

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF: TCC MATERIALS	ADMINISTRATIVE CONSENT ORDER NO. 2020-AQ- 12
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To: TCC Materials
c/o Cemstone Concrete Materials, LLC
Connie Estes, Registered Agent
1343 Highway 105 W
P.O. Box 153
Northwood, Iowa 50459

TCC Materials
Patrick Bergin
Environmental Manager
2025 Centre Pointe Blvd
Suite 300
Mendota Heights, Minnesota 55120

TCC Materials
Tim Becken
Senior Vice President of Operations
2025 Centre Pointe Blvd, Suite 300
Mendota Heights, Minnesota 55120

I. SUMMARY

This administrative consent order is entered into between the Iowa Department of Natural Resources (DNR) and TCC Materials for the purpose of resolving air quality violations. In the interest of avoiding litigation, the parties have agreed to the provisions below.

Any questions regarding this administrative consent order should be directed to:

Relating to technical requirements:

Mark Fields
Iowa Department of Natural Resources
Wallace State Office Building
502 East Ninth Street
Des Moines, Iowa 50319-0034
Phone: 515-725-9526

Relating to legal requirements:

Anne Preziosi, Attorney for the DNR
Iowa Department of Natural Resources
Wallace State Office Building
502 East Ninth Street
Des Moines, Iowa 50319-0034
Phone: 515-725-9551

Payment of penalty to:

Director of the Iowa DNR
Wallace State Office Building

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502 East Ninth Street
Des Moines, Iowa 50319-0034

II. JURISDICTION

This administrative consent order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1), which authorize the director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II (air quality), and the rules promulgated or permits issued pursuant to that part; and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10, which authorize the director to assess administrative penalties.

III. STATEMENT OF FACTS

1. TCC Materials operates a sand-drying facility located at 2530 Pettibone Avenue in Muscatine, Iowa. TCC Materials offers a complete line of packaged concrete and masonry products sold to individuals and professional contractors. Sources of emissions to the outside atmosphere at this facility include a rotary gas dryer (Emission Point (EP) 3A2). TCC Materials is headquartered in Mendota Heights, Minnesota. TCC Materials is owned by Cemstone Concrete Materials, LLC.

2. TCC Materials has failed to comply with the requirement to timely obtain air quality construction permits, has failed to comply with construction permit emission limits, has failed to comply with testing requirements, has failed to report excess emissions as required, and has failed to maintain equipment in a manner consistent with good practice for minimizing emissions.

3. **TCC Materials has failed to comply with the requirement to timely obtain air quality construction permits.** On January 22, 2019, TCC Materials modified the stack identified as Emission Point (EP) 3A. TCC Materials also replaced the baghouse associated with the rotary dryer (Emission Unit (EU) 3A). At that time, EP 3A was permitted by Construction Permit No. 04-A-491-S1, issued on March 24, 2010.

4. TCC Materials made these changes prior to application for and receipt of an air quality construction permit, as required by 567 IAC 22.1(1). On March 8, 2019, DNR received a construction permit application regarding the January 2019 modifications. DNR assigned Project Number 19-075 to this application. On June 28, 2019, DNR issued a Letter of Noncompliance (LNC) to TCC Materials, giving notice that TCC was out of compliance with 567 IAC 22.1(1).

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5. Due to the extent of the stack changes made by TCC Materials, Construction Permit No. 04-A-491-S1 was rescinded and DNR issued new Construction Permit No. 19-A-277 for EP 3A2 on August 9, 2019.

6. **TCC Materials has failed to comply with emission limits and has failed to comply with testing requirements.** TCC Materials has violated the 0.1 gr/dscf PM emission limit cited in 567 IAC 22.3(2)"a"(1) and the 1.16 lb/hr PM and 1.16 lb/hr PM10 emission limits contained in Condition 1 of Construction Permit No. 19-A-277.

7. Condition 2 of Construction Permit No. 19-A-277 required stack testing to be completed within 90 days to demonstrate compliance with the permitted PM and PM10 emission limits. On October 2, 2019, TCC Materials submitted a test protocol for stack testing to be completed October 17, 2019. On October 17, 2019, TCC Materials conducted required stack testing for PM and PM10 as scheduled. No DNR representative was present to observe the testing.

