

United States Steel Corporation Clairton Plant 400 State Street Clairton, PA 15025

September 07, 2023

Mr. Gary Ficshman
Coke Oven Engineer
Allegheny County Health Department
Department of Air Quality
301 Thirty-ninth Street
Pittsburgh, PA 15201

Subject:

**USS Clairton Works** 

Process Information Title V Permit 0052

Dear Sir:

The attached forms list Clairton Plant coking and desulfurization process information for the month of August, 2023. This satisfies the requirements of paragraphs IV.29, V.A.5.a, V.C.5.a, V.E.5.a, and V.N.5.c of the Title V operating permit #0052 as issued on March 27, 2012.

I certify that based on the information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete. Any questions concerning this matter should be referred to Michael Dzurinko at 412-233-1467.

Sincerely,

Mark A. Jeffery Plant Manager

Clairton Works

#### MONTHLY REPORT TO ALLEGHENY COUNTY HEALTH DEPARTMENT BUREAU OF AIR POLLUTION CONTROL COKE PLANT OPERATION DATA

USS CORPORATION - USS CLAIRTON WORKS (Please print or type)

BAPC Use Only

Month:

8

Year:

2023

Date Received:

(to be received by the Bureau no later than 20 days after the end of each month)

#### DAILY AVERAGE FOR THE MONTH

| Coal Charged (Tons) Coke Produced (Tons) Total COG Produced (MMCF) Quench Water Used (Gallons) Elemental Sulfur Produced (Tons) Sulfur Content of Coal (%) | 8,586<br>151.1<br>1,417,000<br>31.3<br>1.01 | (Estimated) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------|
| Sulfur Content of Coke (%)                                                                                                                                 | 0.82                                        |             |

#### PUSHING CONTROL SYSTEM(S) - MONTHLY AVAILABILITY

|                                                               | Total Pushes                 | Total Pushes<br>Controlled   | % of Pushes<br>Controlled              |
|---------------------------------------------------------------|------------------------------|------------------------------|----------------------------------------|
| System 13,14,15<br>System 19,20<br>"B" Battery<br>"C" Battery | 4100<br>5652<br>2583<br>3040 | 4099<br>5640<br>2583<br>3040 | 99.98%<br>99.79%<br>100.00%<br>100.00% |
| Total                                                         | 15375                        | 15362                        | 99.92%                                 |

#### **PUSHING CONTROL OUTAGE SUMMARY \***

| System    | Start<br>Date | Time | End<br>Date     | Time | Hrs.<br>Out | # Ovens<br>Not PEC | USS<br>BRKDWN# | Reason(s) for Outage                        |
|-----------|---------------|------|-----------------|------|-------------|--------------------|----------------|---------------------------------------------|
| System    | Date          | Time | Fed (March Co.) |      | 2.00        | 40                 | 22 0012        | ACHD# 22599; PEC Hood Out of Service Due to |
| 19 20 PEC | 24-Aug-23     | 1405 | 24-Aug-23       | 1717 | 3.20        | 12                 | 23-0013        | Anti-Tip Fault                              |

#### CONTAMINATED WATER (C. W.) QUENCHING SUMMARY \*

|             |            |             |      |             |                 | Avg. C.W. ( | GPM) to:           |                     |
|-------------|------------|-------------|------|-------------|-----------------|-------------|--------------------|---------------------|
| Sta<br>Date | rt<br>Time | End<br>Date | Time | Hrs.<br>Out | BAPC<br>BRKDWN# | Quench      | Treatment<br>Plant | Cause of C.W. Usage |

Total:

<sup>\*</sup> Attach additional pages if necessary

#### MONTHLY REPORT TO ALLEGHENY COUNTY HEALTH DEPARTMENT BUREAU OF AIR POLLUTION CONTROL DESULFURIZATION PLANT DATA

USS CORPORATION - USS CLAIRTON WORKS (Please print or type)

BAPC Use Only

Month: for

Year:

2023

Date Received: (to be received by the Bureau no later than 20 days after the end of each month)

#### H2S OR EQUIVALENT H2S (GR./100 DSCF) IN:

| Date | % 0      |            | 2<br>G Clean COG<br>6.7 | 3<br>Tail Gas<br>0.4 | 2 + 3<br>7.1  | Date<br>17   | 10 100 | 2<br>COG Clean COG<br>6.5 | 3<br>Tail Gas<br>0.2 | 2 + 3<br>6.7 |
|------|----------|------------|-------------------------|----------------------|---------------|--------------|--------|---------------------------|----------------------|--------------|
|      | 1        | 3.5<br>3.6 | 6.8                     | 0.4                  | 7.0           | 18           |        | 7.4                       | 0.2<br>0.2           | 7.6<br>7.8   |
|      | 3        | 3.7        | 7.3                     | 0.3                  | 7.7           | 19<br>20     |        | 7.6<br>7.7                | 0.2                  | 8.1          |
|      | 4        | 3.7        | 7.7<br>7.3              | 0.3<br>0.3           | 8.0<br>7.6    | 2            |        | 7.3                       | 0.3                  | 7.5          |
|      | 5<br>6   | 3.7<br>3.8 | 7.3<br>7.2              | 0.4                  | 7.7           | 22           |        | 5.7                       | 0.3<br>0.3           | 6.0<br>5.2   |
|      | 7        | 3.6        | 6.7                     | 0.3                  | 7.0           | 23<br>24     |        | 4.9<br>5.6                | 0.3                  | 5.8          |
|      | 8        | 3.7        | 7.1                     | 0.4<br>0.4           | 7.5<br>7.1    | 2:           |        | 6.4                       | 0.2                  | 6.6          |
|      | 9<br>10  | 3.7<br>3.8 | 6.6<br>7.4              | 0.4                  | 7.9           | 2            |        | 6.6                       | 0.3                  | 6.9<br>6.7   |
|      | 11       | 3.8        | 7.9                     | 0.4                  | 8.3           | 2            |        | 6.4<br>5.9                | 0.4<br>0.6           | 6.5          |
|      | 12       | N/A        | 96.3                    | 0.0<br>0.0           | 96.3<br>107.6 | 2            | F      | 5.3                       | 0.2                  | 5.5          |
|      | 13<br>14 | N/A<br>2.2 | 107.6<br>6.9            | 0.0                  | 7.0           | 3            | 0 3.4  | 6.2                       | 0.3                  | 6.5<br>6.2   |
|      | 15<br>16 | 3.6        | 6.7<br>4.7              | 0.1<br>0.0           | 6.7<br>4.7    | 3<br>Avg. Mo |        | 6.1<br>12.8               | 0.2<br>0.3           | 13.1         |

