| **Source** | **Emissions Unit** | **Source Test Results** | **Potential Control Equipment[[1]](#endnote-1)** | **Feedback from sources** | **DEQ Comment** |
| --- | --- | --- | --- | --- | --- |
| **Pre-1970 Boilers > 0.10 gr/dscf** | | | | | |
| Boise Cascade (Pilot Rock)  30-0016 | Early 1940s Babcock & Wilcox Dutch-oven boilers, 2 @ 20,000 lb steam/hr, 1 @ 8,000 lb steam/hr;  Backup to NG fired boiler. | Boiler 1: 0.08-0.17 and 0.4% (6 tests);  Boiler 3: 0.08-0.19 and 0-1% (8 tests); Boiler 4: 0.06-0.10 (4 tests) | Need uniform, dry fuel; steady load. | Company indicated concern about control device which requires an air flow system that is incompatible with natural draft stacks. Because boilers are backup, company could decide to stop using the boilers rather than control. | Different from other Dutch oven boilers with multiclones? |
| Columbia Forest Products  18-0014 | 1944 C& E Dutch oven BLR-S w/multiclone, 35,000 lb steam/hr  1939 EF Huffman Dutch oven BLR-N at 12,500 lb steam/hr) | BLR-S: 0.08 – 0.19 (11 tests); 5 – 17% (10 tests);  BLR-N: 0.09 – 0.14 (3 tests); 1 – 5% (3 tests) | Need controls |  |  |
| Frank Lumber  22-2525 | 1969 Wyatt & Kipper spreader stoker boiler, 30,000 lb/hr steam, w/multiclone | ’89 - 0.19  ’97- 0.178  ‘04 -0.137  ’09 - 0.137 | Need controls | Already tuned well |  |
| Interfor Pacific  18-0005 | 1939 Wickes Dutch oven boilers (2), 50,000 lb/hr ea, multiclones, economizer | Common stack – can comply with 0.1 during normal operations. Boiler 1 – 6% and 0.11; Boiler 2 – 2% and 0.15 | Looking at ESP | Already does a lot of maintenance and tuning, | Could run boiler harder, thinking of boiler changes to comply with boiler MACT, don’t want to be a synthetic minor |
| Swanson Group Roseburg  10-0030 | 1968 Kipper boilers, pin hole grate, mechanical stoker, 31,800 lb steam/hr | 0.17 at 26,800 #/hr steam | Looking for used ESP |  | > 26,800 then NG boiler starts up. |
| **Post-1970 Boilers > 0.10 gr/dscf** | | | | | |
| Collins (Fremont Sawmill)  19-0002 | ’75 Wickes Dutch oven, 18,000 lb/yr, multiclone;  ’89 Trane-Murray Dutch oven, 24,000 lb/hr multiclone | Boiler 1: 0.13  Boiler 2: 0.09 | Needs controls | Already does a lot of maintenance, cannot meet 0.10 consistently | 0.1 gr/dscf permit limit |
| Marvin Wood Products  01-0035 |  |  | new blower system to help control additional sawdust created by a new finger joint system | Proactive | Grain loading? |
| Pacific Pellet  09-9509 | NG 3-pass rotary drum dryer w/multiclone |  |  |  | 0.1 gr/dscf permit limit |
| Prineville Sawmill  07-0021 | HFB | 0.16 |  |  | 0.1 gr/dscf permit limit’  not operating, general permit |
| Umpqua Lumber  10-0027 | 1975 Wellons boiler w/multiclone, 20,000 lb/hr | 0.12 gr/dscf |  |  | 0.1 gr/dscf permit limit |
| **Pre-1970 Boilers < 0.10 gr/dscf** | | | | | |
| Grant Western  DR Johnson in John Day  Closed down, permit cancelled  12-0024 | Wood fuel boilers |  | major renovation of multiclones including complete cone replacement | tired of failing source tests and being issued civil penalties | .22 in 2007, repairs, 0.11 subsequent test |
| Roseburg Forest Product facilities Riddle  10-0078 | 1968 Wyatt-Kipper spreader-stoker HFB, 110,000 lb steam/hr  1978 Kipper spreader-stoker HFB, 70,000 lb/hr, | 0.017 lb/M lb steam  0.184 lb/M lb steam (BACT) | Western Pacific multiclone w/110 cyclones; 2006 dry ESP  Zurn multiclone (12 cyclones) with Ducon Spray tower wet scrubber | in anticipation of the original Boiler MACT | 0.2? 20%  0.1; 20% |
| Roseburg Forest Product facilities Coquille  06-0010 | 1958 Garrett & Schafer bentwood tube spreader-stoker HFB, 80,000 lb steam/hr; | 0.038 lb/M lb steam | 2006 dry ESPs added after the existing multiclone controls | in anticipation of the original Boiler MACT | 0.2? 20% |
| Swanson Group Glendale  10-0045 | 1951 Babcock & Wilcox Dutch oven HFB, 125 MMBtu/hr | 0.025 lb/M lbs steam at 58,000 lb/hr | Multiclone and dry ESP |  | 0.2? |
| Wallowa Forest Products  Cancelled permit in 2010  32-0011 | Wellons fuel cell boilers | Opacity noncompliance, no ST for PM,  0.09 in 2005  .11 in 2006 | major renovation of multiclones including complete cone replacement | tired of failing source tests and being issued civil penalties | Rebuilt fuel cell because of opacity |
|  |  |  |  |  |  |
| Harney Rock and Paving  13-0010 | Asphalt plant | 19% and **0.22** (‘99) | Wet scrubber  ~$32,000 |  |  |
| Humberg Asphalt  37-0112 | Asphalt plant |  |  |  |  |
| Rogers Asphalt Paving  31-0001 | Asphalt plant | 0.11 | Wet scrubber  ~$32,000 |  |  |
| Valley Paving  23-0031 |  | 0.231 |  |  | Violation of 0.1 |

1. Initial estimates, company needs to do an engineering assessment to confirm. Cost range for the different types of equipment = [↑](#endnote-ref-1)