# **Air Monitoring Summary Tables**

The table below summarizes monitoring data collected using a portable wireless remote monitoring system. All times in Eastern Standard Time (EST).

#### *From:* 07/20/23 12:00 am

07/20/23 11:59 pm

**Offsite Monitors** 

| Instrument               | Analyte | ATSDR MRL<br>14-day Avg<br>Reached? | Concentration<br>Range Detected <sup>a</sup>          | 24-hr Average <sup>a</sup> | 7-day<br>Average | ATSDR<br>14-day MRL |  |
|--------------------------|---------|-------------------------------------|---|----------------------------|------------------|---------------------|--|
| Catawba Headsta          | art     |                                     |   |                            |                  |                     |  |
| Acrulog PPB              | $H_2S$  | No                                  | 0 - 0 ppb   | 0.00 ppb <sup>b</sup>      | 0.01 ppb         | 70 ppb              |  |
| Treetops                 |         |                                     |   |                            |                  |                     |  |
| Acrulog PPB              | $H_2S$  | No                                  | $0 - 0 \text{ ppb}$ $0.00 \text{ ppb}^{\circ}$ $0.00$ |                            | 0.08 ppb         | 70 ppb              |  |
| Liberty Hill             |         |                                     |   |                            |                  |                     |  |
| Acrulog PPB              | $H_2S$  | No                                  | 0 - 0  ppb 0.00 ppb 0.                                |                            | 0.07 ppb         | 70 ppb              |  |
| <b>Riverchase Estate</b> | es      |                                     |   |                            |                  |                     |  |
| Acrulog PPB              | $H_2S$  | No                                  | $0 - 0 \text{ ppb}$ $0.00 \text{ ppb}^{d}$ $0.0$      |                            | 0.03 ppb         | 70 ppb              |  |
| Millstone Creek          |         |                                     |   |                            |                  |                     |  |
| Acrulog PPB              | $H_2S$  | No                                  | 0-0 ppb   | 0.00 ppb ° 0.01 ppb        |                  | 70 ppb              |  |

To:

<sup>b</sup> The 24-hour average at Catawba Headstart is not represented by the full 24-hour period; a total of 1 30-minute average is missing from the reported period due to routine QC checks performed at this location.

<sup>c</sup> The 24-hour average at Treetops is not represented by the full 24-hour period; a total of 1 30-minute average is missing from the reported period due to routine QC checks performed at this location.

<sup>d</sup> The 24-hour average at Riverchase Estates is not represented by the full 24-hour period; a total of 1 30-minute average is missing from the reported period due to routine QC checks performed at this location.

<sup>e</sup> The 24-hour average at Millstone Creek is not represented by the full 24-hour period; a total of 1 30-minute average is missing from the reported period due to routine QC checks performed at this location.