Plant Std. Gr. H2S/100 DSCF

35

# of Days that [2+3] Exceeded Std. NA - Stack analyzer down

### DESULFURIZATION PLANT OUTAGE SUMMARY \*\*\*

| Start Date Time 12-Aug-23 0415 | End<br>Date<br>13-Aug-23 | Time2130 | Hrs.<br>Out<br>41.25 | 20 0011 | Cause  ACHD# 22595; The Clairton Plant suddenly and unexpectedly lost all electrical power to the plant due to a lightning strike affecting the Clairton Plant Power Distribution System |
|--------------------------------|--------------------------|----------|----------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|--------------------------------|--------------------------|----------|----------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

\*\* Redundant Equipment or No Environmental Impact

Total:

41.3

Percent Availability of COG Desulf. Plant (Monthly)

94.46%

#### RAW COKE OVEN GAS INCIDENTS

| Date 12-Aug-23 12-Aug-23 12-Aug-23 12-Aug-23                  | 13<br>14<br>19<br>20<br>B | Start<br>Time<br>4:30<br>4:30<br>4:30<br>4:30 | End<br>Time<br>12:15<br>12:15<br>12:15<br>12:15 | Minutes<br>465<br>465<br>465<br>465<br>465 | Seconds  0 0 0 0 0 0 | Flared Yes No Yes Yes Yes Yes Yes Yes Yes | Cause of incident  Loss of Power to Clairton Plant |
|---------------------------------------------------------------|---------------------------|-----------------------------------------------|-------------------------------------------------|--------------------------------------------|----------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12-Aug-23<br>12-Aug-23<br>12-Aug-23<br>13-Aug-23<br>13-Aug-23 |                           |                                               |                                                 |                                            | 0<br>0<br>9<br>2     |                                           |                                                                                                                                                                                    |

<sup>\*\*\*</sup> Desulfurization Plant reporting includes upstream processes which affect overall recovery

# MONTHLY REPORT TO ALLEGHENY COUNTY HEALTH DEPARTMENT BUREAU OF AIR POLLUTION CONTROL COKE PLANT OPERATION DATA USS CORPORATION - USS CLAIRTON WORKS (Please print or type)

| for Month:<br>(to be received by the | 8<br>Bureau no la | Year:<br>iter than 20 days | 2023<br>after the | BAPC Use Only Date Received: end of each month) |  |
|--------------------------------------|-------------------|----------------------------|-------------------|-------------------------------------------------|--|
| for Month:<br>(to be received by the | 8<br>Bureau no la | Year:<br>iter than 20 days |                   |                                                 |  |

#### QUENCH TOWER OUTAGE SUMMARY \*

| System | Start<br>Date | Time | End<br>Date | Time | Hrs.<br>Out | # Ovens USS<br>Not Baffled BRKDWN # | Reason(s) for Outage |
|--------|---------------|------|-------------|------|-------------|-------------------------------------|----------------------|
|--------|---------------|------|-------------|------|-------------|-------------------------------------|----------------------|

<sup>\*</sup> Attach additional pages if necessary

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| for Month:             | 8                | Year:           | 2023                          | BAPC Use Only  |  |
|------------------------|------------------|-----------------|-------------------------------|----------------|--|
| (to be received by the | e Bureau no late | er than 20 days | s after the end of each month | Date Received: |  |
| (10 00 1000            |                  |                 |                               |                |  |

Pushing Control Operation at Reduced Efficiency Summary \*

| System | Start<br>Date | Time | End<br>Date | Time | Hrs.<br>Out | # Ovens USS<br>Reduced Efficiency BRKDWN # | Reason(s) for Outage | _ |
|--------|---------------|------|-------------|------|-------------|--------------------------------------------|----------------------|---|
|--------|---------------|------|-------------|------|-------------|--------------------------------------------|----------------------|---|

<sup>\*</sup> Attach additional pages if necessary

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for Month: 8

Year: 2023

### **Pushing Control Outage Summary**

(1 Hour or Less Duration)

# Ovens

|              |           |      | # Ovens |                                        |
|--------------|-----------|------|---------|----------------------------------------|
| Custom       | Date      | Turn | Not PEC | Reason(s) for Outage                   |
| System       |           |      |         | PEC Hood Out of Service For One Push   |
| 13 14 15 PEC | 25-Aug-23 | 2    | 1       | PEC Hood Out of Service For Other deli |

<sup>\*</sup> Attach additional pages if necessary

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for Month: 8 Year: 2023 (to be received by the Bureau no later than 20 days after the end of each month)

STACK CONTROL SYSTEM(S) - MONTHLY AVAILABILITY

Facility Start Date Time End Date Time Duration Hrs. USS Reference # Reason(s) for Outage

<sup>\*</sup> Attach additional pages if necessary