid rain sources is supported. The Department should make a similar change to the Chapter 123 program. (79)

Department response: The Department thanks the commentator for the support. The recommendation to revise the Chapter 123 rule will be reviewed.

147. The compliance timetable of 2003 is no longer practical. The inclusion of a large number of small boilers will increase the demand on the few control equipment vendors. Continued litigation of the rules will shorten the compliance window. (80)

Department response: The Department disagrees with the comment. The compliance date of May 1, 2003 is based on the attainment deadline for the Philadelphia area and availability of control equipment and the time needed to install the controls. The compliance window will not be shortened. The Section 126 rules apply to the same sources as the Chapter 145 rules. The Section 126 rule requires compliance by May 1, 2003. Thus, sources are on notice, now, to comply by 2003.

148. The cost of compliance is underestimated. The cost on small boilers is not accounted for in the estimates. (80)

Department response: The Department disagrees. The small boilers are actually large boilers, greater than 250 mmBtu/hr. These boilers have been determined to be in the class of boilers that can be cost-effectively controlled.

149. Because of the litigation uncertainty around the Section 126 and 110 rules, the Department should include a provision in Chapter 145 that protects generating companies participating in the Chapter 145 rule. The Department should establish a cap of \$1,720 per allowance for the first year. In addition, the Department should allow a company to delay up to 25% of its first year ozone compliance

obligations until the end of the second year. This will provide time for a robust market system to being to operate. This provision would only be available if allowances are priced higher than \$1,720. (86)

Department response: The Department has not made the suggested changes. The program is established and allows sources to seek out either the best control option or the least cost control option. It is up to the source to make the determination. If the cost of allowances is very high, then the source may find it more cost effective to install controls. But the choice is the source's to make and the Department should not interfere in this market by establishing artificial prices.

150. The compliance provisions of the rule are supported. (83)

Department response: The Department thanks the commentator for the support.

151. A review of Chapter 123 Appendix E indicates that Penntech Papers is listed as an affected source. This is incorrect. (80)

Department response: The commentator is commenting on the Appendix E to Chapter 123 that lists sources subject to the NO<sub>x</sub> allowance rule. This Appendix E was revised on December 21, 1999 by the Environmental Quality Board and published on March 11, 2000 in the Pennsylvania Bulletin. In that revision, the Penntech Papers units were deleted.

152. The word "utilization" in Section 145.54 should be replaced with "heat input". (114)

Department response: The change has been made as recommended.

153. Section 145.61(a)(3) may be deleted as unnecessary in conformity with Part 97. (114)

Department response: The change has been made as recommended.

### **ERC/Allowance Interaction**

154. The Department modified the Section 145.90 by deleting the subsection b. This change is supported. A similar change should be made to the Chapter 123 NO<sub>x</sub> allowance program. Another commentator stated that the revision of Section 145.90 deleting subsection (b) should be opposed. This subsection should be reinstated. (79, 83, 105)

Department response: The Department has deleted subsection (b). The Department will review the need for a regulation change to Chapter 123 rule. However, any applicant for ERCs must show that the reductions are surplus. This showing may be very difficult to make for banked allowances.

## Permitting

155. Section 145.30(c)(6) requires that the source report on methods used to comply with Section 127.12a(k). The commentator asks why this is necessary if all permitting requirements have been deleted. (78)

Department response: The Department has not eliminated all permitting requirements. Rather, the Department has eliminated the need for a separate NO<sub>x</sub> permit. Inclusion of a reference to Section 127.12a(k) merely clarifies a source's obligations.

156. The elimination of the permitting requirements is supported. Other commentators stated that the Section 126 rule requires sources to have a federally enforceable permit. Pennsylvania is proposing to remove the permitting provisions of Chapter 145. This is not consistent with the federal requirement. A NO<sub>x</sub> budget permit will streamline allocations, deductions and transfers of allowances. (78, 109, 114)

Department response: The Department has deleted most of the permitting requirements in Chapter 145. These requirements are duplicative of permitting requirements found in Chapter 127, which is federally enforceable.