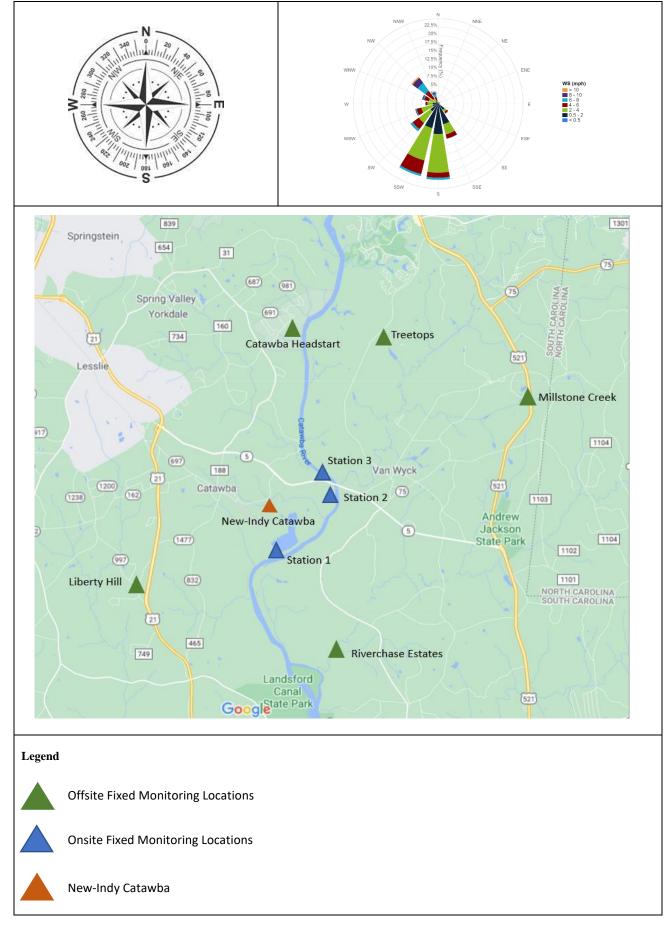
#### **Onsite Fenceline Monitors**

| Analyte   | 30-min AEGL<br>Reached?              | Concentration<br>Range Detected <sup>a</sup>                 | 24-hr Average <sup>a</sup>   | 7-day Average   | 30-min AEGL  |  |
|-----------|--------------------------------------|--|--|---|--|--|
|           |                                      |  |  |   |  |  |
| $H_2S$    | No                                   | 1 – 3 ppb 1.14 ppb   |  | 1.56 ppb  | 600 ppb  |  |
|           |                                      |  |  |   |  |  |
| $H_2S$    | No                                   | 0 – 10 ppb   | 1.90 ppb   | 0.89 ppb  | 600 ppb  |  |
| Station 3 |                                      |  |  |   |  |  |
| $H_2S$    | No                                   | 0 – 6 ppb  | 0.75 ppb   | 0.62 ppb  | 600 ppb  |  |
|           | H <sub>2</sub> S<br>H <sub>2</sub> S | Analyte Reached?   H <sub>2</sub> S No   H <sub>2</sub> S No | Analyte Reached? Range Detected a   H <sub>2</sub> S No 1 – 3 ppb   H <sub>2</sub> S No 0 – 10 ppb | AnalyteReached?Range Detected a24-hr Average a $H_2S$ No $1-3 \text{ ppb}$ $1.14 \text{ ppb}$ $H_2S$ No $0-10 \text{ ppb}$ $1.90 \text{ ppb}$ | AnalyteReached?Range Detected a24-hr Average a7-day Average $H_2S$ No $1-3 \text{ ppb}$ $1.14 \text{ ppb}$ $1.56 \text{ ppb}$ $H_2S$ No $0-10 \text{ ppb}$ $1.90 \text{ ppb}$ $0.89 \text{ ppb}$ |  |

<sup>a</sup> Based on 30-minute averages.

Notes:

| ATSDR MRL | Agency for Toxic Substances and Disease Registry Minimal Risk Level (MRL) |
|-----------|---|
| AEGL      | EPA Acute Exposure Guidelines Levels                                      |
| $H_2S$    | Hydrogen Sulfide  |
| TAPI      | Teledyne API H <sub>2</sub> S Analyzer                                    |
| hr        | Hour  |
| min       | Minute  |
| ppb       | Parts per billion   |
| MRL Limit | Limit defined as a 14-day average value.                                  |



Station 1 Wind Rose – Shows the direction the wind is coming from, the monitoring station being at the center of the rose.

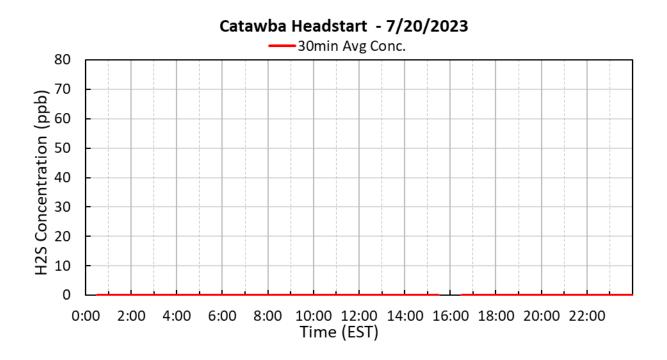
### Period H<sub>2</sub>S Monitoring Hydrogen Sulfide Offsite Monitors

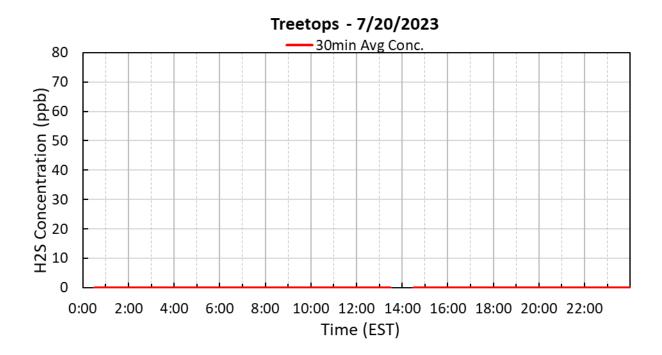
Below are graphs for offsite locations where hydrogen sulfide  $(H_2S)$  was detected during the current reporting period.

