

Appendix

Work Practice Plan for the Control of Fugitive Dust Emissions From Roadways and Parking Areas at the Wheeling-Pittsburgh Steel Corporation, Steubenville and Mingo Junction Facilities

A. Allowable Emission Rates

1. Total combined emissions of particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers ("PM₁₀") from unpaved roads, parking lots, laydown, entrance, unloading areas and berms, and irregular paved surfaces, and from paved roads, which are located at the Steubenville facility and are identified in Sections B and C of this Appendix, shall not exceed 1.72 pounds per hour.
2. Total combined emissions of PM₁₀ from unpaved roads, parking lots, laydown, entrance, unloading areas and berms, and irregular paved surfaces, and from paved roads, which are located at the Mingo Junction facility and are identified in Sections B and C of this Appendix, shall not exceed 7.67 pounds per hour.
3. Compliance with the emission limitations specified in Section A.1. and A.2. of this Appendix shall be determined by the methodology set forth in the U.S. Environmental Protection Agency reference document Control of Open Fugitive Dust Sources (EPA-450/3-88-008), Sections 2.0 and 3.0, and using the dust control plans identified in Sections B and C of this Appendix.

B. Unpaved Roads, Parking Lots, Laydown, Entrance, Unloading Areas and Berms, and Irregular Paved Surfaces—Chemical Suppression

1. The Company shall employ dust control measures on all unpaved surfaces, and irregular paved surfaces that cannot be adequately cleaned under the provisions of Section C of this Appendix, identified in this Section and in accordance with the following:
 - a. All unpaved surfaces and irregular paved surfaces identified in Attachment 1 (map) shall be treated in accordance with the schedule in Attachment 1, following the initial establishment of chemical ground inventory, with a chemical dust suppressant (petroleum resin emulsions, asphalt emulsions or acrylic cements) on a year-round (twelve-month) basis, except as provided under Sections B.1.e., B.1.f. and D below. The dust suppressant application intensity and frequency during the first two months of this program shall be sufficient to achieve the ground inventory specified in Section B.1.d. by the end of the two-month period.
 - b. Tri-weekly, monthly and quarterly applications shall be accomplished before the end of the first full week of the tri-week/month/quarter except as provided under Sections B.1.e., B.1.f. and D below.

- c. For each dust suppressant application during the initial two-month period of the dust control program, the concentrated dust suppressant shall be diluted at a ratio of not more than five (5) parts water to one (1) part concentrate and the resulting solution shall be applied at a minimum rate of 1.0 gallon per square yard of unpaved or irregular paved surface. The dust suppressant shall be applied at sufficient intervals and intensities after the initial two-month period as to maintain the ground inventory. Except as provided in Sections B.1.f. and D below, the continuing program shall provide for the application of dust suppressant specified in Attachment 1 diluted by no more than seven (7) parts water to one part chemical and applied at a rate of not less than 0.5 gallon per square yard of unpaved or irregular paved surface.
 - d. A minimum ground inventory of 0.25 gallon of concentrate per square yard of road surface, as specified in Section 3.0 of the USEPA reference document Control of Open Fugitive Dust Sources (EPA-450/3-88-008) shall be maintained.
 - e. Applications of dust suppressant may be delayed by not more than three (3) days for any scheduled date upon which the unpaved or irregular paved surface is snow and/or ice covered or has experienced > 0.25 inch of rainfall.
 - f. In the event of persistent adverse weather conditions such as snow and/or ice cover or excessive rainfall, the Company may petition the Director or his representative verbally with written confirmation within three (3) days for extended exemptions which may be granted as deemed appropriate by the Director or his representative.
 - g. Applications of chemical dust suppressant for the second year (after establishment of the ground inventory specified in Section B.1.d.) and beyond may follow the revised schedule, application intensities, and application concentrations shown in Table 11 of Attachment 1.
2. Compliance with Section B.1. shall be determined in accordance with procedures set forth in this Appendix.
 3. Control Equipment

The Company shall ensure the availability, required scheduling, and proper maintenance of spray trucks that are designed and equipped, at minimum, with a 2,000 gallon capacity tank, a spray bar system capable of applying the dust suppressant solution at a coverage rate of at least 1.3 gallons per square yard of surface, a certified flow metering device calibrated in units of gallons per minute, and an apparatus that will facilitate manual applications of the solution to areas not readily accessible by the spray truck.

4. Recordkeeping and Reporting

- a. The Company shall maintain records relative to the program to control emissions from unpaved roads, parking lots, laydown, entrance, unloading areas and berms, and irregular paved surfaces identified in Attachment 1. These records shall include, at a minimum, the following information:
 - i. Control equipment maintenance records.
 - ii. Scheduled and unscheduled equipment malfunctions and downtime.
 - iii. Meteorological log to include average daily temperature, daily precipitation and unusual meteorological occurrences.
 - iv. The date, type and quantity received for each delivery of chemical dust suppressant.
 - v. For each dust suppressant application date and for each unpaved road, area, or berm, or irregular paved surface identified in Attachment 1, start and stop times, average truck speed, number of passes, amount of solution applied, and the dilution ratio of the solution.
 - vi. Identification of areas where manual spraying was utilized.
- b. These records shall be retained by the Company for five (5) years and shall be made available to the Director or his representative upon request.
- c. A calendar quarterly report shall be submitted to the Director or his representative. The report shall contain the information cited above and a description of any deviations from the control program and the reasons for such deviations. The report shall be certified to be accurate by management and shall be submitted within fifteen (15) days after the end of the quarter.
- d. The Company shall notify the Director or his representative, in writing, of any noncompliance with Section B of this Appendix. Such notice shall be submitted within five (5) days of the non-compliance occurrence and shall include a detailed explanation of the cause of such noncompliance, all remedial actions required, and the date by which compliance was or will be reestablished.
- e. The Company shall submit to the Director or his representative an annual report which demonstrates compliance with the PM₁₀ emission rates specified in Sections A.1. and A.2. of this Appendix for the unpaved surfaces, and the irregular paved surfaces that cannot be adequately cleaned under the provisions of Section B of this Appendix, at the Mingo Junction and Steubenville facilities. The PM₁₀ emission rate for each individual network segment identified in Attachment 1 shall be reported along with the total PM₁₀ emission rate for each facility. The PM₁₀ emission rates shall be calculated using the methodology specified in Section A.3. of this Appendix and shall reflect the road network as it exists at the

end of each calendar year. Each annual report shall be submitted by no later than January 31 of the succeeding year.

