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The State of New Hampshire  
**Department of Environmental Services**

Robert R. Scott, Commissioner



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July 24, 2023

His Excellency, Governor Christopher T. Sununu  
And the Honorable Council  
State House  
Concord, New Hampshire 03301

**REQUESTED ACTION**

Authorize the Department of Environmental Services (NHDES) to enter into a **sole source** agreement with the Northeast Waste Management Officials' Association (NEWMOA) (VC# 161803-B001), Boston, Massachusetts, in the amount of \$5,000 to provide support for a regional effort to promote pollution prevention efforts to the craft beverage industry, effective upon Governor & Council approval through June 30, 2025. 100% Federal Funds.

Funding is available in the account as follows:

	<u>FY 2024</u>	<u>FY 2025</u>
03-44-444010-1623-102-500731	\$2,500	\$2,500
Dept. of Environmental Services, P2 Federal Grant, Contracts for Program Services		

**EXPLANATION**

NEWMOA is a nonprofit, nonpartisan interstate association. NEWMOA's membership is composed of state environmental agency directors of the hazardous waste, solid waste, waste site cleanup, pollution prevention, and underground storage tank programs in Connecticut, Maine, New Hampshire, Massachusetts, New Jersey, New York, Rhode Island, and Vermont. This is a **sole source** agreement as EPA has specifically authorized the use of these funds to support NEWMOA activity as described below.

NEWMOA has a long history of successfully coordinating collaboration on the states' Pollution Prevention (P2) grant projects and facilitates information sharing and training on tools and strategies for providing direct assistance to different sectors. EPA has authorized NHDES to pay NEWMOA to facilitate the collaboration of regional states' efforts to promote pollution prevention strategies to the craft beverage industry throughout New England. Specifically, NEWMOA will convene regular conference calls and in-person/virtual meetings and will facilitate training and information sharing sessions on P2 strategies to support craft beverage producers. NEWMOA will also coordinate and support the New England Sustainable Craft Beverage Recognition Program effort. While this agreement is below the \$10,000 threshold for G&C items, NHDES has awarded funds in excess of the limit to this entity.

We respectfully request your approval.

  
\_\_\_\_\_  
Robert R. Scott  
Commissioner

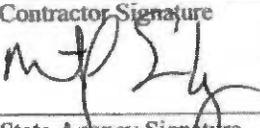
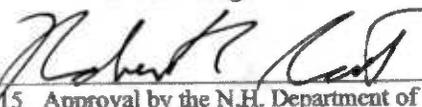
**Notice:** This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

**AGREEMENT**

The State of New Hampshire and the Contractor hereby mutually agree as follows:

**GENERAL PROVISIONS**

**1. IDENTIFICATION.**

1.1 State Agency Name Dept. of Environmental Services		1.2 State Agency Address 29 Hazen Drive, Concord, NH 03301	
1.3 Contractor Name Northeast Waste Management Officials' Association (NEWMOA)		1.4 Contractor Address 89 South Street, Suite 600, Boston, MA 02111	
1.5 Contractor Phone Number 617-367-8558 X302	1.6 Account Unit and Class 03-44-440010-1623-102-500731	1.7 Completion Date 6/30/2025	1.8 Price Limitation \$5,000.00
1.9 Contracting Officer for State Agency Kathryn Black		1.10 State Agency Telephone Number 603-271-6460	
1.11 Contractor Signature  Date: 5/29/23		1.12 Name and Title of Contractor Signatory Martin Suuberg, Executive Director	
1.13 State Agency Signature  Date: 5/30/23		1.14 Name and Title of State Agency Signatory Robert R. Scott, Commissioner, NHDES	
1.15 Approval by the N.H. Department of Administration, Division of Personnel (if applicable) By: _____ Director, On: _____			
1.16 Approval by the Attorney General (Form, Substance and Execution) (if applicable) By:  On: 8/24/23			
1.17 Approval by the Governor and Executive Council (if applicable) G&C Item number: _____ G&C Meeting Date: _____			

**2. SERVICES TO BE PERFORMED.** The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT B which is incorporated herein by reference ("Services").

**3. EFFECTIVE DATE/COMPLETION OF SERVICES.**

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement, unless no such approval is required; in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.13 ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed.

3.3 Contractor must complete all Services by the Completion Date specified in block 1.7.

**4. CONDITIONAL NATURE OF AGREEMENT.**

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds. In no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds by any state or federal legislative or executive action that reduces, eliminates or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope for Services provided in EXHIBIT B, in whole or in part, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to reduce or terminate the Services under this Agreement immediately upon giving the Contractor notice of such reduction or termination. The State shall not be required to transfer funds from any other account or source to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

**5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.**

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT C which is incorporated herein by reference.

5.2 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8. The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance

hereof, and shall be the only and the complete compensation to the Contractor for the Services.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 The State's liability under this Agreement shall be limited to monetary damages not to exceed the total fees paid. The Contractor agrees that it has an adequate remedy at law for any breach of this Agreement by the State and hereby waives any right to specific performance or other equitable remedies against the State.

**6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/EQUAL EMPLOYMENT OPPORTUNITY.**

6.1 In connection with the performance of the Services, the Contractor shall comply with all applicable statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal employment opportunity laws and the Governor's order on Respect and Civility in the Workplace, Executive order 2020-01. In addition, if this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all federal executive orders, rules, regulations and statutes, and with any rules, regulations and guidelines as the State or the United States issue to implement these regulations. The Contractor shall also comply with all applicable intellectual property laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of age, sex, sexual orientation, race, color, marital status, physical or mental disability, religious creed, national origin, gender identity, or gender expression, and will take affirmative action to prevent such discrimination, unless exempt by state or federal law. The Contractor shall ensure any subcontractors comply with these nondiscrimination requirements.

6.3 No payments or transfers of value by Contractor or its representatives in connection with this Agreement have or shall be made which have the purpose or effect of public or commercial bribery, or acceptance of or acquiescence in extortion, kickbacks, or other unlawful or improper means of obtaining business.

6.4 The Contractor agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with this Agreement and all rules, regulations and orders pertaining to the covenants, terms and conditions of this Agreement.

**7. PERSONNEL.**

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 The Contracting Officer specified in block 1.9, or any successor, shall be the State's point of contact pertaining to this Agreement.

## 8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

- 8.1.1 failure to perform the Services satisfactorily or on schedule;
- 8.1.2 failure to submit any report required hereunder; and/or
- 8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) calendar days from the date of the notice, and if the Event of Default is not timely cured, terminate this Agreement, effective two (2) calendar days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 give the Contractor a written notice specifying the Event of Default and set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 give the Contractor a written notice specifying the Event of Default, treat the Agreement as breached, terminate the Agreement and pursue any of its remedies at law or in equity, or both.

## 9. TERMINATION.

9.1 Notwithstanding paragraph 8, the State may, at its sole discretion, terminate the Agreement for any reason, in whole or in part, by thirty (30) calendar days written notice to the Contractor that the State is exercising its option to terminate the Agreement.

9.2 In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall, at the State's discretion, deliver to the Contracting Officer, not later than fifteen (15) calendar days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. In addition, at the State's discretion, the Contractor shall, within fifteen (15) calendar days of notice of early termination, develop and submit to the State a transition plan for Services under the Agreement.

## 10. PROPERTY OWNERSHIP/DISCLOSURE.

10.1 As used in this Agreement, the word "Property" shall mean all data, information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

10.2 All data and any Property which has been received from the State, or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

10.3 Disclosure of data, information and other records shall be governed by N.H. RSA chapter 91-A and/or other applicable law. Disclosure requires prior written approval of the State.

11. **CONTRACTOR'S RELATION TO THE STATE.** In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

## 12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.

12.1 Contractor shall provide the State written notice at least fifteen (15) calendar days before any proposed assignment, delegation, or other transfer of any interest in this Agreement. No such assignment, delegation, or other transfer shall be effective without the written consent of the State.

12.2 For purposes of paragraph 12, a Change of Control shall constitute assignment. "Change of Control" means (a) merger, consolidation, or a transaction or series of related transactions in which a third party, together with its affiliates, becomes the direct or indirect owner of fifty percent (50%) or more of the voting shares or similar equity interests, or combined voting power of the Contractor, or (b) the sale of all or substantially all of the assets of the Contractor.

12.3 None of the Services shall be subcontracted by the Contractor without prior written notice and consent of the State.

12.4 The State is entitled to copies of all subcontracts and assignment agreements and shall not be bound by any provisions contained in a subcontract or an assignment agreement to which it is not a party.

13. **INDEMNIFICATION.** The Contractor shall indemnify, defend, and hold harmless the State, its officers, and employees from and against all actions, claims, damages, demands, judgments, fines, liabilities, losses, and other expenses, including, without limitation, reasonable attorneys' fees, arising out of or relating to this Agreement directly or indirectly arising from death, personal injury, property damage, intellectual property infringement, or other claims asserted against the State, its officers, or employees caused by the acts or omissions of negligence, reckless or willful misconduct, or fraud by the Contractor, its employees, agents, or subcontractors. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph 13. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the State's sovereign immunity, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

#### 14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and continuously maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 commercial general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate or excess; and

14.1.2 special cause of loss coverage form covering all Property subject to subparagraph 10.2 herein, in an amount not less than 80% of the whole replacement value of the Property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or any successor, a certificate(s) of insurance for all insurance required under this Agreement. At the request of the Contracting Officer, or any successor, the Contractor shall provide certificate(s) of insurance for all renewal(s) of insurance required under this Agreement. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference.

#### 15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("*Workers' Compensation*").

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. The Contractor shall furnish the Contracting Officer identified in block 1.9, or any successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. **WAIVER OF BREACH.** A State's failure to enforce its rights with respect to any single or continuing breach of this Agreement shall not act as a waiver of the right of the State to later enforce any such rights or to enforce any other or any subsequent breach.

17. **NOTICE.** Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. **AMENDMENT.** This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

#### 19. CHOICE OF LAW AND FORUM.

19.1 This Agreement shall be governed, interpreted and construed in accordance with the laws of the State of New Hampshire except where the Federal supremacy clause requires otherwise. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

19.2 Any actions arising out of this Agreement, including the breach or alleged breach thereof, may not be submitted to binding arbitration, but must, instead, be brought and maintained in the Merrimack County Superior Court of New Hampshire which shall have exclusive jurisdiction thereof.

20. **CONFLICTING TERMS.** In the event of a conflict between the terms of this P-37 form (as modified in EXHIBIT A) and any other portion of this Agreement including any attachments thereto, the terms of the P-37 (as modified in EXHIBIT A) shall control.

21. **THIRD PARTIES.** This Agreement is being entered into for the sole benefit of the parties hereto, and nothing herein, express or implied, is intended to or will confer any legal or equitable right, benefit, or remedy of any nature upon any other person.

