



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

Worthen Industries, Inc.
3 East Spit Brook Road
Nashua, NH 03060

Re: Worthen Industries, Inc. – Nylco Division
34 Cellu Drive, Nashua, NH
State Permit No. SP-0279
AFS #3301191265

**ADMINISTRATIVE FINE
BY CONSENT**

No. AF 22-010

I. INTRODUCTION

This Administrative Fine by Consent is entered into by and between the Department of Environmental Services and Worthen Industries, Inc., pursuant to RSA 125-C:15. This Administrative Fine by Consent is effective upon signature by the parties.

II. PARTIES

1. The New Hampshire Department of Environmental Services (“NHDES”) is a duly constituted administrative agency of the State of New Hampshire, having its main office at 29 Hazen Drive in Concord, New Hampshire.
2. Worthen Industries, Inc. (“Worthen Industries”) is a New Hampshire corporation having a mailing address of 3 East Spit Brook Road, Nashua, NH 03060.

III. BACKGROUND

1. RSA chapter 125-C authorizes the New Hampshire Department of Environmental Services (“NHDES”) to regulate sources of air pollution in New Hampshire. RSA 125-C:4 authorizes the Commissioner of NHDES to adopt rules relative to the prevention, control, abatement, and limitation of air pollution in New Hampshire. Under this authority, the Commissioner has adopted NH CODE ADMIN. RULES Env-A 100 *et seq.* (the “Air Program Rules”).
2. RSA 125-C:15, I-b, authorizes the Commissioner of NHDES to impose, on any person, administrative fines up to \$4,000¹ for each offense upon any person who violates any provision of RSA chapter 125-C, the Air Program Rules, any permit, compliance schedule, stop use order, or order of abatement, issued under the authority of RSA chapter 125-C; or upon any person who makes or certifies a material false statement relative to any document or information which is required to be submitted to NHDES in accordance with RSA chapter 125-C or the Air Program Rules. The Commissioner may assess an additional fine for repeat violations.
3. RSA chapter 125-I authorizes NHDES to regulate the release of toxic chemicals into the ambient air in New Hampshire. RSA 125-I:3, II, authorizes the Commissioner of NHDES to adopt rules relative to the prevention, control, abatement, and limitation of regulated toxic air pollutant

¹ The Commissioner’s administrative fine authority for violations of RSA chapter 125-C increased from \$2,000 to \$4,000 per violation effective January 1, 2020.

(“RTAP”) emissions. The Commissioner has adopted NH CODE ADMIN. RULES Env-A 1400, in accordance with RSA 125-I:3, II (the “RTAP Rules”).

4. RSA 125-I:3-a authorizes the Commissioner of NHDES to impose administrative fines up to \$4,000² per offense for violations of RSA chapter 125-I, and rules promulgated thereunder, in accordance with RSA 125-C:15, I-b(b). RSA 125-I:3-a, II, requires the Commissioner to determine fines in accordance with RSA 125-C:15, I-b(b). RSA 125-I:3-a, III, authorizes the Commissioner to assess an additional fine for repeat violations.

5. Worthen Industries owns and operates a facility housing processes that use web coating devices with a curing oven to coat fabric, paper, and film substrates located at 34 Cellu Drive in Nashua, New Hampshire (the “Facility”).

6. The Facility emits triethylamine, an RTAP listed in Env-A 1450.01, and volatile organic compounds (“VOCs”) subject to emission coating limits in Env-A 1207.

7. The rules set out in Env-A 1400 apply to the owner or operator of any new, modified, or existing process or device located at a stationary source that emits an RTAP into ambient air, unless exempt, per Env-A 1401.02. The RTAP Rules, in effect at the time of the violations, were readopted on January 5, 2018.

8. RSA 125-I:2, IX, defines *device* as any burner, furnace, machine, equipment, or article which emits an RTAP or air contaminant into the ambient air.