5. The Company shall implement the dust control measures of Section B no later than the effective date of this rule.

C. Paved Roads–Vacuum Sweeping

1. The Company shall employ dust control measures on all paved roads identified in this Section and in accordance with the following:
 - a. All paved roads identified in Attachment 1 (map) of this Appendix shall be cleaned via vacuum sweeping on a daily, year-round (twelve-month) basis except as provided under Sections C.1.a.i., C.1.a.ii., and D below.
 - i. Daily sweeping may be suspended only when there is snow, ice cover, or standing water on the surface. All such suspensions shall be reported and verified as required under Section C.4. (Recordkeeping and Reporting).
 - ii. Irregular paved surfaces that cannot feasibly or adequately be cleaned by vacuum sweeping shall be chemically sprayed in accordance with provisions of Section B.
2. Compliance with Section C.1. shall be determined in accordance with procedures set forth in this Appendix.
3. Control Equipment
 - a. The Company shall ensure the availability, required scheduling, and proper maintenance of vacuum sweeping trucks. The collection hopper of the vacuum truck shall be designed and maintained so as to prevent fugitive dust emissions.
 - b. Material collected by the vacuum sweeping truck shall be handled and disposed of in a manner that minimizes fugitive dust emissions, including but not limited to, wet dumping and chemical treatment or stabilization of stored material.
4. Recordkeeping and Reporting
 - a. The Company shall maintain daily records for the paved road cleaning program. These records shall include, at a minimum, the following information:
 - i. Control equipment maintenance records.
 - ii. Scheduled and unscheduled equipment malfunctions and downtime.
 - iii. Meteorological log to include average daily temperature, daily precipitation and unusual meteorological occurrence.
 - iv. Qualitative description of the road surface conditions.

- v. Start and stop time, average truck speed, number of passes for each paved road identified in Attachment 1.
 - vi. Identification of areas where chemical treatment was utilized.
 - vii. Qualitative descriptions of areas of unusually high silt loadings from spills and track-ons.
 - viii. Total amount of dust collected by vacuum trucks in pounds or tons.
- b. These records shall be retained by the Company for five (5) years and shall be made available to the Director or his representative upon request.
 - c. A calendar quarterly report shall be submitted to the Director or his representative. The report shall contain all of the information cited above and a description of any deviation from the control program and the reasons for such deviation. The report shall be certified to be accurate by Company management and shall be submitted within fifteen (15) days after the end of the quarter.
 - d. The Company shall notify the Director or his representative, in writing, of any non-compliance with Section C of this Appendix. Such notice shall be submitted within five (5) days of the non-compliance occurrence and shall include a detailed explanation of the cause of such non-compliance, all remedial actions required and the date by which compliance was or will be reestablished.
 - e. The Company shall submit to the Director or his representative an annual report which demonstrates compliance with the PM₁₀ emission rates specified in Sections A.1. and A.2., of this Appendix for the paved roads (excluding irregular paved surfaces that cannot be adequately cleaned under the provisions of Section C of this Appendix) at the Mingo Junction and Steubenville facilities. The PM₁₀ emission rate for each individual network segment identified in Attachment 1 shall be reported along with the total PM₁₀ emission rate for each facility. The PM₁₀ emission rates shall be calculated using the methodology specified in Section A.3. of this Appendix and shall reflect the road network as it exists at the end of each calendar year. Each annual report shall be submitted by no later than January 31 of the succeeding year.
5. The Company shall implement the dust control measures of Section C no later than the effective date of this rule.