22. **HEADINGS.** The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

23. **SPECIAL PROVISIONS.** Additional or modifying provisions set forth in the attached EXHIBIT A are incorporated herein by reference.

24. **FURTHER ASSURANCES.** The Contractor, along with its agents and affiliates, shall, at its own cost and expense, execute any additional documents and take such further actions as may be reasonably required to carry out the provisions of this Agreement and give effect to the transactions contemplated hereby.

25. **SEVERABILITY.** In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

26. **ENTIRE AGREEMENT.** This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings with respect to the subject matter hereof.

Exhibit A

Special Provisions

Paragraph 14 of the General Provisions is hereby waived.

Funding is provided through the following EPA grant: Pollution Prevention Strategies for Breweries, Wineries and Beverage Distilleries, Grant #NP00A00934(CFDA # 66.708). All terms and conditions associated with this grant are incorporated by reference.

Initials MS  
Date 5/29/2023

Exhibit B

Scope of Services

Under this Scope of Services, the Northeast Waste Management Officials' Association (NEWMOA) will:

- Convene a minimum of 6 regularly scheduled conference calls, face-to-face and remote meetings of the regional workgroup per year.
- Facilitate training and information sharing about best management practices and innovative strategies craft beverage producers can implement to reduce waste during the regularly scheduled regional workgroup meetings.
- Coordinate and support the New England Sustainable Craft Beverage Recognition Program through the regularly scheduled regional workgroup meetings.

This agreement is effective upon Governor and Council approval and runs through June 30, 2025.

Initials MS  
Date 5/29/2023

Exhibit C

Payment Schedule

Funding for NEWMOA is provided by a federal EPA grant "Pollution Prevention Strategies for Breweries, Wineries and Beverage Distilleries", Grant #NP00A00934 (CFDA # 66.708) and will be split over two years paying NEWMOA \$2,500.00 in FY 2024 and \$2,500.00 in FY2025 for a total of \$5,000.00. NEWMOA will submit an invoice for payment, with supporting documentation for the scope of services in Exhibit B, when services have been rendered and/or prior to the end of each fiscal year.

Initials

Date

ws  
5/21/2023

Corporate Bylaws

I, Greg Cooper, hereby certify that I am duly elected Chair of the Board of Directors of  
*(Name)*  
the Northeast Waste Management Officials' Association. I hereby certify the following is a  
*(Name of Corporation )*

true copy of the current Bylaws or Articles of Incorporation of the Corporation and that the  
Bylaws or Articles of Incorporation authorize the following officers or positions to bind the  
Corporation for contractual obligations Executive Director.  
*(list officer titles or position)*

I further certify that the following individuals currently hold the office or positions  
authorized: Martin Suuberg.  
*(list individuals holding positions authorized)*

I further certify that it is understood that the State of New Hampshire will rely on this  
certificate as evidence that the person listed above currently occupies the position indicated  
and that they have full authority to bind the corporation. This authority **shall remain valid**  
**for thirty (30) days** from the date of this certificate.

DATED: 6/22/23



ATTEST: \_\_\_\_\_  
*(Name & Title)*



## **BY-LAWS**

**Approved by Unanimous Vote by the NEWMOA  
Board of Directors on June 16, 2022**

**Northeast Waste Management Officials' Association, Inc.**  
89 South Street, Suite 600  
Boston, MA 02111  
(617) 367-8558

Connecticut • Maine • Massachusetts • New Hampshire • New Jersey • New York • Rhode Island • Vermont

BY-LAWS  
June 16, 2022

I. PREAMBLE

The Northeast Waste Management Officials' Association, Inc. ("NEWMOA" or the "Corporation") is an official interstate regional corporation that was established in accordance with Section 1005 of the Resource Conservation and Recovery Act for the purpose of coordination and communication on issues of regional concern involving solid waste management. NEWMOA's member states are Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont. Other states may join NEWMOA subject to the approval of the NEWMOA Board of Directors.

II. NAME, PURPOSE, MEMBERSHIP, AND POWERS

The Corporation shall be designated the Northeast Waste Management Officials' Association, Inc. and shall be known by either that title or its acronym, NEWMOA. NEWMOA is organized and shall be operated exclusively for educational and charitable purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code"). In furtherance of such purposes, NEWMOA shall develop and sponsor local, state, and federal initiatives aimed at the solution of solid waste management problems and issues; promote awareness of the local, national, and global issues concerning solid waste management; and work with the U.S. Environmental Protection Agency and other federal and state agencies and environmental organizations to coordinate and facilitate solutions for environmental problems.

For the purposes of these by-laws, the term "solid waste management program" means those programs that provide individuals employed by a state with responsibility for the regulation or management of "solid waste," "hazardous waste," "leaking underground storage tanks," "recovered materials," and "resource recovery" as those terms are defined by the Resource Conservation and Recovery Act, 42 USC, Section 6901 et. seq.; recycling and waste minimization activities under the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC Section 9601 et. seq.; and state remediation acts intended to clean up non-designated CERCLA sites within the respective states. The term also applies to those programs created by member states for the purpose of promoting cross-media pollution prevention or toxics use reduction. The terms "solid waste" or "solid waste management" refer to the issues, problems or activities that concern the above-described programs.

State membership shall be composed of solid waste management program personnel with representatives from the member states, each of whom will be a director of NEWMOA. The directors of the solid waste management programs in the member state, where responsibility for administering solid waste management programs is not assigned to a single person, shall each serve as a member of the Board of Directors of NEWMOA. In states having a single director responsible for administering solid waste management programs, that individual shall serve as the member state's single member of NEWMOA's Board of Directors. Each of these member representatives shall be directors of the Corporation for all purposes set forth herein. In addition,

a program director shall have the right to designate a representative to be a member of the NEWMOA Board of Directors in his or her place.

NEWMOA operates inter alia under the authority of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 3251, et. seq.). Under this legislation, NEWMOA claims all appropriate powers, authority, and responsibility identified therein and developed therefrom. In particular, reference is made to Sections 1005 and 2002, which authorize the administrator of the U.S. Environmental Protection Agency to approve the formation of and provide technical and financial assistance to certain interstate organizations. NEWMOA was granted this authorization on December 2, 1986 by the U.S. EPA Region 1. This authorization is interpreted to mean that NEWMOA is, therefore, entitled to receive funds from any source, including contracts, grants, and other sources relating to NEWMOA activities.

The Corporation may also do all other acts and things necessary, convenient, or expedient to carry out the above mentioned purposes, and to do any and all other acts and things permissible under its Articles of Organization and under Chapter 180 of the Massachusetts General Laws and amendments thereto. Subject to the following, the Corporation shall not conduct any activity not permitted to be conducted by a corporation exempt from Federal Income Tax under Section 501(c)(3) of the Internal Revenue Service Code of the United States of America enacted in 1986, as amended, or the corresponding and applicable provisions of any subsequent Internal Revenue Code.

### III. MEETINGS

Annual meetings of the members and directors of NEWMOA shall be held in September of each year. Other meetings of the Board of Directors may be called by the chair or by a majority of the member states. Notice of any Board meeting shall be provided at least thirty days prior thereto; personally, or by mail, e-mail, or telephone and may be waived in writing by each director. No meeting may be held, except when chaired by an officer. Whenever a vote of the members is required, each member state shall vote through its designated director.

### IV. QUORUM AND VOTING

A quorum for voting purposes shall consist of directors appointed by five of the eight member states. In order to carry out any motion presented for vote, a majority of those directors present and voting at a meeting must vote in the affirmative. Each member state shall have one vote.

In the event that no director appointed by a member state is able to attend a meeting of NEWMOA, he or she may designate a substitute in writing to serve at that meeting and whose vote shall be considered acceptable for all purposes, in the absence of the official director, unless the absent director specifies otherwise.

Any action required or permitted to be taken at any meeting of the directors may be taken without a meeting if all the directors consent to the action in writing, and the written consents are filed with the records of the meetings of the directors. Such consents shall be treated for all

purposes as a vote at a meeting. Members of the Board of Directors of the corporation or any committee designated thereby may participate in a meeting of such board or committee by means of a conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other at the same time and participation by such means shall constitute "presence in person" at a meeting.

## V. OFFICERS AND COMMITTEES

(1) Directors. The directors shall be responsible for the general management and supervision of the business and affairs of the corporation except with respect to those powers reserved to the member by law, the articles of the organization, or these bylaws. The Board of Directors may from time to time, to the extent permitted by law, delegate any of its powers to committees, subject to such limitations as the Board of Directors may impose. The officers of NEWMOA shall consist of a Chair, Vice Chair, President, Treasurer, and Clerk. Unless otherwise agreed to by an affirmative vote of a majority of those present and voting at a meeting, the new officers shall assume office on October 1st each year, with the exception of the President and Clerk. Each year the Board shall determine the rotation of the offices of the Chair, Vice Chair, and Treasurer during their annual meeting in September.

Unless otherwise agreed to by an affirmative vote of a majority of those present and voting at a meeting, the Vice Chair and Treasurer shall be designated as those individuals whose terms as Chair are due to commence respectively in the first and second years following the year in question.

Chair. The Chair's responsibilities, subject to the Board's direction, shall include: (a) presiding at all meetings of the Board; (b) participating in the formulation and implementation of the policies set by the Board; (c) supervising the Executive Director of the Corporation; (e) regularly reporting to the Board on the current affairs of the Corporation; and (f) performing such other duties as the Board may assign from time to time.

Vice-Chair. The Vice-Chair shall have such powers and be charged with such duties, including assuming the powers and duties of the Chair when absent, as the Board may prescribe or as the Chair may designate from time to time.

Treasurer. The Treasurer shall keep, or cause to be kept in the office of the Corporation, regular books of accounts, which are to be available at all times for inspection by any Director. At each Annual Meeting, each regular meeting of the Board, and whenever else requested to do so, the Treasurer shall present a written report of the current financial condition of the Corporation. The Treasurer shall have the overall responsibility for the safe-keeping of all documents of title and valuable papers and shall, if required by the Board, give bond with approved surety for the faithful performance of the duties of that office in such amount as shall be fixed by the Board, the cost of such bond to be borne by the Corporation. The Treasurer shall serve on the Board of Directors.

In the event of a vacancy in the office of the Chair, Vice Chair, or Treasurer, in such order as prescribed by the Board, the next officer shall assume that vacancy. In the event of a vacancy in

the office of Chair, the Vice Chair shall assume the office of Chair, and in the event of a vacancy in the office of Vice Chair, the Treasurer shall assume the office of Vice Chair.

