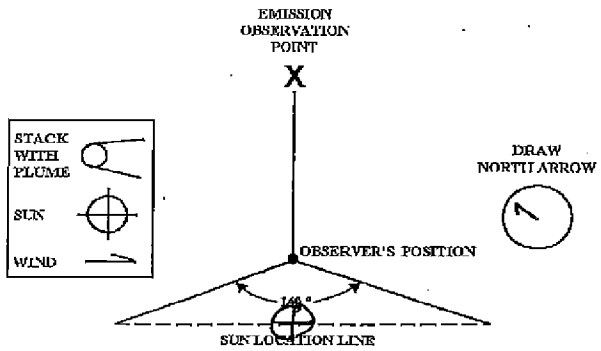
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | Elyria Plant |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#1 & RC#4 (P009-P010) |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | |
| Describe Emission Point | Trimer Stack |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 50 End 50 |
| Distance to Emission Point | Start 50 End 50 |
| Direction to Emission Point | Start NW End NW |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Trimer stack End Trimer Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5mph End 5 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 85°F End 85°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 7/18/16 | 1100 | 1200 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | [signature] |
| Date | 7/18/16 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 3/15/16 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

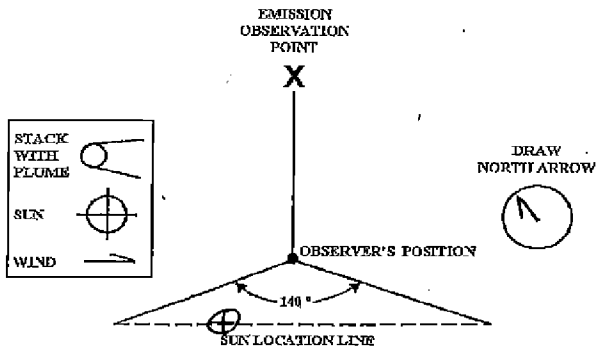
**Additional Information**

| | | | |
|---|---|---|---|
| RC#1 | AL-5645 | 450 lbs/hr | TRIMER |
| RC#4 | CU-0226 | 250 lbs/hr | TRIMER |
| | | | |
| | | | |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | Elyria Plant |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #2 (P162) |
| Operating Mode | Running |
| Control Equipment | F-1 Scrubber |
| Operating Mode | Running |
| Describe Emission Point | F-2 Scrubber Stack |
| Height of Emission Point | 60 feet |
| Height Relative to Observer | Start 60 End 60 |
| Distance to Emission Point | Start 50 End 50 |
| Direction to Emission Point | Start NW End NW |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Scrubber Stack End |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5 End 5 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 85°F End 85°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 7/18/16 | 1245 | 1345 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | |
| Date | 7/18/16 |
| Organization | BASF |
| Certified by | AeroMet |
| Date | 3/15/16 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information**

RC#2 56-42 450 lb/hr F-1 SCRUBBER

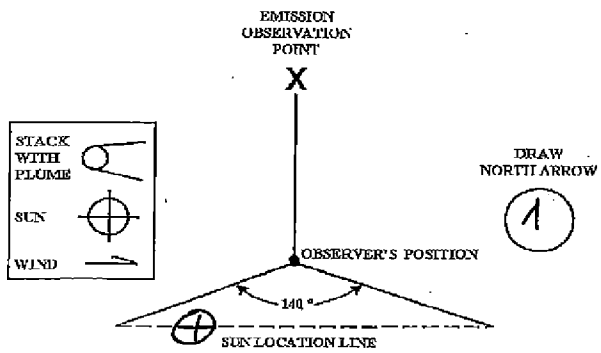
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | Elyria Plant |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#3 (P103) |
| Operating Mode | RUNNING |
| Control Equipment | SCR |
| Operating Mode | RUNNING |
| Describe Emission Point | SCR Stack |
| Height of Emission Point | 60' |
| Height Relative to Observer | Start 60 End 60 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start End |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start SCR Stack End SCR Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5 End 5 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 85°F End 85°F |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 7/18/16 | 1400 | 1500 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Auglin |
| Observer's Signature | |
| Date | 7/18/16 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 3/15/16 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | O | O | O | O | |
| 32 | O | O | O | O | |
| 33 | O | O | O | O | |
| 34 | O | O | O | O | |
| 35 | O | O | O | O | |
| 36 | O | O | O | O | |
| 37 | O | O | O | O | |
| 38 | O | O | O | O | |
| 39 | O | O | O | O | |
| 40 | O | O | O | O | |
| 41 | O | O | O | O | |
| 42 | O | O | O | O | |
| 43 | O | O | O | O | |
| 44 | O | O | O | O | |
| 45 | O | O | O | O | |
| 46 | O | O | O | O | |
| 47 | O | O | O | O | |
| 48 | O | O | O | O | |
| 49 | O | O | O | O | |
| 50 | O | O | O | O | |
| 51 | O | O | O | O | |
| 52 | O | O | O | O | |
| 53 | O | O | O | O | |
| 54 | O | O | O | O | |
| 55 | O | O | O | O | |
| 56 | O | O | O | O | |
| 57 | O | O | O | O | |
| 58 | O | O | O | O | |
| 59 | O | O | O | O | |
| 60 | O | O | O | O | |
| | | | | | |
| | | | | | |

**Additional Information**

RC# 3 D1715 300 lb/hr CTO

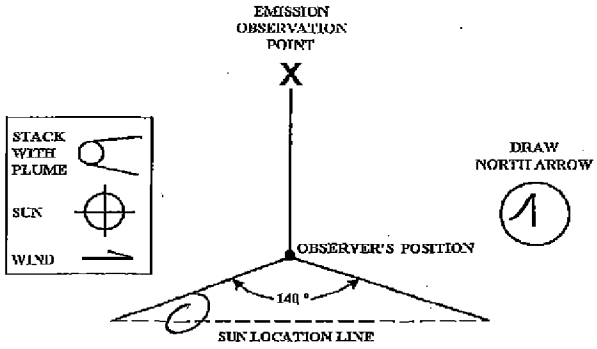
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#3 (P103) |
| Operating Mode | Running |
| Control Equipment | SCR |
| Operating Mode | Running |
| Describe Emission Point | SCR Stack |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 50' End 50' |
| Distance to Emission Point | Start 100' End 100' |
| Direction to Emission Point | Start NW End NW |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start SCR Stack Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start SCR Stack End SCR Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start N End N |
| Ambient Temp | Start 35° F End 35° F |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/4/16 | 1240 | 1340 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Argyle |
| Observer's Signature | |
| Date | 4/4/16 |
| Organization | BASF Corporation |
| Certified by | Aeromet |
| Date | 3/15/16 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

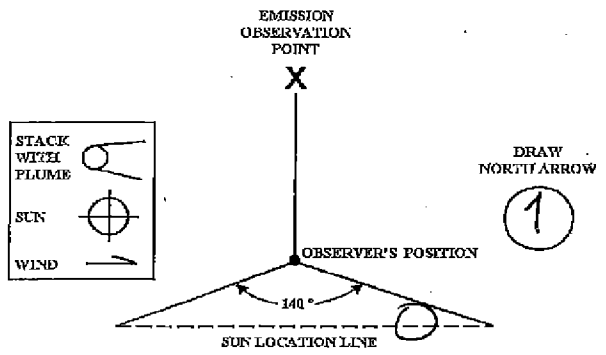
**Additional Information**

RC#3 D0703 350 lbs/hr SLR

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #1 & 4 P010 & P009 |
| Operating Mode | Running |
| Control Equipment | TriMer |
| Operating Mode | Running |
| Describe Emission Point | TriMer Stack |
| | Sources RC #1 and RC #4 |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 50' End 50' |
| Distance to Emission Point | Start 100' End 100' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Slight haze End Slight haze |
| Emission Color | Start offwhite End offwhite |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start TriMer Stack End TriMer Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start N End N |
| Ambient Temp | Start 40°F End 40°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/4/16 | 0930 | 1030 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 5 | 5 | 5 | 5 | |
| 2 | 5 | 5 | 5 | 5 | |
| 3 | 5 | 5 | 5 | 5 | |
| 4 | 5 | 5 | 5 | 5 | |
| 5 | 5 | 5 | 5 | 5 | |
| 6 | 5 | 5 | 5 | 5 | |
| 7 | 5 | 5 | 5 | 5 | |
| 8 | 5 | 5 | 5 | 5 | |
| 9 | 5 | 5 | 5 | 5 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 5 | |
| 16 | 5 | 5 | 5 | 5 | |
| 17 | 5 | 5 | 5 | 5 | |
| 18 | 5 | 5 | 5 | 5 | |
| 19 | 5 | 5 | 5 | 5 | |
| 20 | 5 | 5 | 5 | 5 | |
| 21 | 5 | 5 | 5 | 5 | |
| 22 | 5 | 5 | 5 | 5 | |
| 23 | 5 | 5 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 5 | 5 | 5 | 5 | |
| 26 | 5 | 5 | 5 | 5 | |
| 27 | 5 | 5 | 5 | 5 | |
| 28 | 5 | 5 | 5 | 5 | |
| 29 | 5 | 5 | 5 | 5 | |
| 30 | 5 | 5 | 5 | 5 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Roglin |
| Observer's Signature | [signature] Date 4/4/16 |
| Organization | BASF Corporation |
| Certified by | Aeromet Date 3/15/16 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 5 | 5 | 5 | 5 | |
| 32 | 5 | 5 | 5 | 5 | |
| 33 | 5 | 5 | 5 | 5 | |
| 34 | 5 | 5 | 5 | 5 | |
| 35 | 5 | 5 | 5 | 5 | |
| 36 | 5 | 5 | 5 | 5 | |
| 37 | 5 | 5 | 5 | 5 | |
| 38 | 5 | 5 | 5 | 5 | |
| 39 | 5 | 5 | 5 | 5 | |
| 40 | 5 | 5 | 5 | 5 | |
| 41 | 5 | 5 | 5 | 5 | |
| 42 | 5 | 5 | 5 | 5 | |
| 43 | 5 | 5 | 5 | 5 | |
| 44 | 5 | 5 | 5 | 5 | |
| 45 | 5 | 5 | 5 | 5 | |
| 46 | 5 | 5 | 5 | 5 | |
| 47 | 5 | 5 | 5 | 5 | |
| 48 | 5 | 5 | 5 | 5 | |
| 49 | 5 | 5 | 5 | 5 | |
| 50 | 5 | 5 | 5 | 5 | |
| 51 | 5 | 5 | 5 | 5 | |
| 52 | 5 | 5 | 5 | 5 | |
| 53 | 5 | 5 | 5 | 5 | |
| 54 | 5 | 5 | 5 | 5 | |
| 55 | 5 | 5 | 5 | 5 | |
| 56 | 5 | 5 | 5 | 5 | |
| 57 | 5 | 5 | 5 | 5 | |
| 58 | 5 | 5 | 5 | 5 | |
| 59 | 5 | 5 | 5 | 5 | |
| 60 | 5 | 5 | 5 | 5 | |
| | | | | | |
| | | | | | |

**Additional Information**

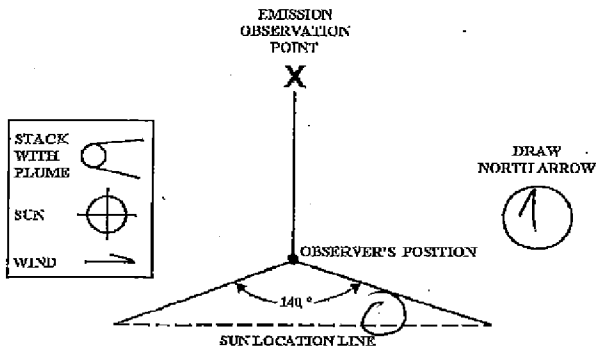
RC#1 (P010) A1-3945 425 lbs/hr TRIMER
RC#4 (P009) D0222 250 lbs/hr TRIMER

Highest Average opacity 5%

# VISIBLE EMISSION OBSERVATION FORM

| | | |
|---|---|---|
| Company Name: BASF Corporation | | |
| Location: 120 Pine Street | | |
| City: Elyria | State: OH | Zip: 44035 |
| Process Equipment: RC#2 (P102) | | Operating Mode: Running |
| Control Equipment: F1 Scrubber | | Operating Mode: Running |
| Describe Emission Point: F1 Scrubber Stack | | |
| Height of Emission Point: 55' | Height Relative to Observer: Start 55' End 55' | |
| Distance to Emission Point: Start 110' End 110' | Direction to Emission Point: Start N End N | |
| Vertical Angle to Observation Pt. Start End | Direction to Observation Point Start End | |
| Describe Emissions: Start Clear End Clear | | |
| Emission Color: Start None End None | If Water Droplet Plume (Circle): Attached Detached N/A | |
| Point In The Plume At Which Opacity Was Determined: Start F1 Stack End F1 Stack | | |
| Describe Plume Background: Start Sky End Sky | | |
| Background Color: Start White End White | Sky Condition: Start Overcast End Overcast | |
| Wind Speed: Start 5-10 End 5-10 | Wind Direction: Start N End N | |
| Ambient Temp: Start 40°F End 40°F | Wet Bulb Temp | RH Percent |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/4/16 | 1035 | 1135 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print): Timothy Hoglin | |
| Observer's Signature: [signature] | Date: 4/4/16 |
| Organization: BASF Corporation | |
| Certified by: Aeromet | Date: 3/15/16 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information**

RU#2 (P102) CO 0060 275 lbs/hr FL Scrubber

Average opacity 0%

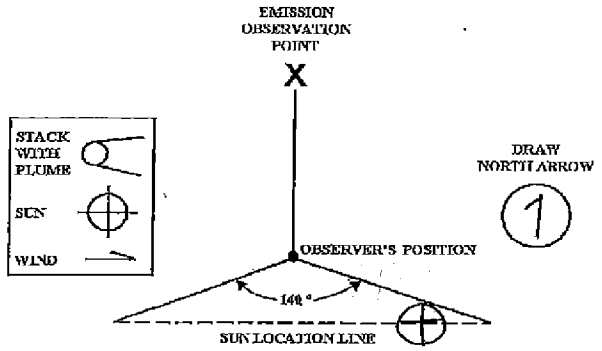
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#4 Poly |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Trimer Stack |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 50 End 50 |
| Distance to Emission Point | Start 75 End 75 |
| Direction to Emission Point | Start NW End NW |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Steam End Steam |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Cloudy End Cloudy |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start N End N |
| Ambient Temp | Start 32F° End 32F° |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 2/9/16 | 0827 | 0927 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Hoylin |
| Observer's Signature | |
| Date | 2/9/16 |
| Organization | BASF Corporation |
| Certified by | Aeromet |
| Date | 9/15/15 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** D-0222 Rate 260 lb/he

