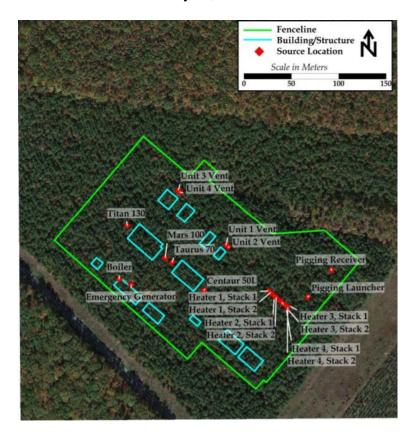
Images and Tables from the New Permit Application for ACP CS#2 and related Air Model Report

(Woods Corner/Union Hill/Buckingham)

July 17, 2018





SUMMARY OF TOTAL POTENTIAL EMISSIONS

| Project Emissions | Annual Emissions (tpy) | | | | | | | |
|---------------------------|------------------------|------|------|------|-----------------|-------------------|--|--|
| Project Emissions | NO_X | CO | VOC | PM | SO ₂ | CO ₂ e | | |
| Application Update (2017) | 46.1 | 86.4 | 32.1 | 43.3 | 7.26 | 317,637 | | |
| Proposed Update (2018) | 34.3 | 51.6 | 7.69 | 43.2 | 8.30 | 295,686 | | |

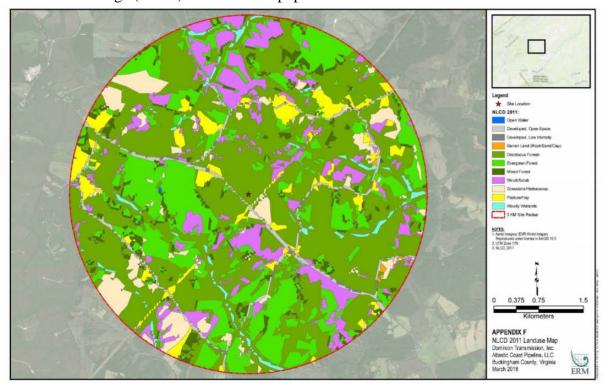
Air Toxics Model Results

| Pollutant | Averaging Period | Scenario | Significant Concentration (µg/m³) | Model Result (µg/m³) |
|--------------|---------------------|-------------------------------------|---|----------------------------|
| Formaldehyde | | 50% Load | | 38.9 |
| | | 75% Load | | 38.9 |
| | 1-hour | 100% Load | 62.5 | 38.9 |
| | | Startup (blended with 50% load) | 02.3 | 40.5 |
| | | Shutdown (blended with 50% load) | | 40.2 |
| | Annual | 50% Load | | 0.081 |
| | | 75% Load | 2.4 | 0.079 |
| | | 100% Load | | 0.076 |
| Hexane | | Pigging (Launching) | | 6,277 |
| | | Pigging (Receiving) | | 6,897 |
| | 1-hour | Purging from Startup Events | 8,800 | 1,370 |
| | | Blowdown from Shutdown Events | | 4,518 |
| | | Normal Operations | | 20 |

TABLE 3.9 FACILITY-WIDE POTENTIAL EMISSIONS (TPY)