(2) **President.** The President shall be the Executive Director and Chief Executive Officer and shall be responsible for the day-to-day operation of the Corporation. The President's responsibilities, subject to the Board's direction shall include: (a) attending all meetings of the Board; (b) participating in the formulation and implementation of the policies set by the Board; (c) maintaining the delivery of quality services according to standards established by the Board; (d) preparing an annual budget for review by the Board; (e) engaging any independent contractors and employees of the Corporation and supervising any personnel of the Corporation; (f) maintaining the physical properties of the Corporation, if any; (g) directing and implementing the plans of the Corporation as approved by the Board; (h) representing the Corporation in its relationship with federal, state, and private agencies; (i) regularly reporting to the Board on the current affairs of the Corporation; and (j) performing such other duties as the Board may assign from time to time. The President may be compensated and shall report to the Chair. The President shall not have a vote on the Board of Directors.

(3) **Clerk.** The Clerk shall be the Executive Director and shall be responsible for being present at and keeping minutes of all Board of Directors meetings. Such minutes shall be kept on file at the Corporation's principal place of business. The Clerk shall also be responsible for giving timely notice of all meetings of the Board of Directors. The Clerk shall be a resident of the Commonwealth of Massachusetts, except that such residence shall not be required during any period in which the Corporation has a duly appointed resident agent.

(4) **Standing Committees.** There shall be a Finance Committee, an Interstate Mercury Education and Reduction Clearinghouse (IMERC) Committee, an Interstate Chemicals Clearinghouse (IC2) Committee, a Toxics in Packaging Clearinghouse (TPCH) Committee, a Clearinghouse for Extended Producer Responsibility Administration (CEPRA) Committee, a Waste Site Cleanup Steering Committee, a Hazardous Waste Steering Committee, a Solid Waste and Sustainable Materials Management Steering Committee, and a Pollution Prevention and Sustainability Steering Committee created and selected by the Board as hereafter provided, and such other committees as the Board of Directors may, from time to time, deem proper. The Board may grant to the committees so formed such authority as is deemed essential to their function.

**Audit and Finance Committee.** The Finance Committee shall be chaired by the Treasurer and include at least two other members selected by and from the Board of Directors. The Finance Committee shall assist the Board of Directors in fulfilling its responsibility for oversight of the quality and integrity of the accounting and reporting practices of the Corporation, and such other duties as directed by the Board. The Committee's purpose is to oversee the accounting and financial reporting processes of the Corporation, the audits of the Corporation's financial statements, the qualifications of the public accounting firm engaged as the Corporation's independent auditor, and the performance of the Corporation's independent auditor. The Committee is directly responsible for the appointment, compensation, retention, and oversight of the independent auditor.

Additional committees of either a permanent or temporary nature may be appointed as appropriate by an affirmative vote of a majority of directors present and voting at a meeting. Permanent committees shall serve until dissolved by an affirmative vote of a majority of a quorum. Temporary committees shall serve throughout the period of time determined at the time of their appointment, after which period they shall automatically dissolve without the requirement of action of any sort by the membership.

#### Interstate Mercury Education and Reduction Clearinghouse Committee

The Interstate Mercury Education and Reduction Clearinghouse (hereinafter, the "IMERC Committee") shall be a permanent committee of NEWMOA. The purpose of the IMERC Committee is to provide ongoing technical and programmatic assistance to states that have enacted provisions similar to the Mercury Education and Reduction Model Act (hereinafter, the "Act") developed by NEWMOA, and to provide a single point of contact for industry and for the public for information on mercury-containing products and member states' mercury education and reduction programs.

The IMERC Committee facilitates deliberations that provide advice and assistance to the individual states for their decision-making. Specifically, the IMERC Committee shall: (a) collect and manage data submitted by manufacturers of mercury-containing products, as necessary to implement the notification provisions of state mercury reduction legislation; (b) facilitate interstate collaboration on the development and implementation of public education and outreach programs on mercury-containing products; (c) endeavor to make information on mercury-containing products available to industry and the public; (d) respond to public information requests for information on mercury-containing products, the requirements of the Act, and the status of state implementation of the Act; and (e) provide technical assistance, facilitate interstate reviews, and make recommendations concerning (i) manufacturers' applications for exemptions to the phase-out of mercury-containing products; (ii) manufacturers' applications for alternative labeling of mercury-containing products; and (iii) manufacturers' plans for collection and proper waste management of mercury-containing materials.

The IMERC Committee shall consist of NEWMOA member and non-NEWMOA member state government agencies (called "Members") and non-governmental entities, including non-governmental organizations, institutions, and businesses (called "Supporting Members"),

#### Interstate Chemicals Clearinghouse

The Interstate Chemicals Clearinghouse (IC2) shall be a permanent committee of NEWMOA. The IC2 is a partnership of state, local, and tribal agencies that promotes a clean environment, healthy communities, and a vital economy through the development and use of safer chemicals and products. The goals of the IC2 are:

- Avoiding duplication and enhancing efficiency and effectiveness of state, local, and tribal agency initiatives on chemicals through collaboration and coordination;

- Building governmental capacity to identify and promote safer chemicals and products; and
- Ensuring access to high quality and authoritative chemical data, information, and assessment methods.

The functions of the IC2 include:

- Supporting state, local, and tribal health and environmental agencies with their development and implementation of programs that promote the use of safer chemicals and products;
- Supporting the development of assessment methods for evaluating alternatives to chemicals of concern and identification of safer alternatives;
- Sharing data and information on chemical use, hazard, exposure, and alternatives;
- Sharing information regarding chemicals prioritization initiatives;
- Building the capacity of governmental agencies by sharing materials, strategies, and trainings; and
- Assisting agencies in meeting the relevant chemical information needs of businesses, consumers, and the public.

The IC2 shall consist of NEWMOA members and non-NEWMOA member state and local government agencies and tribes (called "IC2 Members) as well as non-governmental members, including non-governmental organizations, institutions, and businesses (called "IC2 Supporting Members").

#### Toxics in Packaging Clearinghouse

The Toxics in Packaging Clearinghouse (TPCH) shall be a permanent committee of NEWMOA. TPCH maintains the Model Toxics in Packaging Legislation and coordinates implementation of state legislation, based on the Model, on behalf of its member states, with the goal of promoting consistency across states. TPCH is a resource and single point of contact for companies seeking information on toxics in packaging requirements or an exemption. The functions of the TPCH include:

- Serving as a central point of contact for the public and regulated community, responding to inquiries and maintaining an informative website;
- Providing a forum for dialogue among states with legislation and between states and advisory members on a variety of topics, including determinations of what is and is not a package under state laws;
- Developing and distributing outreach materials – from fact sheets to reports and press releases;
- Undertaking periodic screening projects to assess compliance with state laws, identifying outreach needs, and raising awareness of the continued use of restricted metals in packaging;
- Coordinating member requests to manufacturers or distributors for Certificates of Compliance when violations are suspected, and coordinating ongoing communications with the manufacturers/distributors until members states are satisfied that packaging is in compliance with state laws;

- Researching issues and publishing reports, which in the past included the evaluation of appropriate test methods for determining heavy metals concentration in difficult to analyze packaging materials; and
- Coordinating requests for exemptions between manufacturers/distributors and member states.

The TPCCH shall consist of NEWMOA members and non-NEWMOA member state agencies (called "TPCCH Members") as well non-governmental members, including non-governmental organizations, institutions, and businesses (called "TPCCH Advisory Members."

#### Clearinghouse for Extended Producer Responsibility Administration (CEPRA)

The Clearinghouse for Extended Producer Responsibility Administration (CEPRA) shall be a permanent committee of NEWMOA. CEPRA supports state agency programs with implementation of paint, mattress, and other EPR laws. The goals of the Clearinghouse are to:

- Support state environmental stewardship programs in their efforts to have cost-effective, convenient, and statewide systems for the collection, recycling, and reuse of postconsumer paint, mattresses, and other products;
- Avoid duplication and enhance efficiency and effectiveness of states' environmental agency EPR programs through coordination;
- Support interstate collaboration of state EPR programs, including those states that are looking to develop such programs; and
- Help to enhance state government capacity to manage effective paint, mattress, and other EPR programs and to ensure that agencies, businesses, and the public have ready access to high quality information on state EPR programs and their impacts.

The functions of the Clearinghouse are to:

- Support state environmental agencies with managing consistent and timely reporting by the PROs for paint and mattresses to advance program transparency;
- Sharing data and information on the effectiveness of the states' paint, mattress, and other EPR programs;
- Sharing strategies and lessons learned for improving state paint, mattress, and other EPR programs;
- Building the capacity of agencies by sharing materials and conducting or coordinating trainings; and
- Assist agencies in meeting the relevant information needs of businesses, consumers, and the public.

The CEPRA shall consist of NEWMOA members and non-NEWMOA member state agencies (called "CEPRA Members") as well non-governmental members, including non-governmental organizations, institutions, and businesses (called "CEPRA Supporting Members."

## VI. STAFF

As further described in section V (2), the Directors shall appoint a President to be responsible for administration of the day-to-day activities of NEWMOA. The President is authorized to sign checks and enter into contracts and grant agreements as necessary to the conduct of NEWMOA business. Her or his term of appointment shall nominally be for one year, and at the discretion of the Directors, she or he may be reappointed for successive terms. The Directors may authorize the hiring of additional members of the staff as required by the workload and may at their discretion approve the hiring of a Deputy Director and other senior staff. The Executive staff shall be responsible to the President.

The President and staff shall perform their respective duties in a manner consistent with the stated goals and objectives of NEWMOA and in conformance with the specific functions of NEWMOA (see Appendix A). At the annual meeting, the designated directors of the member States shall evaluate the performance of the President and staff in accordance with the above described standard. Subsequent to this action, the Chair shall prepare a written performance evaluation, based on the comments of the member States, which may include a recommendation to increase or decrease the salaries of the President or staff.

## VII. TERMINATION OF STAFF

The Board of Directors may terminate the employment of a staff member for cause by giving written notice thereof to the staff member.

Notice of termination shall be in writing, shall specify the reason(s) for termination, and shall specify the date of termination, said date to be at least ten (10) business days from the date of notice. A staff member may terminate his or her employment at any time by giving written notice to the President. Such notice shall be in writing and shall specify the date of termination, said date to be at least ten (10) business days from the date of notice.

## VIII. INUREMENT AND DISSOLUTION

No part of the assets or net earnings of NEWMOA shall inure to the benefit of any officer or committee member of NEWMOA or any individual, and NEWMOA shall not participate in, or intervene in, any political campaign on behalf of any candidate for public office.

Upon the liquidation or dissolution of NEWMOA, after payment of all of its liabilities or due provisions therefore, all of the assets of NEWMOA shall be disposed of, at the discretion of the directors, to one or more organizations so long as they are exempt from federal income tax under Section 501(c)(3).

## IX. AMENDMENTS

These By-laws may be amended at any official meeting of NEWMOA only by the affirmative vote of a majority of those present and voting at a meeting provided that due notice has been given of the meeting at which such amendment is moved.