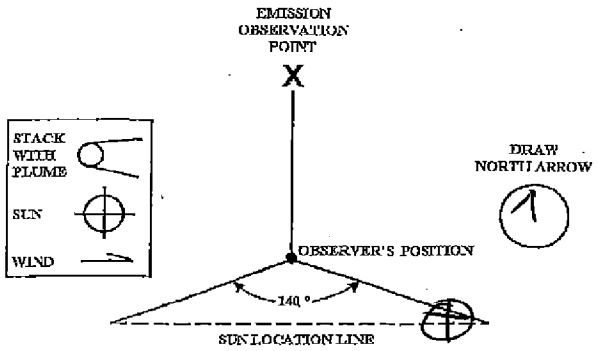
# VISIBLE EMISSION OBSERVATION FORM

| | | |
|---|---|---|
| Company Name: BASF Corporation | | |
| Location: 120 Pine Street | | |
| City: Elyria | State: OH | Zip: 44035 |
| Process Equipment: RC#2, RC#3, RC#6 | | Operating Mode: Running |
| Control Equipment: SCR | | Operating Mode: Running |
| Describe Emission Point: Rotary Calciners P102, P103, P072 | | |
| Height of Emission Point: 50 | Height Relative to Observer: Start 50 End 50 | |
| Distance to Emission Point: Start 40 End 40 | Direction to Emission Point: Start NE End NE | |
| Vertical Angle to Observation Pt. Start End | Direction to Observation Point Start End | |
| Describe Emissions: Start None End None | | |
| Emission Color: Start None End None | If Water Droplet Plume (Circle): Attached Detached (N/A) | |
| Point In The Plume At Which Opacity Was Determined: Start SCR Stack End SCR Stack | | |
| Describe Plume Background: Start Sky End Sky | | |
| Background Color: Start White End White | Sky Condition: Start Overcast End Overcast | |
| Wind Speed: Start 5-10 End 5-10 | Wind Direction: Start N End N | |
| Ambient Temp: Start 25°F End 25°F | Wet Bulb Temp | RH Percent |

| Observation Date | Start Time | End Time |
|---|---|---|
| 1/4/16 | 1045 | 1145 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print): Timothy Anglin | |
| Observer's Signature: [signature] | Date: 1/4/16 |
| Organization: BASF | |
| Certified by: Aeromet | Date: 9/15/15 |

Additional Information

Continue on reverse side

| Sec / Min | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information | | | |
|---|---|---|---|
| | RC#2 | Selexsorb | 350 lb/hr |
| | RC#3 | A13945 | 400 lb/hr |
| | RC#6 | D0765 | 275 lb/hr |
| | | | |
| | | | |

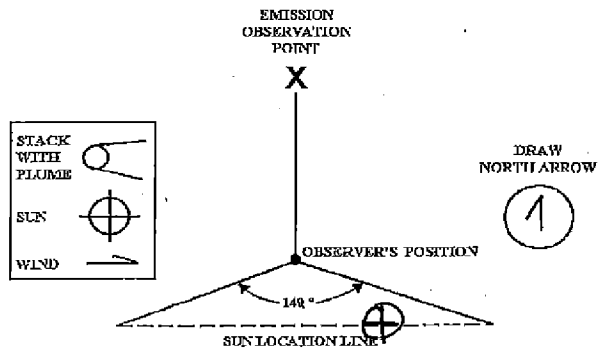
# VISIBLE EMISSION OBSERVATION FORM

| | | |
|---|---|---|
| Company Name: BASF Corporation | | |
| Location: 120 Pine Street | | |
| City: Elyria | State: PA | Zip: 44035 |
| Process Equipment: RC #1 POID | | Operating Mode: Running |
| Control Equipment: Trimer Scrubber | | Operating Mode: Running |
| Describe Emission Point: Rotary Calciner | | |
| Height of Emission Point: 50 | Height Relative to Observer: Start 50 End 50 | |
| Distance to Emission Point: Start 50 End 50 | Direction to Emission Point: Start N End N | |
| Vertical Angle to Observation Pt. Start End | Direction to Observation Point Start End | |
| Describe Emissions: Start None (steam) End None (steam) | | |
| Emission Color: Start None End None | If Water Droplet Plume (Circle): Attached Detached (N/A) | |
| Point In The Plume At Which Opacity Was Determined: Start Trimer Stack End Trimer Stack | | |
| Describe Plume Background: Start Sky End Sky | | |
| Background Color: Start White End White | Sky Condition: Start Overcast End Overcast | |
| Wind Speed: Start 5-10 End 5-10 | Wind Direction: Start N End N | |
| Ambient Temp: Start 25°F End 25°F | Wet Bulb Temp | RH Percent |

| Observation Date | Start Time | End Time |
|---|---|---|
| 1/4/16 | 0930 | 1030 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print): Timothy Argyle | |
| Observer's Signature | Date: 1/4/16 |
| Organization: BASF Corp. | |
| Certified by: Aeromet | Date: 091515 |

Additional Information

Continue on reverse side

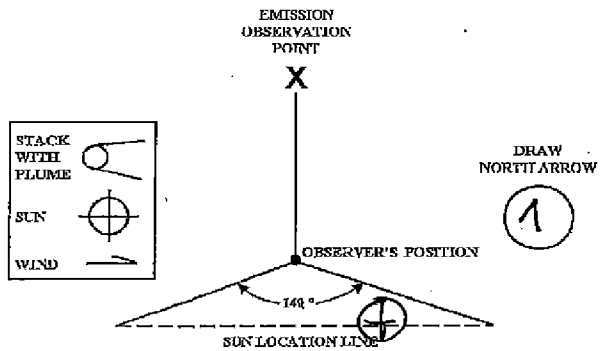
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** Rudolney D0703 350lbs/he

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#1 P010 |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Stack from Scrubber |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 50 End 50 |
| Distance to Emission Point | Start 100 End 100 |
| Direction to Emission Point | Start NE End NE |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Stack Exit End Stack Exit |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start N End N |
| Ambient Temp | Start 65° End 65° |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 10/09/15 | 0945 | 1045 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Angelin |
| Observer's Signature | |
| Date | 10/9/15 |
| Organization | BASF |
| Certified by | Heromet |
| Date | 9/15/15 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

Additional Information A1 5637 500#/hour

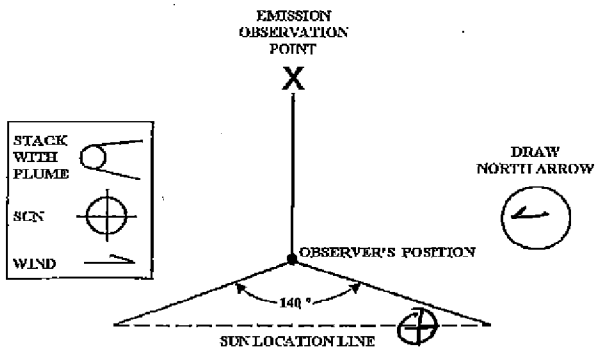
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#2 (P102) |
| Operating Mode | Running |
| Control Equipment | F-1 Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Scrubber Stack |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start W End W |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Stack Exit End Stack Exit |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start 25-30 End 25-30 |
| Wind Direction | Start NE End NE |
| Ambient Temp | Start 55°F End 55°F |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 10/2/15 | 0805 | 0905 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 10/2/15 |
| Organization | BASF |
| Certified by | Aeromet Date 10/30/15 |
| Additional Information | |
| Continue on reverse side | 9/15/15 |

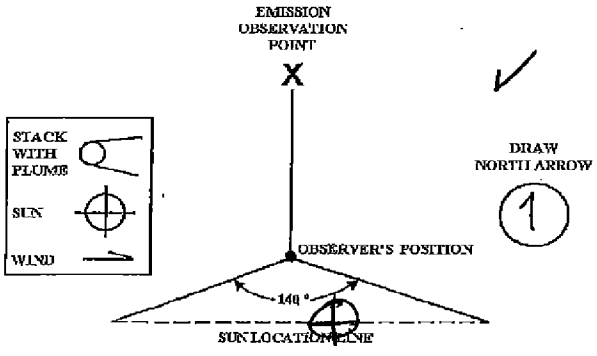
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| Cu 1201 325#/ha |
| |
| |
| |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #3 (P103) |
| Operating Mode | Running |
| Control Equipment | SCR |
| Operating Mode | Running |
| Describe Emission Point | SCR Stack |
| Height of Emission Point | 55' |
| Height Relative to Observer Start | 5' |
| Height Relative to Observer End | 5' |
| Distance to Emission Point Start | 25' |
| Distance to Emission Point End | 25' |
| Direction to Emission Point Start | N |
| Direction to Emission Point End | N |
| Vertical Angle to Observation Pt. Start | |
| Vertical Angle to Observation Pt. End | |
| Direction to Observation Point Start | |
| Direction to Observation Point End | |
| Describe Emissions Start | None |
| Describe Emissions End | None |
| Emission Color Start | Clear |
| Emission Color End | Clear |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined Start | Stack Exit |
| Point In The Plume At Which Opacity Was Determined End | Stack Exit |
| Describe Plume Background Start | Sky |
| Describe Plume Background End | Sky |
| Background Color Start | White |
| Background Color End | White |
| Sky Condition Start | Overcast |
| Sky Condition End | Overcast |
| Wind Speed Start | 25-30 |
| Wind Speed End | 25-30 |
| Wind Direction Start | NE |
| Wind Direction End | NE |
| Ambient Temp Start | 55°F |
| Ambient Temp End | 55°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 10/2/15 | 0940 | 1040 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | |
| Date | 10/2/15 |
| Organization | BASF Corporation |
| Certified by | Aeromet |
| Date | 9/15/15 |

Continue on reverse side

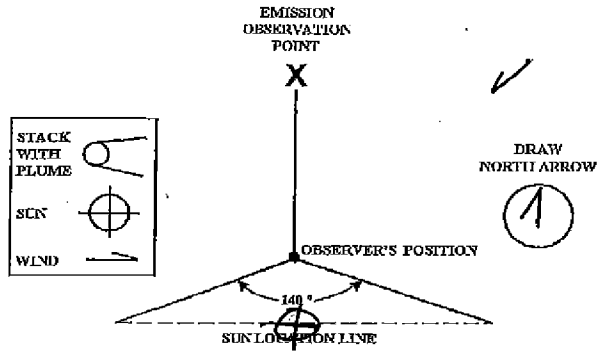
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** D0706 - 325# hr

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #4 (P009) |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Trimer Stack |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start None End None |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start 25-30 End 25-30 |
| Wind Direction | Start NE End NE |
| Ambient Temp | Start 55°F End 55°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 10/2/15 | 1050 | 1150 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | |
| Date | 10/2/15 |
| Organization | BASF Corporation |
| Certified by | Aeromet |
| Date | 09/15/15 |

Continue on reverse side

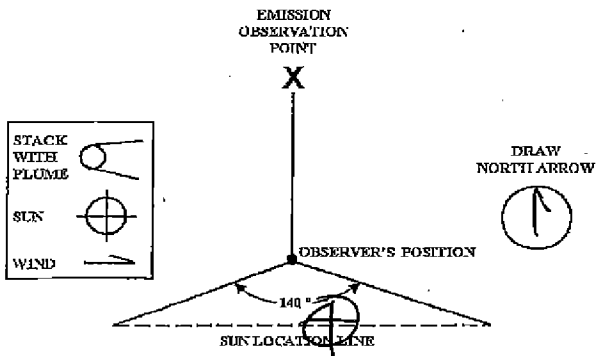
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** Cu0559 270 #/he

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#4 (P009) |
| Operating Mode | Running |
| Control Equipment | Dust Collector |
| Operating Mode | Running |
| Describe Emission Point | Rotary Calciner |
| Height of Emission Point | 45 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start None End None |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Sunny End Sunny |
| Wind Speed | Start Nil End Nil |
| Wind Direction | Start — End — |
| Ambient Temp | Start 80°F End 80°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 08/19/15 | 0915 | 1015 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Hoylin |
| Observer's Signature | Date 8/19/15 |
| Organization | BASF |
| Certified by | Aeromet Date 3/17/15 |

Continue on reverse side

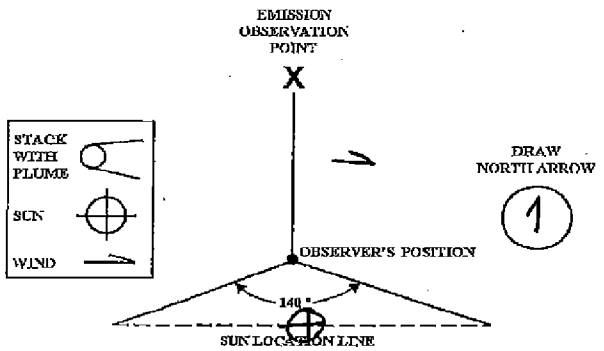
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information | D-1145 | 600 lbs/hr | Dust Collector |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#3 (P103) |
| Operating Mode | Running |
| Control Equipment | SCR |
| Operating Mode | Running |
| Describe Emission Point | SCR Stack |
| | RC#3 is a Rotary Calciner |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start No visible emissions End No visible emissions |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start SCR Stack End SCR Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 80°F End 80°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 08/03/15 | 0952 | 1052 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 08/03/15 |
| Organization | BASF Corporation |
| Certified by | Aeromet Date 3/17/15 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

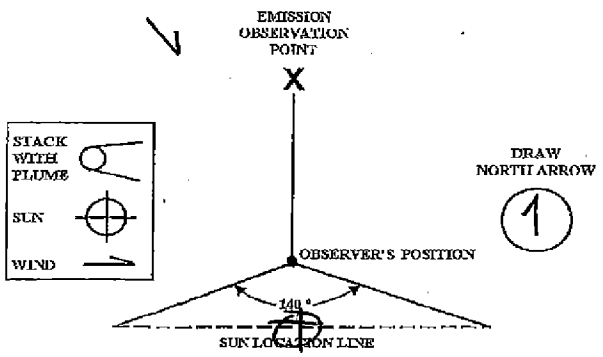
**Additional Information**

D 1702 450 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#1 (P010) RC#2 (P102) |
| Operating Mode | Running |
| Control Equipment | F-1 Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Exit of F-1 Scrubber |
| Height of Emission Point | 40 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Exit of Stack End Exit of Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Cloudy End Cloudy |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start NW End NW |
| Ambient Temp | Start 68°F End 68°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 7/15/15 | 1023 | 1123 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | [signature] |
| Date | 7/15/15 |
| Organization | BASF Corporation |
| Certified by | Aeromet |
| Date | 3/17/15 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