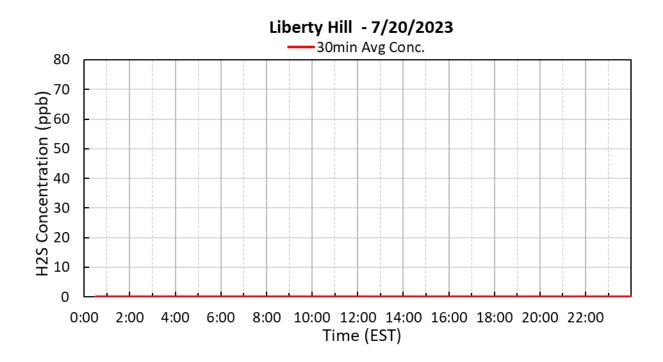
The five stand-alone  $H_2S$  monitoring stations correlate with five previous EPA's Viper monitoring system which includes areas to the north-northeast and south-southwest of the New-Indy Catawba Mill.

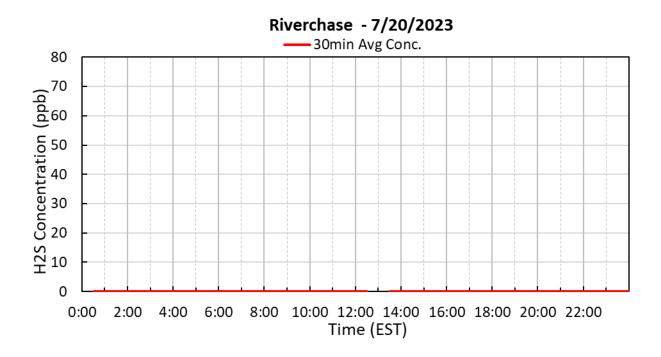
Winds were coming from a variable direction throughout the day at 1 to 7 mph.

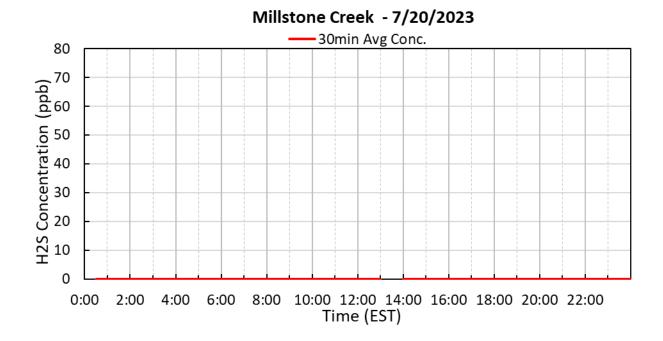
See wind rose diagram with aerial map figure for full wind data during this reporting period.











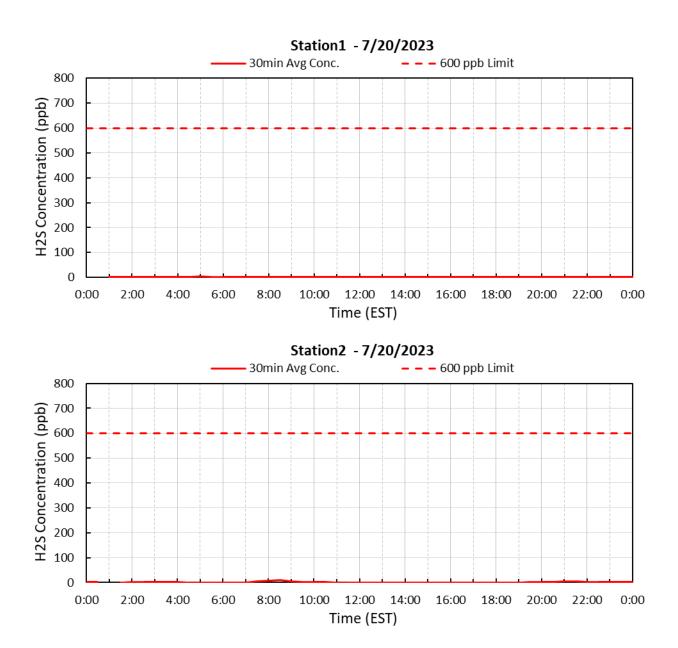
## Period H<sub>2</sub>S Monitoring Hydrogen Sulfide Onsite Monitors

