



Oregon

Kate Brown, Governor

Department of Environmental Quality
Office of Compliance and Enforcement
700 NE Multnomah Street, Suite 600
Portland, OR 97232-4100
(503) 229-5696
FAX (503) 229-5100
TTY 711

September 21, 2020

CERTIFIED MAIL: 7017 1450 0000 8310 4708

Georgia-Pacific Toledo LLC
c/o CT Corporation System, Registered Agent
780 Commercial Street, Suite 100
Salem, OR 97301

Re: Notice of Civil Penalty Assessment and Order
Case No. AQ/V-WR-2020-010

DEQ is committed to balancing its vital obligation to enforce the law and protect the environment with a consideration of the dramatic disruptions to public health and the economy caused by the COVID-19 outbreak. We understand the outbreak may impact your ability to timely appeal, pay the assessed civil penalty, or comply with this order. You may submit to DEQ documentation identifying whether COVID-19-related disruption affects your ability to comply with this order. Visit our webpage <https://www.oregon.gov/deq/Pages/covid-19.aspx> for more information about documenting specific COVID-19 disruptions your facility may be encountering and how that affects your ability to comply. DEQ will exercise reasonable discretion regarding settlement of this order.

This letter is to inform you that the Oregon Department of Environmental Quality (DEQ) has issued you a civil penalty of \$63,600 for violations of the Title V operating permit for your kraft pulp and paper mill at 1400 SE Butler Bridge Road in Toledo, Oregon. The enclosed Notice of Civil Penalty Assessment and Order (Notice) addresses violations from three apparently unrelated events in 2019.

First, emissions from your smelt dissolving tank no. 2 exceeded three particulate matter limits between March 20, 2019 and March 23, 2019, and exceeded the total reduced sulfur limit (TRS) on March 23, 2019. In addition, you failed to complete the TRS source test that you began on March 22, 2019.

Second, the Notice cites you for causing observable off-site deposition of particulate matter caused by a loss of power to the control system for your recovery furnaces on May 6, 2019.

Third, the Notice cites you for failing to ensure that the Low Volume High Concentration (LVHC) system at the facility was enclosed and vented into a closed-vent system and routed to a control device that reduces emissions of Hazardous Air Pollutants (HAPs). The Notice also cites you for failing to conduct complete monthly inspections of that system and to take corrective actions to address visible defects in the system. When DEQ and the U.S. Environmental Protection Agency inspected the facility on September 11, 2019, the inspectors observed visible emissions from several places on your modified kraft pulp digester of the type that should have been identified during monthly visual inspections and

corrected by fixing the leaks. The inspectors also confirmed that you had not been performing complete inspections since April 2019. Thus, the Notice cites you for the incomplete inspections and also for failing to ensure that HAPs would be routed to a control device rather than directly to the atmosphere.

DEQ issued this penalty because you violated two separate National Emission Standards for Hazardous Air Pollutants (NESHAP). First, one of the particulate matter limits that you exceeded in March 2019 was set pursuant to NESHAP subpart MM. Particulate matter is a surrogate measure for HAP emissions from the smelt dissolving tank. You also violated the standard in NESHAP subpart S, which requires you to ensure that HAPs from your LVHC system such as methanol, acetaldehyde and formaldehyde are routed to a control device. The NESHAP standards were promulgated by the federal government and adopted by Oregon to ensure that emissions of hazardous air pollutants are kept to minimum levels to protect public health and the environment. Many hazardous air pollutants are known or suspected carcinogens and cause other serious health effects.

You also violated two limits set by Oregon for particulate matter and one limit for TRS. Particulate matter is known to affect the functioning of the heart and lungs, impacts visibility, and where it is deposited, it can change the acidity or nutrient balance of water bodies and soil. TRS emissions can cause irritation to the eyes, nose or throat, and can generate foul odors which may impact neighboring communities.

Included in Section IV of the Notice is an order requiring you to:

- Within 60 days of the order becoming final by operation of law or on appeal, submit to DEQ for review and approval a plan to continuously monitor flue gas temperature after the smelt dissolving tank scrubbers, PCD 62-056 (associated with EU15) and PCD 62-256 (associated with EU17) (the Temperature Monitoring Plan).
- Implement the Temperature Monitoring Plan once approved by DEQ;
- Within 60 days of this order becoming final by operation of law or on appeal, submit to DEQ for review and approval an updated site-specific inspection plan including a drawing or schematic of the components of the affected equipment, that includes all of the possible leak locations from the Facility's LVHC system, including but not limited to all of the possible leak locations from the MKP digester, turpentine recovery system, blow heat accumulator and foul condensate tank; and
- Conduct quarterly TRS testing at the no. 2 smelt dissolving tank (EU17) to monitor compliance with Condition 29 of the Permit until six (6) consecutive source test results are less than 0.025 pounds of TRS per ton of black liquor solids.

Note that the above is a summary of the order; please consult Section IV of the Notice for the full details of the order's requirements.

DEQ appreciates your efforts to minimize the effects of the emission limits violations by removing blockages in the pollution control device associated with the no. 2 smelt dissolving tank on March 22, and 23, 2019, performing additional maintenance during an annual shutdown in April 2019, installing new doors and seals, and installing a temperature probe on top of the pollution control device for smelt dissolving tank no. 2 to monitor flue gas temperature as an additional indicator of any future problems with the scrubber. In addition, you have begun quarterly source tests for PM and TRS, which indicate

that the no. 2 smelt dissolving tank is back in compliance with emission limits. With regard to the off-site deposition of PM, you worked with the vendor of the control device management system to evaluate and improve your startup/shutdown procedure, to avoid future occurrences of inadvertent shutdown of power to the device. With NESHAP subpart S violations, DEQ appreciates your efforts to promptly fix the leaks identified during the September 2019 inspection. DEQ considered these efforts when determining the amount of civil penalty.

If you wish to appeal this matter, DEQ must receive a request for a hearing within 20 calendar days from your receipt of this letter. The hearing request must be in writing. Send your request to DEQ Office of Compliance and Enforcement:

Via mail – 700 NE Multnomah Street, Suite 600, Portland, Oregon 97232

Via email – DEQappeals@deq.state.or.us

Via fax – 503-229-5100

Once DEQ receives your request, we will arrange to meet with you to discuss this matter. If DEQ does not receive a timely written hearing request, the penalty will become due. Alternatively, you can pay the penalty by sending a check or money order to the above address.

The attached Notice further details DEQ's reasons for issuing the penalty and provides further instructions for appealing the penalty. Please review and refer to it when discussing this case with DEQ.

DEQ may allow you to resolve part of your penalty through the completion of a Supplemental Environmental Project (SEP). SEPs are environmental improvement projects that you sponsor instead of paying a penalty. Further information is available by calling the number below or at <http://www.oregon.gov/deq/Regulations/Pages/SEP.aspx>.

DEQ's rules are available at <http://www.oregon.gov/deq/Regulations/Pages/Statutes.aspx> or by calling the number below.

If you have any questions, please contact Becka Puskas at 503-229-5058 or toll free in Oregon at 800-452-4011, extension 5058.

Sincerely,



Kieran O'Donnell, Manager
Office of Compliance and Enforcement

Enclosures

cc: Michael Davis, Georgia-Pacific Toledo, Assistant General Counsel, Environmental Law
Department, Georgia-Pacific, 133 Peachtree Street NE, Atlanta, GA 30303
James McClure, Georgia-Pacific Toledo, 400 SE Butler Bridge Road, Toledo, OR 97391
German Heredia, Georgia-Pacific Toledo, 400 SE Butler Bridge Road, Toledo, OR 97391
Scott Austin, Georgia-Pacific Toledo, 400 SE Butler Bridge Road, Toledo, OR 97391
Mike Eisele, DEQ
Suzanne Blackburn, DEQ
Claudia Davis, DEQ
Accounting, DEQ
Donald Hendrix, AQ, DEQ
Zach Hedgpeth, US EPA, Region 10, 1200 Sixth Avenue, Seattle, WA 98101
John Keenan, US EPA, Region 10, 1200 Sixth Avenue, Seattle, WA 98101

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

2 OF THE STATE OF OREGON

| | | | |
|---|---------------------------------------|---|---------------------------|
| 3 | IN THE MATTER OF: |) | |
| 4 | GEORGIA-PACIFIC TOLEDO LLC, |) | NOTICE OF CIVIL PENALTY |
| 5 | a Delaware limited liability company, |) | ASSESSMENT AND ORDER |
| | Respondent. |) | CASE NO. AQ/V-WR-2020-010 |

6 I. AUTHORITY

7 The Department of Environmental Quality (DEQ) issues this Notice of Civil Penalty Assessment
8 and Order (Notice) pursuant to Oregon Revised Statutes (ORS) 468.100, ORS 468.126 through 468.140,
9 ORS Chapters 183 and 468A and Oregon Administrative Rules (OAR) Chapter 340, Divisions 011, 012,
10 and 200, 208, 218, 226, 234 and 244.