This amendment may be executed in two or more counterparts, each such counterpart evidencing the agreement of the executing member state as herein set forth.

## X INDEMNIFICATION OF DIRECTORS AND OFFICERS

The corporation shall, to the extent legally permissible, indemnify each person who may serve or who has served at any time as a director or officer of the corporation or of any of its subsidiaries, or who at the request of the corporation may serve or at any time has served as a director, officer or director of, or in a similar capacity with, another organization, against all expenses and liabilities (including counsel fees, judgments, fines, excise taxes, penalties, and amounts payable in settlements) reasonably incurred by or imposed upon such person in connection with any threatened, pending or completed action, suit, or other proceeding, whether civil, criminal, administrative, or investigative, in which he or she may become involved by reason of his or her serving or having served in such capacity (other than a proceeding voluntarily initiated by such person unless he or she is successful on the merits, the proceeding was authorized by the corporation, or the proceeding seeks a declaratory judgment regarding his or her own conduct); provided that no indemnification shall be provided for any such person with respect to any matter as to which he or she shall have been finally adjudicated in any proceeding not to have acted in good faith in the reasonable belief that his or her action was in the best interests of the corporation; and provided, further, that as to any matter disposed of by a compromise payment by such person, pursuant to a consent decree or otherwise, the payment and indemnification thereof have been approved by the corporation, which approval shall not unreasonably be withheld, or by a court of competent jurisdiction. Such indemnification shall include payment by the corporation of expenses incurred in defending a civil or criminal action or proceeding in advance of the final disposition of such action or proceeding, upon receipt of an undertaking by the person indemnified to repay such payment if he or she shall be adjudicated to be not entitled to indemnification under this article, which undertaking may be accepted without regard to the financial ability of such person to make repayment.

A person entitled to indemnification hereunder whose duties include service or responsibilities as a fiduciary with respect to a subsidiary or other organization shall be deemed to have acted in good faith in the reasonable belief that his or her action was in the best interests of the corporation if he or she acted in good faith in the reasonable belief that his or her action was in the best interests of such subsidiary or organization or of the participants or beneficiaries of, or other persons with interests in, such subsidiary or organization to whom he or she had a fiduciary duty.

Where indemnification hereunder requires authorization or approval by the corporation, such authorization or approval shall be conclusively deemed to have been obtained, and in any case where a director of the corporation approves the payment of indemnification, such director shall be wholly protected, if:

- (i) The payment has been approved or ratified (1) by a majority vote of a quorum of the directors consisting of persons who are not at that time parties to the proceeding, (2) by a majority vote of a committee of two or more directors who are not at that time parties to the proceedings and are selected for this purpose by the full board (in

- which selection directors who are parties may participate), or (3) by the members of the corporation if disinterested; or
- (ii) The action is taken in reliance upon the opinion of independent legal counsel (who may be counsel to the corporation) appointed for the purpose by vote of the directors or in the manner specified in clauses (1), (2) or (3) of subparagraph (i); or
  - (iii) The payment is approved by a court of competent jurisdiction; or
  - (iv) The directors may have otherwise acted in accordance with the standard of conduct set forth in Chapter 180 of the Massachusetts General Laws.

Any indemnification or advance of expenses under this article shall be paid promptly and in any event within 30 days, after the receipt by the corporation of a written request therefore from the person to be indemnified, unless with respect to a claim for indemnification the corporation shall have determined that the person is not entitled to indemnification. If the corporation denies the request or if payment is not made within such 30-day period, the person seeking to be indemnified may at any time thereafter seek to enforce his or her rights hereunder in a court of competent jurisdiction and, if successful in whole or in part, he or she shall be entitled also to indemnification for the expenses of prosecuting such action. Unless otherwise provided by law, the burden of proving that the person is not entitled to indemnification shall be on the corporation.

The right of indemnification under this article shall be a contract right inuring to the benefit of the directors, officers, and other persons entitled to be indemnified hereunder and no amendment or repeal of this article shall adversely affect any right of such director, officer, or other person existing at the time of such amendment or repeal.

The indemnification provided hereunder shall inure to the benefit of the heirs, executors, and administrators of a director, officer, or other person entitled to indemnification hereunder. The indemnification provided hereunder may, to the extent authorized by the corporation, apply to the directors, officers, and other persons associated with constituent corporations that have been merged into or consolidated with the corporation who would have been entitled to indemnification hereunder had they served in such capacity with or at the request of the corporation.

The right of indemnification under this article shall be in addition to and not exclusive of all other rights to which such director or officer or other persons may be entitled. Nothing contained in this article shall affect any rights to indemnification to which corporation employees or agents other than directors and officers and other persons entitled to indemnification hereunder may be entitled by contract or otherwise under law.

XI. CONFLICT OF INTEREST

No contract or other transaction between this Corporation and any other person or organization, and no act of this Corporation, shall be affected by the fact that a Member, director, officer, or employee of the Corporation has a financial or other interest in such other person or organization. Any Member, director, officer, or employee, or any firm or corporation in which such Member, director, officer, or employee may have an interest, directly or indirectly may be a party to, or may have financial or other interest in, any contract or transaction of this Corporation, provided that the fact that such person, firm, or corporation has such an interest shall be disclosed to the Board or shall be known to the majority of the directors, and provided further that such person shall not vote upon such matter. All contracts and transactions are also subject to the Corporation's Conflict of Interest Policy, as amended from time to time.

XII. GENERAL

Corporate Seal. Subject to alteration by the Board, from time to time, the seal of the Corporation shall consist of a flat-faced circular die with the words "Massachusetts" and "Corporate Seal" together with the name of the Corporation and the year of its organization, cut or engraved thereon.

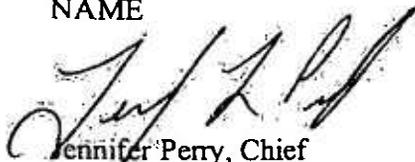
Fiscal Year. Except as otherwise provided by the Board from time to time, the fiscal year of the Corporation shall end on September 30<sup>th</sup> of each year.

The foregoing are adopted as the Bylaws of Northeast Waste Management Officials' Association, Inc., this 16th day of June 2022.

SIGNED and SEALED as of the 16<sup>th</sup> day of June 2022.

NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION

NAME



Jennifer Perry, Chief  
Waste Management Bureau  
Connecticut Department of Energy and Environmental Protection



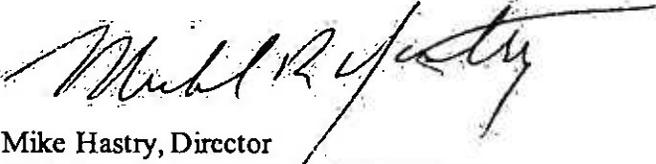
Susanne Miller, Director  
Bureau of Remediation and Waste Management  
Maine Department of Environmental Protection



Greg Cooper, Director  
Division of Hazardous and Solid Waste  
Bureau of Air and Waste  
Massachusetts Department Environmental Protection



Michael Wimsatt, Director  
Waste Management Division  
New Hampshire Department of Environmental Services



Mike Hastry, Director  
Division of Solid and Hazardous Waste  
New Jersey Department of Environmental Protection



William Ottaway, Chief  
Director of the Bureau of Technical Support  
Division of Environmental Remediation  
New York State Department of Environmental Conservation



Ronald Gagnon, Chief  
Office of Technical and Customer Assistance  
Rhode Island Department of Environmental Management



Matthew Chapman, Director  
Waste Management Division  
Vermont Department of Environmental Conservation



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/5/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Eastern Insurance Group LLC 233 West Central St Natick MA 01760	<b>CONTACT NAME:</b> KARI HIGGINS	
	<b>PHONE (A/C, No, Ext):</b> 800-333-7234	<b>FAX (A/C, No):</b> 781-586-8244
<b>E-MAIL ADDRESS:</b> selectwork@easterninsurance.com		
<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>
<b>INSURER A :</b> Great American Insurance Co of New York		22136
<b>INSURER B :</b> Hanover Insurance Co		22292
<b>INSURER C :</b>		
<b>INSURER D :</b>		
<b>INSURER E :</b>		
<b>INSURER F :</b>		

**INSURED** 17073  
 Northeast Waste Management Officials Association  
 89 South Street  
 Suite 600  
 Boston MA 02111

**COVERAGES**      **CERTIFICATE NUMBER:** 1859439574      **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR YVVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			SPP556315516	9/10/2023	9/10/2024	EACH OCCURRENCE \$ 1000000/2000000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			SPP556315516	9/10/2023	9/10/2024	COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED    RETENTION \$			SPP556315516	9/10/2023	9/10/2024	EACH OCCURRENCE \$ AGGREGATE \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N <input type="checkbox"/> N/A	WC 5563156 17	9/10/2023	9/10/2024	PER STATUTE    OTH-ER E.L. EACH ACCIDENT \$ 100,000 E.L. DISEASE - EA EMPLOYEE \$ 100,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
B	DIRECTORS AND OFFICERS			LHNJ20415100	12/1/2022	12/1/2023	AGGREGATE OCCURRENCE RETENTION \$1,000,000 \$1,000,000 \$5,000

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**  
 Professional Liability MPL4961592.21 10/21/2022 - 10/21/2023 \$1,000,000 aggregate / \$1,000,000 occurrence  
 INSIDE RESEARCH & TRAINING.