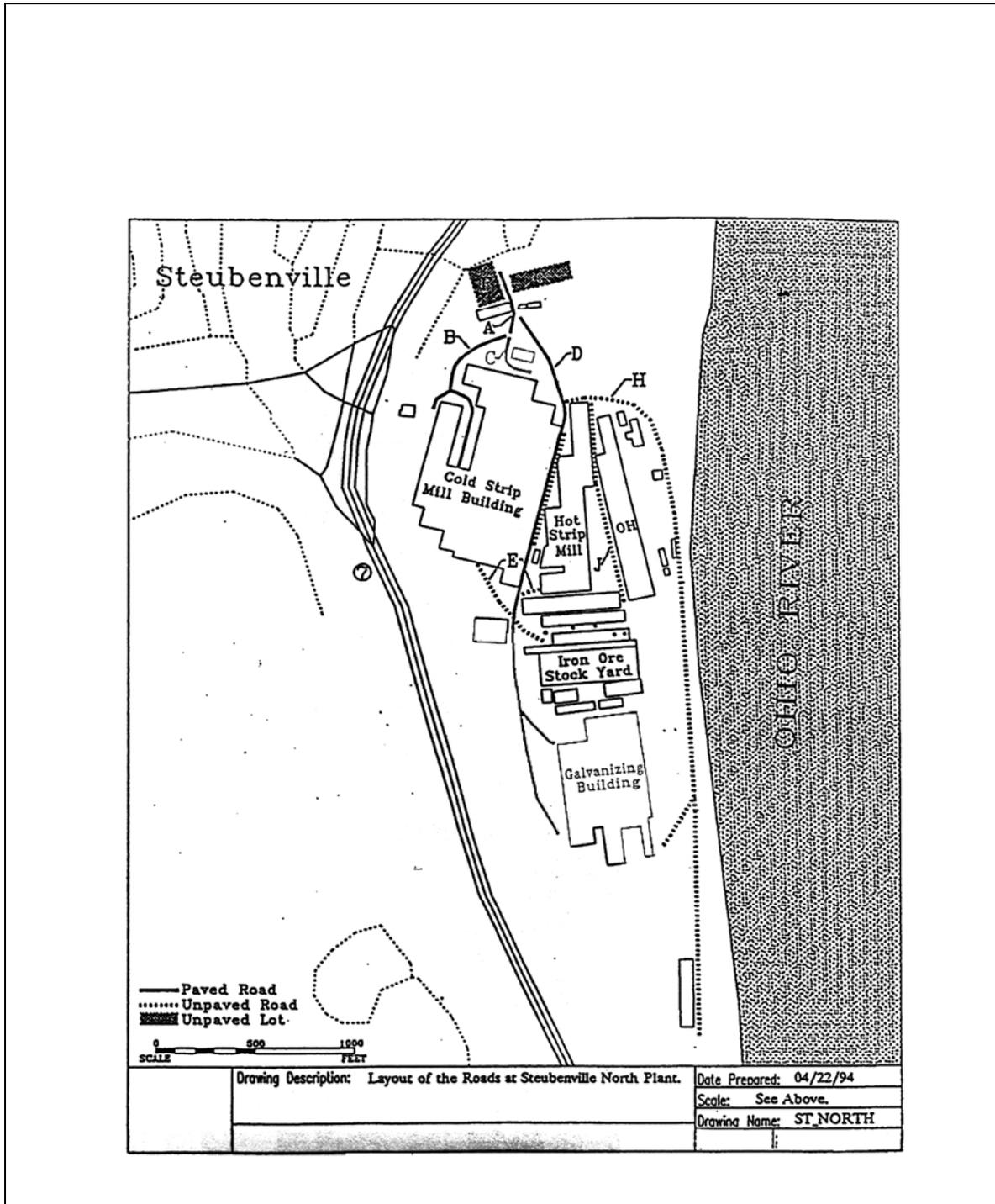
D. Changes to Paved and Unpaved Road/Area Dust Control Programs

- 1. The Company has the right to petition the Ohio EPA for written approval of definitive treatment methods, treatment schedules and procedures or reporting requirements different from those required herein. No action shall be taken by the Company in employing the alternative practices until the Director or his representative issues a written approval to the Company. Such alternative practices must be demonstrated to the Director or his representative to result in equivalent dust control effectiveness in

accordance with Control of Open Fugitive Dust Sources (EPA-450/3-88-008). The Company reserves the right to contest any disapproval of such petition in the appropriate judicial forum.

2. In the event that the Company certifies that all of a roadway or area identified in Attachment 1 has been discontinued, the dust suppression or surface cleaning program for that road or area may be terminated or reduced. If the Company begins to utilize any new roadway, parking lot or other vehicular activity area not shown in Attachment 1, it shall notify the Director or his representative in the reports required under this Appendix and treat or clean the road or area in accordance with the procedures contained herein, unless more stringent requirements are specified in any permit to install issued by the Ohio EPA for such roadway or area.
3. The Director or his representative shall not be precluded from requesting adjustments, including increased chemical suppressant application or cleaning, if on-site inspections reveal that the program contained herein does not prevent excessive visible dust entrainment and emissions from a particular road or area.
4. In the event that an unpaved road or area that has been chemically treated becomes completely hardened and cemented by such treatment so as to become like a paved road as demonstrated by observation, by compaction tests and silt analyses, or in the event that the Company paves any unpaved road or area, that road or area may be treated as a paved surface and cleaned in accordance with the procedures outlined in Section C.

Figure 1: Drawing Description: Layout of the Roads at Steubenville North Plant



Attachment 1 Continued

Tables 1 and 2

Wheeling Pittsburgh Steel Corporation, Steubenville

Paved Roads

| Road Section | Length (feet) | Width (feet) | Area (sq. yds) | Description |
|--------------|---------------|--------------|----------------|--|
| A | 350 | 16 | 622 | Entrance Road |
| B | 1088 | 16 | 1934 | Cold Strip Mill Road |
| C | 250 | 16 | 444 | Cold Strip Mill Entrance Road |
| D | 3250 | 16 | 5778 | Plant Center Road–Wide berms at indicated places |

Unpaved Roads, Areas and Wide Berms

| Road Section | Length (feet) | Width (feet) | Area (sq. yds) | Description |
|--------------|---------------|--------------|----------------|--|
| D | 1584 | 8 | 1408 | Plant Center Road–Wide berms at indicated places |
| E | 288 | 16 | 512 | Small Unpaved Roads from Center Road |
| F | 215 | 140 | 3344 | West Parking Lot |
| G | 315 | 95 | 3325 | East Parking Lot |
| H | 5280 | 30 | 17600 | Open Hearth–Hot Strip Mill Road |
| J | 1056 | 30 | 3520 | Strip Mill Road–Two 15' Lanes |

Attachment 1 Continued

Table 3: Initial Application of Chemical Dust Suppressant at the Wheeling-Pittsburgh Steel Corporation Steubenville North Facility

Wheeling Pittsburgh Steel Corporation, Steubenville
Dust Suppressant Initial Application