11 II. FINDINGS OF FACT

12 1. Respondent owns and operates a kraft pulp and paper mill located at 1400 SE Butler Bridge
13 Road in Toledo, Oregon (Facility).

14 2. On September 9, 2016, DEQ issued Oregon Title V Operating Permit No. 21-0005-TV-01
15 (Permit) to Respondent.

16 3. The Permit was in effect at all material times.

17 4. The Permit authorizes Respondent to discharge air contaminants from the Facility in
18 conformance with the requirements, limitations and conditions set forth in the Permit.

19 Emission Limits and Source Testing

20 5. Respondent's manufacturing process includes two Kraft smelt dissolving tanks that are
21 subject to the National Emission Standards for Hazardous Air Pollutant (NESHAP) regulations in 40
22 Code of Federal Regulations (CFR) Part 63, subpart MM (Kraft Pulp Mill Chemical Recovery
23 Combustion Sources), adopted and incorporated by reference in OAR 340-244-0220(1). The smelt
24 dissolving tanks are known as No. 1 Smelt Dissolving Tank or Emissions Unit 15 (EU15) and No. 2
25 Smelt Dissolving Tank or Emissions Unit 17 (EU17).

26 6. Each smelt dissolving tank is equipped with a pollution control device (PCD) known as a
27 wet scrubber.

1 7. The NESHAP MM standard for the smelt dissolving tanks is incorporated in Part 1,
2 Condition 31 of the Permit, which prohibits Respondent from emitting particulate matter (PM) from
3 EU17 in excess of 0.26 pounds per ton (lb/ton) of black liquor solids (BLS) and prohibits Respondent
4 form emitting PM from EU15 in excess of 0.23 lb/ton BLS.

5 8. Part 1, Condition 30 of the Permit prohibits Respondent from emitting PM from EU15 or
6 EU17 in excess of 0.25 kilograms per metric ton (0.50 lb/ton) of production, as a daily arithmetic
7 average.

8 9. Part 1, Condition 32 of the Permit prohibits Respondent from emitting PM from EU15 or
9 EU17 in excess of 0.10 grains per dry standard cubic foot (gr/dscf).

10 10. Part 1, Condition 29 of the Permit prohibits Respondent from emitting total reduced sulfur
11 (TRS) from EU15 or EU17 in excess of 0.0165 grams/kilogram (0.033 lb/ton) BLS, as a daily
12 arithmetic average.

13 11. Part 1, Condition 69 of the Permit requires Respondent to conduct all testing in accordance
14 with DEQ's Source Sampling Manual unless otherwise specified in the Permit.

15 12. DEQ's Source Sampling Manual, section 2.6, states:

16 It is acceptable to postpone a scheduled test or suspend a test in progress if the discontinuation
17 is due to equipment failure beyond the facility's control, construction delays beyond the
18 facility's control, severe meteorological conditions, and situations that would jeopardize the
19 safety of the testing contractors and/or operators. If the test is underway, the permittee should
20 make every effort to complete the test run. All recoverable test information (process & sample
21 data) must be available for DEQ review.

22 It is unacceptable to postpone or suspend a test run in progress if it is discontinued because the
23 source is not able to comply with an emission limit, verify an existing emission factor, or
24 comply with a control equipment performance standard. The permittee must provide DEQ
25 written documentation explaining the reasons for the postponement or stoppage, and any data
26 collected prior to the stoppage. DEQ will review the documentation and all available stack test
27 data to determine if a violation occurred.

13. The Permit does not otherwise address source testing postponements or stoppages.

14. On February 22, 2019, Respondent submitted a source test plan to DEQ, which included
Respondent's proposal for PM and TRS testing on EU15 and EU17 in March 2019.

\\

1 15. On March 7, 2019, DEQ issued a source test plan approval letter to Respondent. Condition 5
2 of DEQ's approval reiterates the requirements of section 2.6 of the Source Sampling Manual set forth
3 in Paragraph 12 of Section II, above.

4 16. On March 20, 2019, Respondent conducted a source test to measure PM and TRS emissions
5 from EU17.

6 17. On March 20, 2019, after receiving preliminary source test data for EU17 that indicated
7 particulate matter levels above the permit limits, Respondent discovered that it was running its smelt
8 dissolving tanks at much higher green liquor strength than normal as a result of using the wrong
9 strength acid while measuring green liquor strength in their laboratory.

10 18. At approximately 12:00 a.m. on March 21, 2019, Respondent brought the green liquor
11 strength back down into normal range in both smelt dissolving tanks.

12 19. On March 21, 2019 preliminary results from stack testing on EU15 indicated that reducing
13 the green liquor strength in the smelt dissolving tanks back to normal levels resulted in lowered PM
14 emissions rates.

15 20. On March 22, 2019, Respondent began another source test to measure PM and TRS
16 emissions from EU17.

17 21. During the initial run of the source test conducted on the morning of March 22, 2019 (10:30
18 – 11:34 am), the TRS emissions from EU17 exceeded the calibration range of the instrument.

19 22. Upon observing the high TRS levels on March 22, 2019, Respondent suspended the TRS
20 test and began troubleshooting.

21 23. On March 22, 2019, Respondent discovered that the drain and the "bottom cone" of the
22 scrubber for EU17 had become plugged. Later in the day on March 22, 2019, Respondent brought in a
23 contractor to hydroblast the scrubber and remove the blockage.

24 24. On the morning of March 23, 2019, Respondent reinitiated the source test for PM (but not
25 for TRS) and completed two test runs for PM (8:06 - 9:10 a.m. and 9:20 -10:25 a.m.).

26 \\\

27 \\\

1 25. Following the PM test runs on the morning of March 23, 2019, Respondent conducted an
2 engineering test to measure TRS emissions. Between 11:49 a.m. and 1:13 p.m. on March 23, 2019,
3 Respondent measured TRS emissions ranging between 0.050 and 0.010 lbs/ton BLS.

4 26. On the afternoon of March 23, 2019 Respondent discovered that the “top cone” of the
5 scrubber for EU17 was plugged and Respondent brought in a contractor to hydroblast the scrubber and
6 remove the blockage.

7 27. On the morning of March 24, 2019, Respondent conducted a source test to measure TRS
8 emissions from EU17. Respondent’s TRS emissions from EU17 measured below the permitted limit, as
9 described in Table 1 below.

10 28. Table 1 shows Respondent’s TRS emissions from EU17, measured during the source tests
11 and engineering tests described in Paragraphs 14-27 of Section II above, as compared to the Permit
12 limit for TRS described in Paragraph 10 of Section II above.

13
14 **Table 1. TRS Emissions from EU17**

| 15 Permit Limit | 16 March 20, 2019 source test | 17 March 22, 2019 source test | 18 March 23, 2019 engineering test | 19 March 24, 2019 source test |
|---------------------------------------|--|--|---|--|
| 20 0.033 lb/ton BLS (Condition 29) | 21 0.015 lb/ton BLS | 22 Test suspended | 23 0.050 - 0.100 lbs/ton BLS | 24 0.008 lb/ton BLS |

25 29. On April 8, 2019, Respondent conducted maintenance on the scrubber associated with
26 EU17, including cleaning/hydroblasting of the scrubber including the top and bottom cones and the
27 drain line to the smelt dissolving tank.

30. In addition to the cleaning described in Paragraphs 22 and 26 of Section II, during an annual
shutdown between April 6 and 17, 2019, Respondent installed new access doors and seals on all entries
to the scrubber associated with EU17, performed a drone inspection on all accessible areas of the
scrubber and stack, and added a temperature probe at the top of EU17 to monitor flue gas temperature.

31. On April 24, 2019, Respondent conducted a source test to measure PM emissions from
EU17. Respondent’s PM emissions from EU17 measured below the permitted limit, as described in
Table 2 below.