<b>CERTIFICATE HOLDER</b>  New Hampshire Department of Environmental Services 29 Hazen Drive PO Box 95 Concord NH 03301	<b>CANCELLATION</b>  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE 
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	<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b>  <b>Grant Agreement</b>	<b>GRANT NUMBER (FAIN):</b> 00A00934 <b>MODIFICATION NUMBER:</b> 0 <b>PROGRAM CODE:</b> NP	<b>DATE OF AWARD</b> 09/16/2022
		<b>TYPE OF ACTION</b> New	<b>MAILING DATE</b> 09/21/2022
		<b>PAYMENT METHOD:</b> ASAP	<b>ACH#</b> 10108
		<b>RECIPIENT TYPE:</b> State	
<b>RECIPIENT:</b> New Hampshire D.E.S. 29 Hazen Drive, P.O. Box 95 Concord, NH 03302-0095 EIN: 02-6000618		<b>PAYEE:</b> New Hampshire D.E.S. 29 Hazen Drive, P.O. Box 95 Concord, NH 03302-0095	
<b>PROJECT MANAGER</b> Kathy Black 29 Hazen Drive, P.O. Box 95 Concord, NH 03301 Email: Kathryn.Black@des.nh.gov Phone: 603-271-6398	<b>EPA PROJECT OFFICER</b> Lee Fiske 5 Post Office Square, Suite 100 Boston, MA 02109 Email: Fiske.Lee@epa.gov Phone: 617-918-1847	<b>EPA GRANT SPECIALIST</b> Trevor Tavano Grants Management Branch 5 Post Office Square, Suite 100 Boston, MA 02109 Email: Tavano.Trevor@epa.gov Phone: 617-918-1235	
<b>PROJECT TITLE AND DESCRIPTION</b> Federal Fiscal Year 2022-2023 Pollution Prevention Grant  See Attachment 1 for project description.			
<b>BUDGET PERIOD</b> 10/01/2022 - 09/30/2024	<b>PROJECT PERIOD</b> 10/01/2022 - 09/30/2024	<b>TOTAL BUDGET PERIOD COST</b> \$400,000.00	<b>TOTAL PROJECT PERIOD COST</b> \$400,000.00
<b>NOTICE OF AWARD</b>			
<p>Based on your Application dated 04/11/2022 including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA) hereby awards \$100,000.00. EPA agrees to cost-share 50.00% of all approved budget period costs incurred, up to and not exceeding total federal funding of \$100,000.00. Recipient's signature is not required on this agreement. The recipient demonstrates its commitment to carry out this award by either: 1) drawing down funds within 21 days after the EPA award or amendment mailing date; or 2) not filing a notice of disagreement with the award terms and conditions within 21 days after the EPA award or amendment mailing date. If the recipient disagrees with the terms and conditions specified in this award, the authorized representative of the recipient must furnish a notice of disagreement to the EPA Award Official within 21 days after the EPA award or amendment mailing date. In case of disagreement, and until the disagreement is resolved, the recipient should not draw down on the funds provided by this award/amendment, and any costs incurred by the recipient are at its own risk. This agreement is subject to applicable EPA regulatory and statutory provisions, all terms and conditions of this agreement and any attachments.</p>			
<b>ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)</b>		<b>AWARD APPROVAL OFFICE</b>	
<b>ORGANIZATION / ADDRESS</b> U.S. EPA, Region 1, EPA New England 5 Post Office Square, Suite 100 Boston, MA 02109-3912		<b>ORGANIZATION / ADDRESS</b> U.S. EPA, Region 1, EPA New England R1 - Region 1 5 Post Office Square, Suite 100 Boston, MA 02109-3912	
<b>THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY</b>			
Digitally signed by EPA Award Official Arthur Johnson - Director, Mission Support Division Fred Weeks - Deputy Director, Mission Support Division			<b>DATE</b> 09/16/2022

### EPA Funding Information

FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	\$0	\$100,000	\$100,000
EPA In-Kind Amount	\$0	\$0	\$0
Unexpended Prior Year Balance	\$0	\$0	\$0
Other Federal Funds	\$0	\$0	\$0
Recipient Contribution	\$0	\$0	\$0
State Contribution	\$0	\$200,000	\$200,000
Local Contribution	\$0	\$0	\$0
Other Contribution	\$0	\$0	\$0
Allowable Project Cost	\$0	\$300,000	\$300,000

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.708 - Pollution Prevention Grant Program	Pollution Prevention Act of 1990: Sec. 6605	2 CFR 200, 2 CFR 1500, 40 CFR 33 and 40 CFR 35 Subpart A

Fiscal									
Site Name	Req No	FY	Approp. Code	Budget Organization	PRC	Object Class	Site/Project	Cost Organization	Obligation / Deobligation
	220101G075	22	E1	01V4	000C13	4183			\$100,000
									\$100,000

## Budget Summary Page

Table A - Object Class Category (Non-Construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$242,244
2. Fringe Benefits	\$113,030
3. Travel	\$4,053
4. Equipment	\$0
5. Supplies	\$1,122
6. Contractual	\$5,000
7. Construction	\$0
8. Other	\$28,480
9. Total Direct Charges	\$393,929
10. Indirect Costs: 0.00 % Base -	\$6,071
11. Total (Share: Recipient <u>50.00</u> % Federal <u>50.00</u> %)	\$400,000
12. Total Approved Assistance Amount	\$200,000
13. Program Income	\$0
14. Total EPA Amount Awarded This Action	\$100,000
15. Total EPA Amount Awarded To Date	\$100,000

### **Attachment 1 - Project Description**

This project will provide technical assistance (e.g., information, training, tools) to businesses to help them develop and adopt source reduction practices (also known as pollution prevention (P2)). P2 means reducing or eliminating pollutants from entering any waste stream or otherwise being released into the environment prior to recycling, treatment, or disposal. P2 practices can help businesses save money by reducing their resource use, expenditures, waste and liability costs, while at the same time reducing their environmental footprint and helping to protect human health and the environment. Specifically, this project will provide on-site and off-site P2 technical assistance to the New Hampshire brewery, winery and beverage distillery industry. On-site assistance will include gathering baseline data and providing cost savings calculations to promote implementation of energy efficiency, water conservation and water pollution reduction projects. Energy efficiency projects will include available incentives and return on investment calculations. The

work will also promote best management practices to reduce the strength and volume of wastewater discharges and the use of safer cleaning chemicals.

The priorities for P2 technical assistance (information, training, and tools) align with one or more of the program's national emphasis areas (NEAs). Specifically, this project will

provide on-site and off-site P2 technical assistance to the New Hampshire brewery, winery and beverage distillery industry (NEA 1). On-site assistance will include gathering baseline

data and providing cost savings calculations to promote implementation of energy efficiency, water conservation and water pollution reduction projects. Energy efficiency projects will include available incentives and return on investment calculations. The work will also promote best management practices to reduce the strength and volume of wastewater discharges and the use of safer cleaning chemicals. Highlights of the project include providing training, webinars and outreach; developing and distributing case studies and other documentation products describing P2 best practices identified, developed or implemented under this project; and follow-up visits with participants to determine which practices

were implemented and impediments preventing implementation of those that were not. New Hampshire Department of Environmental Services will be partnering with the New Hampshire electric and gas utilities to provide on-site technical assistance and the New Hampshire Brewers Association, National Brewers Association, New Hampshire Craft Spirits Organization, other New England states and the University of New Hampshire to offer training and educational materials.

The technical assistance conducted by the grantee will benefit facilities and, if applicable, may address underserved communities. The grantee is expected to report on P2 performance measures (outputs and outcomes) and note who will benefit from the technical assistance as well as commit to following-up with facilities to find out whether the technical assistance was adopted and implemented. New Hampshire Department of Environmental Services anticipates providing in depth P2 technical assistance to a minimum of 10 facilities.

They will assist brewers to generate metrics by using the National Brewer's Association benchmarking tool and will document and share best practices and innovations developed through their grant work. Follow-up with participants at two weeks, three months, six months and one year is planned to determine which practices were implemented and identify impediments preventing implementation of others. In addition to in-depth, on-site assistance to 10 facilities, the grantee will also provide off-site technical assistance to the remainder of this growing New Hampshire sector upon request. Highlights of the project include providing training, webinars and outreach and distributing case studies and other documentation products describing P2 best practices. A minimum of one case study will be developed with detailed information on innovative process improvements. Recognition will be awarded to business facilities which adopt a set of P2 best management practices as set forth in the regional Sustainable Craft Beverage recognition program. Outcomes will be shared through videos, case studies, social media posts, webpages, blog posts, and guidance documents.

No subawards are included in this assistance agreement.

## Administrative Conditions

### National Administrative Terms and Conditions

The recipient agrees to comply with the current EPA general terms and conditions available at:

<https://www.epa.gov/grants/epa-general-terms-and-conditions-effective-october-1-2021-or-later>.

These terms and conditions are in addition to the assurances and certifications made as a part of the award and the terms, conditions, or restrictions cited throughout the award.

The EPA repository for the general terms and conditions by year can be found at: <https://www.epa.gov/grants/grant-terms-and-conditions#general>.

#### **A. Correspondence Condition**

The terms and conditions of this agreement require the submittal of reports, specific requests for approval, or notifications to EPA. Unless otherwise noted, all such correspondence should be sent to the following email addresses:

- Federal Financial Reports (SF-425): [rtpfc-grants@epa.gov](mailto:rtpfc-grants@epa.gov)
- MBE/WBE reports (EPA Form 5700-52A): **Grants Specialist on Page 1 of Award Document AND Larry Wells, Disadvantaged Business Utilization Program Manager: [r1\\_mbewbereport@epa.gov](mailto:r1_mbewbereport@epa.gov)**
- All other forms/certifications/assurances, Indirect Cost Rate Agreements, Requests for Extensions of the Budget and Project Period, Amendment Requests, Requests for other Prior Approvals, updates to recipient information (including email addresses, changes in contact information or changes in authorized representatives) and other notifications: **Grants Specialist and Project Officer on Page 1 of Award Document**
- Workplan revisions, equipment lists, programmatic reports and deliverables: **Project Officer on Page 1 of Award Document**
- Quality Assurance documents, **Project Officer on Page 1 of Award Document AND [R1QAPPs@epa.gov](mailto:R1QAPPs@epa.gov)**

#### **B. Contingent Funding**

EPA is funding this agreement incrementally. There is no guarantee of funding beyond the first year. The **Total Approved Assistance Amount** identified on Line 12 of the budget table of this award is contingent upon the availability of appropriated funds, EPA funding priorities, and satisfactory progress in carrying out the activities described in the scope of work. If EPA informs the recipient that the amount on Line 12 will be reduced, the recipient agrees to provide an updated workplan and budget information, as needed, to amend the agreement.

## Programmatic Conditions

### Grant-Specific Programmatic Terms and Conditions

#### **A. PERFORMANCE REPORTING AND FINAL PERFORMANCE REPORT**

##### **Performance Reports – Content**

1. Recipients who provide technical assistance to facilities must submit to EPA the facility-level reporting as described in the Request for Applications (see Section I.I., Section VI.C.3., and Appendix E of RFA), and repeated in section B below.

This reporting includes all P2 recommendations the recipients provide to business facilities as part of the P2 technical assistance they conduct under the grant and, as determined by follow-up with those business facilities, the P2 recommendations actually implemented by those facilities, and the costs, savings and outcomes resulting from that implementation. If recipients perform only one round of follow-up to learn what actions the facility implemented, that follow-up should occur at an interval long enough to allow for some facility implementation planning and follow through.

For the convenience of the recipients, Excel spreadsheet templates are available from EPA's Grant Programs for P2 Website and EPA Regional P2 Program Offices may be used for the required reporting. When the new P2 Grants Database is complete and available, and the Information Collection Budget has been approved, grant recipients will be required to report this information into the P2 Grants Reporting Database.

2. Reporting Requirements Based on the Type of Grant Work Performed: The reporting requirements for grant recipients are specified below according to the type of grant work performed.

**a. Grant Work Providing Direct P2 Technical Assistance to Individual Facilities:** Report as described below in sections 1.- 3.