Mixture = 1 part Chemical
5 part Water

Application Intensity = 1 gal./yd.**2

| Road Section | Area (sq.yds.) | Chemical (gal./appl.) | Mixture (gal./appl.) | Application Frequency | Initial Application (gal.) | |
|--------------------------|----------------|-----------------------|----------------------|-----------------------|----------------------------|---------|
| | | | | | Chemical | Mixture |
| D | 1,408 | 235 | 1,408 | 1 | 235 | 1,408 |
| E | 512 | 85 | 512 | 3 | 256 | 1,536 |
| F | 3,344 | 557 | 3,344 | 2 | 1,115 | 6,688 |
| G | 3,325 | 554 | 3,325 | 2 | 1,108 | 6,650 |
| H | 17,600 | 2,933 | 17,600 | 2 | 5,867 | 35,200 |
| J | 3,520 | 587 | 3,520 | 2 | 1,173 | 7,040 |
| Total gal./application = | | 4,952 | 29,709 | gal/initial ap | 9,754 | 58,522 |

Attachment 1 Continued

Table 4: Follow-up Applications of Chemical Dust Suppressant at the Wheeling-Pittsburgh Steel Corporation Steubenville North Facility Based on a 52 Week/Year Season

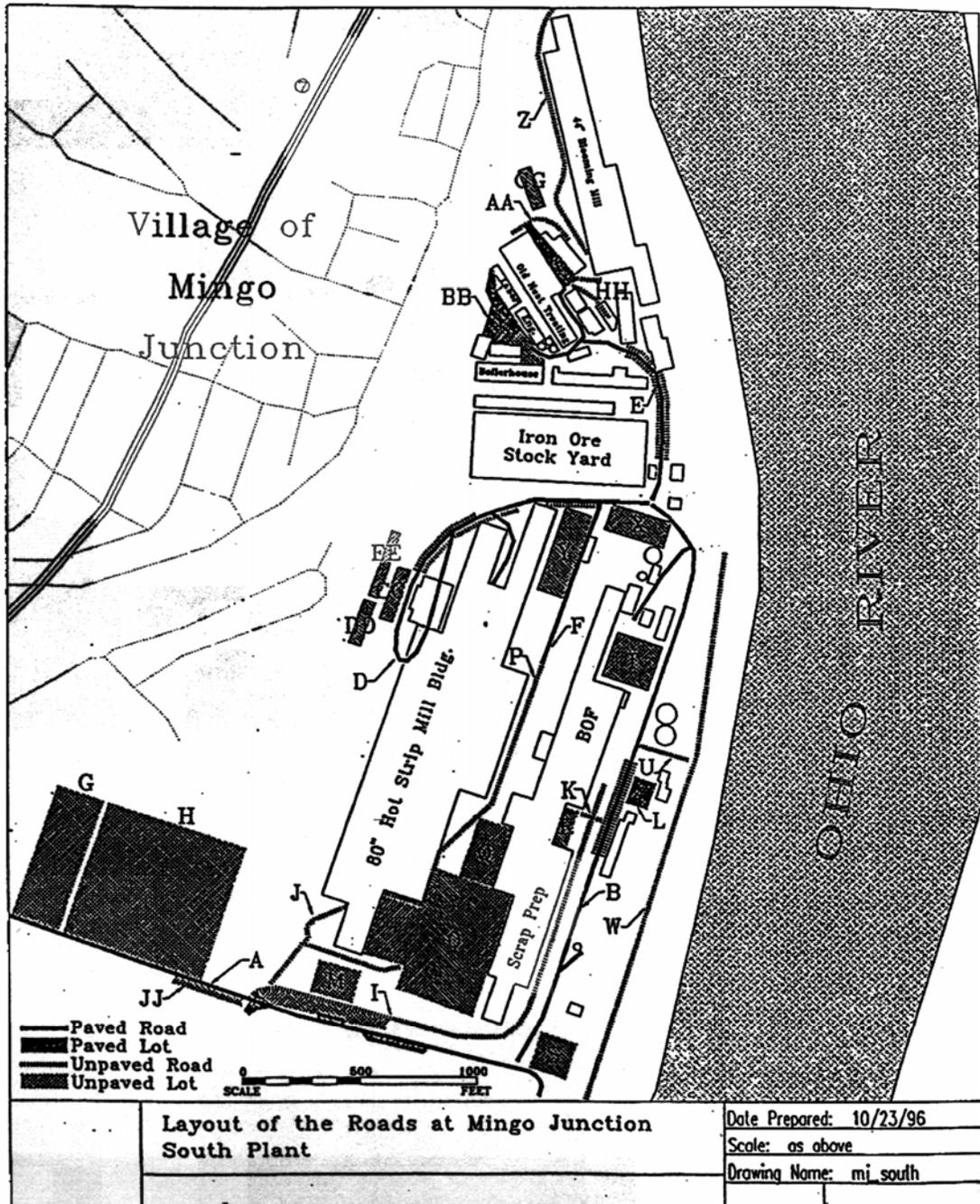
Mixture = 1 part Chemical
7 part Water

Application Intensity= 0.5 gal./yd. **2

| Road Section | Area (sq.yds.) | Chemical (gal./appl.) | Mixture (gal./appl.) | Application Frequency | Yearly Totals (gal.) | |
|--------------------------|----------------|-----------------------|----------------------|--------------------------------|----------------------|---------|
| | | | | | Chemical | Mixture |
| D | 1,408 | 88 | 704 | 4 /yr.-Quarterly application | 352 | 2,816 |
| E | 512 | 32 | 256 | 17 /yr.-Tri-weekly application | 544 | 4,352 |
| F | 3,344 | 209 | 1,672 | 12 /yr.-Monthly application | 2,508 | 20,064 |
| G | 3,325 | 208 | 1,663 | 12 /yr.-Monthly application | 2,494 | 19,950 |
| H | 17,600 | 1,100 | 8,800 | 12 /yr.-Monthly application | 13,200 | 105,600 |
| J | 3,520 | 220 | 1,760 | 12 /yr.-Monthly application | 2,640 | 21,120 |
| Total gal./application 0 | | 1857 | 14855 | Total gal./yr. = | 21,738 | 173,902 |