32. Table 2 shows Respondent's PM from EU17, measured during the source tests described in Paragraphs 14-31 of Section II above, as compared to the Permit limits for particulate matter described in Paragraphs 7-9 of Section II above.

Table 2. PM emissions from EU17

| Permit Limit | March 20, 2019 source test | March 22-23, 2019 source test | April 24, 2019 source test |
|--|----------------------------|-------------------------------|----------------------------|
| 0.26 lb/ton BLS (Condition 31) | 1.13 lb/ton BLS | 0.50 lb/ton BLS | 0.086 lb/ton BLS |
| 0.50 lb/ton of production (Condition 30) | 1.30 lb/ton of production | 0.57 lb/ton of production | 0.099 lb/ton of production |
| 0.10 gr/dscf (Condition 32) | 0.445 gr/dscf | 0.181 gr/dscf | 0.030 gr/dscf |

Offsite PM Deposition

33. Part 1, Condition 9 of the Permit prohibits Respondent from causing or permitting PM emissions at sufficient duration or quantity as to create an observable deposition upon the real property of another person.

34. On May 6, 2019, while technicians were working on communications issues between the Precipitator Control and Management System (PCAMS) computer and the operators' displays in the control room for the recovery furnaces, Respondent lost power to the Automatic Voltage Controllers (AVC) for the precipitators on Recovery Furnace No. 1 (EU14) and Recovery Furnace No. 2 (EU16) for a period of ten (10) minutes.

35. The loss of power described in Paragraph 34 of Section II, above, caused an increase in opacity from the recovery furnaces for a period of six (6) minutes.

36. On May 6, 2019, Respondent caused an observable deposition of PM off-site on Butler Bridge Road and on the bridge immediately southwest of the main plant at the Facility.

\\

\\

\\

1 NESHAP Subpart S

2 37. Respondent's Facility uses a kraft pulping process to produce pulp from wood by
3 cooking (digesting) wood chips in a water solution of sodium hydroxide and sulfide at high temperature
4 and pressure.

5 38. The digestion process creates pulp along with gaseous byproducts that include volatile
6 organic HAPs (e.g. methanol, acetaldehyde and formaldehyde) and total reduced sulfur.

7 39. Respondent's Facility includes emission points in its kraft pulping system, including
8 emission points in its Low Volume High Concentration (LVHC) system and closed-vent systems, that
9 are subject to the National Emission Standards for Hazardous Air Pollutant (NESHAP) regulations in
10 40 Code of Federal Regulations (CFR) Part 63, subpart S (Pulp and Paper Industry), adopted and
11 incorporated by reference in OAR 340-244-0220(1).

12 40. The NESHAP subpart S requirements are incorporated in Part 2 of the Permit.

13 41. Part 2, Condition 23 of the Permit requires Respondent to "at all times...operate and
14 maintain the affected source, including associated air pollution control equipment and monitoring
15 equipment, in a manner consistent with safety and good air pollution control practices for minimizing
16 emissions. Determination of whether such operation and maintenance procedures are being used will be
17 based on information available to DEQ which may include, but is not limited to, monitoring results,
18 review of operation and maintenance procedures, review of operation and maintenance records, and
19 inspection of the source."

20 42. According to the NESHAP subpart S, 40 CFR 63.440(b)(1), the affected source is the
21 total of all HAP [Hazardous Air Pollutant] emission points in the pulping and bleaching systems".

22 43. NESHAP subpart S, 40 CFR 63.441 defines "emission points" as "any part of a
23 stationary source that emits hazardous air pollutants regulated under this subpart, including emissions
24 from individual process vents, stacks, open pieces of process equipment, equipment leaks, wastewater
25 and condensate collection and treatment system units, and those emissions that could reasonably be
26 conveyed through a stack, chimney, or duct where such emissions first reach the environment."

27 \\\

1 44. Part 2, Condition 11.a of the Permit requires Respondent to ensure that each LVHC
2 system is enclosed and vented into a closed-vent system and routed to a control device that meets the
3 requirements specified Condition 11 and NESHAP subpart S.

4 45. According to the NESHAP subpart S, 40 CFR 63.441 a “LVHC system” is defined as
5 “the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper
6 systems, and any other equipment serving the same function as those previously listed.”

7 46. Part 2, Condition 10 lists the “LVHC equipment” that is subject to the Subpart S
8 requirements in the Permit, including “Kraft digesters 1-11, Semi-chem digester, Turpentine recovery
9 system, blow heat evaporator system, and foul condensate collection tank off-gas.”

10 47. According to the NESHAP subpart S, 40 CFR 63.441 a “Digester system” means “each
11 continuous digester or each batch digester used for the chemical treatment of wood or non-wood fibers.
12 The digester system equipment includes associated flash tank(s), blow tank(s), chip steamer(s) not
13 using fresh steam, blow heat recovery accumulator(s), relief gas condenser(s), prehydrolysis unit(s)
14 preceding the pulp washing system, and any other equipment serving the same function as those
15 previously listed. The digester system includes any of the liquid streams or condensates associated with
16 batch or continuous digester relief, blow, or flash steam processes.”

17 48. According to Part 2, Condition 11 and NESHAP subpart S, 40 CFR 63.443(d), the
18 control device used to reduce total HAP emissions from the LVHC system must reduce total HAP
19 emissions by 98 percent or more by weight, or meet other specified requirements.

20 49. Part 2, Condition 28 of the Permit sets forth inspection requirements derived from
21 NESHAP subpart S, 40 CFR 63.453(k), for enclosures and closed-vent systems.

22 50. According to the NESHAP subpart S, 40 CFR 63.441 a “closed vent system” means a
23 “system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if
24 necessary, flow-inducing devices that transport gas or vapor from an emission point to a control
25 device.”

26 \\\

27 \\\

1 51. More specifically, Part 2, Condition 28.a of the Permit requires Respondent to prepare
2 and maintain a site-specific inspection plan including a drawing or schematic of the components of
3 applicable affected equipment for each closed-vent system.

4 52. Part 2, Condition 28.c of the Permit requires that each calendar month, each closed-vent
5 system, including the LVHC system, must be visually inspected. The visual inspection must include
6 inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

7 53. If an inspection required by Part 2, Condition 28 of the Permit identifies visible evidence
8 of defects then corrective actions must be taken under Condition 27, with a first effort to repair or
9 correct within 5 calendar days after the problem has been identified, and completion of the repair or
10 correction 15 days after the problem is identified.

11 54. On or before April 2019, Respondent updated its form used for the monthly inspections
12 described in Paragraph 52 of Section II above. The updated form excluded possible leak points from
13 equipment that is part of the Facility's LVHC system, including the modified kraft pulp (MKP) digester
14 (also known as the "Semi-chem digester"), turpentine recovery system, blow heat accumulator and foul
15 condensate tank.

16 55. During the months of April 2019 through August 2019, Respondent conducted visual
17 inspections at the Facility using the updated form, which did not include all of the possible LVHC leak
18 locations described in Paragraph 54 of Section II above.

19 56. On September 11 and 12, 2019, the U.S. Environmental Protection Agency (EPA)
20 Region 10 and DEQ inspected the Facility.

21 57. At the time of the September 11, 2019, inspection, not all emissions from the MKP
22 digester were routed to a control device. Specifically there were continuous visible emissions from the
23 following locations at and around the MKP digester at the Facility:

24 a. From the metering screw shaft where it extends outside the digester housing on
25 the side opposite of the impregnator and metering screw;

26 b. From the metering screw shaft where it extends outside the impregnator housing
27 on the side opposite of the digester; and

1 c. From the flex line connector in one of the two non-condensable gas collection
2 pickups connected to the top of the digester.

3 58. The visible emissions described in Paragraphs 57.a through 57.c of Section II above,
4 were routed to the atmosphere through open doors and windows and/or roof vents in the MKP building.

5 59. During the inspection on September 11, 2019, the DEQ inspector, accompanied by
6 Respondent's personnel, attempted to climb, using stairs and a walkway, over the leaking shaft
7 described in Paragraph 57.b of Section II above, in order to view it more clearly. As they approached
8 the leaking shaft, the hydrogen sulfide (H₂S) monitor carried by Respondent's personnel alarmed when
9 exposed to the emissions coming from the leaking shaft.