9. RSA 125-I:5, I, states that no person shall operate any device or process at a stationary source that emits an RTAP without a temporary or operating permit issued by NHDES in accordance with RSA chapter 125-I or RSA chapter 125-C, provided that no permit or permit application shall be required for any device or process at a stationary source exempted under RSA 125-I:3, III, or whose uncontrolled emissions of RTAPs do not exceed ambient air limits (“AALs”) at or beyond the compliance boundary and for which no other permit is required under RSA chapter 125-C.

10. RSA 125-C:6 and RSA 125-C:11, I, authorize NHDES to establish and operate a statewide system under which permits shall be required for the construction, installation, operation, or material modification of air pollution devices and sources. In accordance with this authority, the Commissioner of NHDES has adopted NH CODE ADMIN. RULES Env-A 600 to regulate a statewide permit system.

11. On April 17, 2019, NHDES reissued State Permit to Operate SP-0279 (the “Permit”) to Worthen Industries authorizing the operation of two web coating devices (“EU01” and “EU02”) at the Facility. Worthen Industries operates a regenerative thermal oxidizer at the Facility, designated as “PCE01” in the Permit, to control emissions of VOCs, RTAPs, and hazardous air pollutants from EU02.

12. Env-A 604.01(a) states that a temporary permit or permit to operate issued by the department shall contain terms and conditions establishing the parameters under which the stationary source, area source, or device to which it applies shall be constructed or operated. Env-A 604.01(b) states

² The Commissioner’s administrative fine authority for violations of RSA chapter 125-I increased from \$2,000 to \$4,000 per violation effective January 1, 2020.

that upon the issuance of a temporary permit or permit to operate, the permittee shall comply with all terms and conditions in the permit.

13. The Permit expires on April 30, 2024.

14. NHDES has classified the toxicity of each RTAP as a Class I, II, or III; per RSA 125-I:4, II, and Env-A 1406.01. Triethylamine is Toxicity Class II, per Table 1450-1 in the RTAP Rules.

15. RSA 125-I:5, V, and Env-A 1405.01(a) require the owner or operator of any device or process that emits an RTAP to determine compliance with the AALs by using one of the methods listed in Env-A 1405.01. When the airflow exiting the vent or stack is vertical and unobstructed, the *de minimis* and the adjusted in-stack concentration methods are also authorized methods to demonstrate compliance per Env-A 1405.01.

16. On February 10, 2020, Worthen Industries submitted to NHDES a Permit Deviation Reporting Form stating that it failed to limit emissions of toluene, a VOC, from EU02 during a 5.5-hour period on January 29, 2020, when Worthen Industries applied a coating with a VOC content exceeding 0.40 pounds of VOC per pound of solids (lb. VOC/lb. solids) or 0.08 pounds of VOCs per pound of coating (lb. VOC/lb. coating) using EU02 while bypassing PCE01 at the Facility. While in the bypass mode, EU02 emitted approximately 427.7 pounds of excess toluene on January 29, 2020.

17. The Permit requires the operation of PCE01 when EU02 is used to apply coatings that will exceed the AALs in Env-A 1450.01, at Table 2.

18. The Permit requires Worthen Industries to operate PCE01 at the Facility at all times EU02 is in operation using coatings that do not comply with the coating emission rate limits listed in Item 7 of Table 4 in the Permit and in Env-A 1207.03(c), per Table 4, Item 6a.

19. The Permit requires Worthen Industries to limit emission rates of VOCs from EU01 and EU02 to 0.40 lb. VOC/lb. solids or 0.08 lb. VOC/lb. coating, or control VOC emissions from EU01 and EU02 by an equivalent of 90 percent, per Table 4, at Item 7.

20. The Permit prohibits Worthen Industries from emitting any RTAP from the Facility that causes an exceedance of the RTAP's associated 24-hour or annual *de minimis* level or 24-hour or annual AALs as set forth in Env-A 1450.01, per Table 4, at Item 2.

21. As set forth in Env-A 1450.01, the daily AAL for triethylamine is 21 micrograms per cubic meter of air.

22. During a review of the deviation report, NHDES determined that Worthen Industries failed to operate PCE01 on January 29, 2020, when EU02 had operated, and had used a coating that does not comply with a coating emission rate limit in Item 7 in Table 4 of the Permit.