Attachment 1 Continued

Figure 2: Layout of the Roads at Mingo Junction South Plant



Attachment 1 Continued

Tables 5 and 6: Wheeling Pittsburgh Steel Corporation, Mingo Junction
Mingo Junction South Plant Roads

Paved Roads

| Road Section | Length (feet) | Width (feet) | Area (sq. yds) | Description |
|--------------|---------------|--------------|----------------|---------------------------------|
| A | 2,700 | 25 | 7,500 | Entrance Road |
| B | 1,165 | 16 | 2,071 | BOF-Scrap Handling Road |
| D | 1,800 | 16 | 3,200 | 80" Hot Strip Mill Road |
| E | 900 | 16 | 1,600 | Blast Furnace-Labor Office Road |
| F | 375 | 16 | 667 | Center Road Section |
| BB | 600 | 16 | 1,067 | Office Road |
| HH | 700 | 15 | 1,167 | Fork Truck Road, paved section |

Unpaved Roads, Areas and Wide Berms

| Road Section | Length (feet) | Width (feet) | Area (sq. yds) | Description |
|--------------|---------------|--------------|----------------|------------------------------------|
| B | 980 | 6 | 653 | Scrap Handling Road Berms |
| D | 1,650 | 6 | 1,100 | 80" Hot Strip Mill Road Wide Berms |
| E | 590 | 8 | 524 | BF-Labor Ofc. Road Berms |
| G | 600 | 200 | 13,333 | Truck Turnaround Area |
| H | 650 | 600 | 43,333 | Main Parking Lot |
| I | 2,630 | 40 | 11,689 | Slag Haul Road & Berms |
| J | 513 | 30 | 1,710 | Strip Mill Road |
| K | 80 | 20 | 178 | Caster Access Road |
| M | 138 | 180 | 2,760 | Strip Mill Area |
| O | 2,340 | 12 | 3,120 | Slab Laydown |
| P | 1,614 | 12 | 2,152 | Middle Road |
| Q | 175 | 75 | 1,458 | Lab Parking |
| R | 170 | 60 | 1,133 | BOF 4 Parking |
| S | 160 | 160 | 2,844 | IMS Corner |
| T | 200 | 200 | 4,444 | Lime Area |
| U | 225 | 15 | 375 | Short Road |
| W | 2,700 | 12 | 3,600 | River Road |
| X | 260 | 115 | 3,322 | Used Machine Parts Storage Yard |
| Y | 380 | 120 | 5,067 | Cooling Tower Area |
| Z | 1,070 | 20 | 2,378 | 44" Blooming Mill Road |
| AA | 200 | 20 | 444 | Old Heat Treat Road |
| CC | 240 | 55 | 1,467 | Coil Storage Yard |
| DD | 200 | 50 | 1,111 | State Street Parking Lot 1 |
| EE | 300 | 40 | 1,333 | State Street Parking Lot 2 |
| GG | 185 | 55 | 1,131 | 44" Blooming Mill Storage Yard |
| HH | 275 | 15 | 458 | Fork Truck Road, Unpaved Section |
| JJ | 300 | 30 | 1,000 | Visitors' Parking Area |

Attachment 1 Continued

Table 7: Initial Application of Chemical Dust Suppressant at the Wheeling-Pittsburg Steel Corporation Mingo Junction Facility

Mixture = 1 part Chemical
5 part Water

Application Intensity= 1 gal./yd.**2

| Road Section | Area (sq.yds.) | Chemical (gal./appl.) | Mixture (gal./appl.) | Application Frequency | Initial Application (gal.) | |
|------------------------|----------------|-----------------------|----------------------|-----------------------|----------------------------|---------|
| | | | | | Chemical | Mixture |
| B | 653 | 109 | 653 | 1 | 109 | 653 |
| D | 1,100 | 183 | 1,100 | 1 | 183 | 1,100 |
| E | 524 | 87 | 524 | 1 | 87 | 524 |
| G | 13,333 | 2,222 | 13,333 | 1 | 2,222 | 13,333 |
| H | 9,285 | 1,547 | 9,285 | 3 | 4,642 | 27,855 |
| I* | 11,689 | 1,948 | 11,689 | 2 | 3,896 | 23,378 |
| J | 2,338 | 390 | 2,338 | 3 | 1,169 | 7,015 |
| K | 178 | 30 | 178 | 2 | 59 | 356 |
| M | 2,760 | 460 | 2,760 | 1 | 460 | 2,760 |
| O | 3,120 | 520 | 3,120 | 1 | 520 | 3,120 |
| P | 1,818 | 303 | 1,818 | 1 | 303 | 1,818 |
| Q | 1,458 | 243 | 1,458 | 2 | 486 | 2,917 |
| R | 1,133 | 189 | 1,133 | 2 | 378 | 2,267 |
| S | 2,844 | 474 | 2,844 | 3 | 1,422 | 8,533 |
| T | 4,444 | 741 | 4,444 | 3 | 2,222 | 13,333 |
| U | 375 | 63 | 375 | 3 | 188 | 1,125 |
| W | 3,600 | 600 | 3,600 | 3 | 1,800 | 10,800 |
| X | 3,322 | 554 | 3,322 | 1 | 554 | 3,322 |
| Y | 5,067 | 844 | 5,067 | 1 | 844 | 5,067 |
| Z | 2,378 | 396 | 2,378 | 3 | 1,189 | 7,133 |
| AA | 444 | 74 | 444 | 3 | 222 | 1,333 |
| CC | 1,467 | 244 | 1,467 | 1 | 244 | 1,467 |
| DD | 1,111 | 185 | 1,111 | 2 | 370 | 2,222 |
| EE | 1,333 | 222 | 1,333 | 2 | 444 | 2,667 |
| GG | 1,131 | 188 | 1,131 | 1 | 188 | 1,131 |
| HH | 458 | 76 | 458 | 3 | 229 | 1,375 |
| JJ | 1,000 | 167 | 1,000 | 2 | 333 | 2,000 |
| Total gal./application | | 12,952 | 77,712 | gal/initial appl | 24,658 | 147,950 |