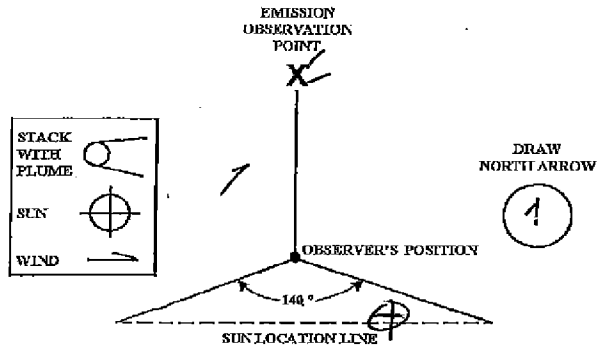
**Additional Information**

AI-3992 35lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#1 (P010) RC#4 (P009) |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Two Calciners venting to Trimer Scrubber |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 15 End 15 |
| Distance to Emission Point | Start 30 End 30 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start N End N |
| Describe Emissions | Start Light Haze End Light Haze |
| Emission Color | Start White End White |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Trimer Stack Exit End Trimer Stack Exit |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start 0-5 End 0-5 |
| Wind Direction | Start SW End SW |
| Ambient Temp | Start 50 End 50 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/8/15 | 0755 | 0855 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 5 | 10 | 5 | 5 | |
| 2 | 10 | 10 | 10 | 10 | |
| 3 | 5 | 5 | 5 | 5 | |
| 4 | 5 | 5 | 5 | 5 | |
| 5 | 5 | 5 | 5 | 5 | |
| 6 | 5 | 10 | 10 | 10 | |
| 7 | 10 | 10 | 10 | 10 | |
| 8 | 10 | 5 | 5 | 5 | |
| 9 | 5 | 5 | 5 | 5 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 5 | |
| 16 | 5 | 10 | 10 | 10 | |
| 17 | 10 | 10 | 10 | 10 | |
| 18 | 10 | 10 | 10 | 10 | |
| 19 | 10 | 10 | 10 | 10 | |
| 20 | 10 | 10 | 10 | 10 | |
| 21 | 10 | 10 | 10 | 10 | |
| 22 | 10 | 10 | 10 | 10 | |
| 23 | 10 | 5 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 5 | 5 | 5 | 5 | |
| 26 | 5 | 5 | 5 | 5 | |
| 27 | 5 | 5 | 5 | 5 | |
| 28 | 5 | 5 | 10 | 5 | |
| 29 | 5 | 5 | 5 | 5 | |
| 30 | 10 | 5 | 5 | 5 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Angelin |
| Observer's Signature | Date 04/08/15 |
| Organization | BASF |
| Certified by | Aeromet Date 3/17/15 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 5 | 5 | 5 | 5 | |
| 32 | 5 | 10 | 5 | 5 | |
| 33 | 5 | 5 | 5 | 5 | |
| 34 | 5 | 5 | 5 | 5 | |
| 35 | 10 | 5 | 5 | 5 | |
| 36 | 5 | 5 | 5 | 5 | |
| 37 | 5 | 5 | 5 | 5 | |
| 38 | 5 | 5 | 5 | 5 | |
| 39 | 5 | 5 | 5 | 5 | |
| 40 | 5 | 5 | 5 | 5 | |
| 41 | 5 | 5 | 5 | 5 | |
| 42 | 5 | 5 | 5 | 5 | |
| 43 | 5 | 5 | 5 | 5 | |
| 44 | 5 | 5 | 5 | 5 | |
| 45 | 5 | 5 | 5 | 5 | |
| 46 | 5 | 5 | 10 | 5 | |
| 47 | 5 | 5 | 5 | 5 | |
| 48 | 5 | 5 | 5 | 5 | |
| 49 | 5 | 5 | 5 | 5 | |
| 50 | 5 | 5 | 5 | 5 | |
| 51 | 5 | 5 | 5 | 5 | |
| 52 | 5 | 5 | 5 | 5 | |
| 53 | 5 | 5 | 5 | 5 | |
| 54 | 5 | 5 | 5 | 5 | |
| 55 | 5 | 5 | 5 | 5 | |
| 56 | 5 | 5 | 5 | 5 | |
| 57 | 5 | 5 | 5 | 5 | |
| 58 | 5 | 5 | 5 | 5 | |
| 59 | 10 | 5 | 5 | 5 | |
| 60 | 5 | 5 | 5 | 5 | |
| | | | | | |
| | | | | | |

**Additional Information** Highest 6 min. average opacity 10%

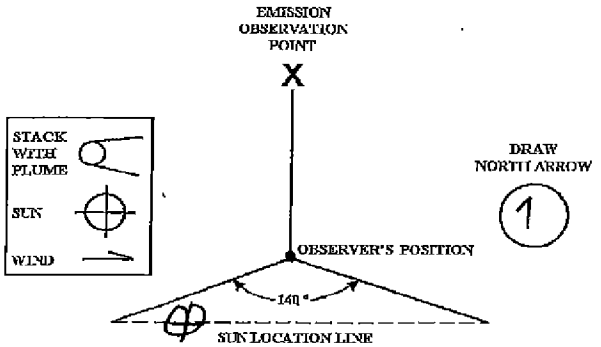
RC #1 A1-5857 / 10 lbs/hr

RC #4 N1-2458 210 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#2 P102 |
| Operating Mode | Running |
| Control Equipment | SCR |
| Operating Mode | Running |
| Describe Emission Point | Exit of SCR Stack |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 25 End 25 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start N End N |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Exit of SCR Stack End Exit of SCR Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start 0-5 End 0-5 |
| Wind Direction | Start N End N |
| Ambient Temp | Start 45°F End 45°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/7/2015 | 1245 | 1345 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Averlin |
| Observer's Signature | [signature] |
| Date | 4/7/15 |
| Organization | BASF |
| Certified by | Aerosmet |
| Date | 3/17/15 |

Continue on reverse side

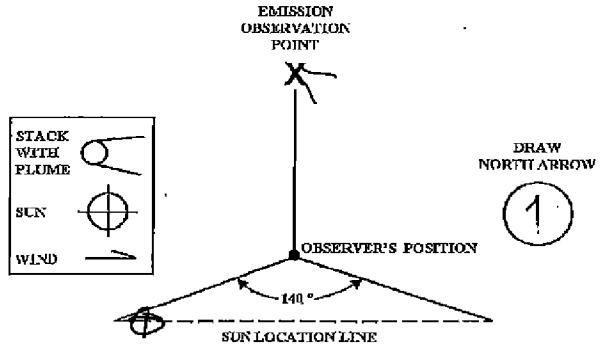
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** Cu-0380 - 150 lbs/ha

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#3 P103 |
| Operating Mode | Running |
| Control Equipment | SCR |
| Operating Mode | Running |
| Describe Emission Point | SCR Stack |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 50 End 50 |
| Distance to Emission Point | Start 120 End 120 |
| Direction to Emission Point | Start U End U |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start U End U |
| Describe Emissions | Start Yellow Smoke End Yellow Smoke |
| Emission Color | Start Yellow End Yellow |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start SCR Stack End SCR Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start White End White |
| Sky Condition | Start Cloudy End Cloudy |
| Wind Speed | Start 0-5 End 0-5 |
| Wind Direction | Start NW End NW |
| Ambient Temp | Start 50 End 50 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/6/15 | 0320 | 0420 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 20 | 25 | 20 | 20 | |
| 2 | 20 | 20 | 30 | 20 | |
| 3 | 20 | 20 | 25 | 30 | |
| 4 | 20 | 20 | 20 | 20 | |
| 5 | 15 | 15 | 15 | 15 | |
| 6 | 15 | 15 | 15 | 15 | |
| 7 | 15 | 15 | 15 | 15 | |
| 8 | 15 | 10 | 10 | 10 | |
| 9 | 10 | 10 | 10 | 10 | |
| 10 | 10 | 10 | 10 | 10 | |
| 11 | 10 | 10 | 10 | 10 | |
| 12 | 10 | 10 | 10 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 5 | |
| 16 | 5 | 5 | 5 | 5 | |
| 17 | 5 | 5 | 5 | 5 | |
| 18 | 5 | 5 | 5 | 5 | |
| 19 | 5 | 5 | 5 | 5 | |
| 20 | 5 | 5 | 5 | 5 | |
| 21 | 5 | 5 | 5 | 5 | |
| 22 | 5 | 5 | 5 | 5 | |
| 23 | 5 | 5 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 5 | 5 | 5 | 5 | |
| 26 | 5 | 5 | 5 | 5 | |
| 27 | 5 | 5 | 5 | 5 | |
| 28 | 5 | 5 | 5 | 5 | |
| 29 | 5 | 5 | 5 | 5 | |
| 30 | 5 | 5 | 5 | 5 | |

| | |
|---|---|
| Observer's Name (Print) | Tim Anglin |
| Observer's Signature | |
| Date | 4/6/15 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 3/17/15 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 5 | 5 | 5 | 5 | |
| 32 | 5 | 5 | 5 | 5 | |
| 33 | 5 | 5 | 5 | 5 | |
| 34 | 5 | 0 | 5 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information**

Highest Average 6 minute period 19.6

CU-0350 - 430 lb/hr

Reported as a malfunction to OEPA on 4/6/15

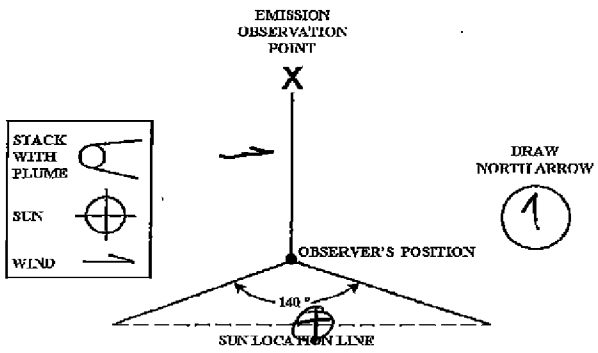
# VISIBLE EMISSION OBSERVATION FORM

| | | |
|---|---|---|
| Company Name: BASF Corporation | | |
| Location: 120 Pine Street | | |
| City: Elyria | State: OH | Zip: 44035 |
| Process Equipment: RC#3 (P103) | | Operating Mode: Running |
| Control Equipment: SCR | | Operating Mode: Running |
| Describe Emission Point: SCR stack on top of building 16 | | |
| Height of Emission Point: 40 | Height Relative to Observer: Start 10 End 10 | |
| Distance to Emission Point: Start 20 End 20 | Direction to Emission Point: Start N End N | |
| Vertical Angle to Observation Pt. Start End | Direction to Observation Point Start End | |
| Describe Emissions: Start Non Visible End Non Visible | | |
| Emission Color: Start Clear End Clear | If Water Droplet Plume (Circle): Attached Detached (N/A) | |
| Point In The Plume At Which Opacity Was Determined: Start SCR Stack End SCR Stack | | |
| Describe Plume Background: Start Sky End Sky | | |
| Background Color: Start Overcast End Overcast | Sky Condition: Start Cloudy End Cloudy | |
| Wind Speed: Start 5-10 End 5-10 | Wind Direction: Start W End W | |
| Ambient Temp: Start 28 End 28 | Wet Bulb Temp | RH Percent |

| Observation Date | Start Time | End Time |
|---|---|---|
| 03/27/2015 | 0852 | 0952 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print): Timothy Anglin | |
| Observer's Signature: | Date: 3/27/15 |
| Organization: BASF Corporation | |
| Certified By: Neromzt | Date: 03/17/15 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| Cu - 0380 - 247 lb/ha |
| |
| |
| |

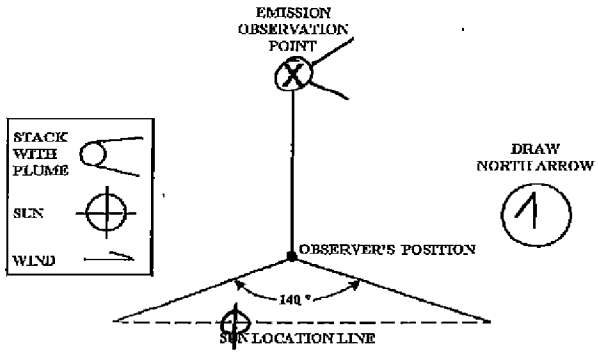
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | Elyria, OH |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#4 P009 |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Exit of Trimer Stack |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start N End N |
| Describe Emissions | Start Clear/Steam End Clear/Steam |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Exit of Trimer Stack End Exit of Trimer Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Overcast End Overcast |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 40 End 40 |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 3/24/2015 | 1045 | 1140 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Hoglin |
| Observer's Signature | |
| Date | 3/24/15 |
| Organization | BASF Corporation |
| Certified by | Aeromet |
| Date | 3/17/15 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| N, -2458 - 300 lb/ha |
| |
| |
| |

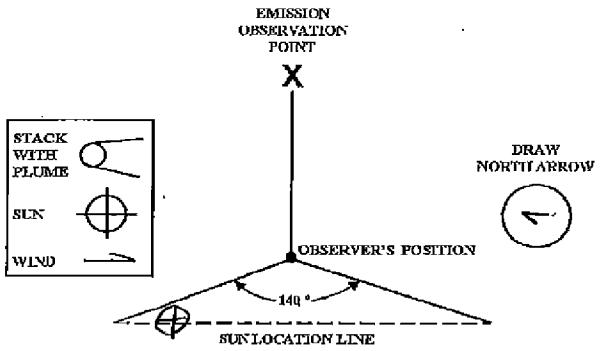
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #2 P102 |
| Operating Mode | Running |
| Control Equipment | F-1 Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Top of F-1 Scrubber |
| Height of Emission Point | 55' |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start — End — |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start End of Stack End Same |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue/white End Blue/white |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start Nil End Nil |
| Wind Direction | Start — End — |
| Ambient Temp | Start 45 End 45 |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 03/10/2015 | 1110 | 1210 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Adgin |
| Observer's Signature | Date 3/10/15 |
| Organization | BASF |
| Certified by Aeromet | Date 9/16/15 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information**

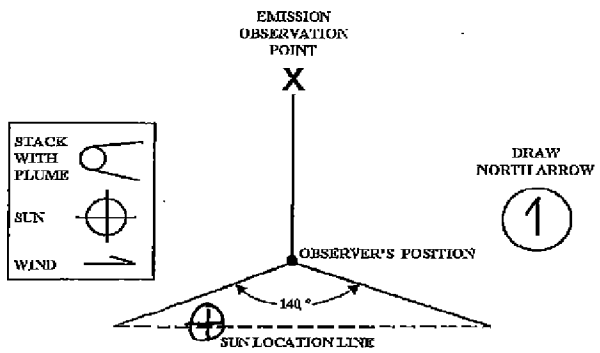
Highest six minute average opacity - 0

Ni 4322 - 400 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | | |
|---|---|---|
| Company Name: BASF Corporation | | |
| Location: 120 Pine Street | | |
| City: Elyria | State: OH | Zip: 44035 |
| Process Equipment: RC #1 P010 | | Operating Mode: Running |
| Control Equipment: TriMer Scrubber | | Operating Mode: Running |
| Describe Emission Point: Top of TriMer Stack | | |
| Height of Emission Point: 50 | Height Relative to Observer: Start 10 End 10 | |
| Distance to Emission Point: Start 20 End 20 | Direction to Emission Point: Start N End N | |
| Vertical Angle to Observation Pt. Start End | Direction to Observation Point: Start N End N | |
| Describe Emissions: Start | End | |
| Emission Color: Start white End white | If Water Droplet Plume (Circle): Attached Detached (N/A) | |
| Point In The Plume At Which Opacity Was Determined: Start Exit of Stack End Exit of Stack | | |
| Describe Plume Background: Start Overcast Sky End Overcast Sky | | |
| Background Color: Start Blue/white End Blue/white | Sky Condition: Start Overcast End Overcast | |
| Wind Speed: Start Nil End Nil | Wind Direction: Start — End — | |
| Ambient Temp: Start 45 End 45 | Wet Bulb Temp | RH Percent |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 3/10/2015 | 1005 | 1105 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 5 | 5 | |
| 8 | 5 | 5 | 5 | 5 | |
| 9 | 5 | 5 | 5 | 5 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 5 | |
| 16 | 5 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print): Timothy Ardill | |
| Observer's Signature: [signature] | Date: 3/10/15 |
| Organization: BASF Corporation | |
| Certified by: Aeromet | Date: 9/16/14 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** Highest six minute Average opacity 5