1. Report on P2 recommendations provided to each facility: Within the grant year that the grantee provided the P2 recommendations to a facility, the grantee will need to report to EPA:

i. The facility identifier information, including:

- a. Business or facility name\*.
- b. EPA facility ID number\*.
- c. Facility contact\*.
- d. Facility location (city\*, state and region).
- e. Facility NAICS code.
- f. Indicate if the facility is located in or adjacent to an underserved community.
- g. The date when the grantee provided P2 recommendations to the facility.
- h. The specific P2 recommendations the grantee provided to the facility (e.g., specific equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of chemicals or raw materials in a named process). Do not report recommendations not considered P2 (see Section I.D of RFA).

**\*NOTE: If a facility raises confidentiality concerns or there are confidentiality constraints under state law, report a generic facility name such as Facility A and omit the EPA facility ID, contact, and the city.**

2. Report on P2 recommendations implemented at each facility: A year after the P2 recommendations were provided to a facility or by the end of the grant. Note: If implementation occurs the same year as recommendations were made, grantees can report it that year. Grant recipients must follow-up with each facility provided technical assistance and report to EPA:

- i. The date when the grantee followed up with the facility to determine the implementation status of the P2 recommendations previously provided.
- ii. The specific P2 recommendations implemented by the facility and comments on implementation details.
- iii. The gross cost of implementation for each P2 action if this information can be obtained from the facility. Do not indicate any savings at this stage.
- iv. The annualized outcomes achieved from implementation of each P2 action at the facility, expressed in:
  - a. reductions of pounds of hazardous material used,
  - b. reductions in hazardous substances, pollutants and contaminants released,
  - c. reductions in gallons of water used,
  - d. reductions in MTCO<sub>2</sub>e released, and
  - e. the dollar savings associated with implementing the P2 actions.

NOTE: Do not include savings from lean manufacturing activities not associated with implementing the P2 actions.

- v. For P2 recommendations not implemented by a facility, indicate whether the facility intends to implement the recommendation within the next 5 years or identify the implementation barrier.

**3. Report on P2 outputs:**

- i. Number of facilities provided P2 technical assistance. Note for EJ: Number of facilities in or adjacent to underserved communities provided P2 technical assistance.
- ii. Percentage of facilities provided P2 technical assistance that the grantee follows-up with (e.g., phone call, visit, letter, or email) to determine which P2 practices were implemented (should be 100%).
- iii. Percentage of facilities that implement at least one new P2 practice as a result of the technical assistance provided by the grantee.

Note for EJ: Percentage of facilities in or adjacent to underserved communities that implemented at least one new P2 practice as a result of the technical assistance provided by the grantee.
- iv. Number of case studies and other P2 documentation products describing specific P2 best practices identified, developed, or implemented through the grant.

**b. Grant Work Involving Green Certification or Leadership Programs:**

1. Report on P2 outcomes: Report the specific P2 actions implemented by each facility as a result of participation in the Green Certification or Leadership Program.

i. Report the same facility identifier information described under (1)(i) above. Note that the same confidentiality option exists as described in that section.

ii. Include the cost of implementation for each P2 action implemented at each facility if this information is obtainable.

iii. Include the annualized outcomes achieved from each implemented P2 action, expressed in:

- a. reductions of pounds of hazardous material used,
- b. reductions in hazardous substances, pollutants and contaminants released,
- c. reductions in gallons of water used,
- d. reductions in MTCO<sub>2e</sub> released, and
- e. the dollar savings as a result of the P2 actions implemented.

**2. Report P2 outputs:**

i. Number of case studies and other P2 documentation products describing specific P2 best practices identified, developed, or implemented through grant work involving green certification or leadership programs.

ii. Number of certification/ leadership amplification activities (i.e., training, webinars, other outreach) that widely share P2 practices and documentation.

Note for EJ: Number of these amplification activities that widely share P2 practices and documentation in underserved communities.

Note for EJ: Number of program participant facilities that are in or adjacent to an underserved community.

**c. Grant Work Providing P2 Technical Assistance to Multiple Facilities at a Time (e.g., P2 training, webinars, roundtables, and other outreach).**

1. EPA expects good faith efforts to follow-up with facilities one-year after the technical assistance was provided, or by the end of the grant period to learn the following information and report as available:

**I. Facility identifier information, including:**

- a. Facility name\*.
- b. EPA facility ID number\*.
- c. Facility contact\*.
- d. Facility location (city\*, state and region).
- e. Facility NAICS code.
- f. Indicate if the facility is located in or adjacent to an underserved community.

**\* NOTE: If the facility raises confidentiality concerns or there are confidentiality constraints under state law, report a generic name such as Facility A and omit the EPA facility ID, contact, and the city.**

- ii. The date of follow-up with the facility to determine the P2 actions implemented.
- iii. Specific P2 actions implemented by the facility as a result of the technical assistance.
- iv. The total cost of implementation for each P2 action implemented, if obtainable. Do not indicate any savings at this stage.
- v. The annualized outcomes achieved from implementation of each P2 action at each facility, expressed in:
  - a. Reductions of pounds of hazardous material used.
  - b. Reductions in hazardous substances, pollutants and contaminants released.
  - c. Reductions in gallons of water used.
  - d. Reductions in MTCO<sub>2</sub>e released.
  - e. The dollar savings associated with the P2 implementation.

**NOTE: Do not include savings from lean manufacturing not associated with the P2 action implemented.**

vi. For P2 recommendations not implemented by a facility, indicate whether the facility intends to implement the recommendation within the next 5 years, or identify the implementation barrier.

**2. Report P2 outputs:**

- i. Number of case studies and other P2 documentation products describing specific P2 best practices identified, developed, or implemented through the grant.
- ii. Number of amplification activities (i.e., training, webinars, roundtables, or other outreach) that widely share P2 practices and documentation.

Note for EJ: Number of these amplification activities that widely share P2 practices and documentation in underserved communities.

iii. Standard outputs associated with each amplification event:

- a. Topic(s) covered.
- b. Number of businesses attending each event.
- c. Increased participant understanding of topics and types of skills achieved during these events.

**d. Grant Work using P2 Technical Assistance to Develop P2 Tools or Products, report on:**

- i. Description of product(s) developed.

ii. Any information on pilot testing or stakeholder input.

iii. Any information on documentation and amplification approaches for product developed.

### **Performance Reports - Frequency**

P2 grant recipients will be required to submit annual progress reports and a final technical report. Some regions may also require a semi-annual progress report, e.g., sharing information on milestones.

In the annual performance report and final technical report, grant recipients will be expected to report on the outputs and outcomes of the grant as described in **Section I.I** of the RFA, "Measuring and Reporting Environmental Results: Output & Outcome Performance Measures," and in **Section VI.C.3.**, "Guidance on Reporting Requirements Based on the Type of Grant Work Performed."

If the outputs planned in the assistance agreement work plan differ from the actual outputs for the reporting period, the grantee should explain the reason for those differences.

Grantees are expected to submit annual performance reports on outputs and environmental outcomes achieved electronically to the EPA Project Officer within 60 days after the anniversary of the grant award, and a final technical report within 120 days after the grant activities have concluded. Grant recipients are encouraged to use a table and text to report outputs and outcomes (see the business facility-level reporting template examples offered in **Appendix E** of the RFA). Additionally, Excel spreadsheet templates are available from EPA's P2 Program Grant Reporting page found on EPA's Grant Programs for P2 website and from EPA's Regional P2 Program Offices. EPA will use this information to determine if workplan requirements are being met and to build a repository of pollution prevention lessons learned that can be widely shared and replicated.

## **B. CYBERSECURITY CONDITION**

### **State Grant Cybersecurity**

(a) The recipient agrees that when collecting and managing environmental data under this assistance agreement, it will protect the data by following all applicable State law cybersecurity requirements.

(b) (1) EPA must ensure that any connections between the recipient's network or information system and EPA networks used by the recipient to transfer data under this agreement, are secure.

For purposes of this Section, a connection is defined as a dedicated persistent interface between an Agency IT system and an external IT system for the purpose of transferring information. Transitory, user-controlled connections such as website browsing are excluded from this definition.

If the recipient's connections as defined above do not go through the Environmental Information Exchange Network or EPA's Central Data Exchange, the recipient agrees to contact the EPA Project Officer (PO) and work with the designated Regional/Headquarters Information Security Officer to ensure that the connections meet EPA security requirements, including entering into Interconnection Service Agreements as appropriate. This condition does not apply to manual entry of data by the recipient into systems operated and used by EPA's regulatory programs for the submission of reporting and/or compliance data.

(2) The recipient agrees that any subawards it makes under this agreement will require the subrecipient to comply with the requirements in (b)(1) if the subrecipient's network or information system is connected to EPA networks to transfer data to

the Agency using systems other than the Environmental Information Exchange Network or EPA's Central Data Exchange. The recipient will be in compliance with this condition: by including this requirement in subaward agreements; and during subrecipient monitoring deemed necessary by the recipient under 2 CFR 200.332(d), by inquiring whether the subrecipient has contacted the EPA Project Officer. Nothing in this condition requires the recipient to contact the EPA Project Officer on behalf of a subrecipient or to be involved in the negotiation of an Interconnection Service Agreement between the subrecipient and EPA.

### C. DEVELOPMENT OF CASE STUDIES

1. Recipients must develop at least one case study describing P2 actions implemented by facilities receiving technical assistance during the grant period. P2 Case studies should not describe all P2 practices implemented at a facility. They should only describe one or two specific P2 practices that the grantee believes are new or not widely known or adopted, or where the grantee believes other businesses or P2 technical assistance providers would benefit from the additional technical detail that a case study would provide. These P2 Case studies will be used by EPA to build and share a body of knowledge about P2 practices that could be replicated and implemented at similar businesses.

P2 case studies should provide information describing the P2 practice with enough detail that others could generally understand what was done, why it was implemented, and the costs, savings and environmental outcomes (P2 measures). A clear case study allows readers to determine if the practice is relevant to their circumstance and whether they could replicate the practice. If applicable, the case study should also provide information on the financing mechanism, model or approach used to implement the P2 practices, particularly if that information could be useful to others who may want to replicate the P2 practices described in the case study.

The guidance for case studies is provided in Appendix F of Request for Applications and key language from that appendix is provided below.

a. Audience: The target audience for these case studies are environmental professionals, such as State and Tribal P2 Technical Assistance Providers (TAPs) and similar businesses seeking to identify, assess and implement P2 best practices.

b. Elements: Generally, within 2-5 pages.