* This road is treated as a paved road supplemented with chemical dust suppressant.

Attachment 1 Continued

Table 8: Follow-up Application of Chemical Dust Suppressant at the Wheeling-Pittsburgh Steel Corporation Mingo Junction Facility
Based on 52 Week/Year Season During Initial Year

Mixture = 1 part Chemical
7 part Water

Application Intensity= 0.5 gal./yd. **2

| Road Section | Area (sq.yds.) | Chemical (gal./appl.) | Mixture (gal./appl.) | Application Frequency | Yearly Totals (gal.) | |
|-------------------------|----------------|-----------------------|----------------------|------------------------------|----------------------|---------|
| | | | | | Chemical | Mixture |
| B | 653 | 41 | 327 | 4 /yr.–Quarterly application | 163 | 1,307 |
| D | 1,100 | 69 | 550 | 4 /yr.–Quarterly application | 275 | 2,200 |
| E | 524 | 33 | 262 | 4 /yr.–Quarterly application | 131 | 1,049 |
| G | 13,333 | 833 | 6,667 | 4 /yr.–Quarterly application | 3,333 | 26,667 |
| H | 9,285 | 580 | 4,642 | 4 /yr.–Quarterly application | 2,321 | 18,570 |
| I* | 11,689 | 731 | 5,844 | 4 /yr.–Quarterly application | 2,922 | 23,378 |
| J | 2,338 | 146 | 1,169 | 15 /yr.–24 day application | 2,192 | 17,538 |
| K | 178 | 11 | 89 | 15 /yr.–24 day application | 167 | 1,333 |
| M | 2,760 | 173 | 1,380 | 15 /yr.–24 day application | 2,588 | 20,700 |
| O | 3,120 | 195 | 1,560 | 15 /yr.–24 day application | 2,925 | 23,400 |
| P | 1,818 | 114 | 909 | 15 /yr.–24 day application | 1,704 | 13,632 |
| Q | 1,458 | 91 | 729 | 4 /yr.–Quarterly application | 365 | 2,917 |
| R | 1,133 | 71 | 567 | 4 /yr.–Quarterly application | 283 | 2,267 |
| S | 2,844 | 178 | 1,422 | 15 /yr.–24 day application | 2,667 | 21,333 |
| T | 4,444 | 278 | 2,222 | 15 /yr.–24 day application | 4,167 | 33,333 |
| U | 375 | 23 | 188 | 12 /yr.–Monthly application | 281 | 2,250 |
| W | 3,600 | 225 | 1,800 | 12 /yr.–Monthly application | 2,700 | 21,600 |
| X | 3,322 | 208 | 1,661 | 4 /yr.–Quarterly application | 831 | 6,644 |
| Y | 5,067 | 317 | 2,533 | 4 /yr.–Quarterly application | 1,267 | 10,133 |
| Z | 2,378 | 149 | 1,189 | 15 /yr.–24 day application | 2,229 | 17,833 |
| AA | 444 | 28 | 222 | 12 /yr.–Monthly application | 333 | 2,667 |
| CC | 1,467 | 92 | 733 | 4 /yr.–Quarterly application | 367 | 2,933 |
| DD | 1,111 | 69 | 556 | 4 /yr.–Quarterly application | 278 | 2,222 |
| EE | 1,333 | 83 | 667 | 12 /yr.–Monthly application | 1,000 | 8,000 |
| GG | 1,131 | 71 | 565 | 12 /yr.–Monthly application | 848 | 6,783 |
| HH | 458 | 29 | 229 | 4 /yr.–Quarterly application | 115 | 917 |
| JJ | 1,000 | 63 | 500 | 15 /yr.–24 day application | 938 | 7,500 |
| Total gal./application= | | 4,898 | 39,183 | Total gal./yr. = | 37,388 | 299,106 |

* This road is treated as a paved road supplemented with chemical dust suppressant.