AL 4190 - 450 lbs hr

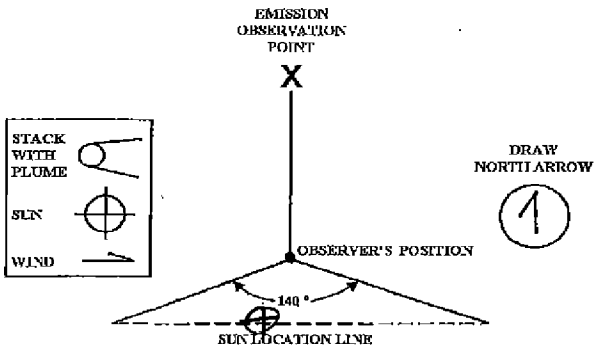
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corp. |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#1 (P010) |
| Operating Mode | Running |
| Control Equipment | F1 Scrubber |
| Operating Mode | Running |
| Describe Emission Point | F1 Scrubber |
| Height of Emission Point | 60 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start N End N |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Exit of F1 Scrubber End Same |
| Describe Plume Background | Start Blue Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start N End N |
| Ambient Temp | Start 50°F End 50°F |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 11/03/2014 | 1005 | 1105 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | |
| Date | 11/3/2014 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 9/16/2014 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| RC# S. 1624 / <10 lb/hr |
| |
| |
| |
| |

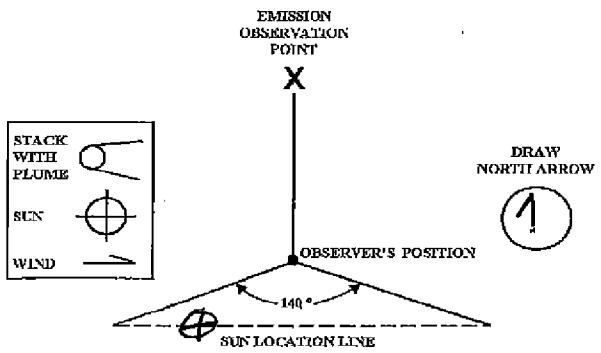
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #2 & RC #3 (P102 & P103) |
| Operating Mode | Running |
| Control Equipment | SCR |
| Operating Mode | Running |
| Describe Emission Point | Exit of SCR Stack |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 10' End 10' |
| Distance to Emission Point | Start 20' End 20' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Above SCR Stack End Same |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start — End — |
| Sky Condition | Start Overcast End Overcast |
| Wind Speed | Start Nil End Nil |
| Wind Direction | Start — End — |
| Ambient Temp | Start 65 End 65 |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 10/01/14 | 1005 | 1105 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 10/1/14 |
| Organization | BASF |
| Certified by | Aeromet — Date 9/16/14 |

Additional Information

Continue on reverse side

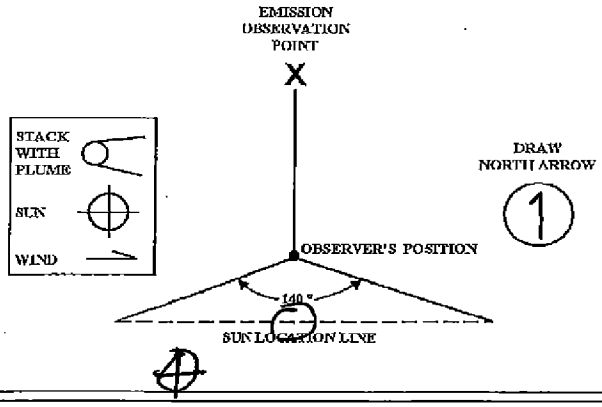
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information | | |
|---|---|---|
| | RC#2 | Cu 1230 / 450 lbs/he |
| | | |
| | RC#3 | D 1794 / 410 lbs/he |
| | | |
| | | |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corp. |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RL#4 P009 |
| Operating Mode | Running |
| Control Equipment | Trimer |
| Operating Mode | Running |
| Describe Emission Point | Exit of Trimer Stack |
| Height of Emission Point | 40' |
| Height Relative to Observer | Start 10' End 10' |
| Distance to Emission Point | Start 20' End 20' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start White Smoke End White Smoke |
| Emission Color | Start White End White |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Stack Exit End Stack Exit |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Overcast End Overcast |
| Sky Condition | Start — End — |
| Wind Speed | Start Nil End Nil |
| Wind Direction | Start — End — |
| Ambient Temp | Start 65 End 65 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 10/01/2014 | 0901 | |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 5 | 5 | 5 | 10 | |
| 2 | 10 | 10 | 5 | 5 | |
| 3 | 5 | 5 | 5 | 5 | |
| 4 | 5 | 5 | 5 | 5 | |
| 5 | 5 | 5 | 5 | 5 | |
| 6 | 5 | 5 | 5 | 5 | |
| 7 | 10 | 5 | 5 | 5 | |
| 8 | 5 | 5 | 5 | 5 | |
| 9 | 5 | 5 | 5 | 5 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 10 | |
| 16 | 10 | 10 | 10 | 5 | |
| 17 | 5 | 5 | 5 | 5 | |
| 18 | 5 | 5 | 5 | 5 | |
| 19 | 5 | 5 | 5 | 5 | |
| 20 | 5 | 5 | 5 | 5 | |
| 21 | 5 | 5 | 5 | 5 | |
| 22 | 5 | 5 | 5 | 5 | |
| 23 | 5 | 5 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 5 | 5 | 5 | 5 | |
| 26 | 5 | 5 | 5 | 5 | |
| 27 | 5 | 5 | 5 | 5 | |
| 28 | 5 | 5 | 5 | 5 | |
| 29 | 5 | 5 | 5 | 5 | |
| 30 | 5 | 5 | 5 | 5 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | [signature] |
| Date | 10/1/14 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 9/16/2014 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 15 | 10 | 10 | 5 | |
| 32 | 5 | 5 | 5 | 5 | |
| 33 | 5 | 5 | 5 | 5 | |
| 34 | 5 | 5 | 5 | 5 | |
| 35 | 5 | 5 | 5 | 5 | |
| 36 | 5 | 5 | 5 | 5 | |
| 37 | 5 | 5 | 5 | 5 | |
| 38 | 5 | 5 | 5 | 5 | |
| 39 | 5 | 5 | 5 | 5 | |
| 40 | 5 | 5 | 5 | 5 | |
| 41 | 5 | 10 | 5 | 5 | |
| 42 | 5 | 5 | 5 | 5 | |
| 43 | 5 | 5 | 5 | 5 | |
| 44 | 5 | 5 | 5 | 5 | |
| 45 | 5 | 5 | 5 | 5 | |
| 46 | 5 | 5 | 5 | 5 | |
| 47 | 5 | 5 | 5 | 5 | |
| 48 | 5 | 5 | 5 | 5 | |
| 49 | 5 | 5 | 5 | 5 | |
| 50 | 5 | 10 | 10 | 5 | |
| 51 | 5 | 5 | 5 | 5 | |
| 52 | 5 | 5 | 5 | 5 | |
| 53 | 5 | 5 | 5 | 5 | |
| 54 | 5 | 5 | 5 | 5 | |
| 55 | 5 | 5 | 5 | 5 | |
| 56 | 5 | 5 | 5 | 5 | |
| 57 | 5 | 5 | 5 | 5 | |
| 58 | 5 | 5 | 5 | 5 | |
| 59 | 5 | 5 | 5 | 5 | |
| 60 | 5 | 5 | 5 | 5 | |
| | | | | | |
| | | | | | |

**Additional Information**

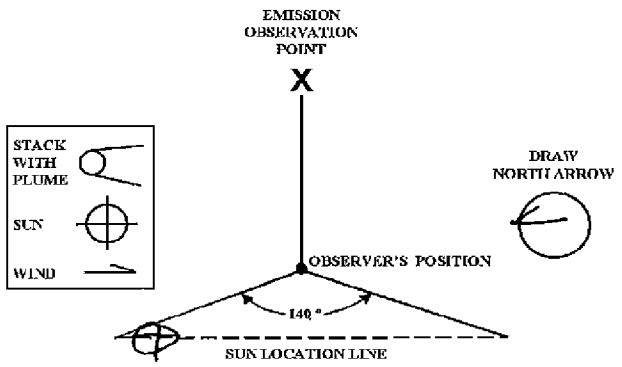
Highest 6 minute Average 5.8

Selexsorb 250 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44870 |
| Process Equipment | RC #2 P102 |
| Operating Mode | Running |
| Control Equipment | F-1 Scrubber |
| Operating Mode | |
| Describe Emission Point | F-1 Scrubber Stack |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 10 End 10 |
| Direction to Emission Point | Start East End East |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start None End None |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Top of Stack End Top of Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start End |
| Wind Speed | Start Nil End Nil |
| Wind Direction | Start End |
| Ambient Temp | Start 80°F End 80°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 7/31/14 | 1336 | 1436 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 7/31/14 |
| Organization | BASF |
| Certified by | Aeromet — Date 3/19/14 |

Continue on reverse side

| Sec / Min | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** CU-0880 - 310 lbs/hr

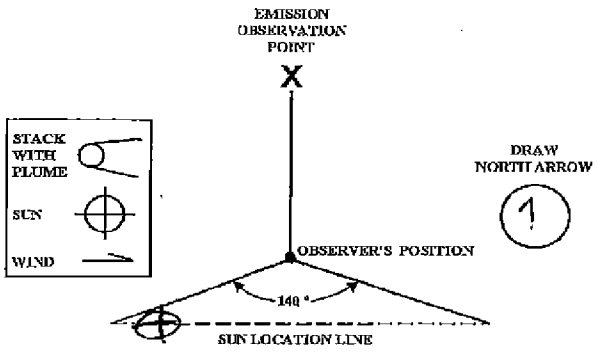
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#1 & RC#4 P010 & P009 |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Trimer Stack |
| Height of Emission Point | 40 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 10 End 10 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Light white smoke End Light white smoke |
| Emission Color | Start white End white |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start Nil End Nil |
| Wind Direction | Start — End — |
| Ambient Temp | Start 80 End |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 7/18/14 | 1407 | 1507 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 5 | 5 | 5 | 5 | |
| 2 | 5 | 5 | 5 | 5 | |
| 3 | 5 | 5 | 5 | 5 | |
| 4 | 5 | 5 | 5 | 5 | |
| 5 | 5 | 5 | 5 | 5 | |
| 6 | 5 | 5 | 5 | 5 | |
| 7 | 5 | 5 | 5 | 5 | |
| 8 | 5 | 5 | 5 | 5 | |
| 9 | 10 | 5 | 5 | 5 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 5 | |
| 16 | 5 | 5 | 5 | 5 | |
| 17 | 5 | 5 | 5 | 5 | |
| 18 | 5 | 5 | 5 | 5 | |
| 19 | 5 | 5 | 5 | 5 | |
| 20 | 5 | 5 | 5 | 5 | |
| 21 | 5 | 5 | 5 | 5 | |
| 22 | 5 | 5 | 5 | 5 | |
| 23 | 5 | 5 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 5 | 5 | 5 | 5 | |
| 26 | 5 | 5 | 5 | 5 | |
| 27 | 5 | 5 | 5 | 5 | |
| 28 | 5 | 5 | 5 | 5 | |
| 29 | 5 | 5 | 5 | 5 | |
| 30 | 5 | 5 | 5 | 5 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Aoglin |
| Observer's Signature | |
| Date | 7/18/14 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 3/19/14 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 5 | 5 | 5 | 5 | |
| 32 | 5 | 5 | 5 | 5 | |
| 33 | 5 | 5 | 5 | 5 | |
| 34 | 5 | 5 | 5 | 5 | |
| 35 | 5 | 5 | 5 | 5 | |
| 36 | 5 | 5 | 5 | 5 | |
| 37 | 5 | 5 | 5 | 5 | |
| 38 | 5 | 5 | 5 | 5 | |
| 39 | 5 | 5 | 5 | 5 | |
| 40 | 5 | 5 | 5 | 5 | |
| 41 | 5 | 5 | 5 | 5 | |
| 42 | 5 | 5 | 5 | 5 | |
| 43 | 5 | 5 | 5 | 5 | |
| 44 | 5 | 5 | 5 | 5 | |
| 45 | 5 | 5 | 5 | 5 | |
| 46 | 5 | 5 | 5 | 5 | |
| 47 | 5 | 5 | 5 | 5 | |
| 48 | 5 | 5 | 5 | 5 | |
| 49 | 5 | 5 | 5 | 5 | |
| 50 | 5 | 5 | 5 | 5 | |
| 51 | 5 | 5 | 5 | 5 | |
| 52 | 5 | 5 | 5 | 5 | |
| 53 | 5 | 5 | 5 | 5 | |
| 54 | 5 | 5 | 5 | 5 | |
| 55 | 5 | 5 | 5 | 5 | |
| 56 | 5 | 5 | 5 | 5 | |
| 57 | 5 | 5 | 5 | 5 | |
| 58 | 5 | 5 | 5 | 5 | |
| 59 | 5 | 5 | 5 | 5 | |
| 60 | 5 | 5 | 5 | 5 | |
| | | | | | |
| | | | | | |

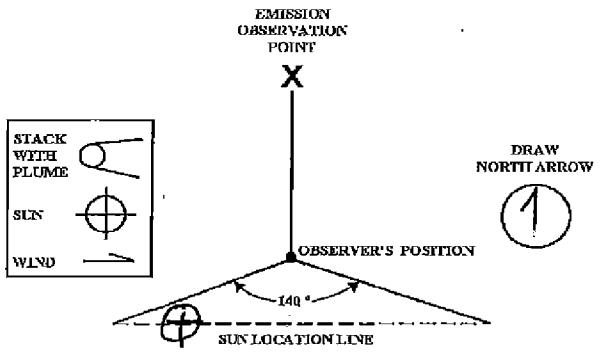
Highest 6 min
Opacity 5

| Additional Information | | | |
|---|---|---|---|
| | RC#1 | AL 5656 | / 500 lbs/hr |
| | | | |
| | RC#4 | AL 5656 | / 500 lbs/hr |
| | | | |
| | | | |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | PA |
| Zip | 44035 |
| Process Equipment | RL #3 P103 |
| Operating Mode | Running |
| Control Equipment | SCR |
| Operating Mode | Running |
| Describe Emission Point | SCR Stack |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 10' End 10' |
| Distance to Emission Point | Start 20' End 20' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Stack End Stack |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Exit of Stack End Exit of Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start Nil End Nil |
| Wind Direction | Start — End — |
| Ambient Temp | Start 80 End 80 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 7/18/14 | 1305 | 1405 |

| Sec / Min | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Angelin |
| Observer's Signature | [signature] |
| Date | 7/18/14 |
| Organization | BASF |
| Certified by | Aerocomet |
| Date | 3/19/14 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