10 60. On September 11, 2019, Respondent had identified the leak in the flex line connector,
11 described in Paragraph 57.c of Section II, above, and had ordered a part to repair the leak; Respondent
12 had not identified or taken any corrective actions with regard to the leaks from the metering screw shaft
13 described in Paragraphs 57.a or 57.b of Section II.

14 61. On or about September 16, 2019, Respondent repaired all of the leaks described in
15 Paragraph 57 of Section II, above.

16 III. CONCLUSIONS

17 Emission Limits and Source Testing

18 1. From March 20, 2019 to at least March 23, 2019, Respondent violated Part 1, Condition 31
19 of the Permit and ORS 468A.045(2) by exceeding the 0.26 lb/ton BLS PM emission limit for EU17, as
20 described in Section II, Paragraphs 5-32 above. This is a Class I violation, according to OAR 340-012-
21 0054(1)(i). DEQ hereby assesses a \$16,800 civil penalty for this violation.

22 2. From March 20, 2019 to at least March 23, 2019, Respondent violated Part 1, Condition 30
23 of the Permit and ORS 468A.045(2) by exceeding the 0.50 lb/ton of production PM emission limit for
24 EU17, as described in Section II, Paragraphs 5-32 above. This is a Class I violation, according to OAR
25 340-012-0054(1)(o). DEQ hereby assesses an \$8,400 civil penalty for this violation.

26 \\\

27 \\\

1 3. From March 20, 2019 to at least March 23, 2019, Respondent violated Part 1, Condition 32
2 of the Permit and ORS 468A.045(2) by exceeding the 0.10 gr/dscf PM emission limit for EU17, as
3 described in Section II, Paragraphs 5-32 above. This is a Class I violation, according to OAR 340-012-
4 0054(1)(o). DEQ hereby assesses an \$8,400 civil penalty for this violation.

5 4. On March 23, 2019, Respondent violated Part 1, Condition 29 of the Permit and ORS
6 468A.045(2) by exceeding the 0.033 lb/ton BLS TRS emission limit for EU17, as described in Section
7 II, Paragraphs 5-32 above. This is a Class II violation, according to OAR 340-012-0054(2)(b). DEQ
8 hereby assesses a \$3,600 civil penalty for this violation.

9 5. Respondent violated Part 1, Condition 69 of the Permit by failing to complete the TRS source
10 test that it began on March 22, 2019, as described in Section II, Paragraphs 5-32 above. Specifically,
11 Respondent failed to complete the TRS source test for reasons that are not permitted under Condition 69,
12 the DEQ Source Test Manual, and DEQ's March 7, 2019 source test approval letter because the
13 discontinuation of the source test was not "due to equipment failure beyond the facility's control,
14 construction delays beyond the facility's control, severe meteorological conditions, and situations that
15 would jeopardize the safety of the testing contractors and/or operators." As described in Paragraphs 20-
16 22 and 25 of Section II, Respondent recorded TRS emissions from EU17 above the range of the
17 instrument on March 22, 2019 and above the permitted limit on March 23, 2019. These high TRS levels
18 were not due to an equipment failure beyond the facility's control or any other circumstances under
19 which the DEQ Source Sampling Manual allows source testing to be discontinued. Rather, according to
20 Respondent's own evaluation, the high TRS levels were caused because Respondent used the wrong
21 strength of acid to titrate green liquor strength for its manual measurements, and thus ran its smelt
22 dissolving tanks at much higher green liquor strength than normal despite higher than normal values
23 from its automatic analyzer; this generated higher than normal PM emissions from EU17 and also
24 clogged the top and bottom cones and the drain of the scrubber associated with EU17. These issues
25 caused at least some of the smelt gases to bypass the scrubber, which led to the high TRS levels, above
26 the emissions limit. Thus, the high TRS levels were a result of operator error, which is not a
27 permissible reason to discontinue a source test under the DEQ Source Sampling Manual and Condition

69 of the Permit. This is a Class II violation according to OAR 340-012-0054(2)(b). DEQ hereby assesses a \$3,600 civil penalty for this violation.

Offsite PM Deposition

6. On May 6, 2019, Respondent violated Part 1, Condition 9 of the Permit by causing or allowing observable off-site deposition of particulate matter, as described in Section II, Paragraphs 33-36 above. This is a Class II violation according to OAR 340-012-0054(2)(b). DEQ hereby assesses a \$3,000 civil penalty for this violation.

NESHAP Subpart S

7. From April 2019 through September 16, 2019, Respondent violated Part 2, Condition 11.a of the Permit by failing to ensure that the LVHC system at the Facility was enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified Condition 11 of the Permit and NESHAP subpart S, as described in Section II, Paragraphs 37-61 above. Specifically, the MKP digester is part of the LVHC system as defined by NESHAP subpart S, 40 CFR 63.441, and per the list of “LVHC equipment” in Part 2, Condition 10 of the Permit. As described in Paragraphs 53-57 of Section II above, on September 11, 2019, the EPA and DEQ inspectors observed that not all emissions from the MKP digester were routed to a control device that meets subpart S requirements. Specifically, the inspectors observed that some digester gases were escaping from metering screw shafts on both sides of the MKP digester and from the flex line connector in one of the two non-condensable gas collection pickups connected to the top of the digester. Rather than being routed to a control device, these emissions escaped to the atmosphere. From at least April 2019 through September 11, 2019, Respondent had not been conducting monthly visual inspections of the MKP digester or other equipment that makes up the LVHC system, and thus had not observed or corrected the visible defects that were apparent on September 11, 2019, with the exception of the leak in the flex line connector, which had been identified but not yet corrected. On or about September 16, 2019, Respondent repaired all of the leaks observed during the September 11, 2019 inspection. This is a Class I violation according to OAR 340-012-0054(1)(i). DEQ hereby assesses a \$9,600 civil penalty for this violation.

\\

1 8. From April 2019 through August 2019, Respondent violated Part 2, Conditions 27 and 28.c
2 of the Permit by failing to perform complete monthly visual inspections of the Facility's enclosures and
3 closed-vent systems and to take corrective actions to address visible defects in the system, as described
4 in Section II, Paragraphs 37-61 above. Specifically, Respondent did not inspect all of the possible leak
5 locations of the equipment that makes up the LVHC system during its inspections conducted during the
6 months of April through August 2019. This is a Class I violation according to OAR 340-012-
7 0054(1)(p). DEQ hereby assesses a \$10,200 civil penalty for this violation.

8 IV. ORDER TO PAY CIVIL PENALTY AND TO COMPLY

9 Based upon the foregoing FINDINGS OF FACTS AND CONCLUSIONS, Respondent is
10 hereby ORDERED TO:

11 1. Pay a total civil penalty of \$63,600. The determination of the civil penalties is attached as
12 Exhibits 1-8 and are incorporated as part of this Notice.

13 If you do not file a request for hearing as set forth in Section V below, your check or money
14 order must be made payable to "**State Treasurer, State of Oregon**" and sent to the **DEQ, Business**
15 **Office, 700 NE Multnomah Street, Suite 600, Portland, Oregon 97232.**

16 2. Within 60 days of this order becoming final by operation of law or on appeal, submit to
17 DEQ for review and approval a plan to continuously monitor flue gas temperature after the smelt
18 dissolving tank scrubbers, PCD 62-056 (associated with EU15) and PCD 62-256 (associated with
19 EU17) (the Temperature Monitoring Plan). To be approvable, the Temperature Monitoring Plan must
20 include:

- 21 a. A timeline for installing a flue gas monitor on PCD 62-056;
- 22 b. A frequency for collecting and recording temperature data;
- 23 c. An Action Level for flue gas temperature, above which corrective actions will be taken;
- 24 and
- 25 d. Procedures for recordkeeping.

26 3. Implement the Temperature Monitoring Plan once approved by DEQ. This requirement will
27 remain in effect until the Permit renewal is issued by DEQ.

1 4. Within 60 days of this order becoming final by operation of law or on appeal, submit to
2 DEQ for review and approval an updated site-specific inspection plan including a drawing or schematic
3 of the components of the affected equipment, that includes all of the possible leak locations from the
4 Facility's LVHC system, including but not limited to all of the possible leak locations from the MKP
5 digester, turpentine recovery system, blow heat accumulator and foul condensate tank.

6 5. Written documentation demonstrating Respondent's compliance with Paragraphs 2-4 of
7 Section IV above must be sent to Mike Eisele, Oregon Department of Environmental Quality, Western
8 Region – Salem Office, 4026 Fairview Industrial Drive, Salem, Oregon 97302 or
9 michael.eisele@deq.state.or.us.