Attachment 1 Continued

Table 9 and 10: Control Efficiencies for On-going Control Programs

| Control Efficiencies for Monthly Applications | | | | |
|---|--|--|---|--|
| Averaging Period | Application Concentration | Ground Inventory (gal/yd ² chemical) at start of period | 1-Month Average Control Efficiency from EPA-450/3-88-008 Figure 3-4 (%) | Running Average Control Efficiency (%) |
| Jan 1–Feb 1 | 1.00 gal/yd ² of 1:6 solution | 0.143 | 78 | 78 |
| Feb 1–Mar 1 | 0.50 gal/yd ² of 1: 12 solution | 0.181 | 84 | 81 |
| Mar 1–Apr 1 | 0.50 gal/yd ² of 1: 12 solution | 0.220 | 89 | 84 |
| Apr 1–May 1 | 0.50 gal/yd ² of 1: 12 solution | 0.258 | 90 | 85 |
| May 1–Jun 1 | 0.50 gal/yd ² of 1: 12 solution | 0.297 | 90 | 86 |
| Jun 1–Jul 1 | 0.50 gal/yd ² of 1: 12 solution | 0.335 | 90 | 87 |
| Jul 1–Aug 1 | 0.50 gal/yd ² of 1: 12 solution | 0.374 | 90 | 87 |
| Aug 1–Sep 1 | 0.50 gal/yd ² of 1: 12 solution | 0.412 | 90 | 88 |
| Sep 1–Oct 1 | 0.50 gal/yd ² of 1: 12 solution | 0.451 | 90 | 88 |
| Oct 1–Nov 1 | 0.50 gal/yd ² of 1: 12 solution | 0.489 | 90 | 88 |
| Nov 1–Dec 1 | 0.50 gal/yd ² of 1: 12 solution | 0.527 | 90 | 88 |
| Dec 1–Jan 1 | 0.50 gal/yd ² of 1: 12 solution | 0.566 | 90 | 89 |

| Control Efficiencies for Bimonthly Applications | | | | |
|---|--|--|---|--|
| Averaging Period | Application Concentration | Ground Inventory (gal/yd ² chemical) at start of period | 2-Month Average Control Efficiency from EPA-450/3-88-008 & MECH@X@Y (%) | Running Average Control Efficiency (%) |
| Jan 1–Mar 1 | 1.00 gal/yd ² of 1:6 solution | 0.143 | 58 | 58 |
| Mar 1–May 1 | 0.50 gal/yd ² of 1: 12 solution | 0.181 | 62 | 60 |
| May 1–Jul 1 | 0.50 gal/yd ² of 1: 12 solution | 0.220 | 67 | 62 |
| Jul 1–Sep 1 | 0.50 gal/yd ² of 1: 12 solution | 0.258 | 67 | 64 |
| Sep 1–Nov 1 | 0.50 gal/yd ² of 1: 12 solution | 0.297 | 67 | 64 |
| Nov 1–Jan 1 | 0.50 gal/yd ² of 1: 12 solution | 0.335 | 67 | 65 |

Attachment 1 Continued

Table 11: Chemical Applications for On-going Programs Based on “Control of Open Fugitive Dust Sources”