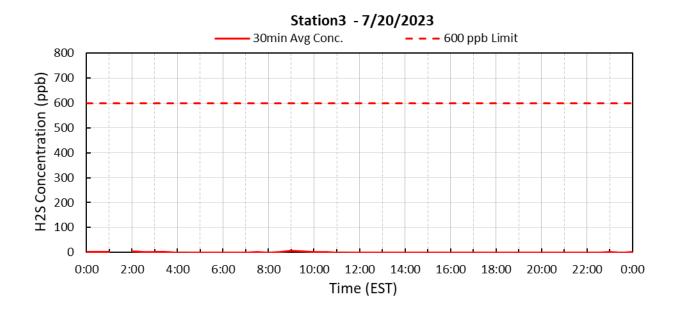
Below are graphs for onsite locations during the current reporting period.

Depending on wind direction, the  $H_2S$  measured at the onsite fence line locations may not exit the mill property at reported concentrations. Wind directions from offsite locations, blowing onto mill property, will disperse ambient concentrations to lower levels prior to exiting the plant site.

Winds were coming from a variable direction throughout the day at 1 to 7 mph.

See wind rose diagram with aerial map figure for full wind data during this reporting period.





|                 | Station 1              |                 |                 | Station 2              |                 |                 | Station 3              |                 |                 |
|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|
| 30-Minute Avgs  | H2S                    | М               | et              | H2S                    | М               | et              | H2S                    | M               | et              |
| 7/20/2023       | 30min Avg<br>H2S Conc. | 30min Avg<br>WS | 30min Avg<br>WD | 30min Avg<br>H2S Conc. | 30min Avg<br>WS | 30min Avg<br>WD | 30min Avg<br>H2S Conc. | 30min Avg<br>WS | 30min Avg<br>WD |
| Date / Time     | ppb                    | mph             | degrees         | ppb                    | mph             | degrees         | ppb                    | mph             | degrees         |
| 7/20/2023 0:30  | AX                     | 2.5             | 182             | 1.5                    | 0.5             | 354             | 0.9                    | 0.4             | 278             |
| 7/20/2023 1:00  | 1.3                    | 3.2             | 184             | AX                     | 0.8             | 158             | 0.9                    | 0.8             | 209             |
| 7/20/2023 1:30  | 1.1                    | 3.8             | 203             | 0.4                    | 1.1             | 197             | AX                     | 0.3             | 116             |
| 7/20/2023 2:00  | 1.4                    | 1.9             | 192             | 2.2                    | 0.4             | 292             | 5.1                    | 0.3             | 150             |
| 7/20/2023 2:30  | 1.4                    | 1.7             | 195             | 3.0                    | 0.4             | 190             | 2.9                    | 0.5             | 264             |
| 7/20/2023 3:00  | 1.9                    | 2.2             | 180             | 2.9                    | 0.4             | 12              | 1.0                    | 0.2             | 241             |
| 7/20/2023 3:30  | 1.5                    | 2.2             | 192             | 2.2                    | 0.4             | 125             | 0.8                    | 0.6             | 246             |
| 7/20/2023 4:00  | 1.1                    | 1.0             | 175             | 1.4                    | 0.6             | 298             | 0.2                    | 0.3             | 273             |
| 7/20/2023 4:30  | 1.9                    | 1.0             | 331             | 0.5                    | 0.3             | 65              | 0.2                    | 0.4             | 69              |
| 7/20/2023 5:00  | 3.2                    | 1.0             | 175             | 0.6                    | 0.4             | 335             | 0.2                    | 0.5             | 122             |
| 7/20/2023 5:30  | 1.2                    | 1.8             | 188             | 0.6                    | 0.5             | 1               | 0.2                    | 0.4             | 258             |
| 7/20/2023 5:30  | 1.2                    | 1.3             | 164             | 0.6                    | 0.3             | 46              | 0.2                    | 0.4             | 354             |
| 7/20/2023 6:30  | 1.0                    | 1.4             | 178             | 0.5                    | 0.5             | 333             | 0.2                    | 0.4             | 74              |
| 7/20/2023 7:00  | 1.0                    | 1.2             | 206             | 0.8                    | 0.5             | 250             | 0.2                    | 0.3             | 167             |
| 7/20/2023 7:30  | 1.0                    | 1.3             | 181             | 4.4                    | 0.4             | 223             | 0.2                    | 0.3             | 107             |
| 7/20/2023 8:00  | 1.2                    | 1.6             | 202             | 8.3                    | 0.4             | 172             | 0.7                    | 0.6             | 69              |
| 7/20/2023 8:30  | 0.9                    | 1.5             | 159             | 9.7                    | 0.7             | 207             | 0.4                    | 1.2             | 64              |
| 7/20/2023 8:30  | 1.0                    | 1.5             | 179             | 4.1                    | 1.1             | 167             | 6.3                    | 1.2             | 60              |
| 7/20/2023 9:30  | 1.0                    | 2.5             | 179             | 4.1                    | 1.1             | 179             | 3.2                    | 1.2             | 115             |
|                 |                        |                 |                 |                        |                 |                 |                        |                 |                 |
| 7/20/2023 10:00 | 0.9                    | 3.0             | 168             | 3.1                    | 2.0             | 192             | 2.7                    | 1.7             | 107             |