157. The provisions of Section 145.6 stating that allowance allocations, deductions, and transfers are incorporated automatically in the NO<sub>x</sub> budget permit should be eliminated. (114)

Department response: The Department has reviewed the wording of the Part 97 rules and made changes to ensure consistency with the federal program.

158. The permitting references in Sections 145.83 through 145.88 should not be eliminated. (114)

Department response: The Department has revised the rule to provide for sources to receive an approval. The permitting requirements of Chapter 127 remain in effect.

159. The Part 97 rules eliminated the provisions for the confirmation of intent to opt-in and the issuance of a draft NO<sub>x</sub> budget permit. Pennsylvania's regulation should be revised to conform to Part 97. (114)

Department response: The Department agrees that confirmation of intent to opt-in and issuance of a draft NO<sub>x</sub> permit is unnecessary. These provisions have been deleted.

## Monitoring

160. Sources subject to Chapter 139 monitoring requirements should not be required to revise their monitors to meet Part 75. Sources that are not subject to Part 75 would have to purchase new monitoring equipment. Some commentators state that capital costs for industrial sources cannot be

recovered as readily as utilities can recover costs. These sources should not have to repeat certification testing if that testing was done to comply with the Chapter 123 NO<sub>x</sub> Allowance program. (11)

Department response: The Department has retained the monitoring requirements. These requirements provide uniform monitoring among all sources in all states participating in the trading program. This assures that a ton of emissions measured in one location is equal in value to a ton of emissions in another location. The EPA has committed to revise the Chapter 75 monitoring requirements to provide certain flexibilities for small sources that are provided under the Chapter 123 NO<sub>x</sub> allowance program. The Department will continue to work with EPA to ensure that these changes are made. These changes will reduce the number of sources that may need changes to existing monitoring equipment or need recertifications. It should be noted that electric utility rates are no longer set by the Public Utility Commission. These electric utility sources have the same ability to pass on costs as industrial sources.

161. The commentator asks the Department to work to obtain approval for the current Chapter 123 monitoring requirements. However, if this is not possible, the commentator does not support using a monitoring program that prevents Pennsylvania sources from participating in interstate trading. (78)

Department response: The Department will work with EPA to provide the flexibility needed through a revision to the Part 75 requirements. The Department is adopting the Part 75 requirements in order to have a trading program that allows multi-state trading.

162. Sections 145.70 and 145.71 should be revised to allow small units to use the current Chapter 123 NO<sub>x</sub> allowance monitoring provisions. These monitoring provisions would also be used by small sources to obtain an exemption from the program. (79, 86, 97, 104, 105, 109, 119)

Department response: The EPA has stated its intention to revise Part 75 to provide the flexibility found in the Chapter 123 program. The adoption of the Part 75 rules will ensure that Pennsylvania sources are treated equally to sources in other states.

163. The commentator states that the monitoring requirements for small sources in Part 75 are onerous and inflate the actual emissions. The commentator recommends that the current Chapter 123 monitoring requirements are reasonable and should replace the Chapter 145 requirements. (97, 106)

Department response: The Department will work with EPA to ensure that the Part 75 monitoring requirements are revised to provide additional flexibility. It is important that the state adopt the Part 75 requirements in order to have consistent rules with other states. This would not occur if the Chapter 123 monitoring requirements were adopted instead of the Part 75 rules.

164. The monitoring provisions should be modified to incorporate the monitoring provisions in Chapter 123 that relate to determining the NO<sub>x</sub> emission rate. The commentator agrees that new monitoring is needed to determine heat input. This is supported. (93, 96)

Department response: The Department has retained the Part 75 monitoring requirements. The EPA plans to revise Part 75 to provide additional flexibility for small emitters when determining emission rate. The Department will work with EPA to ensure that the revision is completed.