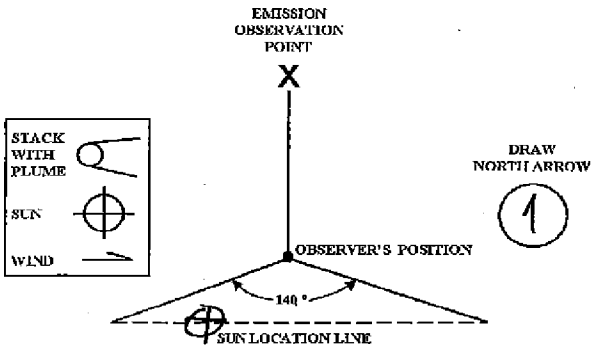
Highest 6min opacity 0

**Additional Information** D0702 - 350 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | | |
|---|---|---|
| Company Name: BASF Corporation | | |
| Location: 120 Pine Street | | |
| City: Elyria | State: OH | Zip: 44870 |
| Process Equipment: RC # 2 P102 | | Operating Mode: Running |
| Control Equipment: SCR | | Operating Mode: Running |
| Describe Emission Point: Stack of SCR | | |
| Height of Emission Point: 40 | Height Relative to Observer: Start 10 End 10 | |
| Distance to Emission Point: Start 20 End 20 | Direction to Emission Point: Start N End N | |
| Vertical Angle to Observation Pt. Start End | Direction to Observation Point Start End | |
| Describe Emissions: Start Clear End Clear | | |
| Emission Color: Start None End None | If Water Droplet Plume (Circle): Attached Detached N/A | |
| Point In The Plume At Which Opacity Was Determined: Start Stack Exit End Stack Exit | | |
| Describe Plume Background: Start Sky End Sky | | |
| Background Color: Start Blue End | Sky Condition: Start Blue End | |
| Wind Speed: Start <5 End <5 | Wind Direction: Start W End W | |
| Ambient Temp: Start 70 End 70 | Wet Bulb Temp | RH Percent |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 5/22/14 | 0945 | 1045 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print): Timothy Anglin | |
| Observer's Signature: | Date: 5/22/14 |
| Organization: ~~Aeromet~~ BASF | |
| Certified by: Aeromet | Date: 3/14/14 |

Continue on reverse side

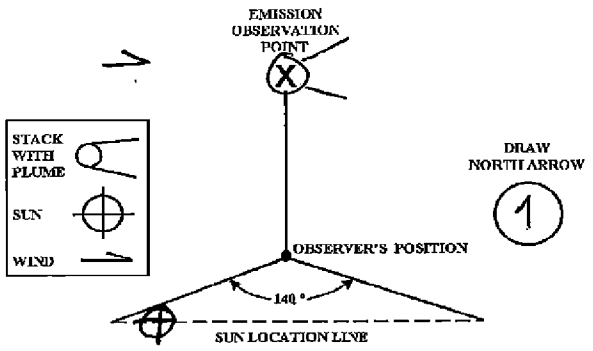
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| CW 0360 / <10 lbs/hr |
| |
| |
| |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#4 P009 |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Trimer Stack |
| Height of Emission Point | 40' |
| Height Relative to Observer | Start 10' End 10' |
| Distance to Emission Point | Start 20' End 20' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Stack Plume End Same |
| Emission Color | Start White End White |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack exit End Same |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start PC End PC |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 55 End 55 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/22/14 | 1335 | 1435 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 5 | 5 | 5 | 5 | |
| 2 | 5 | 5 | 5 | 5 | |
| 3 | 5 | 5 | 5 | 5 | |
| 4 | 5 | 5 | 5 | 5 | |
| 5 | 5 | 5 | 5 | 5 | |
| 6 | 5 | 5 | 5 | 5 | |
| 7 | 5 | 5 | 5 | 5 | |
| 8 | 5 | 5 | 5 | 5 | |
| 9 | 5 | 5 | 5 | 5 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 5 | |
| 16 | 5 | 5 | 5 | 5 | |
| 17 | 5 | 5 | 5 | 5 | |
| 18 | 5 | 5 | 5 | 5 | |
| 19 | 5 | 5 | 5 | 5 | |
| 20 | 5 | 5 | 5 | 5 | |
| 21 | 5 | 5 | 5 | 5 | |
| 22 | 5 | 5 | 5 | 5 | |
| 23 | 5 | 5 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 5 | 5 | 5 | 5 | |
| 26 | 5 | 5 | 5 | 5 | |
| 27 | 5 | 5 | 5 | 5 | |
| 28 | 5 | 5 | 5 | 5 | |
| 29 | 5 | 5 | 5 | 5 | |
| 30 | 5 | 5 | 5 | 5 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | [signature] Date 4/22/14 |
| Organization | BASF |
| Certified by | Aeromet Date 3/19/14 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 5 | 5 | 5 | 5 | |
| 32 | 5 | 5 | 5 | 5 | |
| 33 | 5 | 5 | 5 | 5 | |
| 34 | 5 | 5 | 5 | 5 | |
| 35 | 5 | 5 | 5 | 5 | |
| 36 | 5 | 5 | 5 | 5 | |
| 37 | 5 | 5 | 5 | 5 | |
| 38 | 5 | 5 | 5 | 5 | |
| 39 | 5 | 5 | 5 | 5 | |
| 40 | 5 | 5 | 5 | 5 | |
| 41 | 5 | 5 | 5 | 5 | |
| 42 | 5 | 5 | 5 | 5 | |
| 43 | 5 | 5 | 5 | 5 | |
| 44 | 5 | 5 | 5 | 5 | |
| 45 | 5 | 5 | 5 | 5 | |
| 46 | 5 | 5 | 5 | 5 | |
| 47 | 5 | 5 | 5 | 5 | |
| 48 | 5 | 5 | 5 | 5 | |
| 49 | 5 | 5 | 5 | 5 | |
| 50 | 5 | 5 | 5 | 5 | |
| 51 | 5 | 5 | 5 | 5 | |
| 52 | 5 | 5 | 5 | 5 | |
| 53 | 5 | 5 | 5 | 5 | |
| 54 | 5 | 5 | 5 | 5 | |
| 55 | 5 | 5 | 5 | 5 | |
| 56 | 5 | 5 | 5 | 5 | |
| 57 | 5 | 5 | 5 | 5 | |
| 58 | 5 | 5 | 5 | 5 | |
| 59 | 5 | 5 | 5 | 5 | |
| 60 | 5 | 5 | 5 | 5 | |
| | | | | | |
| | | | | | |

**Additional Information**

Highest AVERAGE 6 minute opacity 5%

N1-2458 180 lbs/hr

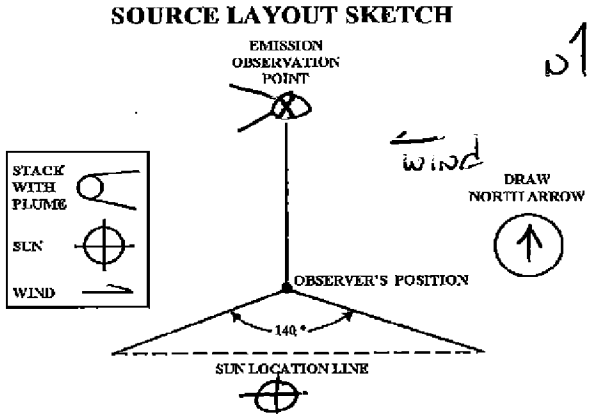
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | BASF Elyria Plant |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC-1 |
| Operating Mode | |
| Control Equipment | F1 Scrubber |
| Operating Mode | |
| Describe Emission Point | |
| Height of Emission Point | |
| Height Relative to Observer | Start 30' End 30' |
| Distance to Emission Point | Start 30 End 30 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Continuous End Continuous |
| Emission Color | Start White End White |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start End End |
| Describe Plume Background | Start Blue Sky End Blue Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start East End East |
| Ambient Temp | Start 60 F End 60 F |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/22/13 | 1301 | 1401 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 5 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 5 | 5 | 5 | 5 | |
| 6 | 5 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 5 | 5 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Axlin |
| Observer's Signature | Date 4/22/13 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 3/20/13 |

Additional Information

Continue on reverse side

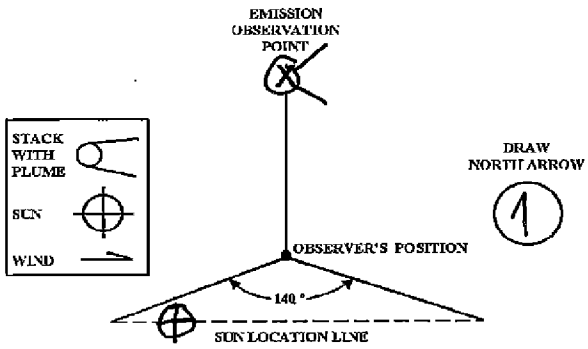
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| Si 1624 - 90 lb/hr |
| |
| |
| |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corp. |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#1 (P010) |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | End of Trimer Stack |
| Height of Emission Point | 40' |
| Height Relative to Observer | Start 10' End 10' |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Faint white End Faint white |
| Emission Color | Start white End white |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack exit End Stack exit |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 60°F End 60°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 4/9/2014 | 1351 | 1451 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 5 | 5 | 5 | 5 | |
| 2 | 5 | 5 | 5 | 5 | |
| 3 | 5 | 5 | 5 | 5 | |
| 4 | 5 | 5 | 5 | 5 | |
| 5 | 5 | 5 | 5 | 5 | |
| 6 | 5 | 5 | 5 | 5 | |
| 7 | 5 | 5 | 5 | 5 | |
| 8 | 5 | 5 | 5 | 5 | |
| 9 | 5 | 5 | 5 | 5 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 5 | |
| 16 | 5 | 5 | 5 | 5 | |
| 17 | 5 | 5 | 5 | 5 | |
| 18 | 5 | 5 | 5 | 5 | |
| 19 | 5 | 5 | 5 | 5 | |
| 20 | 5 | 5 | 5 | 5 | |
| 21 | 5 | 5 | 5 | 5 | |
| 22 | 5 | 5 | 5 | 5 | |
| 23 | 5 | 5 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 5 | 5 | 5 | 5 | |
| 26 | 5 | 5 | 5 | 5 | |
| 27 | 5 | 5 | 5 | 5 | |
| 28 | 5 | 5 | 5 | 5 | |
| 29 | 5 | 5 | 5 | 5 | |
| 30 | 5 | 5 | 5 | 5 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Naylin |
| Observer's Signature | |
| Date | 4/9/2014 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | |

Continue on reverse side

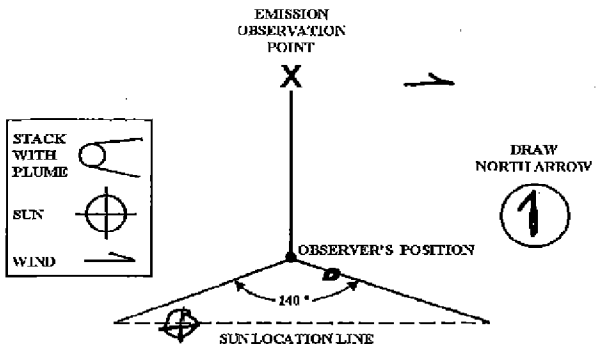
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 5 | 5 | 5 | 5 | |
| 32 | 5 | 5 | 5 | 5 | |
| 33 | 5 | 5 | 5 | 5 | |
| 34 | 5 | 5 | 5 | 5 | |
| 35 | 5 | 5 | 5 | 5 | |
| 36 | 5 | 5 | 5 | 5 | |
| 37 | 5 | 5 | 5 | 5 | |
| 38 | 5 | 5 | 5 | 5 | |
| 39 | 5 | 5 | 5 | 5 | |
| 40 | 5 | 5 | 5 | 5 | |
| 41 | 5 | 5 | 5 | 5 | |
| 42 | 5 | 5 | 5 | 5 | |
| 43 | 5 | 5 | 5 | 5 | |
| 44 | 5 | 5 | 5 | 5 | |
| 45 | 5 | 5 | 5 | 5 | |
| 46 | 5 | 5 | 5 | 5 | |
| 47 | 5 | 5 | 5 | 5 | |
| 48 | 5 | 5 | 5 | 5 | |
| 49 | 5 | 5 | 5 | 5 | |
| 50 | 5 | 5 | 5 | 5 | |
| 51 | 5 | 5 | 5 | 5 | |
| 52 | 5 | 5 | 5 | 5 | |
| 53 | 5 | 5 | 5 | 5 | |
| 54 | 5 | 5 | 5 | 5 | |
| 55 | 5 | 5 | 5 | 5 | |
| 56 | 5 | 5 | 5 | 5 | |
| 57 | 5 | 5 | 5 | 5 | |
| 58 | 5 | 5 | 5 | 5 | |
| 59 | 5 | 5 | 5 | 5 | |
| 60 | 5 | 5 | 5 | 5 | |
| | | | | | |
| | | | | | |

**Additional Information** D708 / <10 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corp |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#3 (P103) |
| Operating Mode | |
| Control Equipment | SCR |
| Operating Mode | |
| Describe Emission Point | Top of SCR stack |
| Height of Emission Point | 50 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start top of stack End top of stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 15 End 15 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 60°F End 60°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 04/01/2014 | 1254 | 1354 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | Average 6 minute |
| 7 | 0 | 0 | 0 | 0 | opacity = 0 |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 04/01/14 |
| Organization | BASF |
| Certified by | Aercomet — Date 3/19/14 |

Continue on reverse side

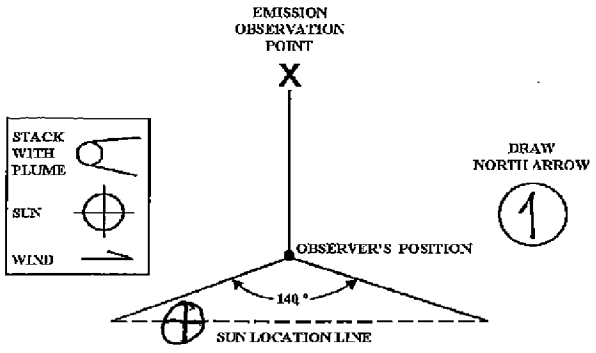
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information | D0704 / 500 lbs/hr |
|---|---|
| | |
| | |
| | |
| | |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corp. |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #1 |
| Operating Mode | Running |
| Control Equipment | Trimer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Exit of Trimer Stack |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start 45 End 45 |
| Direction to Observation Point | Start N End N |
| Describe Emissions | Start None End None |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Exit of Stack End Exit of Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start blue End blue |
| Sky Condition | Start PC End PC |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start NW End NW |
| Ambient Temp | Start 30 End 30 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 03-21-14 | 0835 | 0939 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Angelin |
| Observer's Signature | |
| Date | 03/21/14 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 03/19/14 |