- i. Name and location of the facility (optional if confidentiality concerns).
- ii. EPA Region.
- iii. NAICS code and type of facility.
- iv. General description of the facility (e.g., size of facility, annual revenues, number of employees).
- v. Why did the facility choose to explore P2? (e.g., company goals, EMS requirement)
- vi. What problem(s) was identified through P2 technical assistance?
- vii. What were the major or innovative P2 actions implemented at the facility (e.g., process change, chemical substitution, green chemistry solution, equipment changes)? Please provide detail.
- viii. If applicable, what was the financing mechanism, model or approach used to implement the P2 practice.

c. Results (to the extent that the information below applies to the P2 action implemented):

i. Narrative description of the human health or environmental benefits, cost savings, or regulatory relief achieved by implementing the P2 actions.

ii. Simple payback period.

iii. Numerical results and associated cost savings for each P2 action and outcome:

1. Reduction in hazardous materials used – measured in lbs.
2. Reduction in hazardous substances, pollutants and contaminants released to air, water and land – measured in lbs.
3. Reduction in metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>).
4. Water conserved – measured in gallons.
5. Include regulatory relief not covered in the above (e.g., waste hauling costs, reductions in permitting costs).
6. Other numerical outcomes.

#### **D. COMPETENCY POLICY**

##### **Competency of Organizations Generating Environmental Measurement Data**

In accordance with Agency Policy Directive Number FEM-2012-02, Policy to Assure the Competency of Organizations Generating Environmental Measurement Data under Agency-Funded Assistance Agreements,

Recipient agrees, by entering into this agreement, that it has demonstrated competency prior to award, or alternatively, where a pre-award demonstration of competency is not practicable, Recipient agrees to demonstrate competency prior to carrying out any activities under the award involving the generation or use of environmental data. Recipient shall maintain competency for the duration of the project period of this agreement and this will be documented during the annual reporting process. A copy of the Policy is available online at <https://www.epa.gov/sites/production/files/2015-03/documents/competency-policy-aaia-new.pdf> or a copy may also be requested by contacting the EPA Project Officer for this award.

#### **E. QUALITY ASSURANCE**

Authority: Quality Assurance applies to all assistance agreements involving environmental information as defined in 2 C.F.R. § 1500.12 Quality Assurance.

##### **1. Quality Assurance Project Plan (QAPP)**

a. Prior to beginning environmental information operations, the recipient must:

- i. Develop a QAPP,
- ii. Prepare QAPP in accordance with the most current version of EPA QA/R-5: EPA Requirements for Quality Assurance Project Plans,
- iii. Submit the document for EPA review to the Project Officer and [R1QAPPs@epa.gov](mailto:R1QAPPs@epa.gov), and

- iv. Obtain EPA Quality Assurance Manager or designee (hereafter referred to as QAM) approval.
- b. The recipient must submit the QAPP within 90 days after grant award.
- c. The recipient shall notify the PO and QAM when substantive changes are needed to the QAPP. EPA may require the QAPP be updated and re-submitted for approval.
- d. The recipient must review their approved QAPP at least annually. The results of the QAPP review and any revisions must be submitted to the PO and the QAM at least annually and may also be submitted when changes occur.

**For Reference:**

- EPA QA/R-2: EPA Requirements for Quality Management Plans and EPA QA/R-5: EPA Requirements for Quality Assurance Project Plans; contain quality specifications for EPA and non-EPA organizations and definitions applicable to these terms and conditions.
- EPA QA/G-5: Guidance for Quality Assurance Project Plans, Appendix C provides a QAPP Checklist.
- EPA's Quality Program website has a list of QA managers, and Quality Specifications for non-EPA Organizations to do business with EPA.
- The Office of Grants and Debarment Quality Assurance Requirements.

**F. TRAVEL FUNDS**

Grant recipients may use federal grant dollars to support the facilitation, hosting/co-hosting of P2 focused events. Grant recipients should also set aside funds to support travel to the national EPA/P2 Grantee meetings. Federal dollars awarded under this program may not be used to facilitate or directly benefit EPA-led/sponsored events.

**G. USE OF LOGOS**

If the EPA logo is appearing along with logos from other participating entities on websites, outreach materials, or reports, it must **not** be prominently displayed to imply that any of the recipient or subrecipient's activities are being conducted by the EPA. Instead, the EPA logo should be accompanied with a statement indicating that the [Insert Recipient or subrecipient NAME] received financial support from the EPA under an Assistance Agreement. More information is available at: <https://www.epa.gov/stylebook/using-epa-seal-and-logo#policy>.

**H. GRANT RECIPIENT WORK PRODUCTS**

Grant recipients that produce grant or cooperative agreement work products will be required to include the following disclaimer on produced materials:

"Grant recipient work products may not have been formally reviewed by the U.S. Environmental Protection Agency (EPA) and may not reflect the views and policies of the EPA. The EPA does not endorse trade names or recommend the use of commercial products mentioned in these documents."

**FY 2022-2023 POLLUTION PREVENTION GRANT PROGRAM**

EPA-HQ-OPPT-2022-001

Grant # *NP00A00934*

**New Hampshire Pollution Prevention Program**

**EPA Region 1**

**NEA# 1 – Food and Beverage Manufacturing and Processing**

The proposed project will provide pollution prevention technical assistance to the New Hampshire brewery, winery, and beverage distillery industry to reduce the strength and volume of discharges of wastewater pollutants and to implement energy efficiency, water conservation and hazardous waste reduction projects. NHPPP will be partnering with New Hampshire electric and gas utilities to provide on-site technical assistance and the New Hampshire Brewers Association, National Brewers Association, New Hampshire Craft Spirits Organization, other New England states, and the University of New Hampshire to offer training and educational materials.

**Total Project Funding: \$400,000**

**Requested Funding: \$200,000**

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New Hampshire Department of Environmental Services  
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Revised July 2022

System for Award Management Registration Date: 1/14/2022

**FY 2022-2023 POLLUTION PREVENTION GRANT  
PROPOSAL NARRATIVE**  
**New Hampshire Department of Environmental Services**  
**New Hampshire Pollution Prevention Program**  
*Pollution Prevention Strategies for Breweries, Wineries, and Beverage Distilleries*  
**July 2022**

*NHPPP will provide source reduction information, training, and tools to craft beverage manufacturers and support EPA's strategic goal to provide clean and safe water by preventing or reducing the discharge of pollutants.*

**1. Project Strategy & Overall Approach**

**1.a. Environmental and/or Human Health Concern**

Currently, there are 103 established breweries, 47 wineries (includes cideries and meaderies), and 16 distilleries in New Hampshire with at least 10 more manufacturers in the planning stages. In 2013 there were approximately 19 breweries and in 2016 when our partnership with the New Hampshire Brewers Association (NHBA) began there were 54 breweries; throughout our partnership, the industry has nearly doubled! The growth of this industry is expected to continue. Micro-breweries (defined as a brewery that produces less than 15,000 barrels/year) play an important role in New Hampshire's economy. The brewery industry in New Hampshire has an economic impact of \$506 million, employs more than 4,500 people, and produces 108,078 barrels annually. New Hampshire's tourism industry also benefits from contributions of breweries, wineries, and distilleries by drawing both in-state and out-of-state visitors for tours, tastings, and special events. Craft beverage manufacturers have a positive and growing impact on New Hampshire's economy, however, along with this industry's growth is the potential for increased environmental impacts such as issues relating to the discharge of high strength wastewater, increased energy use and water consumption. The craft beverage manufacturing process is typically water-use intensive and generates waste. Environmental and human health concerns include:

- Use of hazardous chemicals in cleaning and sanitizing.
- Inefficient use of energy, leading to increased air emissions associated with the generation of electricity.
- Inefficient use of water, contributing to increased water usage and cost, as well as increased volume of wastewater.

The craft beverage industry has a culture of sustainability and recognizes that sustainable practices can result in a better product at lower cost. The adoption of P2 practices will resolve some of the significant environmental and health concerns at craft beverage manufacturers; they will help conserve natural resources, mitigate climate change, promote environmental sustainability, and improve the health of overburdened and vulnerable communities located near these facilities. This project will support EPA's Draft FY 2022-2026 Strategic Plan under Goal 7: Ensure Safety of Chemicals for People and the Environment, Objective 7.2: Promote Pollution Prevention.

**1.b. NEA Alignment**

For Federal Fiscal Years 2022 and 2023, the New Hampshire Pollution Prevention Program (NHPPP) of the New Hampshire Department of Environmental Services (NHDES) proposes to work within the Food and Beverage Manufacturing and Processing Sector (NEA #1), which includes the micro-brewery industry (NAICS code 3121), winery industry (NAICS code 31213) and beverage distilleries (NAICS code 31214) to

carry out technical assistance and projects to support more sustainable food and beverage manufacturing and processing entities resulting in reduced toxic air emissions and water discharges, water and energy usage, hazardous materials generation and use. Grant funding from EPA will allow NHPPP to continue and expand our outreach to provide source reduction information, training, and tools to this growing sector and support EPA's strategic goal to provide clean and safe water by preventing or reducing the discharge of pollutants.

#### **1.c. Environmental Justice (EJ) and Underserved Communities Emphasis**

In New Hampshire there are 59 craft beverage manufacturers in or adjacent to overburdened and vulnerable communities, as defined by socioeconomic and demographic factors in EPA's EJ Screen Tool. These communities bear the negative impacts of hazardous emissions to air and water disproportionately. By assisting the beverage manufacturers in or adjacent to these communities, the disproportionate and adverse human health, environmental, climate-related, and other cumulative impacts are reduced. These populations are more likely to experience greater exposure to environmental hazards, including those internal and external to their home environment; less access to green space, clean air, clean water; and less access to engagement in policy decisions. NHDES recognizes that environmental health disparities persist within the state, and that these disparities have a cumulative impact on the vulnerable communities in which we live and serve. Therefore, NHDES is committed to incorporating environmental justice principles in its practices and policies at the program level and to providing the education and resources needed to allow programs to do this.

NHDES has a Title VI Nondiscrimination/Environmental Justice Team to assist NHDES in ensuring compliance with Title VI nondiscrimination legal requirements and in incorporating the non-regulatory environmental justice principles of fair and equitable treatment that encourages meaningful involvement of impacted communities into agency programs, practices, and policies. NHPPP seeks to reduce disparities that result in vulnerable populations in New Hampshire bearing a disproportionate impact relative to the implementation of programs, policies, and practices related to the environment. NHPPP will prioritize technical assistance to businesses in or adjacent to these areas and will translate hazard information such as Standard Data Sheets (SDS) and best management practices to other languages represented in those areas.

#### **1.d. Climate Change Impacts**

New Hampshire is already feeling the impacts of climate change – from more frequent and intense storms, to warming temperatures. The business-as-usual approaches to the way we generate and use energy, manage our waters, and sustain our communities simply won't work any longer. NHPPP will provide technical assistance to businesses to reduce greenhouse gas emissions and/or increase energy efficiency to benefit the environment and public health. The practice of source reduction benefits the environment through reduced energy consumption and pollution, conservation of natural resources, and extension of valuable landfill space. It can also have economic benefits by reducing costs associated with transportation, disposal, or recycling of waste. Plus, source reduction can save businesses money.