10 6. Conduct quarterly TRS testing at the no. 2 smelt dissolving tank (EU17) to monitor
11 compliance with Condition 29 of the Permit until six (6) consecutive source test results are less than
12 0.025 pounds of TRS per ton of black liquor solids.

13 7. Written documentation demonstrating Respondent's compliance with Paragraph 6 of
14 Section IV must be sent to Suzanne Blackburn, Oregon Department of Environmental Quality, Western
15 Region – Salem Office, 4026 Fairview Industrial Drive, Salem, Oregon 97302.

16 V. NOTICE OF RIGHT TO REQUEST A CONTESTED CASE HEARING

17 You have a right to a contested case hearing on this Notice, if you request one in writing. DEQ
18 must receive your request for hearing **within 20 calendar days** from the date you receive this Notice. If
19 you have any affirmative defenses or wish to dispute any allegations of fact in this Notice or attached
20 exhibits, you must do so in your request for hearing, as factual matters not denied will be considered
21 admitted, and failure to raise a defense will be a waiver of the defense. (See OAR 340-011-0530 for
22 further information about requests for hearing.) You must send your request to: **DEQ, Office of**
23 **Compliance and Enforcement, 700 NE Multnomah Street, Suite 600, Portland, Oregon 97232**, fax
24 it to **503-229-5100** or email it to DEQappeals@deq.state.or.us. An administrative law judge
25 employed by the Office of Administrative Hearings will conduct the hearing, according to ORS
26 Chapter 183, OAR Chapter 340, Division 011 and OAR 137-003-0501 to 0700. You have a right to be
27 represented by an attorney at the hearing, however you are not required to be. If you are an individual,

1 you may represent yourself. If you are a corporation, partnership, limited liability company,
2 unincorporated association, trust or government body, you must be represented by an attorney or a duly
3 authorized representative, as set forth in OAR 137-003-0555.

4 Active duty Service members have a right to stay proceedings under the federal Service
5 Members Civil Relief Act. For more information contact the Oregon State Bar at 1-800-
6 452-8260, the Oregon Military Department at 503-584-3571, or the nearest United States Armed
7 Forces Legal Assistance Office through <http://legalassistance.law.af.mil>. The Oregon Military
8 Department does not have a toll free telephone number.

9 If you fail to file a timely request for hearing, the Notice will become a final order by default
10 without further action by DEQ, as per OAR 340-011-0535(1). If you do request a hearing but later
11 withdraw your request, fail to attend the hearing or notify DEQ that you will not be attending the
12 hearing, DEQ will issue a final order by default pursuant to OAR 340-011-0535(3). DEQ designates
13 the relevant portions of its files, including information submitted by you, as the record for purposes of
14 proving a prima facie case.

15
16
17
18 9 / 21 / 2020
Date

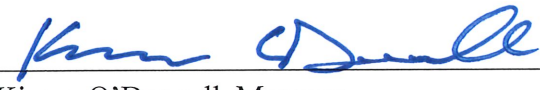
18 
Kieran O'Donnell, Manager
Office of Compliance and Enforcement

EXHIBIT 1

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

- VIOLATION No. 1 Exceeding the 0.26 lb/ton BLS particulate matter (PM) emission limit for EU17, in violation of Part 1, Condition 31 of the Permit and ORS 468A.045(2).
- CLASSIFICATION: This is a Class I violation pursuant to OAR 340-012-0054(1)(i).
- MAGNITUDE: The magnitude of the violation is major pursuant to OAR 340-012-0135(1)(d) because Respondent exceeded an emission limit established pursuant to federal National Emission Standards for Hazardous Air Pollutants (NESHAPs). Specifically, Respondent exceeded the Maximum Achievable Control Technology standard emission limit for HAP metals directly measured by a source test.
- CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$
- "BP" is the base penalty, which is \$12,000 for a Class I, major magnitude violation in the matrix listed in OAR 340-012-0140(2)(b)(A)(i) and applicable pursuant to OAR 340-012-0140(2)(a)(A) because Respondent has a Title V permit.
- "P" is whether Respondent has any prior significant actions, as defined in OAR 340-012-0030(19), in the same media as the violation at issue that occurred at a facility owned or operated by the same Respondent, and receives a value of 0 according to OAR 340-012-0145(2)(a)(C) and OAR 340-012-0145(2)(d)(A)(1), because Respondent has one Class I violation in case no. AQ/V-WR-2014-005, issued on January 28, 2014.
- "H" is Respondent's history of correcting prior significant actions, and receives a value of 1 according to OAR 340-012-0145(3)(d) because the violations were uncorrectable and Respondent took reasonable but not extraordinary efforts to minimize the effects of the violations cited as prior significant actions.
- "O" is whether the violation was repeated or ongoing, and receives a value of 2 according to OAR 340-012-0145(4)(b) because there were more than one but less than seven occurrences of the violation. Each day of violation is a separate occurrence. Respondent's emissions exceeded the Condition 31 PM limit from at least March 20, 2019 to March 23, 2019.
- "M" is the mental state of the Respondent, and receives a value of 4 according to OAR 340-012-0145(5)(c) because Respondent's conduct was negligent. According to OAR 340-012-0030(15), negligent means the respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation. Because Respondent used the wrong strength of acid to titrate green liquor strength, Respondent misinterpreted its

manual green liquor strength test results and ran its smelt dissolving tanks at much higher green liquor strength than normal, despite higher than normal green liquor strength results from its continuous analyzer. This generated higher than normal PM emissions from EU17 and also caused clogging in the top and bottom cones and drain in the scrubber on EU17. These issues caused at least some of the smelt gases to bypass the scrubber and were the likely cause of the PM emission limit exceedance. According to Respondent's policies and procedures, the association between high green liquor strength and clogging of the scrubber is a known issue. By failing to ensure that the green liquor analysis was accurate, and reducing its green liquor strength accordingly, Respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation.

"C" is Respondent's efforts to correct or mitigate the violation, and receives a value of -3 according to OAR 340-012-0145(6)(c) because Respondent took reasonable affirmative efforts to minimize the effects of the violation. Respondent had a contractor hydroblast the scrubber on March 22 and 23, 2019, to remove blockages in the scrubber. In addition, between April 6 and 17, 2019, Respondent performed maintenance on the scrubber for EU17 including cleaning/hydroblasting of the scrubber, top and bottom cones, and the drain line to the smelt dissolving tank; installing new doors and seals on all entries, performing a drone inspection on all accessible areas of the scrubber and stack and installing a temperature probe at the top of EU17 to monitor flue gas temperature.

"EB" is the approximate dollar value of the benefit gained and the costs avoided or delayed as a result of the Respondent's noncompliance. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, "EB" receives a value of \$0 because Respondent took corrective actions as described in in the "C" factor, above, and any benefit Respondent received from delaying these costs is de minimis.

PENALTY CALCULATION: $\text{Penalty} = \text{BP} + [(0.1 \times \text{BP}) \times (\text{P} + \text{H} + \text{O} + \text{M} + \text{C})] + \text{EB}$
= \$12,000 + [(0.1 x \$BP) x (0 + 1 + 2 + 4 + -3)] + \$0
= \$12,000 + (\$1,200 x 4) + \$0
= \$12,000 + \$4,800 + \$0
= \$16,800

EXHIBIT 2

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

VIOLATION No. 2 Exceeding the 0.50 lb/ton of production PM emission limit for EU17, in violation of Part 1, Condition 30 of the Permit and ORS 468A.045(2).

CLASSIFICATION: This is a Class I violation pursuant to OAR 340-012-0054(1)(o).

MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 applicable to this violation, and the information reasonably available to DEQ does not indicate a minor or major magnitude.

CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$

"BP" is the base penalty, which is \$6,000 for a Class I, moderate magnitude violation in the matrix listed in OAR 340-012-0140(2)(b)(A)(ii) and applicable pursuant to OAR 340-012-0140(2)(a)(A) because Respondent has a Title V permit.

"P" is whether Respondent has any prior significant actions, as defined in OAR 340-012-0030(19), in the same media as the violation at issue that occurred at a facility owned or operated by the same Respondent, and receives a value of 0 according to OAR 340-012-0145(2)(a)(C) and OAR 340-012-0145(2)(d)(A)(1), because Respondent has one Class I violation in case no. AQ/V-WR-2014-005, issued on January 28, 2014.