8. Stack test results for PM and PM10 were 82.71 lb/hr, which is in violation of the permitted PM and PM10 emission limit of 1.16 lb/hr. PM results were 1.593 gr/dscf, which is in violation of the 0.1 gr/dscf emission limit cited in Construction Permit No. 19-A-277 and 567 IAC 22.3(2)"a"(1). Further, production during the test event was 25 tons/hr or 50% of maximum rated capacity.

9. On November 7, 2019, Patrick Bergin of TCC Materials emailed Mark Fields of DNR to request a stack testing extension due to test results exceeding permitted limits. On November 12, 2019, Mark Fields of DNR emailed Patrick Bergin of TCC Materials in response to the November 7, 2019, stack test extension request. TCC Materials was informed that a compliance plan would be required to address the PM and PM10 exceedances. Also on November 12, 2019, the test report for the October 17, 2019, stack test was received by DNR.

10. A November 25, 2019, Notice of Violation (NOV) was issued to TCC Materials for exceeding permitted emission limits and the requirements of 567 IAC 22.3(2)"a"(1) during the October 2019 stack test event. TCC Materials submitted a compliance plan stating a loose diaphragm had been replaced and that the facility would switch the type of bags being used in the associated baghouse. A retest was to be completed by January 31, 2020. On December 16, 2020, TCC Materials submitted a test protocol for PM and PM10 testing to be completed January 16, 2020.

11. On December 20, 2019, TCC Material submitted letter requesting to rescind four construction permits. Rescission of Construction Permit No. 04-A-

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491-S1, issued in 2010 for the stack associated with the original rotary dryer, EP 3A, was included in this request letter.

12. A retest occurred on January 16, 2020. DNR and EPA Region VII representatives were on site to observe compliance testing. Compliance testing was started and Run 1 of stack testing was completed. The test was halted for several hours to repair the baghouse due to high emissions observed during stack test Run 1. Run 2 failed a post run leak check, making the run invalid. TCC Materials cancelled the testing after the second run was invalidated. The DNR observer noted high opacity being emitted by the source and a large volume of particulate collected on the test filters.

13. One test run completed provided credible evidence that demonstrated the source continued to emit 0.32 gr/dscf of PM and 19.46 lb/hr of PM and PM10, in violation of Construction Permit No. 19-A-277 and 567 IAC 22.3(2)"a"(1).

14. TCC Materials failed to timely submit the January 16, 2020, stack test report within six weeks as required by 567 IAC 25.1(7). On March 9, 2020, Mark Fields of DNR contacted Pat Bergin of TCC Materials to request that the report from the January 16, 2020, stack testing be submitted. An electronic version of this test report was submitted on March 18, 2020. The report was submitted 61 days after the test event was completed. The report stated that the first test run results for PM were 0.32 gr/dscf and for PM and PM10 were 19.46 lb/hr.

15. On March 9, 2020, Mark Fields of DNR requested that an updated compliance plan and production data from October 2019 through February 2020 be submitted. On March 13, 2020, TCC Materials submitted a test notification and test protocol to complete compliance testing on April 14, 2020. On March 23, 2020, TCC Materials submitted an updated compliance plan and the requested production data. TCC Materials stated that the source again needed modifications to the bags used in the baghouse and stated plans to change out a diaphragm with a better unit.

16. On April 3, 2020, DNR issued an NOV for late test reporting and also citing credible evidence demonstrating that EP 3A2 was continuing to exceed the permitted limits for PM and PM10.

17. The permitted PM10 emission limit was set to maintain the facility-wide air emissions below the Title V Major Source threshold and to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS).

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18. TCC Materials conducted stack testing on April 14, 2020, and PM/PM10 test results were 0.72 lb/hr, which is below the 1.16 lb/hr permitted limit. A Letter of Noncompliance was issued June 1, 2020, because the testing was conducted below maximum capacity. TCC Materials requested to modify the permit to place a production limit on EP 32A, and Construction Permit No. 19-A-277-S1 was issued on July 8, 2020, limiting the maximum rated capacity of EP 3A2 to 30 tons/hr and adding stack testing requirements.