Continue on reverse side

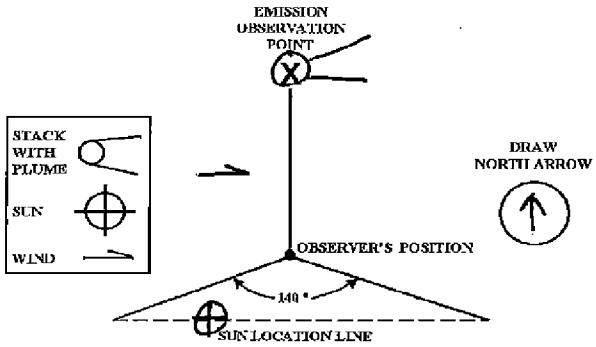
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information | | | |
|---|---|---|---|
| | D04105 | 395 lbs | he |
| | | | |
| | | | |
| | | | |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corp |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC # 3 |
| Operating Mode | Running |
| Control Equipment | SCR |
| Operating Mode | Running |
| Describe Emission Point | Stack exit SCR |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 10' End 10' |
| Distance to Emission Point | Start 20' End 20' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack exit End Stack exit |
| Describe Plume Background | Start Blue Sky End Blue Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 15 End 15 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 40°F End 40°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 02/21/2014 | 0910 | 1010 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 02/21/14 |
| Organization | BASF |
| Certified by | Aeromet — Date 09/18/13 |

Continue on reverse side

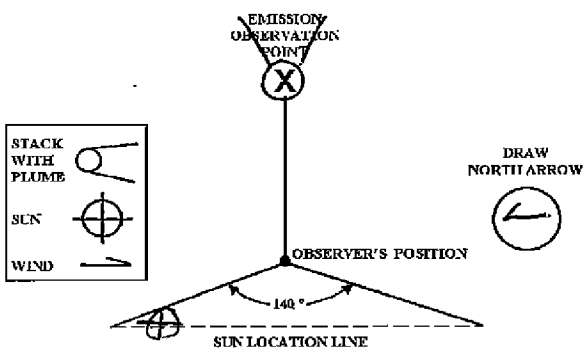
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** D 1798 / 190 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | | | |
|---|---|---|---|
| Company Name: BASF Corp. | | | |
| Location: Elyria | | | |
| City: Elyria | State: OH | Zip: 44870 | |
| Process Equipment: RC # 4 | | Operating Mode: Running | |
| Control Equipment: Trimer | | Operating Mode: Running | |
| Describe Emission Point: Trimer Stack | | | |
| Height of Emission Point: 40 | Height Relative to Observer: Start 5' End 5' | | |
| Distance to Emission Point: Start 10 End 10 | Direction to Emission Point: Start East End East | | |
| Vertical Angle to Observation Pt.: Start End | Direction to Observation Point: Start End | | |
| Describe Emissions: Start Clear with Steam End Clear with Steam | | | |
| Emission Color: Start None End None | If Water Droplet Plume (Circle): Attached Detached N/A | | |
| Point In The Plume At Which Opacity Was Determined: Start Stack Exit End Stack Exit | | | |
| Describe Plume Background: Start Blue Sky End Blue Sky | | | |
| Background Color: Start Blue End Blue | Sky Condition: Start Clear End Clear | | |
| Wind Speed: Start 10 End 10 | Wind Direction: Start W End W | | |
| Ambient Temp: Start 10°F End 10°F | Wet Bulb Temp | RH Percent | |

## SOURCE LAYOUT SKETCH




| Observation Date | Start Time | End Time |
|---|---|---|
| 1/21/14 | 1332 | 1432 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print): Timothy Anglin | |
| Observer's Signature: [signature] | Date: 01/21/14 |
| Organization: BASF | |
| Certified by: Aeromet | Date: 07/18/13 |

Additional Information

Continue on reverse side

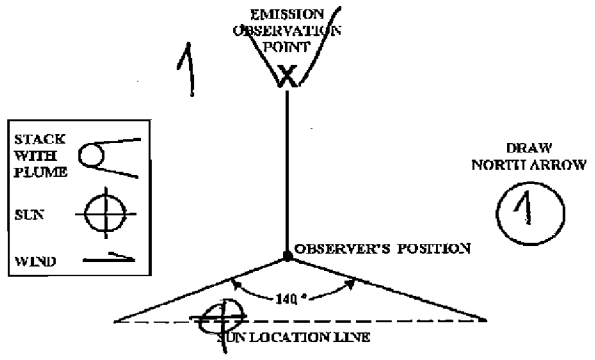
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information | Nr. 2458 / 210 lbs/hr |
|---|---|
| | |
| | |
| | |
| | |

# VISIBLE EMISSION OBSERVATION FORM

| | | |
|---|---|---|
| Company Name BASF | | |
| Location 120 Pine Street | | |
| City Elyria | State OH | Zip 44035 |
| Process Equipment RC #2 | | Operating Mode Running |
| Control Equipment CTO | | Operating Mode Running |
| Describe Emission Point Top of stack | | |
| Height of Emission Point 50' | Height Relative to Observer Start 10' End 10' | |
| Distance to Emission Point Start 20 End 20 | Direction to Emission Point Start N End N | |
| Vertical Angle to Observation Pt. Start End | Direction to Observation Point Start End | |
| Describe Emissions Start Clear | End Clear | |
| Emission Color Start Clear End Clear | If Water Droplet Plume (Circle) Attached Detached (N/A) | |
| Point In The Plume At Which Opacity Was Determined Start Top of Stack | End Top of Stack | |
| Describe Plume Background Start Sky | End Sky | |
| Background Color Start Clear End Clear | Sky Condition Start Cloudy End Cloudy | |
| Wind Speed Start 5-10 End 5-10 | Wind Direction Start S End S | |
| Ambient Temp Start 32°F End 32°F | Wet Bulb Temp | RH Percent |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 1/17/2014 | 0935 | 1035 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) Timothy Anglin | |
| Observer's Signature | Date 1/17/14 |
| Organization BASF | |
| Certified by Aeromet | Date 9/18/13 |

Continue on reverse side

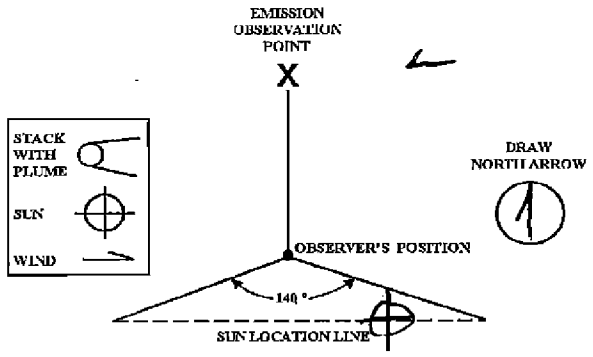
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

**Additional Information** Al 5637 - 450 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC # 1 |
| Operating Mode | Running |
| Control Equipment | Trimer |
| Operating Mode | Running |
| Describe Emission Point | At Trimer Stack |
| Height of Emission Point | 45' |
| Height Relative to Observer | Start 15' End 15' |
| Distance to Emission Point | Start 30' End 30' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start White Billowy End Same |
| Emission Color | Start White End White |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Blue Sky End Same |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 0-5 End 0-5 |
| Wind Direction | Start E End E |
| Ambient Temp | Start 60 End 60 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 10/11/13 | 0855 | 0955 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 30 | 25 | 30 | 30 | |
| 2 | 30 | 30 | 30 | 30 | |
| 3 | 30 | 30 | 30 | 30 | |
| 4 | 15 | 10 | 10 | 10 | |
| 5 | 20 | 20 | 20 | 20 | |
| 6 | 30 | 30 | 30 | 30 | |
| 7 | 30 | 30 | 30 | 30 | |
| 8 | 30 | 30 | 30 | 30 | |
| 9 | 30 | 30 | 30 | 30 | |
| 10 | 30 | 30 | 30 | 30 | |
| 11 | 30 | 30 | 30 | 30 | Highest six |
| 12 | 30 | 30 | 30 | 30 | minute Average |
| 13 | 30 | 30 | 30 | 30 | 30% Opacity |
| 14 | 30 | 30 | 30 | 30 | |
| 15 | 30 | 30 | 30 | 30 | |
| 16 | 30 | 30 | 30 | 30 | |
| 17 | 30 | 30 | 30 | 30 | |
| 18 | 30 | 30 | 30 | 30 | |
| 19 | 30 | 30 | 30 | 30 | |
| 20 | 30 | 30 | 30 | 30 | |
| 21 | 30 | 30 | 30 | 30 | |
| 22 | 30 | 30 | 30 | 30 | |
| 23 | 30 | 30 | 30 | 30 | |
| 24 | 30 | 30 | 30 | 30 | |
| 25 | 30 | 30 | 30 | 30 | |
| 26 | 30 | 30 | 30 | 30 | |
| 27 | 30 | 30 | 30 | 30 | |
| 28 | 30 | 30 | 30 | 30 | |
| 29 | 30 | 30 | 30 | 30 | |
| 30 | 30 | 30 | 30 | 30 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 10/11/13 |
| Organization | BASF |
| Certified by | AeroMet Date 9/18/13 |

Continue on reverse side

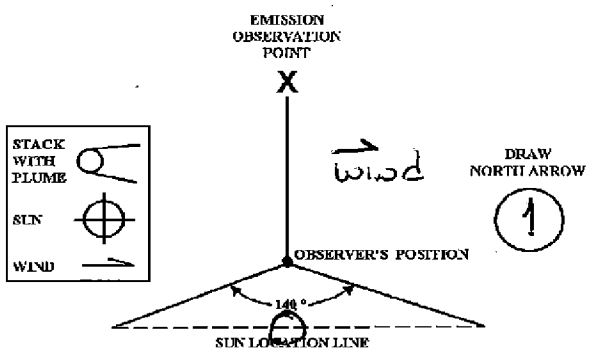
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 30 | 30 | 30 | 25 | |
| 32 | 25 | 25 | 25 | 25 | |
| 33 | 25 | 20 | 20 | 20 | |
| 34 | 20 | 20 | 20 | 20 | |
| 35 | 20 | 20 | 20 | 20 | |
| 36 | 20 | 20 | 20 | 20 | |
| 37 | 20 | 20 | 20 | 20 | |
| 38 | 20 | 20 | 20 | 20 | |
| 39 | 20 | 20 | 20 | 20 | |
| 40 | 20 | 20 | 20 | 20 | |
| 41 | 20 | 20 | 20 | 20 | |
| 42 | 20 | 20 | 20 | 20 | |
| 43 | 20 | 20 | 20 | 20 | |
| 44 | 20 | 20 | 20 | 20 | |
| 45 | 20 | 20 | 20 | 20 | |
| 46 | 20 | 20 | 20 | 20 | |
| 47 | 20 | 20 | 20 | 20 | |
| 48 | 20 | 20 | 20 | 20 | |
| 49 | 20 | 20 | 20 | 20 | |
| 50 | 20 | 20 | 20 | 20 | |
| 51 | 20 | 20 | 20 | 20 | |
| 52 | 20 | 20 | 20 | 20 | |
| 53 | 20 | 20 | 20 | 20 | |
| 54 | 20 | 20 | 20 | 20 | |
| 55 | 20 | 20 | 20 | 20 | |
| 56 | 20 | 20 | 20 | 20 | |
| 57 | 20 | 20 | 20 | 20 | |
| 58 | 20 | 20 | 20 | 20 | |
| 59 | 20 | 20 | 20 | 20 | |
| 60 | 20 | 20 | 20 | 20 | |
| | | | | | |
| | | | | | |

**Additional Information** AI-3917 / <10 lbs/ha

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | R.C # 2 & #3 |
| Operating Mode | Running |
| Control Equipment | CTO |
| Operating Mode | Running |
| Describe Emission Point | Stack of CTO |
| Height of Emission Point | |
| Height Relative to Observer | Start 15' End 15' |
| Distance to Emission Point | Start 25' End 25' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack Exit End Stack Exit |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 70 End 71 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 10/1/2013 | 1015 | 1115 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | Highest 6 |
| 14 | 0 | 0 | 0 | 0 | Minute |
| 15 | 0 | 0 | 0 | 0 | Average |
| 16 | 0 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Argyle |
| Observer's Signature | |
| Date | 10-1-13 |
| Organization | BASF |
| Certified by | AeroMet |
| Date | 9/18/13 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information | | | |
|---|---|---|---|
| | RC#2 | AL 3945 | 525 lbs/hr |
| | | | |
| | | | |
| | RC#3 | D 1794 | 377 lbs/hr |
| | | | |

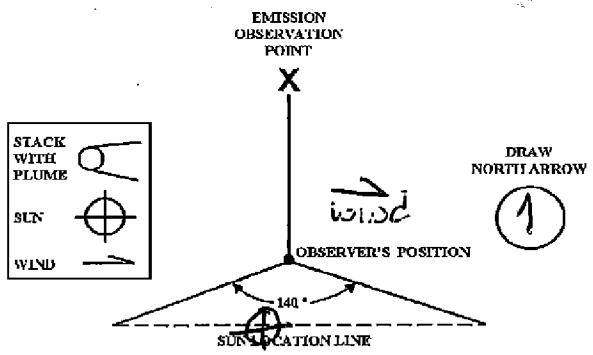
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corporation |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | Rotary Calciner 4 |
| Operating Mode | Running |
| Control Equipment | Trimer |
| Operating Mode | Running |
| Describe Emission Point | Stack of Trimer |
| Height of Emission Point | |
| Height Relative to Observer | Start 10' End 10' |
| Distance to Emission Point | Start 20' End 20' |
| Direction to Emission Point | Start NE End NE |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack exit End Stack exit |
| Describe Plume Background | Start Foliage End Foliage |
| Background Color | Start Green End Green |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 70 End 70 |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 10-1-2013 | 0909 | 1009 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 5 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | Highest |
| 22 | 0 | 0 | 0 | 0 | six minute |
| 23 | 0 | 0 | 0 | 0 | Average <1 |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | |
| Date | 10/1/13 |
| Organization | BASF |
| Certified by | Aero Met |
| Date | 9/18/13 |