"H" is Respondent's history of correcting prior significant actions, and receives a value of 1 according to OAR 340-012-0145(3)(d) because the violations were uncorrectable and Respondent took reasonable but not extraordinary efforts to minimize the effects of the violations cited as prior significant actions.

"O" is whether the violation was repeated or ongoing, and receives a value of 2 according to OAR 340-012-0145(4)(b) because there were more than one but less than seven occurrences of the violation. Each day of violation is a separate occurrence. Respondent's emissions exceeded the Condition 30 PM limit from at least March 20, 2019 to March 23, 2019.

"M" is the mental state of the Respondent, and receives a value of 4 according to OAR 340-012-0145(5)(c) because Respondent's conduct was negligent. According to OAR 340-012-0030(15), negligent means the respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation. Because Respondent used the wrong strength of acid to titrate green liquor strength, Respondent misinterpreted its manual green liquor strength test results and ran its smelt dissolving tanks at much higher

green liquor strength than normal, despite higher than normal green liquor strength results from its continuous analyzer. This generated higher than normal PM emissions from EU17 and also caused clogging in the top and bottom cones and drain in the scrubber on EU17. These issues caused at least some of the smelt gases to bypass the scrubber and were the likely cause of the PM emission limit exceedance. According to Respondent's policies and procedures, the association between high green liquor strength and clogging of the scrubber is a known issue. By failing to ensure that the green liquor analysis was accurate, and reducing its green liquor strength accordingly, Respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation.

"C" is Respondent's efforts to correct or mitigate the violation, and receives a value of -3 according to OAR 340-012-0145(6)(c) because Respondent took reasonable affirmative efforts to minimize the effects of the violation. Respondent had a contractor hydroblast the scrubber on March 22 and 23, 2019, to remove blockages in the scrubber. In addition, between April 6 and 17, 2019, Respondent performed maintenance on the scrubber for EU17 including cleaning/hydroblasting of the scrubber, top and bottom cones, and the drain line to the smelt dissolving tank; installing new doors and seals on all entries, performing a drone inspection on all accessible areas of the scrubber and stack and installing a temperature probe at the top of EU17 to monitor flue gas temperature.

"EB" is the approximate dollar value of the benefit gained and the costs avoided or delayed as a result of the Respondent's noncompliance. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, "EB" receives a value of \$0 because Respondent took corrective actions as described in in the "C" factor, above, and any benefit Respondent received from delaying these costs is de minimis.

PENALTY CALCULATION: $\text{Penalty} = \text{BP} + [(0.1 \times \text{BP}) \times (\text{P} + \text{H} + \text{O} + \text{M} + \text{C})] + \text{EB}$
 $= \$6,000 + [(0.1 \times \$600) \times (0 + 1 + 2 + 4 + -3)] + \0
 $= \$6,000 + (\$600 \times 4) + \$0$
 $= \$6,000 + \$2,400 + \$0$
 $= \$8,400$

EXHIBIT 3

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY
PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

VIOLATION No. 3 Exceeding the 0.10 gr/dscf PM emission limit for EU17, in violation of Part 1, Condition 32 of the Permit and ORS 468A.045(2).

CLASSIFICATION: This is a Class I violation pursuant to OAR 340-012-0054(1)(o).

MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 applicable to this violation, and the information reasonably available to DEQ does not indicate a minor or major magnitude.

CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$

"BP" is the base penalty, which is \$6,000 for a Class I, moderate magnitude violation in the matrix listed in OAR 340-012-0140(2)(b)(A)(ii) and applicable pursuant to OAR 340-012-0140(2)(a)(A) because Respondent has a Title V permit.

"P" is whether Respondent has any prior significant actions, as defined in OAR 340-012-0030(19), in the same media as the violation at issue that occurred at a facility owned or operated by the same Respondent, and receives a value of 0 according to OAR 340-012-0145(2)(a)(C) and OAR 340-012-0145(2)(d)(A)(1), because Respondent has one Class I violation in case no. AQ/V-WR-2014-005, issued on January 28, 2014.

"H" is Respondent's history of correcting prior significant actions, and receives a value of 1 according to OAR 340-012-0145(3)(d) because the violations were uncorrectable and Respondent took reasonable but not extraordinary efforts to minimize the effects of the violations cited as prior significant actions.

"O" is whether the violation was repeated or ongoing, and receives a value of 2 according to OAR 340-012-0145(4)(b) because there were more than one but less than seven occurrences of the violation. Each day of violation is a separate occurrence. Respondent's emissions exceeded the Condition 32 PM limit from at least March 20, 2019 to March 23, 2019.

"M" is the mental state of the Respondent, and receives a value of 4 according to OAR 340-012-0145(5)(c) because Respondent's conduct was negligent. According to OAR 340-012-0030(15), negligent means the respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation. Because Respondent used the wrong strength of acid to titrate green liquor strength, Respondent misinterpreted its manual green liquor strength test results and ran its smelt dissolving tanks at much higher

green liquor strength than normal, despite higher than normal green liquor strength results from its continuous analyzer. This generated higher than normal PM emissions from EU17 and also caused clogging in the top and bottom cones and drain in the scrubber on EU17. These issues caused at least some of the smelt gases to bypass the scrubber and were the likely cause of the PM emission limit exceedance. According to Respondent's policies and procedures, the association between high green liquor strength and clogging of the scrubber is a known issue. By failing to ensure that the green liquor analysis was accurate, and reducing its green liquor strength accordingly, Respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation.

"C" is Respondent's efforts to correct or mitigate the violation, and receives a value of -3 according to OAR 340-012-0145(6)(c) because Respondent took reasonable affirmative efforts to minimize the effects of the violation. Respondent had a contractor hydroblast the scrubber on March 22 and 23, 2019, to remove blockages in the scrubber. In addition, between April 6 and 17, 2019, Respondent performed maintenance on the scrubber for EU17 including cleaning/hydroblasting of the scrubber, top and bottom cones, and the drain line to the smelt dissolving tank; installing new doors and seals on all entries, performing a drone inspection on all accessible areas of the scrubber and stack and installing a temperature probe at the top of EU17 to monitor flue gas temperature.

"EB" is the approximate dollar value of the benefit gained and the costs avoided or delayed as a result of the Respondent's noncompliance. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, "EB" receives a value of \$0 because Respondent took corrective actions as described in in the "C" factor, above, and any benefit Respondent received from delaying these costs is de minimis.

PENALTY CALCULATION: $\text{Penalty} = \text{BP} + [(0.1 \times \text{BP}) \times (\text{P} + \text{H} + \text{O} + \text{M} + \text{C})] + \text{EB}$
 $= \$6,000 + [(0.1 \times \$600) \times (0 + 1 + 2 + 4 + -3)] + \0
 $= \$6,000 + (\$600 \times 4) + \$0$
 $= \$6,000 + \$2,400 + \$0$
 $= \$8,400$

EXHIBIT 4

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY
PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

VIOLATION No. 4 Exceeding the 0.033 lb/ton BLS TRS emission limit for EU17, in violation of Part 1, Condition 29 of the Permit and ORS 468A.045(2).

CLASSIFICATION: This is a Class II violation pursuant to OAR 340-012-0054(2)(b).

MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 applicable to this violation, and the information reasonably available to DEQ does not indicate a minor or major magnitude.

CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$

"BP" is the base penalty, which is \$3,000 for a Class II, moderate magnitude violation in the matrix listed in OAR 340-012-0140(2)(b)(B)(ii) and applicable pursuant to OAR 340-012-0140(2)(a)(A) because Respondent has a Title V permit.

"P" is whether Respondent has any prior significant actions, as defined in OAR 340-012-0030(19), in the same media as the violation at issue that occurred at a facility owned or operated by the same Respondent, and receives a value of 0 according to OAR 340-012-0145(2)(a)(C) and OAR 340-012-0145(2)(d)(A)(1), because Respondent has one Class I violation in case no. AQ/V-WR-2014-005, issued on January 28, 2014.

"H" is Respondent's history of correcting prior significant actions, and receives a value of 1 according to OAR 340-012-0145(3)(d) because the violations were uncorrectable and Respondent took reasonable but not extraordinary efforts to minimize the effects of the violations cited as prior significant actions.

"O" is whether the violation was repeated or ongoing, and receives a value of 0 according to OAR 340-012-0145(4)(a) because there was only one occurrence of the violation. Respondent's emissions exceeded the Condition 29 TRS limit on March 23, 2019.

