

## Simple Statistics of Alaska Department of Environmental Conservation's review of EPA Certification Test Reports

The following statistics are based upon applying the Decision Matrix (last updated March 1, 2022) to the reviewed test reports. However, actual lists may vary slightly given that some devices' milestone dates were extended prior to the finalization of the matrix and are therefore grandfathered until the existing milestone expires.

### Cordwood Stoves

| Overall Summary Statistics |                       |                                  |                                |                                  |                             |                                |                   |
|----------------------------|-----------------------|----------------------------------|--------------------------------|----------------------------------|-----------------------------|--------------------------------|-------------------|
|                            | # of Reports Reviewed | Disapproved (emission threshold) | Disapproved (unable to verify) | No Determination (Report Issues) | Temp. Approval w/ Milestone | Approved/Retest to Renew Cert. | Approved w/ Flags |
| ASTM E3053                 | 70                    | 33                               | 2                              | 34                               | 1                           | 0                              | 0                 |
| EPA M28R                   | 63                    | 23                               | 4                              | 28                               | 8                           | 0                              | 0                 |
| Not reported               | 1                     | 0                                | 1                              | 0                                | 0                           | 0                              | 0                 |
| <b>Total</b>               | <b>134</b>            | <b>56</b>                        | <b>7</b>                       | <b>62</b>                        | <b>9</b>                    | <b>0</b>                       | <b>0</b>          |

| ADEC Emission Threshold Statistics |              |               |          |           |
|------------------------------------|--------------|---------------|----------|-----------|
|                                    | 2.0 g/hr Avg | 6.0 g/hr 1-hr | Both     | Total     |
| ASTM E3053                         | 1            | 24            | 8        | 33        |
| EPA M28R                           | 1            | 21            | 1        | 23        |
| Not reported                       | 0            | 0             | 0        | 0         |
| <b>Total</b>                       | <b>2</b>     | <b>45</b>     | <b>9</b> | <b>56</b> |

| Number of ASTM 3053 Reports Reviewed with: |        |         |         |         |         |         |
|--------------------------------------------|--------|---------|---------|---------|---------|---------|
| 0 Flags                                    | 1 Flag | 2 Flags | 3 Flags | 4 Flags | 5 Flags | 6 Flags |
| 1                                          | 2      | 4       | 8       | 21      | 18      | 16      |

| Statistics for ASTM 3053 Flags (Issues 29a-29f) |                       |                  |                     |                   |                    |                                   |
|-------------------------------------------------|-----------------------|------------------|---------------------|-------------------|--------------------|-----------------------------------|
| Flag Description                                | Med vs Low Burn (29a) | Log Length (29b) | Atypical Fuel (29c) | 50% Squared (29d) | 50% Debarked (29e) | Firebox vol diff by over 5% (29f) |
| <b># Reports w/ Flags</b>                       | <b>48</b>             | <b>52</b>        | <b>58</b>           | <b>61</b>         | <b>34</b>          | <b>63</b>                         |

| Decision Matrix Statistics |           |           |          |             |                                                                                 |
|----------------------------|-----------|-----------|----------|-------------|---------------------------------------------------------------------------------|
| Method                     | E3053     | M28R      | NR       | All Methods | Decision Matrix Description                                                     |
|                            | 33        | 23        | 0        | 56          | Moved to Disapproved list (did not meet ADEC's emission threshold)              |
|                            | 2         | 4         | 1        | 7           | Moved to Disapproved list (unable to verify emission threshold)                 |
|                            | 13        | 27        | 0        | 40          | Moved to No Determination list (flags relating to emissions issues)             |
|                            | 6         | 1         | 0        | 7           | Remains on No Determination list (post 5/15/2020 cert date emission flags)      |
|                            | 14        | 0         | 0        | 14          | Moved to no determination - non representative test concerns                    |
|                            | 1         | 0         | 0        | 1           | Remains on no determination - non rep. test concerns (post 5/15/2020 cert date) |
|                            | 1         | 8         | 0        | 9           | Remains on the Approved list pending based on milestone data                    |
|                            | 0         | 0         | 0        | 0           | Remains on Approved List, re-test required to renew certification.              |
|                            | 0         | 0         | 0        | 0           | Moved to Approved list, re-test required to renew certification.                |
|                            | 0         | 0         | 0        | 0           | Moved to Approved List with flags (post 5/15/2020 cert date)                    |
|                            | 0         | 0         | 0        | 0           | Remains on Approved List with flags                                             |
| <b>Total</b>               | <b>70</b> | <b>63</b> | <b>1</b> | <b>134</b>  |                                                                                 |

## Pellet Stoves

| Overall Summary Statistics |                       |                                  |                                |                                  |                             |                                |                   |
|----------------------------|-----------------------|----------------------------------|--------------------------------|----------------------------------|-----------------------------|--------------------------------|-------------------|
|                            | # of Reports Reviewed | Disapproved (emission threshold) | Disapproved (unable to verify) | No Determination (Report Issues) | Temp. Approval w/ Milestone | Approved/Retest to Renew Cert. | Approved w/ Flags |
| Other (ATM)                | 2                     | 0                                | 0                              | 0                                | 2                           | 0                              | 0                 |
| ASTM 2779                  | 83                    | 3                                | 6                              | 45                               | 29                          | 0                              | 0                 |
| Not reported               | 11                    | 0                                | 11                             | 0                                | 0                           | 0                              | 0                 |

| ADEC Emission Threshold Statistics |              |               |          |          |
|------------------------------------|--------------|---------------|----------|----------|
|                                    | 2.0 g/hr Avg | 6.0 g/hr 1-hr | Both     | Total    |
| Other (ATM)                        | 0            | 0             | 0        | 0        |
| ASTM 2779                          | 0            | 3             | 0        | 3        |
| Not reported                       | 0            | 0             | 0        | 0        |
| <b>Total</b>                       | <b>0</b>     | <b>3</b>      | <b>0</b> | <b>3</b> |

| Decision Matrix Statistics |             |           |              |             |                                                                                 |
|----------------------------|-------------|-----------|--------------|-------------|---------------------------------------------------------------------------------|
| Method                     | Other (ATM) | ASTM 2779 | Not reported | All Methods | Decision Matrix Description                                                     |
|                            | 0           | 3         | 0            | 3           | Moved to Disapproved list (did not meet ADEC's emission threshold)              |
|                            | 0           | 6         | 11           | 17          | Moved to Disapproved list (unable to verify emission threshold)                 |
|                            | 0           | 40        | 0            | 40          | Moved to No Determination list (flags relating to emissions issues)             |
|                            | 0           | 5         | 0            | 5           | Remains on No Determination list (post 5/15/2020 cert date emission flags)      |
|                            | 0           | 0         | 0            | 0           | Moved to no determination - non representative test concerns                    |
|                            | 0           | 0         | 0            | 0           | Remains on no determination - non rep. test concerns (post 5/15/2020 cert date) |
|                            | 2           | 29        | 0            | 31          | Remains on the Approved list pending based on milestone data                    |
|                            | 0           | 0         | 0            | 0           | Remains on Approved List, re-test required to renew certification.              |
|                            | 0           | 0         | 0            | 0           | Moved to Approved list, re-test required to renew certification.                |
|                            | 0           | 0         | 0            | 0           | Moved to Approved List with flags (post 5/15/2020 cert date)                    |
|                            | 0           | 0         | 0            | 0           | Remains on Approved List with flags                                             |
| <b>Total</b>               | <b>2</b>    | <b>83</b> | <b>11</b>    | <b>96</b>   |                                                                                 |