Additional Information

Continue on reverse side

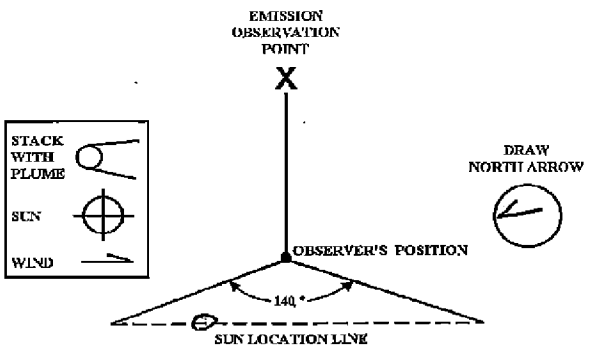
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| D-0222 - 150 lbs/hr |
| |
| |
| |
| |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Elyria Plant |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #1 |
| Operating Mode | Running |
| Control Equipment | TriMer |
| Operating Mode | Running |
| Describe Emission Point | TriMer stack on roof of Building 31 |
| Height of Emission Point | 35' |
| Height Relative to Observer | Start 5' End 5' |
| Distance to Emission Point | Start 20' End 20' |
| Direction to Emission Point | Start W End W |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Foliage End Foliage |
| Background Color | Start Green End Green |
| Sky Condition | Start PC End PC |
| Wind Speed | Start 0 End 0 |
| Wind Direction | Start End |
| Ambient Temp | Start 80° End 80° |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 09/09/13 | 1400 | 1500 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | Highest 6 minute |
| 4 | 0 | 0 | 0 | 0 | Average = 0 |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | [signature] |
| Date | 9/9/13 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 3/20/13 |

Continue on reverse side

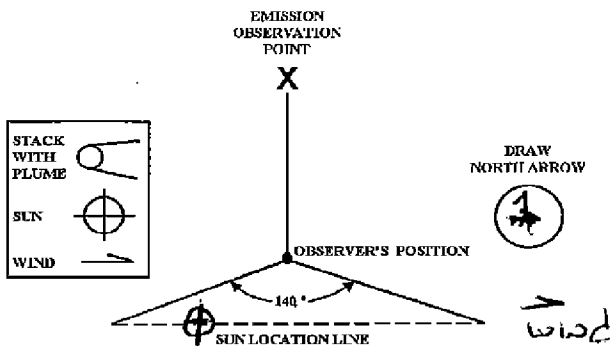
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| AI 3952 - <10 lbs/hr |
| |
| |
| |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corp. |
| Location | Elyria Plant 120 Pine St. |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#2 & RC#3 |
| Operating Mode | Running |
| Control Equipment | CTO |
| Operating Mode | Running |
| Describe Emission Point | Roof Building 16 |
| Height of Emission Point | 50' |
| Height Relative to Observer | Start 10' End 10' |
| Distance to Emission Point | Start 30' End 30' |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start PC End PC |
| Wind Speed | Start 1-5 End 1-5 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 75°F End 75°F |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 9-5-13 | 1000 | 1100 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Aaglin |
| Observer's Signature | Date 9-5-13 |
| Organization | BASF |
| Certified by | Date |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| RC# 2 A1 3925 - <10 lbs/hr |
| |
| RC# 3 D 0795 - <10 lbs/hr |
| |
| |

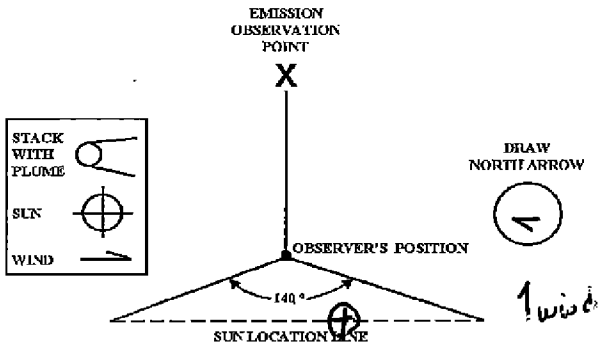
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | BASF Elyria |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC#4 |
| Operating Mode | Running |
| Control Equipment | TRIMER |
| Operating Mode | Running |
| Describe Emission Point | Stack on Roof Bldg. 31 |
| Height of Emission Point | 40 |
| Height Relative to Observer | Start 5 End 5 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start End |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start white End white |
| Emission Color | Start white End white |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start End |
| Describe Plume Background | Start Stack End Stack |
| Background Color | Start green End green |
| Sky Condition | Start cloudy End cloudy |
| Wind Speed | Start <5 End <5 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 80°F End 80°F |
| Wet Bulb Temp | |
| RH Percent | |

Observation Date 8/23/13 | Start Time 1005 | End Time 1105

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 5 | 5 | 5 | 10 | |
| 2 | 10 | 10 | 5 | 5 | |
| 3 | 5 | 5 | 10 | 10 | |
| 4 | 10 | 10 | 10 | 10 | |
| 5 | 15 | 10 | 10 | 10 | |
| 6 | 10 | 10 | 10 | 10 | |
| 7 | 10 | 10 | 10 | 10 | |
| 8 | 5 | 5 | 5 | 5 | |
| 9 | 5 | 5 | 5 | 10 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 10 | 10 | 10 | |
| 13 | 10 | 10 | 10 | 10 | |
| 14 | 10 | 10 | 10 | 10 | Highest six |
| 15 | 10 | 10 | 10 | 10 | minute average |
| 16 | 10 | 10 | 10 | 10 | is 10% |
| 17 | 10 | 10 | 10 | 10 | |
| 18 | 10 | 10 | 10 | 10 | |
| 19 | 10 | 10 | 10 | 10 | |
| 20 | 10 | 10 | 10 | 10 | |
| 21 | 10 | 10 | 10 | 10 | |
| 22 | 10 | 10 | 10 | 10 | |
| 23 | 5 | 10 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 10 | 10 | 10 | 10 | |
| 26 | 10 | 10 | 10 | 10 | |
| 27 | 10 | 10 | 10 | 10 | |
| 28 | 10 | 10 | 10 | 10 | |
| 29 | 10 | 10 | 10 | 10 | |
| 30 | 10 | 10 | 10 | 10 | |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 8/28/13 |
| Organization | BASF Corp. |
| Certified by | Aeromet — Date 3/20/13 |

Additional Information

Continue on reverse side

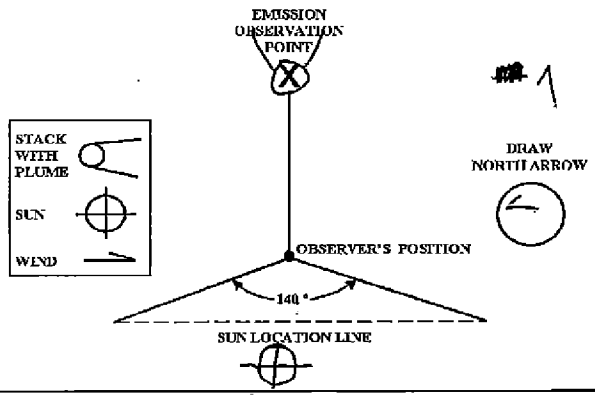
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 10 | 10 | 10 | 10 | |
| 32 | 10 | 10 | 10 | 10 | |
| 33 | 10 | 15 | 10 | 10 | |
| 34 | 5 | 5 | 5 | 5 | |
| 35 | 5 | 10 | 10 | 10 | |
| 36 | 5 | 10 | 10 | 10 | |
| 37 | 10 | 10 | 10 | 10 | |
| 38 | 10 | 10 | 10 | 10 | |
| 39 | 10 | 10 | 10 | 10 | |
| 40 | 10 | 10 | 10 | 10 | |
| 41 | 10 | 10 | 10 | 10 | |
| 42 | 5 | 10 | 10 | 10 | |
| 43 | 10 | 15 | 10 | 10 | |
| 44 | 10 | 10 | 10 | 10 | |
| 45 | 10 | 10 | 10 | 10 | |
| 46 | 10 | 10 | 10 | 10 | |
| 47 | 10 | 10 | 10 | 10 | |
| 48 | 10 | 10 | 10 | 10 | |
| 49 | 10 | 10 | 10 | 10 | |
| 50 | 10 | 10 | 10 | 10 | |
| 51 | 10 | 5 | 10 | 10 | |
| 52 | 15 | 10 | 10 | 10 | |
| 53 | 10 | 10 | 10 | 10 | |
| 54 | 10 | 10 | 10 | 10 | |
| 55 | 10 | 10 | 10 | 10 | |
| 56 | 10 | 10 | 10 | 10 | |
| 57 | 10 | 10 | 10 | 10 | |
| 58 | 10 | 10 | 10 | 10 | |
| 59 | 10 | 10 | 10 | 10 | |
| 60 | 10 | 10 | 10 | 10 | |
| | | | | | |
| | | | | | |

**Additional Information** Cu 0226 190 lbs/hr

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | BASF |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #1 |
| Operating Mode | |
| Control Equipment | TRIMER |
| Operating Mode | |
| Describe Emission Point | Stack on Roof of Building 31 |
| Height of Emission Point | 30 |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 30 End 30 |
| Direction to Emission Point | Start E End E |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start E End E |
| Describe Emissions | Start white End white |
| Emission Color | Start white End white |
| If Water Droplet Plume (Circle) | Attached ✓ Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Trees End Trees |
| Background Color | Start Green End Green |
| Sky Condition | Start Cloudy End Cloudy |
| Wind Speed | Start 1-5 End 1-5 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 80° End 80° |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 6/26/13 | 1010 | 1110 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 50 | 50 | 50 | 50 | |
| 2 | 60 | 50 | 50 | 50 | |
| 3 | 60 | 60 | 60 | 60 | |
| 4 | 50 | 50 | 50 | 50 | |
| 5 | 50 | 50 | 50 | 50 | |
| 6 | 50 | 50 | 50 | 50 | Highest Average |
| 7 | 60 | 60 | 60 | 60 | 55% |
| 8 | 60 | 60 | 60 | 60 | |
| 9 | 50 | 50 | 50 | 50 | |
| 10 | 50 | 50 | 50 | 50 | |
| 11 | 50 | 50 | 50 | 50 | |
| 12 | 60 | 60 | 60 | 60 | |
| 13 | 65 | 60 | 60 | 60 | |
| 14 | 55 | 60 | 60 | 55 | |
| 15 | 50 | 60 | 60 | 55 | |
| 16 | 60 | 60 | 60 | 60 | |
| 17 | 40 | 40 | 45 | 50 | |
| 18 | 50 | 50 | 50 | 50 | |
| 19 | 55 | 60 | 60 | 60 | |
| 20 | 45 | 50 | 45 | 50 | |
| 21 | 45 | 45 | 45 | 45 | |
| 22 | 40 | 40 | 40 | 40 | |
| 23 | 40 | 35 | 40 | 40 | |
| 24 | 35 | 35 | 35 | 35 | |
| 25 | 35 | 35 | 35 | 35 | |
| 26 | 30 | 30 | 30 | 30 | |
| 27 | 30 | 30 | 30 | 30 | |
| 28 | 40 | 40 | 45 | 40 | |
| 29 | 50 | 55 | 55 | 50 | |
| 30 | 50 | 45 | 45 | 50 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | |
| Date | 6/26/13 |
| Organization | BASF |
| Certified by | Aeromet |
| Date | 3/20/13 |

Continue on reverse side

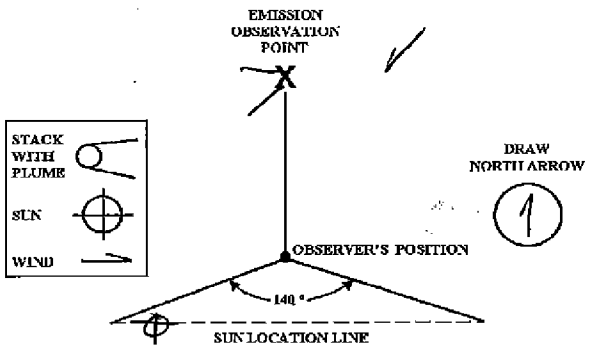
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 50 | 55 | 60 | 60 | |
| 32 | 45 | 50 | 50 | 60 | |
| 33 | 60 | 60 | 60 | 60 | |
| 34 | 50 | 30 | 30 | 35 | |
| 35 | 30 | 25 | 30 | 30 | |
| 36 | 50 | 50 | 50 | 50 | |
| 37 | 45 | 50 | 55 | 50 | |
| 38 | 50 | 50 | 50 | 50 | |
| 39 | 50 | 55 | 60 | 55 | |
| 40 | 55 | 50 | 50 | 50 | |
| 41 | 45 | 35 | 40 | 40 | |
| 42 | 40 | 40 | 40 | 40 | |
| 43 | 30 | 30 | 25 | 30 | |
| 44 | 30 | 30 | 30 | 30 | |
| 45 | 25 | 30 | 30 | 30 | |
| 46 | 35 | 30 | 30 | 30 | |
| 47 | 25 | 25 | 25 | 25 | |
| 48 | 25 | 25 | 25 | 25 | |
| 49 | 25 | 25 | 30 | 25 | |
| 50 | 25 | 25 | 25 | 30 | |
| 51 | 25 | 20 | 20 | 20 | |
| 52 | 20 | 20 | 20 | 20 | |
| 53 | 20 | 20 | 20 | 20 | |
| 54 | 20 | 20 | 20 | 20 | |
| 55 | 25 | 25 | 20 | 20 | |
| 56 | 20 | 20 | 20 | 20 | |
| 57 | 20 | 20 | 20 | 20 | |
| 58 | 20 | 20 | 15 | 20 | |
| 59 | 20 | 20 | 20 | 20 | |
| 60 | 25 | 25 | 30 | 25 | |
| | | | | | |
| | | | | | |

| Additional Information | D1765 | 195 lbs/hr |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | BASF Elyria Plant, 120 Pine St. |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RL #4 |
| Operating Mode | Running |
| Control Equipment | Tri Mer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Stack on Roof of 2nd Floor of Bldg. 31 |
| Height of Emission Point | 30' |
| Height Relative to Observer | Start 10 End 10 |
| Distance to Emission Point | Start 30 End 30 |
| Direction to Emission Point | Start N End N |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start N End N |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start Clear End Clear |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Blue End Blue |
| Sky Condition | Start Clear End Clear |
| Wind Speed | Start <5 End <5 |
| Wind Direction | Start SW End SW |
| Ambient Temp | Start 75 End 75 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 5/13/13 | 1324 | 1424 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 10 | 10 | 10 | 10 | Highest Average |
| 2 | 10 | 10 | 10 | 10 | 10% |
| 3 | 10 | 10 | 10 | 10 | |
| 4 | 10 | 10 | 10 | 10 | |
| 5 | 10 | 10 | 10 | 10 | |
| 6 | 10 | 10 | 10 | 10 | |
| 7 | 10 | 10 | 10 | 10 | |
| 8 | 10 | 10 | 10 | 10 | |
| 9 | 10 | 10 | 10 | 10 | |
| 10 | 10 | 10 | 10 | 10 | |
| 11 | 10 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Axlin |
| Observer's Signature | Date 5/15/13 |
| Organization | BASF |
| Certified by | Aeromet — Date 3/20/13 |