"M" is the mental state of the Respondent, and receives a value of 4 according to OAR 340-012-0145(5)(c) because Respondent's conduct was negligent. According to OAR 340-012-0030(15), negligent means the respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation. Because Respondent used the wrong strength of acid to titrate green liquor strength, Respondent misinterpreted its manual green liquor strength test results and ran its smelt dissolving tanks at much higher green liquor strength than normal, despite higher than normal green liquor strength

results from its continuous analyzer. This generated higher than normal PM emissions from EU17 and also caused clogging in the top and bottom cones and drain in the scrubber on EU17. These issues caused at least some of the smelt gases to bypass the scrubber and were the likely cause of the TRS emission limit exceedance. According to Respondent's policies and procedures, the association between high green liquor strength and clogging of the scrubber is a known issue. By failing to ensure that the green liquor analysis was accurate, and reducing its green liquor strength accordingly, Respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation.

"C" is Respondent's efforts to correct or mitigate the violation, and receives a value of -3 according to OAR 340-012-0145(6)(c) because Respondent took reasonable affirmative efforts to minimize the effects of the violation. Respondent had a contractor hydroblast the scrubber on March 22 and 23, 2019, to remove blockages in the scrubber. In addition, between April 6 and 17, 2019, Respondent performed maintenance on the scrubber for EU17 including cleaning/hydroblasting of the scrubber, top and bottom cones, and the drain line to the smelt dissolving tank; installing new doors and seals on all entries, performing a drone inspection on all accessible areas of the scrubber and stack and installing a temperature probe at the top of EU17 to monitor flue gas temperature.

"EB" is the approximate dollar value of the benefit gained and the costs avoided or delayed as a result of the Respondent's noncompliance. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, "EB" receives a value of \$0 because Respondent took corrective actions as described in in the "C" factor, above, and any benefit Respondent received from delaying these costs is de minimis.

PENALTY CALCULATION: $\text{Penalty} = \text{BP} + [(0.1 \times \text{BP}) \times (\text{P} + \text{H} + \text{O} + \text{M} + \text{C})] + \text{EB}$
 $= \$3,000 + [(0.1 \times \$3000) \times (0 + 1 + 0 + 4 + -3)] + \0
 $= \$3,000 + (\$300 \times 2) + \$0$
 $= \$3,000 + \$600 + \$0$
 $= \$3,600$

EXHIBIT 5

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY
PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

- VIOLATION No. 5 Failing to complete the TRS source test, in violation of Part 1, Condition 69 of the Permit.
- CLASSIFICATION: This is a Class II violation pursuant to OAR 340-012-0054(2)(b).
- MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 applicable to this violation, and the information reasonably available to DEQ does not indicate a minor or major magnitude.
- CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$
- "BP" is the base penalty, which is \$3,000 for a Class II, moderate magnitude violation in the matrix listed in OAR 340-012-0140(2)(b)(B)(ii) and applicable pursuant to OAR 340-012-0140(2)(a)(A) because Respondent has a Title V permit.
- "P" is whether Respondent has any prior significant actions, as defined in OAR 340-012-0030(19), in the same media as the violation at issue that occurred at a facility owned or operated by the same Respondent, and receives a value of 0 according to OAR 340-012-0145(2)(a)(C) and OAR 340-012-0145(2)(d)(A)(1), because Respondent has one Class I violation in case no. AQ/V-WR-2014-005, issued on January 28, 2014.
- "H" is Respondent's history of correcting prior significant actions, and receives a value of 1 according to OAR 340-012-0145(3)(d) because the violations were uncorrectable and Respondent took reasonable but not extraordinary efforts to minimize the effects of the violations cited as prior significant actions.
- "O" is whether the violation was repeated or ongoing, and receives a value of 0 according to OAR 340-012-0145(4)(a) because there was only one occurrence of the violation. Respondent failed to complete the TRS source test that it began on March 22, 2019.
- "M" is the mental state of the Respondent, and receives a value of 4 according to OAR 340-012-0145(5)(c) because Respondent's conduct was negligent. According to OAR 340-012-0030(15), negligent means the respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation. Condition 69 incorporates the DEQ Source Sampling Manual, which expressly states that "It is unacceptable to postpone or suspend a test run in progress if it is discontinued because the source is not able to comply with an emission limit..." Rather, sources may discontinue a source in progress only if "the discontinuation is due to equipment failure beyond the facility's

control, construction delays beyond the facility's control, severe meteorological conditions, and situations that would jeopardize the safety of the testing contractors and/or operators. If the test is underway, the permittee should make every effort to complete the test run." DEQ's source test plan approval letter, issued to Respondent on March 7, 2019, reiterates these requirements from the Source Sampling Manual. On March 22, 2019, Respondent discontinued the TRS source test when it observed TRS levels above the range of the instrument. By the morning of March 23, 2019, Respondent had determined through troubleshooting that it had been running its green liquor strength too high in the smelt dissolving tanks, which had resulted in plugging of the scrubber associated with EU17. Thus, Respondent understood that the source of the high TRS levels was likely operator error, and not equipment failure beyond the facility's control. Respondent unplugged the bottom cone and drain of the scrubber and resumed the PM source test on the morning of March 23, 2019, but did not resume TRS testing. Thus, by stopping and then failing to resume the TRS source testing, when it knew the source of the problem was likely due to operator error and not an unavoidable equipment failure, Respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation of Condition 69 of the Permit.

"C" is Respondent's efforts to correct or mitigate the violation, and receives a value of -3 according to OAR 340-012-0145(6)(c) because Respondent took reasonable affirmative efforts to minimize the effects of the violation. Starting with the third quarter of 2019, Respondent has conducted quarterly source testing for TRS emissions from EU17.

"EB" is the approximate dollar value of the benefit gained and the costs avoided or delayed as a result of the Respondent's noncompliance. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, "EB" receives a value of \$0 because DEQ has insufficient information to calculate an economic benefit for this violation.

PENALTY CALCULATION: $Penalty = BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$
 $= \$3,000 + [(0.1 \times \$BP) \times (0 + 1 + 0 + 4 + -3)] + \0
 $= \$3,000 + (\$300 \times 2) + \$0$
 $= \$3,000 + \$600 + \$0$
 $= \$3,600$

EXHIBIT 6

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY
PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

VIOLATION No. 6 Causing or allowing observable off-site deposition of particulate matter, in violation of Part 1, Condition 9 of the Permit.

CLASSIFICATION: This is a Class II violation pursuant to OAR 340-012-0054(2)(b).

MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 applicable to this violation, and the information reasonably available to DEQ does not indicate a minor or major magnitude.

CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$

"BP" is the base penalty, which is \$3,000 for a Class II, moderate magnitude violation in the matrix listed in OAR 340-012-0140(2)(b)(B)(ii) and applicable pursuant to OAR 340-012-0140(2)(a)(A) because Respondent has a Title V permit.

"P" is whether Respondent has any prior significant actions, as defined in OAR 340-012-0030(19), in the same media as the violation at issue that occurred at a facility owned or operated by the same Respondent, and receives a value of 0 according to OAR 340-012-0145(2)(a)(C) and OAR 340-012-0145(2)(d)(A)(1), because Respondent has one Class I violation in case no. AQ/V-WR-2014-005, issued on January 28, 2014.

"H" is Respondent's history of correcting prior significant actions, and receives a value of 1 according to OAR 340-012-0145(3)(d) because the violations were uncorrectable and Respondent took reasonable but not extraordinary efforts to minimize the effects of the violations cited as prior significant actions.

"O" is whether the violation was repeated or ongoing, and receives a value of 0 according to OAR 340-012-0145(4)(a) because there was only one occurrence of the violation. Respondent caused observable off-site deposition of PM on May 6, 2019.

"M" is the mental state of the Respondent, and receives a value of 2 according to OAR 340-012-0145(5)(b) because Respondent had constructive knowledge (reasonably should have known) of the requirement. As a permittee, Respondent has constructive knowledge of all of the conditions of its Permit. In addition, on October 4, 2018, Respondent received Warning Letter No. 2018-WL-3690 for violating Part 1, Condition 9 of the Permit due to the off-site deposition of PM when foam was carried off-site during September 7-18, 2018.