| 7/20/2023 10:30 | 0.8                    | 4.1             | 189             | 1.7                    | 2.5             | 191             | 1.7                    | 2.6             | 194             |
| 7/20/2023 11:00 | 0.9                    | 3.3             | 205             | 0.6                    | 2.7             | 186             | 0.2                    | 2.0             | 231             |
| 7/20/2023 11:30 | 1.0                    | 3.5             | 189             | 0.6                    | 2.8             | 189             | 0.2                    | 2.3             | 213             |
| 7/20/2023 12:00 | 0.9                    | 4.7             | 213             | 0.9                    | 2.7             | 203             | 0.2                    | 2.3             | 215             |
| 7/20/2023 12:30 | 0.9                    | 4.2             | 193             | 0.5                    | 2.6             | 190             | 0.2                    | 2.1             | 155             |
| 7/20/2023 13:00 | 0.9                    | 3.9             | 187             | 0.7                    | 2.3             | 205             | 0.2                    | 2.3             | 211             |
| 7/20/2023 13:30 | 1.1                    | 5.1             | 278             | 0.6                    | 2.2             | 301             | 0.2                    | 1.0             | 294             |
| 7/20/2023 14:00 | 1.3                    | 6.8             | 310             | 0.4                    | 2.7             | 281             | 0.2                    | 0.6             | 263             |
| 7/20/2023 14:30 | 0.9                    | 2.5             | 256             | 0.4                    | 3.1             | 291             | 0.2                    | 0.8             | 326             |
| 7/20/2023 15:00 | 1.3                    | 7.3             | 316             | 0.2                    | 3.7             | 315             | 0.2                    | 1.3             | 330             |
| 7/20/2023 15:30 | 1.5                    | 4.6             | 324             | 0.4                    | 2.2             | 348             | 0.2                    | 1.2             | 329             |
| 7/20/2023 16:00 | 1.4                    | 6.2             | 327             | 0.2                    | 3.1             | 350             | 0.2                    | 1.2             | 325             |
| 7/20/2023 16:30 | 1.4                    | 6.5             | 331             | 0.4                    | 2.6             | 346             | 0.2                    | 1.3             | 346             |
| 7/20/2023 17:00 | 1.3                    | 4.2             | 305             | 0.4                    | 1.4             | 347             | 0.2                    | 0.7             | 295             |
| 7/20/2023 17:30 | 0.9                    | 2.7             | 222             | 0.2                    | 0.8             | 97              | 0.2                    | 0.7             | 218             |
| 7/20/2023 18:00 | 0.9                    | 2.4             | 217             | 0.9                    | 1.8             | 221             | 0.4                    | 0.7             | 295             |
| 7/20/2023 18:30 | 1.0                    | 2.5             | 252             | 0.8                    | 2.4             | 283             | 0.2                    | 0.3             | 286             |
| 7/20/2023 19:00 | 1.0                    | 3.5             | 277             | 0.4                    | 3.1             | 284             | 0.2                    | 0.5             | 262             |
| 7/20/2023 19:30 | 1.0                    | 4.6             | 269             | 1.3                    | 3.2             | 263             | 0.2                    | 0.7             | 242             |
| 7/20/2023 20:00 | 0.9                    | 4.1             | 213             | 3.4                    | 2.3             | 235             | 0.2                    | 1.1             | 258             |
| 7/20/2023 20:30 | 0.9                    | 5.4             | 217             | 3.1                    | 3.6             | 231             | 0.2                    | 2.2             | 252             |
| 7/20/2023 21:00 | 0.9                    | 4.2             | 210             | 4.4                    | 3.6             | 226             | 0.2                    | 2.3             | 238             |
| 7/20/2023 21:30 | 0.9                    | 4.0             | 223             | 4.8                    | 2.5             | 234             | 0.2                    | 0.8             | 262             |
| 7/20/2023 22:00 | 1.0                    | 3.1             | 239             | 3.3                    | 4.1             | 268             | 0.2                    | 1.2             | 227             |
| 7/20/2023 22:30 | 1.0                    | 3.1             | 190             | 3.0                    | 2.6             | 218             | 0.2                    | 2.9             | 224             |
| 7/20/2023 23:00 | 0.9                    | 2.9             | 204             | 2.3                    | 1.9             | 207             | 1.0                    | 2.2             | 244             |
| 7/20/2023 23:30 | 0.9                    | 1.2             | 152             | 3.2                    | 0.6             | 113             | 0.2                    | 0.4             | 259             |
| 7/21/2023 0:00  | 1.0                    | 1.8             | 173             | 2.4                    | 0.4             | 212             | 0.5                    | 0.8             | 234             |