| | Criteria Pollutants | | | | | Greenhouse Gases | | | | | | | | |
|------------|---------------------|------|----------|--------|---------|-----------------------|------------------------|---------|-----------------|-----------------|------------------|-------------------|-----------------|---------------|
| Unit ID | NO _x | co | VOC | SO_2 | PM-Filt | PM _{10-Filt} | PM _{2.5-Filt} | PM-Cond | CO ₂ | CH ₄ | N ₂ O | CO ₂ e | NH ₃ | Total HAPs |
| CT-01 | 8.67 | 9.54 | 1.05 | 2.12 | 3.58 | 3.58 | 3.58 | 8.87 | 74,103 | 6.05 | 1.88 | 74,813 | 8.12 | 1.11 |
| CT-02 | 5.72 | 5.85 | 0.687 | 1.40 | 2.37 | 2.37 | 2.37 | 5.86 | 48,911 | 3.96 | 1.24 | 49,381 | 5.77 | 0.900 |
| CT-03 | 10.5 | 13.0 | 1.28 | 2.57 | 4.35 | 4.35 | 4.35 | 10.8 | 89,784 | 7.48 | 2.27 | 90,649 | 10.2 | 1.32 |
| CT-04 | 3.68 | 4.77 | 0.444 | 0.898 | 1.52 | 1.52 | 1.52 | 3.76 | 31,455 | 2.54 | 0.796 | 31,755 | 3.58 | 0.476 |
| WH- | | | | | | | | | | | | | | |
| 01 | 1.37 | 2.30 | 0.151 | 0.091 | 0.052 | 0.052 | 0.052 | 0.156 | 3,290 | 0.063 | 0.060 | 3,309 | 0 | 0.052 |
| LH-01 | 0.929 | 3.44 | 0.501 | 0.304 | 0.112 | 0.112 | 0.112 | 0.335 | 10,935 | 0.210 | 0.200 | 11,000 | 0 | 0.172 |
| LH-02 | 0.929 | 3.44 | 0.501 | 0.304 | 0.112 | 0.112 | 0.112 | 0.335 | 10,935 | 0.210 | 0.200 | 11,000 | 0 | 0.172 |
| LH-03 | 0.929 | 3.44 | 0.501 | 0.304 | 0.112 | 0.112 | 0.112 | 0.335 | 10,935 | 0.210 | 0.200 | 11,000 | 0 | 0.172 |
| LH-04 | 0.929 | 3.44 | 0.501 | 0.304 | 0.112 | 0.112 | 0.112 | 0.335 | 10,935 | 0.210 | 0.200 | 11,000 | 0 | 0.172 |
| EG-01 | 0.599 | 2.40 | 0.599 | 0.012 | 0.144 | 0.144 | 0.144 | 0.037 | 531 | 4.80 | 0 | 651 | 0 | 0.657 |
| FUG- 01 | - | - | 0.421 | - | - | - | - | - | 0.433 | 14.3 | - | 357 | - | 0.026 |
| FUG- 02 | - | - | 0.910 | - | - | - | | - | 0.936 | 30.9 | - | 772 | - | 0.056 |
| TK-1 | - | - | 2.52E-05 | - | - | - | - | - | - | - | - | - | - | 2.52E-05 |
| TK-2 | - | - | 0.146 | - | - | - | - | - | 0.009 | 0.017 | - | 0.439 | - | 0.010 |
| Total | 34.3 | 51.6 | 7.69 | 8.30 | 12.5 | 12.5 | 12.5 | 30.8 | 291,812 | 70.9 | 7.05 | 295,686 | 27.7 | 5.30 |

This land use image (below) erases human populations.



The following table shows woody wetlands in a three kilometer radius.

| ACP - Buckingham Site, Virginia | | | | | | | | |
|---------------------------------|------------------------------|---------|---------|--|--|--|--|--|
| NLCD 2011 (3KM Radius) | | | | | | | | |
| Grid Code | Grid Code Description | Acres | % Total | | | | | |
| 11 | Open water | 1.01 | 0.01% | | | | | |
| 21 | Developed, Open Space | 169.12 | 2.42% | | | | | |
| 22 | Developed, Low Intensi | 24.41 | 0.35% | | | | | |
| 31 | Barren Land | 6.73 | 0.10% | | | | | |
| 41 | Deciduous Forest | 3410.61 | 48.84% | | | | | |
| 42 | Evergreen Forest | 1497.83 | 21.45% | | | | | |
| 43 | Mixed Forest | 293.76 | 4.21% | | | | | |
| 52 | Shrub/Scrub | 709.44 | 10.16% | | | | | |
| 71 | Grassland/Herbaceous | 417.15 | 5.97% | | | | | |
| 81 | Pasture/Hay | 349.61 | 5.01% | | | | | |
| 90 | Woody Wetlands | 103.84 | 1.49% | | | | | |
| TOTAL | | 6983.50 | 100.00% | | | | | |

*UTM Zone 17 N

Look at in the modeling tests. Who lives in this cleared area in the lines?