| Road | Description | Daily Vehicle Passes ¹ | | | | Length (mi) | VMT /day | Speed (mph) | Avg. No. Wheels | Avg. Weight (Tons) | Application Frequency | Worst Case Uncontrolled PM10 (g/s) | Control Efficiency (%) | Controlled PM10 (g/s) | | |
|------|--------------------------------------|-----------------------------------|-----|-----|-----|-------------|----------|-------------|-----------------|--------------------|-----------------------|------------------------------------|------------------------|-----------------------|--------------|--------------|
| | | A | B | C | D | | | | | | | | | Total | Worst Case | Annual |
| | SOUTH PLANT | | | | | | | | | | | | | | | |
| B | Scrap Handling Road Berms | 7 | 3 | 11 | | 21 | 0.1856 | 3.90 | 5 | 8 | 24 | Bimonthly | 2.602597E-02 | 65 | 9.176779E-03 | 5.067222E-03 |
| D | 80° Hot Strip Mill Road Wide Berms | 2 | | 6 | | 8 | 0.3125 | 2.50 | 5 | 9 | 31 | Bimonthly | 2.125125E-02 | 65 | 7.493210E-03 | 4.137591E-03 |
| E | BF - Labor Office Road Berms | 56 | | | | 56 | 0.1117 | 6.26 | 5 | 4 | 2 | Bimonthly | 5.194226E-03 | 65 | 1.831489E-03 | 1.011309E-03 |
| G | Scrap Handling Road Berms | 229 | | | | 229 | 0.1136 | 26.01 | 5 | 4 | 2 | Bimonthly | 2.159377E-02 | 65 | 7.613984E-03 | 4.204279E-03 |
| H | 80° Hot Strip Mill Road Wide Berms | 213 | 34 | | | 247 | 0.0609 | 15.04 | 5 | 3 | 4 | Bimonthly | 1.691390E-02 | 65 | 5.963857E-03 | 3.293115E-03 |
| J | Strip Mill Road | | | | 84 | 84 | 0.1329 | 11.16 | 5 | 4 | 92 | Monthly | 1.351196E-01 | 89 | 1.551779E-02 | 8.568593E-03 |
| K | Caster Access Road | | 13 | 114 | 3 | 130 | 0.0151 | 1.97 | 5 | 11 | 37 | Monthly | 2.065485E-02 | 89 | 2.372103E-03 | 1.309825E-03 |
| M | Strip Mill Area | ³ | | | 12 | 12 | 0.0261 | 0.31 | 15 | 4 | 92 | Monthly | 1.139181E-02 | 89 | 1.308291E-03 | 7.224106E-04 |
| O | Slab Laydown | ² | | | 72 | 72 | 0.1108 | 7.98 | 5 | 4 | 92 | Monthly | 9.658277E-02 | 89 | 1.109204E-02 | 6.124786E-03 |
| P | Center Road Section | ² | 44 | | | 44 | 0.2582 | 11.36 | 15 | 4 | 2 | Bimonthly | 2.829078E-02 | 65 | 9.975354E-03 | 5.508177E-03 |
| Q | Lab Parking | ² | 20 | | | 20 | 0.0331 | 0.66 | 5 | 4 | 2 | Bimonthly | 5.502358E-04 | 65 | 1.940136E-04 | 1.071302E-04 |
| R | BOF 4 Parking | ² | 66 | 30 | | 96 | 0.0322 | 3.09 | 5 | 5 | 6 | Bimonthly | 6.195263E-03 | 65 | 2.184455E-03 | 1.206210E-03 |
| S | IMS Corner | | 273 | 46 | 229 | 548 | 0.0303 | 16.61 | 15 | 7 | 19 | Monthly | 2.675367E-01 | 89 | 3.072522E-02 | 1.696581E-02 |
| T | Line Area | | 7 | | 86 | 93 | 0.0379 | 3.52 | 15 | 10 | 37 | Monthly | 1.097210E-01 | 89 | 1.260089E-02 | 6.957943E-03 |
| U | Short Road | | 2 | | | 2 | 0.0426 | 0.09 | 15 | 4 | 2 | Monthly | 2.122338E-04 | 89 | 2.437397E-05 | 1.345878E-05 |
| W | River Road | | 2 | | | 2 | 0.5114 | 1.02 | 15 | 4 | 2 | Bimonthly | 2.546806E-03 | 65 | 8.980060E-04 | 4.958597E-04 |
| X | Used Machine Parts Storage Yard | ² | 10 | 5 | | 15 | 0.0492 | 0.74 | 5 | 5 | 6 | Bimonthly | 1.538109E-03 | 65 | 5.416335E-04 | 2.990784E-04 |
| Y | Cooling Tower Area | ² | 15 | 8 | | 23 | 0.0720 | 1.66 | 5 | 5 | 7 | Monthly | 3.529074E-03 | 89 | 4.052960E-04 | 2.237958E-04 |
| Z | 44° Blooming Mill Road | | 9 | | | 9 | 0.2027 | 1.82 | 15 | 4 | 2 | Monthly | 4.541803E-03 | 89 | 5.216029E-04 | 2.880180E-04 |
| AA | Old Heat Treat Road | | 18 | | | 18 | 0.0379 | 0.68 | 15 | 4 | 2 | Bimonthly | 1.698821E-03 | 65 | 5.990059E-04 | 3.307583E-04 |
| CC | Cold Storage Yard | ² | 5 | | | 5 | 0.0455 | 0.23 | 5 | 4 | 2 | Bimonthly | 1.886523E-04 | 65 | 6.651896E-05 | 3.673035E-05 |
| DD | State Street Parking Lot 1 | ⁴ | 20 | | | 20 | 0.0379 | 0.75 | 5 | 4 | 2 | Monthly | 6.288409E-04 | 89 | 7.221916E-05 | 3.987788E-05 |
| EE | State Street Parking Lot 2 | ⁴ | 30 | | | 30 | 0.0568 | 1.70 | 5 | 4 | 2 | Monthly | 1.414892E-03 | 89 | 1.624931E-04 | 8.972523E-05 |
| GG | 44° Blooming Mill Storage Yard | ² | 18 | | | 18 | 0.0350 | 0.63 | 5 | 4 | 2 | Bimonthly | 5.235101E-04 | 65 | 1.845901E-04 | 1.019267E-04 |
| HH | Fork Truck Road, Unpaved Section | | 27 | | | 27 | 0.0521 | 1.41 | 15 | 4 | 2 | Monthly | 3.501858E-03 | 89 | 4.021705E-04 | 2.220699E-04 |
| JJ | Visitors' Parking Area | ² | 60 | 12 | | 72 | 0.0568 | 4.09 | 5 | 5 | 4 | Monthly | 6.020630E-03 | 89 | 6.914386E-04 | 3.817976E-04 |
| | | | | | | | | | | | | | 7.933652E-01 | | 1.226188E-01 | 6.770749E-02 |
| | NORTH PLANT | | | | | | | | | | | | | | | |
| D | Plant Center Road Wide Berms | 35 | | | | 35 | 0.3000 | 10.50 | 5 | 4 | 2 | Bimonthly | 8.715735E-03 | 65 | 3.073178E-03 | 1.696942E-03 |
| E | Small Unpaved Roads from Center Road | 27 | 30 | | | 57 | 0.0545 | 3.11 | 15 | 6 | 9 | Monthly | 2.588115E-02 | 89 | 2.972317E-03 | 1.641250E-03 |
| F | West Parking Lot | 100 | | | | 100 | 0.0407 | 4.07 | 5 | 4 | 2 | Monthly | 3.380020E-03 | 89 | 3.881780E-04 | 2.143436E-04 |
| G | East Parking Lot | 120 | | | | 120 | 0.0597 | 7.16 | 5 | 4 | 2 | Monthly | 5.942547E-03 | 89 | 6.824711E-04 | 3.768460E-04 |
| H | Open Hearth-Hot Strip Mill Road | 2 | 5 | | | 7 | 1.0000 | 7.00 | 15 | 6 | 11 | Monthly | 7.253349E-02 | 89 | 6.330100E-03 | 4.599703E-03 |
| J | Strip Mill Road - Two 15' Lanes | 2 | 5 | | | 7 | 0.2000 | 1.40 | 15 | 6 | 11 | Monthly | 1.450670E-02 | 89 | 1.666020E-03 | 9.199407E-04 |
| | | | | | | | | | | | | | 1.309596E-01 | | 1.711226E-02 | 9.449026E-03 |

1. Vehicle types and specifications are as follows:

| Type | Weight (tons) | Wheels |
|------|----------------------|--------|
| A | 2 | 4 |
| B | 15 | 7 |
| C | 40 | 11 |
| D | 55 empty 130 full | 4 |

153 Mean Annual Days With Rain
347 Working Days per Year
Bimonthly means every two months.

- 2. Parking lot traffic is based on Daily Vehicle Passes of nearest road.
- 3. Type D vehicles (slab handlers) travel these areas only.
- 4. Capacity estimated by size.