23. On April 2, 2020, NHDES received from Worthen Industries another Permit Deviation Reporting Form stating that emissions from the Facility caused an exceedance of the associated 24-hour and annual AALs of triethylamine, when Worthen Industries used a coating, identified as "D3315-4U", in EU01 on November 15, 26, 27, and December 3, in 2019. Worthen Industries also reported the following: it had reviewed the material safety data sheet ("SDS") for D3315-4U prior to using the coating in EU01 and that no RTAPs were listed in the SDS; it had discovered in

March 2020 that triethylamine was listed in the certified product data sheet (“CPDS”) for D3315-4U and that triethylamine was not listed in the SDS because it was below the material reporting threshold established by the Occupational Safety and Health Administration; on March 26, 2020, it had discovered that it had exceeded the AALs of triethylamine by using air dispersion modeling analyses and the information in the CPDS; it had caused approximately 86 pounds of excess emissions of triethylamine from EU01; and that it had discontinued using D3315-4U in EU01. Worthen Industries submitted copies of the SDS and CPDS for D3315-4U with its deviation report.

24. During a review of the deviation report and attachments received by NHDES on April 2, 2020, NHDES determined that triethylamine was not listed in the SDS for D3315-4U, triethylamine was listed in the CPDS for D3315-4U, and that Worthen Industries had not demonstrated that emissions of triethylamine from the Facility complied with the associated AALs. NHDES also determined that the emissions of triethylamine from the Facility during the deviation period did not pose a substantial threat of harm to public health or the environment.

25. On May 21, 2020, NHDES issued a Notice of Past Violation (“NPV”) to Worthen Industries. In the NPV, NHDES notified Worthen Industries that it failed to maintain compliance with the VOC limit for toluene on January 29, 2020; and the AAL for triethylamine on November 15, 26, 27, and December 3, 2019.

26. On March 26, 2021, NHDES received a Permit Deviation Reporting Form from Worthen Industries stating that the Facility exceeded the AAL for triethylamine on December 14, 15, 16, and 17 in 2020; February 24 and 25 in 2021; and March 4 and 5 in 2021 while applying coating D3315-4U on EU01. In the deviation report, Worthen Industries estimated through the application of a modeling-based unit impact rate that the Facility emitted 28.4 pounds in total of excess triethylamine over the eight production days. The amount of excess triethylamine equates to approximately 50% over the modeled compliance limit.

27. Worthen Industries stated that their vendor was unable to reformulate and remove triethylamine from the coating or provide a compliant replacement coating by the end of calendar year 2020 when a customer order was due. As a result, Worthen Industries made the decision to proceed with filling the order using D3315-4U without any air pollution controls in place.

28. On April 6, 2021, NHDES requested additional information from Worthen Industries regarding the permit deviation reported on March 26, 2021. NHDES requested the method used to estimate excess triethylamine emissions; the reason that coating D3315-4U could not be applied using EU02 while being controlled by PCE01; a procedure for ensuring that the coating will only be applied at reduced rates to ensure compliance with the daily AAL for triethylamine; and details of the modeling approach used to determine the reduced daily application limit.

29. On April 7, 2021, Worthen Industries submitted a written response that NHDES deemed responsive. In its response, Worthen Industries stated that a procedure had been developed to limit the coating application rate for D3315-4U to 67 lbs./hour and to evaluate applying the coating in the future using EU02 in concert with PCE01.

30. On August 17, 2022, NHDES sent a letter to Worthen Industries outlining its findings as set out in this Administrative Fine by Consent (“Agreement”).

31. On September 21, 2022, NHDES received from Worthen Industries an email response to the NHDES letter. In the email message, Worthen Industries asserted that the D3315-4U had been reformulated with a lower triethylamine content that would have been compliant with the production controls implemented if the production team had not mistakenly applied the original D3315-4U instead of the newly formulated coating designated as D3315-4H. Worthen Industries also stated that applying D3315-4U using EU02 in concert with PCE01 was not feasible.