19. TCC Materials has failed to report excess emissions as required and has failed to maintain equipment in a manner consistent with good practice for minimizing emissions.

20. TCC Materials has failed to report excess emissions as required by 567 IAC 24.1. On August 30, 2019, excess emissions were observed by Ryan Stouder of DNR Field Office 6. On September 23, 2019, DNR Field Office 6 issued an NOV to TCC Materials for failure to report the August 30, 2019, excess emissions, as required by 567 IAC 24.1 and Condition 8 of Construction Permit No. 19-A-277. TCC Materials also was cited in this letter for failure to maintain equipment in a manner consistent with good practice to minimize emissions pursuant to the provisions of 567 IAC 24.2.

21. The facility has a history of violating air quality requirements. On July 27, 2017, DNR Field Office 6 issued an NOV to TCC Materials for failure to report excess emissions observed on July 11, 2017, as required by 567 IAC 24.1. TCC Materials also was cited for failure to maintain equipment in a manner consistent with good practice to minimize emissions pursuant to 567 IAC 24.2. On August 9, 2017, TCC Materials provided a compliance plan to Iowa DNR, stating that 250 bags for the baghouse had been ordered and would be installed. TCC Materials also stated future emissions of particulate would be reported as required by DNR rules.

IV. CONCLUSIONS OF LAW

1. Iowa Code section 455B.133 provides that the Environmental Protection Commission (Commission) shall establish rules governing the quality of air and emission standards. The Commission has adopted 567 IAC chapters 20-35 relating to air quality.

2. Iowa Code section 455B.134(3) provides that the director of DNR shall grant, modify, suspend, terminate, revoke, reissue or deny permits for the construction or operation of new, modified, or existing air contaminant sources and for related control equipment.

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3. Pursuant to Iowa Code sections 455B.133 and 455B.134, 567 IAC 22.1(1) was adopted, which states, in relevant part, that “[u]nless exempted in subrule 22.1(2) or to meet the parameters established in paragraph “c” of this subrule, no person shall construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit...” TCC Materials has failed to timely obtain a construction permit, as stated above.

4. 567 IAC 22.3(3) states that a permit may be issued subject to conditions which shall be specified in writing. Such conditions may include but are not limited to emission limits, operating conditions, fuel specifications, compliance testing, continuous monitoring, and excess emission reporting. As stated above, TCC Materials has failed to comply with emission limits contained in air quality construction permits. TCC Materials has violated compliance demonstration and stack testing requirements.

5. As stated above, TCC Materials has failed to timely report excess emissions, as required by the provisions of 567 IAC 24. 567 IAC 24 requires that an initial report of excess emissions shall occur within eight hours of, or at the start of the first working day following the onset of the incident. The rule also requires that a written report of excess emissions shall be submitted within seven days of the onset of the upset condition.

6. 567 IAC 24.1(1)”a” requires that sources be operated and maintained in a manner to minimize emissions. TCC Materials has failed to operate and maintain equipment in a manner designed to minimize emissions, as required by Condition 8 of the construction permit for EP 3A2 and by 567 IAC 24.1(1)”a”.

V. ORDER

THEREFORE, DNR orders and TCC Materials agrees to the following:

1. Within 30 days of the date this order is signed by the director, and in accordance with the provisions of 567 IAC 24.2(2), TCC Materials shall submit for approval to the Department a proposed Operation and Maintenance Plan for all equipment and control equipment included in Construction Permit No. 19-A-277-S1; and

2. Within 30 days of the date this order is signed by the director, TCC Materials shall pay a penalty of \$7,000.00.

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VI. PENALTY

Pursuant to the provisions of Iowa Code section 455B.109 and 567 IAC chapter 10, which authorize the director to assess administrative penalties, a penalty of \$7,000.00 is assessed by this administrative consent order. The penalty must be paid within 30 days of the date this order is signed by the director. The administrative penalty is determined as follows:

Iowa Code section 455B.146 authorizes the assessment of civil penalties of up to 10,000.00 per day of violation for the air quality violations involved in this matter. More serious criminal sanctions are also available pursuant to Iowa Code section 455B.146A.

Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to \$10,000.00 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties through 567 IAC chapter 10. Pursuant to this rule, DNR has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative consent order with a penalty. The administrative penalty assessed by this order is determined as follows:

Economic Benefit – 567 IAC chapter 10 requires that DNR consider the costs saved or likely to be saved by noncompliance. 567 IAC 10.2(1) states that “where the violator received an economic benefit through the violation or by not taking timely compliance or corrective measures, DNR shall take enforcement action which includes penalties which at least offset the economic benefit.” 567 IAC 10.2(1) further states, “reasonable estimates of economic benefit should be made where clear data are not available.”

TCC Materials has gained economic benefit by delaying maintenance costs associated with maintaining or replacing control equipment in a manner consistent with minimizing emissions and meeting applicable emission limits.

For these reasons, \$2,000.00 is assessed for economic benefit.

Gravity of the Violation – One of the factors to be considered in determining the gravity of a violation is the amount of penalty authorized by the Iowa Code for that type of violation. As indicated above, substantial civil penalties are authorized by statute. Despite the high penalties authorized, DNR has decided to handle the violations administratively at this time, as the most equitable and efficient means of resolving the matter.

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Actual harm to the environment and public health likely occurred due to the amount of PM and PM10 that TCC Materials has emitted and is emitting above the emission limits set forth in Construction Permit No. 19-A-277 and 567 IAC 22.3. Emissions of PM10 pose an increased public health risk due to the size of particles being directly linked to their potential for causing health issues. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into a person's lungs, and some may even get into the bloodstream. Numerous scientific studies have linked particle pollution exposure to a variety of health problems, including: premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

For these reasons \$3,000.00 should be assessed for this factor.

Culpability – In January 2019, TCC Materials modified EP 3A without first obtaining a construction permit as required by 567 IAC 22.1(1). Excess Emissions and failure to maintain control equipment were documented by DNR Field Office 6 on August 30, 2019. A stack test completed on October 17, 2019, demonstrated EP 3A2 was in violation of the permitted PM and PM10 limits. TCC Materials submitted a compliance plan to the DNR stating its intention to address the baghouse issues prior to the stack testing. TCC Materials stopped testing and attempted to make repairs to the control equipment associated with EP 3A2 following the first run of the January 16, 2020, stack test. TCC Materials subsequently cancelled scheduled compliance testing on January 16, 2020, due to emissions observed during the first test run. The stack test report for January test event was submitted 61 days after the testing was completed

These actions threaten the integrity of the Iowa DNR Air Quality compliance program. Stack testing is used to quantify actual emission rates of a source. The stopping, delaying, and cancellation of stack tests, and subsequent late submittal of the test report, prevents DNR from determining actual emission rates. Failing to ensure that preventative maintenance plans are sufficient and failing to perform needed maintenance shows negligence. TCC Materials has failed to address the excess emissions and control equipment issues as evidenced by the attempts to repair control equipment during compliance testing and ongoing PM and PM10 violations.

For these reasons, \$2,000.00 is assessed for culpability.

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VII. WAIVER OF APPEAL RIGHTS

This administrative consent order is entered into knowingly and with the consent of TCC Materials. For that reason, TCC Materials waives its right to appeal this order or any part thereof.


VIII. NONCOMPLIANCE

Failure to comply with this administrative consent order, including failure to timely pay any penalty, may result in the imposition of further administrative penalties or referral to the attorney general to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.146. Compliance with Section "V. Order" of this administrative consent order constitutes full satisfaction of all requirements pertaining to the specific violations described in Section "IV. Conclusions of Law" of this administrative consent order.



Kayla Lyon, Director
Iowa Department of Natural Resources

Dated this 6th day of
October, 2020.



TCC Materials Tom Becken, CEO

Dated this 6 day of
Oct., 2020.

DNR Field Office 6; Anne Preziosi: VII.A.1, VII.A.2.