"C" is Respondent's efforts to correct or mitigate the violation, and receives a value of -3 according to OAR 340-012-0145(6)(c) because Respondent took reasonable affirmative efforts to minimize the effects of the violation. Following the incident, Respondent determined that the Automatic Voltage Controllers (AVCs) were inadvertently shut down by its technicians while working on communications issues between the Precipitator Control and Management System (PCMS) and the operators' displays in the controls room for the recovery furnaces. Respondent worked with the vendor of the PCMS to evaluate and improve its startup/shutdown procedure, to prevent future occurrences of inadvertently shut down the AVCs while shutting down / starting up the PCAMS computer.

"EB" is the approximate dollar value of the benefit gained and the costs avoided or delayed as a result of the Respondent's noncompliance. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, "EB" receives a value of \$0 because DEQ has insufficient information to calculate an economic benefit for this violation.

PENALTY CALCULATION: $\text{Penalty} = \text{BP} + [(0.1 \times \text{BP}) \times (\text{P} + \text{H} + \text{O} + \text{M} + \text{C})] + \text{EB}$
 $= \$3,000 + [(0.1 \times \$\text{BP}) \times (0 + 1 + 0 + 2 + -3)] + \0
 $= \$3,000 + (\$300 \times 0) + \$0$
 $= \$3,000 + \$0 + \$0$
 $= \$3,000$

EXHIBIT 7

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY
PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

VIOLATION No. 7 Failing to ensure that the LVHC system is enclosed and vented into a closed-vent system and routed to a control device, in violation of Part 2, Condition 11.a of the Permit.

CLASSIFICATION: This is a Class I violation pursuant to OAR 340-012-0054(1)(i).

MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 applicable to this violation, and the information reasonably available to DEQ does not indicate a minor or major magnitude.

CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$

"BP" is the base penalty, which is \$6,000 for a Class I, moderate magnitude violation in the matrix listed in OAR 340-012-0140(2)(b)(A)(ii) and applicable pursuant to OAR 340-012-0140(2)(a)(A) because Respondent has a Title V permit.

"P" is whether Respondent has any prior significant actions, as defined in OAR 340-012-0030(19), in the same media as the violation at issue that occurred at a facility owned or operated by the same Respondent, and receives a value of 0 according to OAR 340-012-0145(2)(a)(C) and OAR 340-012-0145(2)(d)(A)(1), because Respondent has one Class I violation in case no. AQ/V-WR-2014-005, issued on January 28, 2014.

"H" is Respondent's history of correcting prior significant actions, and receives a value of 1 according to OAR 340-012-0145(3)(d) because the violations were uncorrectable and Respondent took reasonable but not extraordinary efforts to minimize the effects of the violations cited as prior significant actions.

"O" is whether the violation was repeated or ongoing, and receives a value of 4 according to OAR 340-012-0145(4)(d) because there were more than 28 occurrences of the violation. Each day is a separate occurrence of the violation. Respondent failed to ensure that the Facility's LVHC system was enclosed and vented into a closed-vent system and routed to a control device that meets NESHAP subpart S requirements from April 2019 through September 16, 2019. Thus, there were more than 28 occurrences of the violation.

"M" is the mental state of the Respondent, and receives a value of 4 according to OAR 340-012-0145(5)(c) because Respondent's conduct was negligent. According to OAR 340-012-0030(15), negligent means the respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation. The requirement to

ensure that the LVHC system is enclosed and vented into a closed-vent system and routed to a control device such that HAP emissions do not escape to the atmosphere is an express condition of Respondent's permit and a fundamental standard of the NESHAP S. Respondent also has an obligation, per Part 2 Condition 23 of the Permit to, at all times, operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. The NESHAP subpart S definition of a "LVHC system" and the list of "LVHC equipment" in Part 1, Condition 10 of the Permit expressly includes the MKP digester, yet Respondent did not include possible leak locations associated with the MKP digester in its updated monthly inspection plan nor did Respondent detect and correct two of the three leaks that were observed by EPA and DEQ inspectors on September 11, 2019. Therefore, Respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation of the requirement to ensure that its LVHC system was enclosed and vented emissions to a control device.

"C" is Respondent's efforts to correct or mitigate the violation, and receives a value of -3 according to OAR 340-012-0145(6)(c) because Respondent made reasonable efforts to correct the violation. On or about September 16, 2019, Respondent repaired all of the leaks identified during the September 11, 2019 inspection.

"EB" is the approximate dollar value of the benefit gained and the costs avoided or delayed as a result of the Respondent's noncompliance. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, "EB" receives a value of \$0 because DEQ has insufficient information to calculate an economic benefit for this violation.

PENALTY CALCULATION: $\text{Penalty} = \text{BP} + [(0.1 \times \text{BP}) \times (\text{P} + \text{H} + \text{O} + \text{M} + \text{C})] + \text{EB}$
 $= \$6,000 + [(0.1 \times \$600) \times (0 + 1 + 4 + 4 + -3)] + \0
 $= \$6,000 + (\$600 \times 6) + \$0$
 $= \$6,000 + \$3,600 + \$0$
 $= \$9,600$

EXHIBIT 8

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

VIOLATION No. 8 Failing to perform complete monthly visual inspections of the Facility's enclosures and closed-vent systems at least once per calendar month and to take corrective actions to address visible defects in the system, in violation of Part 2, Conditions 27 and 28.c of the Permit.

CLASSIFICATION: This is a Class I violation pursuant to OAR 340-012-0054(1)(p).

MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 applicable to this violation, and the information reasonably available to DEQ does not indicate a minor or major magnitude.

CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$

"BP" is the base penalty, which is \$6,000 for a Class I, moderate magnitude violation in the matrix listed in OAR 340-012-0140(2)(b)(A)(ii) and applicable pursuant to OAR 340-012-0140(2)(a)(A) because Respondent has a Title V permit.

"P" is whether Respondent has any prior significant actions, as defined in OAR 340-012-0030(19), in the same media as the violation at issue that occurred at a facility owned or operated by the same Respondent, and receives a value of 0 according to OAR 340-012-0145(2)(a)(C) and OAR 340-012-0145(2)(d)(A)(1), because Respondent has one Class I violation in case no. AQ/V-WR-2014-005, issued on January 28, 2014.

"H" is Respondent's history of correcting prior significant actions, and receives a value of 1 according to OAR 340-012-0145(3)(d) because the violations were uncorrectable and Respondent took reasonable but not extraordinary efforts to minimize the effects of the violations cited as prior significant actions.

"O" is whether the violation was repeated or ongoing, and receives a value of 2 according to OAR 340-012-0145(4)(c) because there were from more than one but less than seven occurrences of the violation. Respondent failed to conduct complete monthly inspections for at least five months, from April 2019 through August 2019.

"M" is the mental state of the Respondent, and receives a value of 4 according to OAR 340-012-0145(5)(c) because Respondent's conduct was negligent. According to OAR 340-012-0030(15), negligent means the respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation. The NESHAP subpart S

definition of a “LVHC system” and the list of “LVHC equipment” in Part 1, Condition 10 of the Permit expressly includes the MKP digester, yet Respondent did not include possible leak locations associated with the MKP digester or other LVHC system equipment in its inspection plan. In addition, Respondent’s previous version of the inspection plan had included some of the LVHC equipment, including the MKP digester. Nevertheless, Respondent failed to inspect the MKP digester and other LVHC equipment for possible leaks during monthly inspections between at least April 2019 and August 2019. Therefore, Respondent failed to take reasonable care to avoid a foreseeable risk of conduct constituting or resulting in a violation of the requirement to conduct complete monthly inspections of its LVHC system.

"C" is Respondent's efforts to correct or mitigate the violation, and receives a value of 0 according to OAR 340-012-0145(6)(f) because there is insufficient information to make a finding under paragraphs (6)(a) through (6)(e), or (6)(g).

"EB" is the approximate dollar value of the benefit gained and the costs avoided or delayed as a result of the Respondent’s noncompliance. It is designed to “level the playing field” by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, “EB” receives a value of \$0 because DEQ has insufficient information to calculate an economic benefit for this violation.

PENALTY CALCULATION: $Penalty = BP + [(0.1 \times BP) \times (P + H + O + M + C)] + EB$
= \$6,000 + [(0.1 x \$BP) x (0 + 1 + 2 + 4 + 0)] + \$0
= \$6,000 + (\$600 x 7) + \$0
= \$6,000 + \$4,200 + \$0
= \$10,200