32. In a follow-up email message dated September 27, 2022, Worthen Industries stated that in February 2022 it had implemented a replacement for D3315-4U and D3315-4H for use at the Facility that did not contain triethylamine.

IV. ALLEGATIONS

Worthen Industries violated the Permit, Env-A 604.01, Env-A 1207.03, and the RTAP Rules by exceeding the AAL for triethylamine on eight separate production days between December 14, 2020, and March 5, 2021. ARD has determined the violations to be major deviations from the requirement with a moderate potential for harm for which RSA 125-C-15, I-b(b)(8) specifies a potential fine range of \$1,251 to \$3,500. For settlement purposes only, ARD proposes a fine of \$2,500 for each day of violation for a total of \$20,000 for these violations.

V. ADMINISTRATIVE FINES, PAYMENT, WAIVER OF HEARING

1. To settle this matter, NHDES and Worthen Industries have agreed to the terms of this Administrative Fine by Consent (“Agreement”), as set forth herein.
2. Worthen Industries agrees to pay the proposed fine in the amount of \$20,000, subject to the following terms:
 - a. Of the total administrative fine in the amount of \$20,000, the amount of \$5,000 will be suspended, provided that Worthen Industries remains in compliance with RSA 125-C, RSA 125-I, the Air Program Rules, and the RTAP Rules at its facilities in Nashua for a period of three years from the effective date of this Agreement. If Worthen Industries fails to maintain compliance during the three-year period or fails to fully comply with the terms of this Agreement the amount suspended, \$5,000, and any other amounts remaining due under the terms of this Agreement, shall become immediately due and payable in full. If Worthen Industries maintains compliance with RSA 125-C, RSA 125-I, the Air Program Rules, and the RTAP Rules at its facilities in Nashua for the prescribed three-year period, the suspended portion of the fine shall be waived.
 - b. Worthen Industries agrees to pay the remaining portion of the administrative fine, not suspended, in the amount of \$15,000 upon execution of the agreement by a duly authorized representative of Worthen Industries.
3. Any payments due and payable, or that become due and payable, pursuant to the preceding paragraph shall be paid by certified or corporate check made payable to *Treasurer, State of New Hampshire* and mailed to: NHDES Legal Unit, Attn: Atty. Barnsley, P.O. Box 95, Concord, NH 03302-0095.
4. If any payment is made by check or money order that is returned as uncollectable, NHDES may charge a fee in the amount of 5% of the face amount of the check or money order or \$25.00, whichever is greater, plus all protest and bank fees, in addition to the amount of the check or money order, to cover the costs of collection pursuant to RSA 6:11-a.

5. By executing this Agreement, Worthen Industries waives its right to a hearing on or any appeal of the administrative fines identified herein and agrees that this Agreement may be entered into and enforced by a court of competent jurisdiction.

6. The effective date of this Agreement is the date on which it is signed by an authorized representative of Worthen Industries and the Commissioner of NHDES.

7. No failure by NHDES to enforce any provision of this Agreement after any breach or default will be deemed as a waiver of its rights regarding that breach or default, nor will such failures be construed as a waiver of the right to enforce each and all provisions of this Agreement on any further breach or default.

8. NHDES will take all necessary and feasible steps to assist companies and other entities affected by the outbreak of COVID-19, including those with employees who are unable to work because of illness or the need to care for a family member, those which have temporarily closed or reduced their hours, those unable to access necessary resources because of shortages, or any other company experiencing hardship because of the outbreak of COVID-19. All extension requests of any deadline set out in this Order, due to the COVID-19 pandemic, will be carefully considered.

WHEREFORE, the parties voluntarily accept the terms of this Agreement.

Worthen Industries, Inc.

COPY

FW
By: Frederick P. Worthen, III, President
Duly Authorized

11/14/23
Date

Department of Environmental Services

COPY

Robert R. Scott, Commissioner

11/19/23
Date

cc: NHDES Legal Unit
File AFS #3301191265 (Stationary Source)

cc: Public Information Officer, NHDES PIP Office
K. Allen Brooks, Chief, AGO-Environmental Protection Bureau
E. Kudarauskas, EPA Region 1