Continue on reverse side

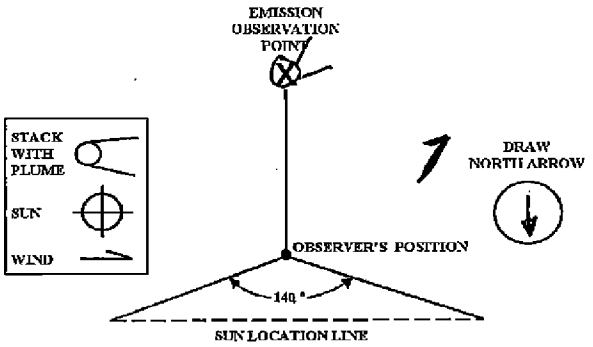
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | |

| Additional Information |
|---|
| DS206 - <100 lbs/hr |
| |
| |
| |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | BASF Elyria Plant 120 Pine St. |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC #2 and #3 |
| Operating Mode | |
| Control Equipment | CTO/SCR |
| Operating Mode | |
| Describe Emission Point | CTO/SCR stack on top of Bldg 16 |
| Height of Emission Point | 40' |
| Height Relative to Observer | Start 30 End 30 |
| Distance to Emission Point | Start 100 End 100 |
| Direction to Emission Point | Start S End S |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Clear End Clear |
| Emission Color | Start End |
| If Water Droplet Plume (Circle) | Attached Detached (N/A) |
| Point In The Plume At Which Opacity Was Determined | Start Stack End Stack |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start Clouds End Clouds |
| Sky Condition | Start Cloudy End Cloudy |
| Wind Speed | Start <5 End <5 |
| Wind Direction | Start SW End SW |
| Ambient Temp | Start 75 End 75 |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 5/15/13 | 0948 | 1048 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 5 | 5 | 5 | 5 | Average 5% |
| 2 | 5 | 5 | 5 | 5 | |
| 3 | 5 | 5 | 5 | 5 | |
| 4 | 5 | 5 | 5 | 5 | |
| 5 | 5 | 5 | 5 | 5 | |
| 6 | 5 | 5 | 5 | 5 | |
| 7 | 5 | 5 | 5 | 5 | |
| 8 | 5 | 5 | 5 | 5 | |
| 9 | 5 | 5 | 5 | 5 | |
| 10 | 5 | 5 | 5 | 5 | |
| 11 | 5 | 5 | 5 | 5 | |
| 12 | 5 | 5 | 5 | 5 | |
| 13 | 5 | 5 | 5 | 5 | |
| 14 | 5 | 5 | 5 | 5 | |
| 15 | 5 | 5 | 5 | 5 | |
| 16 | 5 | 5 | 5 | 5 | |
| 17 | 5 | 5 | 5 | 5 | |
| 18 | 5 | 5 | 5 | 5 | |
| 19 | 5 | 5 | 5 | 5 | |
| 20 | 5 | 5 | 5 | 5 | |
| 21 | 5 | 5 | 5 | 5 | |
| 22 | 5 | 5 | 5 | 5 | |
| 23 | 5 | 5 | 5 | 5 | |
| 24 | 5 | 5 | 5 | 5 | |
| 25 | 5 | 5 | 5 | 5 | |
| 26 | 5 | 5 | 5 | 5 | |
| 27 | 5 | 5 | 5 | 5 | |
| 28 | 5 | 5 | 5 | 5 | |
| 29 | 5 | 5 | 5 | 5 | |
| 30 | 5 | 5 | 5 | 5 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | [signature] Date 5/15/13 |
| Organization | BASF |
| Certified by | AEROMET Date 3/20/13 |

Continue on reverse side

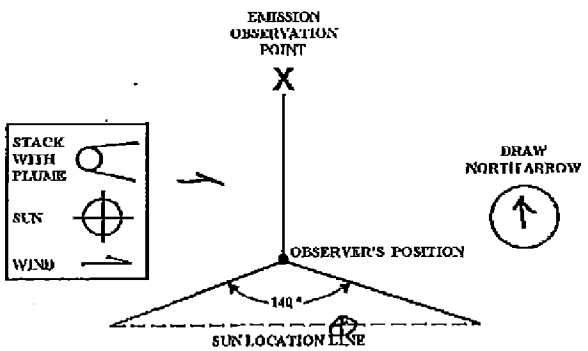
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 5 | 5 | 5 | 5 | |
| 32 | 5 | 5 | 5 | 5 | |
| 33 | 5 | 5 | 5 | 5 | |
| 34 | 5 | 5 | 5 | 5 | |
| 35 | 5 | 5 | 5 | 5 | |
| 36 | 5 | 5 | 5 | 5 | |
| 37 | 5 | 5 | 5 | 5 | |
| 38 | 5 | 5 | 5 | 5 | |
| 39 | 5 | 5 | 5 | 5 | |
| 40 | 5 | 5 | 5 | 5 | |
| 41 | 5 | 5 | 5 | 5 | |
| 42 | 5 | 5 | 5 | 5 | |
| 43 | 5 | 5 | 5 | 5 | |
| 44 | 5 | 5 | 5 | 5 | |
| 45 | 5 | 5 | 5 | 5 | |
| 46 | 5 | 5 | 5 | 5 | |
| 47 | 5 | 5 | 5 | 5 | |
| 48 | 5 | 5 | 5 | 5 | |
| 49 | 5 | 5 | 5 | 5 | |
| 50 | 5 | 5 | 5 | 5 | |
| 51 | 5 | 5 | 5 | 5 | |
| 52 | 5 | 5 | 5 | 5 | |
| 53 | 5 | 5 | 5 | 5 | |
| 54 | 5 | 5 | 5 | 5 | |
| 55 | 5 | 5 | 5 | 5 | |
| 56 | 5 | 5 | 5 | 5 | |
| 57 | 5 | 5 | 5 | 5 | |
| 58 | 5 | 5 | 5 | 5 | |
| 59 | 5 | 5 | 5 | 5 | |
| 60 | 5 | 5 | 5 | 5 | |
| | 5 | 5 | 5 | 5 | |
| | 5 | 5 | 5 | 5 | |

| Additional Information | | | |
|---|---|---|---|
| | RC #2 | D0768 / | 360 lbs/hr |
| | | | |
| | RC #3 | Selexorb | 90lbs/hr |
| | | | |
| | | | |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC-2 |
| Operating Mode | Running |
| Control Equipment | SCR / CTO |
| Operating Mode | Running |
| Describe Emission Point | Stack Exit |
| Height of Emission Point | 40 |
| Height Relative to Observer | Start 5 End 5 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start End |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Continuous End Continuous |
| Emission Color | Start white End white |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start End End |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start blue End blue |
| Sky Condition | Start End |
| Wind Speed | Start 0-5 End 0-5 |
| Wind Direction | Start W End W |
| Ambient Temp | Start 30° End 30° |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 3/22/13 | 1030 | 1130 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 03/22/13 |
| Organization | BASF |
| Certified by | Aeromet — Date 03/20/13 |

Continue on reverse side

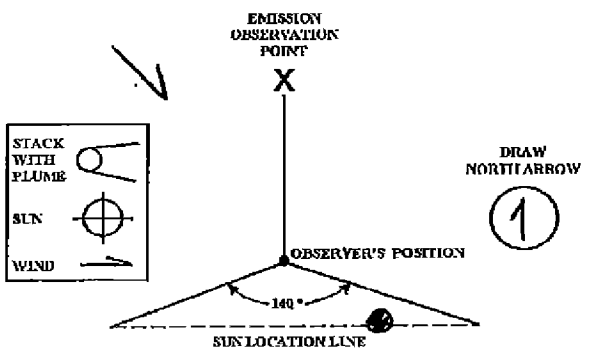
| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | 0 | | | | |
| | | | | | |

| Additional Information |
|---|
| |
| |
| |
| |

# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF Corp. |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC-4, RC-3 |
| Operating Mode | Running |
| Control Equipment | Tri-Mer Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Stack Exit |
| Height of Emission Point | 60 |
| Height Relative to Observer | Start 5 End 5 |
| Distance to Emission Point | Start 30 End 30 |
| Direction to Emission Point | Start End |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start Continous End Continous |
| Emission Color | Start white End white |
| If Water Droplet Plume (Circle) | Attached Detached N/A |
| Point In The Plume At Which Opacity Was Determined | Start End End |
| Describe Plume Background | Start Sky End Sky |
| Background Color | Start blue End blue |
| Sky Condition | Start End |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start WSW End WSW |
| Ambient Temp | Start 25° End 25° |
| Wet Bulb Temp | |
| RH Percent | |

## SOURCE LAYOUT SKETCH




Additional Information

| Observation Date | Start Time | End Time |
|---|---|---|
| 3/21/13 | 0915 | 1000 |

| Sec / Min | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | ZERO OPACITY OBSERVED |

| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 3/21/13 |
| Organization | BASF |
| Certified by | Aeromet — Date 3/20/13 |

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | 0 | 0 | 0 | 0 | |
| 32 | 0 | 0 | 0 | 0 | |
| 33 | 0 | 0 | 0 | 0 | |
| 34 | 0 | 0 | 0 | 0 | |
| 35 | 0 | 0 | 0 | 0 | |
| 36 | 0 | 0 | 0 | 0 | |
| 37 | 0 | 0 | 0 | 0 | |
| 38 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 0 | 0 | |
| 40 | 0 | 0 | 0 | 0 | |
| 41 | 0 | 0 | 0 | 0 | |
| 42 | 0 | 0 | 0 | 0 | |
| 43 | 0 | 0 | 0 | 0 | |
| 44 | 0 | 0 | 0 | 0 | |
| 45 | 0 | 0 | 0 | 0 | |
| 46 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 0 | 0 | 0 | |
| 48 | 0 | 0 | 0 | 0 | |
| 49 | 0 | 0 | 0 | 0 | |
| 50 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 0 | 0 | |
| 52 | 0 | 0 | 0 | 0 | |
| 53 | 0 | 0 | 0 | 0 | |
| 54 | 0 | 0 | 0 | 0 | |
| 55 | 0 | 0 | 0 | 0 | |
| 56 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | |
| 58 | 0 | 0 | 0 | 0 | |
| 59 | 0 | 0 | 0 | 0 | |
| 60 | 0 | 0 | 0 | 0 | |
| | | | | | |
| | | | | | ZERO opacity observed |

| Additional Information |
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| |
| |
| |

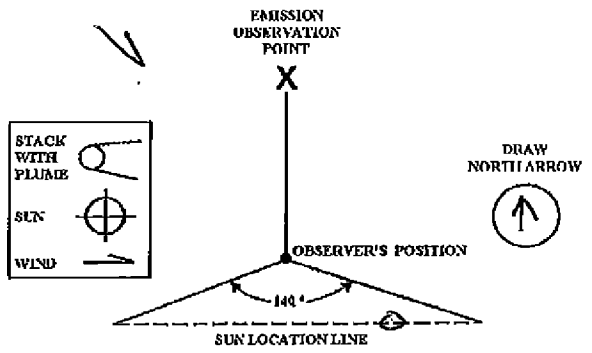
# VISIBLE EMISSION OBSERVATION FORM

| | |
|---|---|
| Company Name | BASF |
| Location | 120 Pine Street |
| City | Elyria |
| State | OH |
| Zip | 44035 |
| Process Equipment | RC-1 |
| Operating Mode | Running |
| Control Equipment | F-1 Scrubber |
| Operating Mode | Running |
| Describe Emission Point | Stack exit |
| Height of Emission Point | 70 |
| Height Relative to Observer | Start 20 End 20 |
| Distance to Emission Point | Start 20 End 20 |
| Direction to Emission Point | Start End |
| Vertical Angle to Observation Pt. | Start End |
| Direction to Observation Point | Start End |
| Describe Emissions | Start continuous End continuous |
| Emission Color | Start white End white |
| If Water Droplet Plume (Circle) | Attached (Detached) N/A |
| Point In The Plume At Which Opacity Was Determined | Start stack exit End stack exit |
| Describe Plume Background | Start sky End sky |
| Background Color | Start blue End blue |
| Sky Condition | Start End |
| Wind Speed | Start 5-10 End 5-10 |
| Wind Direction | Start WSW End WSW |
| Ambient Temp | Start 25° End 25° |
| Wet Bulb Temp | |
| RH Percent | |

| Observation Date | Start Time | End Time |
|---|---|---|
| 3/21/13 | 0715 | 1015 |

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | |
| 2 | 0 | 0 | 0 | 0 | |
| 3 | 0 | 0 | 0 | 0 | |
| 4 | 0 | 0 | 0 | 0 | |
| 5 | 0 | 0 | 0 | 0 | |
| 6 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | |
| 12 | 0 | 0 | 0 | 0 | |
| 13 | 0 | 0 | 0 | 0 | |
| 14 | 0 | 0 | 0 | 0 | |
| 15 | 0 | 0 | 0 | 0 | |
| 16 | 0 | 0 | 0 | 0 | |
| 17 | 0 | 0 | 0 | 0 | |
| 18 | 0 | 0 | 0 | 0 | |
| 19 | 0 | 0 | 0 | 0 | |
| 20 | 0 | 0 | 0 | 0 | |
| 21 | 0 | 0 | 0 | 0 | |
| 22 | 0 | 0 | 0 | 0 | |
| 23 | 0 | 0 | 0 | 0 | |
| 24 | 0 | 0 | 0 | 0 | |
| 25 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 0 | 0 | 0 | |
| 27 | 0 | 0 | 0 | 0 | |
| 28 | 0 | 0 | 0 | 0 | |
| 29 | 0 | 0 | 0 | 0 | |
| 30 | 0 | 0 | 0 | 0 | ZERO OPACITY OBSERVED |

## SOURCE LAYOUT SKETCH




| | |
|---|---|
| Observer's Name (Print) | Timothy Anglin |
| Observer's Signature | Date 3/21/13 |
| Organization | BASF |
| Certified by | Aeroment Date 3/20/13 |

Additional Information

Continue on reverse side

| Min \ Sec | 0 | 15 | 30 | 45 | Comments |
|---|---|---|---|---|---|
| 31 | O | O | O | O | |
| 32 | O | O | O | O | |
| 33 | O | O | O | O | |
| 34 | O | O | O | O | |
| 35 | O | O | O | O | |
| 36 | O | O | O | O | |
| 37 | O | O | O | O | |
| 38 | O | O | O | O | |
| 39 | O | O | O | O | |
| 40 | O | O | O | O | |
| 41 | O | O | O | O | |
| 42 | O | O | O | O | |
| 43 | O | O | O | O | |
| 44 | O | O | O | O | |
| 45 | O | O | O | O | |
| 46 | O | O | O | O | |
| 47 | O | O | O | O | |
| 48 | O | O | O | O | |
| 49 | O | O | O | O | |
| 50 | O | O | O | O | |
| 51 | O | O | O | O | |
| 52 | O | O | O | O | |
| 53 | O | O | O | O | |
| 54 | O | O | O | O | |
| 55 | O | O | O | O | |
| 56 | O | O | O | O | |
| 57 | O | O | O | O | |
| 58 | O | O | O | O | |
| 59 | O | O | O | O | |
| 60 | O | O | O | O | |
| | | | | | |
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| Additional Information |
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