### Submitted Fenceline H<sub>2</sub>S and Met 30-minute Data

| AQS Null          | AQS Null Data Codes                 |  |  |  |  |
|-------------------|-------------------------------------|--|--|--|--|
| Qualifier<br>Code | Item Description                    |  |  |  |  |
| AB                | TECHNICIAN UNAVAILABLE              |  |  |  |  |
| AC                | CONSTRUCTION/REPAIRS IN AREA        |  |  |  |  |
| AD                | SHELTER STORM DAMAGE                |  |  |  |  |
| AE                | SHELTER TEMPERATURE OUTSIDE LIMITS  |  |  |  |  |
| AI                | INSUFFICIENT DATA (CAN'T CALCULATE) |  |  |  |  |
| AM                | MISCELLANEOUS VOID                  |  |  |  |  |
| AN                | MACHINE MALFUNCTION                 |  |  |  |  |
| AO                | BAD WEATHER                         |  |  |  |  |
| AP                | VANDALISM                           |  |  |  |  |
| AS                | POOR QUALITY ASSURANCE RESULTS      |  |  |  |  |
| AT                | CALIBRATION                         |  |  |  |  |
| AU                | MONITORING WAIVED                   |  |  |  |  |
| AV                | POWER FAILURE (POWR)                |  |  |  |  |
| AW                | WILDLIFE DAMAGE                     |  |  |  |  |
| AX                | PRECISION CHECK (PREC)              |  |  |  |  |
| AY                | Q C CONTROL POINTS (ZERO/SPAN)      |  |  |  |  |
| AZ                | Q C AUDIT (AUDT)                    |  |  |  |  |
| BA                | MAINTENANCE/ROUTINE REPAIRS         |  |  |  |  |
| BB                | UNABLE TO REACH SITE                |  |  |  |  |
| BC                | MULTI-POINT CALIBRATION             |  |  |  |  |
| BD                | AUTO CALIBRATION                    |  |  |  |  |
| BE                | BUILDING/SITE REPAIR                |  |  |  |  |
| BF                | PRECISION/ZERO/SPAN                 |  |  |  |  |
| BJ                | OPERATOR ERROR                      |  |  |  |  |
| BK                | SITE COMPUTER/DATA LOGGER DOWN      |  |  |  |  |
| EC                | EXCEED CRITICAL CRITERIA            |  |  |  |  |