165. The final regulations should allow sources that cannot directly monitor heat input to calculate heat input from the fuel throughput and gross calorific values reported to the AIMS system. The ANFR allows this method of heat input determination for the NO<sub>x</sub> allocations for the 2003 through 2007 period. (11)

Department response: The recommended change has not been made. The Department is requiring sources to comply with 40 CFR Part 75 Subpart H monitoring requirements for heat input. These requirements provide sources that cannot directly monitor heat input to petition the Administrator for an alternative. The Department believes that it is important for the Administrator to make the determination so that sources in different states are treated equally and have similar monitoring requirements. The commentator is correct that the initial allocation period will use estimated heat input in some cases. However, the Administrator has held several public comment periods to receive input on this issue and has determined that this information is the best available.

166. The definition of continuous emission monitoring system should be revised to include the phrase “to the extent consistent with Sections 145.70-76 of this subchapter”. This makes the definition consistent with Part 97. (78)

Department response: The recommended phrase is not necessary. The definition states that the CEM system needs to be consistent with Part 75. Sections 145.70 through 145.76 require the CEM system to comply with the Part 75 provisions.

167. The commentator suggests modifying Section 145.70(1)(i) to add the words “as necessary”. The commentator states that the current wording implies that a flow monitor is required. Flow monitors may not be required depending on the monitoring option selected. (78)

Department response: The commentator is correct that flow monitors may not be required depending on the option selected. Section 145.70(1)(i) requires flow monitors to be installed in accordance with 40 CFR 75.72 and 75.76. If these sections do not require a flow monitor, then none is needed. No change is necessary to the rule.

168. The commentator recommends that Sections 145.70(2) and (3) be modified to allow for a shakedown period. This would allow the source to troubleshoot and debug the systems. Emissions data would not be required to be reported until after the shakedown period is completed. (78)

Department response: The Department disagrees with the comment. The NO<sub>x</sub> budget program is intended to capture the mass emissions from the sources. There should be no exempted

emissions. The monitoring provisions do address shakedown needs by requiring maximum emission reports with the ability to substitute actual data after the system is certified.

169. The commentator recommends that Section 145.74(d)(1)(iii) be revised to clarify that data is reported after the CEM system is certified. (78)

Department response: The Department has not made the suggested revision. All NO<sub>x</sub> data must be submitted in order to demonstrate that the budget is being met. The rules do provide the source with the opportunity to address pre-certification data.

170. Section 145.74(d)(2) should be clarified. It is unclear what quarters of data must be submitted by non-acid rain sources. The language is more stringent than the EPA Part 97 rules. (93)

Department response: The Section 145.74(d)(2) allows non acid rain sources to choose whether to submit data for all four quarters of the year or to submit data for the two quarters covering the ozone season. The subsection (2) is consistent with the Part 97 rules.

171. Section 145.70 has two incorrect references to 40 CFR 75.72 and 75.76. These references should be corrected. (76)

Department response: The Department has corrected the references.

172. Section 145.70 should be revised to provide guidance on what alternative monitoring methods are allowed. (76)

Department response: The EPA maintains a file of alternative monitoring methods that have been approved. The Department has not included guidance or a list of the methods in the rule in order to allow sources to take advantage of changes or updates as they occur.

## **Other Issues**

173. The commentator suggests that the use of biodiesel fuels would result in lower NO<sub>x</sub> emissions. (6)

Department response: The Department supports the use of alternative fuels that reduce emissions. However, the Department does not support the inclusion of mobile sources in the NO<sub>x</sub> allowance program because the emission quantification techniques have not been established.

174. The Department should support a bill that would mandate that state facilities should use or consider the use of a blend of coal and biomass fuels. This would help establish a biomass infrastructure for long term use. (6)

Department response: The Department supports the use of alternative fuels or innovative technologies that result in environmental improvements. The Department is interested in the results of any testing of blended fuels. Until such results are reviewed, the Department cannot support legislation mandating consideration of such fuels. The ANFR regulations do not specify the type of fuel to be used by sources. Sources are free to use any fuel as long as they comply with the allowance requirements and any other permit requirements. Therefore, no change in the regulation is necessary.

175. The Department should finalize the regulations pertaining to cement kilns and stationary internal combustion engines. (83, 89, 112, 115, 116, 121, 128)

Department response: The Department will finalize these rules on a schedule consistent with the NO<sub>x</sub> SIP Call requirements.