Preventing waste is a potent strategy for reducing greenhouse gases, as well. Pollution prevention reduces emissions from energy consumption. Manufacturing goods from recycled materials typically requires less energy than producing goods from virgin materials. When people reuse things or when products are made with less material, less energy is needed to extract, transport, and process raw materials and to manufacture products. The payoff? When energy demand decreases, fewer fossil fuels

are burned, and less carbon dioxide is emitted to the atmosphere. Recycling and waste prevention allow some materials to be diverted from incinerators and thus reduce greenhouse gas emissions from the combustion of waste. Waste prevention and recycling (including composting) divert organic wastes from landfills, reducing the methane released when these materials decompose.

**1.e. Description of P2 Technical Assistance**

This project has four main task areas to deliver P2 assistance to craft beverage manufacturers:

- **Task 1: Technical Assistance**
- **Task 2: Application of Pollution Prevention Strategies & Tools to Craft Beverage Manufacturers**
- **Task 3: Recognition Program**
- **Task 4: Outreach and Training**

**Task 1: Technical Assistance.** NHPPP will provide technical assistance to a minimum of 10 facilities (five per year) using the Follow Up Plan shown in the table below. This will allow us the ability to allocate sufficient time to provide in-depth assistance to businesses that may not have the knowledge or resources to implement energy efficiency and water conservation measures, and understand the issues related to high-strength wastewater and toxic chemical use. Assistance to this sector provides benefits to both human health and the environment by ensuring that beverage manufacturers use best management practices to reduce water and air pollutants, conserve precious resources and seek out less toxic cleaning products. In P2 assessments NHPPP will look for opportunities to conserve water (e.g. use high-volume, low-pressure washing systems that reuse water); identify practices to minimize loadings to wastewater systems, find carbon dioxide leaks using a CO<sub>2</sub> leak detection tool, look for opportunities to use lower-toxicity products (i.e., refrigerants, equipment cleaning), look for ways to reduce energy use and increase energy efficiency (e.g., heat transfer systems, equipment upgrades/innovations, process), and look for opportunities to reduce pollutants discharged to water (e.g., reduce volume and strength of wastewater.)

In addition to the in-depth assistance to 10 facilities, we will also provide technical assistance to the remainder of this growing sector upon request. Facilities-in-planning and smaller manufacturers hoping to grow also present a unique opportunity for pollution prevention (P2). Our partnership with the state trade organizations for brewers and craft distillers who promote our services, enhances our ability to provide technical assistance in source reduction during the planning phase, or as a business grows, reinforcing the fact that P2 strategies can help them grow sustainably.

**Technical Assistance Follow Up Plan**

No more than 2 weeks after Site Visit	Follow up phone call or email asking if they have questions or need additional information. The site visit report will be produced within 30 days of the visit.
3 months after Site Visit	Email asking if they implemented any P2 practices, need assistance, what barriers to implementing P2 practices they are encountering, and what P2 practices they are planning to implement in the future. Phone call if no response.
6 months after Site Visit	Email asking what P2 practices implemented, need assistance, what barriers to implementation they are encountering, and what P2 practices they are planning to implement in the future. Phone call if no response.
1 year after Site Visit	Email asking if they implemented any P2 practices, need assistance, what barriers to implementing P2 practices they are encountering, and what P2 practices they are planning to implement in the future. Phone call if no response.

## **Task 2: Application of Pollution Prevention Strategies and Tools to Craft Beverage Producers**

NHPPP will assist brewers to generate metrics by using interns to input data using the National Brewer's Association (NHBA) benchmarking tool. Interns will assist with all aspects of Task 2 work. Case studies will be developed to assist other businesses in implementing P2 strategies. Overall, the P2 strategies developed by NHPPP will enable craft beverage manufacturers to assess their environmental, economic, and social (triple bottom line) performance and provide recommendations to become more competitive in an energy, water, and waste-intensive industry. NHPPP will continue to update best management practices as new and innovative strategies are identified. NHPPP will utilize tools such as EPA ENERGY STAR treasure hunts, ENERGY STAR guidance for breweries and distilleries, and EPA WaterSense. NEWMOA will also support work performed for this task specifically related to sharing best management strategies and innovative strategies during regularly scheduled regional workgroup meetings convened by NEWMOA.

**Task 3: Recognition Program** - NHPPP will provide recognition to business facilities which adopt a set of P2 best management practices as set forth in the regional Sustainable Craft Beverage recognition program, which will result in newly implemented P2 practices as a result of P2 technical assistance provided under this grant. NHPPP will amplify innovative new strategies and practices that are not widely in use through social media, videos, case studies, and guidance documents. As new best management practices are identified, NHPPP will continue to update the best management practices checklist. NHPPP will collaborate with other New England states (Maine, Massachusetts, Rhode Island, Connecticut, and Vermont) to promote this program. NEWMOA will assist with regional coordination through regularly schedule regional workgroup meetings convened by NEWMOA.

**Task 4: Outreach and Training** - NHPPP will provide information on P2 opportunities and best practices to businesses (e.g., by phone, e-mail, or internet). NHPPP will provide training in source reduction techniques at trade association meetings and conferences. Innovative practices will be introduced through webinars, as well. NHPPP will conduct training and P2 outreach to teach groups of businesses to identify and reduce the use of hazardous chemicals, water, and energy. NHPPP will amplify innovative new strategies and practices that are not widely in use through social media, videos, case studies, and guidance documents. NHPPP will collaborate with other New England states to hold a regional workshop funded by the University of Massachusetts Boston and attend and/or present at two industry conferences. Also, NHPPP will provide training in source reduction techniques for brewery students and brewers-in-training enrolled in the University of New Hampshire Brewing Science Program's *Advanced Aspects of Brewing* course. NEWMOA will create a series of (video) case studies as well as cleaning and sanitizing guidance for the craft beverage sector.

### **1.f. Effectiveness of P2 Technical Assistance Approach**

NHPPP has provided high quality technical assistance to businesses for more than two decades. Our assistance was enthusiastically received by New Hampshire craft brewers. We have provided some level of assistance to approximately one third of the breweries in NH and continue to have requests for technical assistance. NHPPP is effective in assisting breweries in development through its partnership with the NHBA. Our partnership with the NH Craft Spirits Organization (NHCSO) and energy efficiency providers is effective in identifying new businesses to provide energy efficiency recommendations. This partnership enabled outreach to other craft beverage manufacturers, as well. In the past, NHPPP made 191 pollution prevention recommendations, of which 91 were implemented, an implementation rate of about 45%. These actions resulted in approximate savings of \$192,644.00, a reduction of 205 MTCO<sub>2</sub>

emissions, a reduction of 78,836 pounds of pollutants in air emissions, and a reduction of 202,100 gallons of water used. Partnerships formed have resulted in successful outreach and technical assistance, indicating a successful approach to technical assistance.

#### **1.g. Leveraging Resources and Expertise of Partners**

Pollution prevention programs in the northeast have a long tradition of coordination and collaboration that has allowed programs to successfully leverage and amplify the work of their peers and deliver a menu of rich service offerings on limited budgets. NHPPP will collaborate with other New England states to hold a regional workshop and promote the Sustainable Craft Beverage recognition program. NHPPP will partner with the NHBA and NHCSO to develop and provide P2 training at their conferences and workshops. NHBA and NHCSO will encourage its membership to reach out to us for assistance and will also share our guidance documents through their list-serve. NHPPP will share information, webinars and case studies provided by other sources such as P2 programs and the Massachusetts' Toxics Use Reduction Institute (TURI) through this network to amplify the results of this work. NHPPP will continue to partner with NHSaves and New Hampshire utility providers (gas and electric) to perform joint on-site energy audits. To provide brewers, wineries, and/or distilleries with the best expertise, consultants from the business' energy provider(s) will join NHPPP on visits. NHPPP is also teaming up with NEWMOA to provide additional case studies (video/written) and guidance documents as well as amplify our efforts both nationally and regionally.

#### **Partners**

- **NH Utility Providers:** NHPPP will partner with Liberty Utilities (Contact Bob Reals), Resilient Buildings Group/NHSaves (Contact Brian Dwyer), and NH Electric Coop (Contact Joe Lajewski) to provide energy efficiency audits and financial incentives.
- **New Hampshire Brewers Association & NH Craft Spirits Organization:** These trade organizations have strong relationships with their members and support the work of NHPPP. NHBA will encourage participation in benchmarking and recognition programs and amplify outreach efforts (Contacts CJ Haines and Brian Ferguson).
- **National Brewers Association:** Will provide training and access to their National Benchmarking tool (Contact Chuck Skypeck).
- **University of New Hampshire Craft Brewing Program:** Partnering with the brewing program at this school gives students an opportunity to assist with on- and off-site solutions and trains students in source reduction (Contacts Cheryl Parker).
- **US EPA, National and Region 1, Other New England States:** New Hampshire anticipates that EPA will host a national grantee meeting for all Pollution Prevention grant recipients. New Hampshire will send a representative to this meeting and will reflect the cost to attend in our proposed budget. NHPPP will collaborate with other New England states to hold a regional workshop. Also, NHPPP, New England Environmental Finance Center Pollution Prevention and University of Massachusetts Boston Center for Sustainable Enterprise and Regional Competitiveness programs are working collaboratively to deliver a uniform recognition program, resources, and technical assistance to help small craft beverage producers reduce water, energy, chemicals, and waste in their operations, (Contacts Dr. Vesela Veleva and Martha Sheils/Peter Cooke)
- **Northeast Waste Management Officials' Association (NEWMOA):** NEWMOA has a long history of successfully coordinating collaboration with NHPPP and Region 1 state P2 grant projects and will provide support for Tasks 2, 3 and 4 describe above. (Andy Bray)

#### **1.h. Documenting P2 Best Practices**

Throughout the project, NHPPP will document best practices and innovative practices as discovered through the grant work. A minimum of one case study will be developed with detailed information on innovative process improvements. Building on our past success, best practices will be documented and shared through the Sustainable Craft Beverage Recognition Program, videos, case studies, social media posts, webpages, blog posts, and guidance documents. NHPPP will document specific P2 practices that could benefit other craft beverage facilities as well as other P2 technical providers.

### **1.i. Amplifying P2 Best Practices**

NHPPP will identify, document, and develop P2 best management practices for breweries, wineries, and/or distilleries and disseminate the outcomes for others to replicate. This will be accomplished in the form of case studies, guidance documents, webinars, and video which will be widely shared on the NHDES website and EPA Teams Channel, as well as links to our materials on our industry partners' webpages. Guidance documents, case studies, and a video highlighting the results of this grant activity will be made available for use by breweries, wineries, and/or distilleries, the NHBA, NHCSO, Publicly Owned Treatment Works (POTWs) and other states' pollution prevention programs for future efforts. NHPPP will continue to utilize social media, EPA Pollution Prevention Program newsletters, National Pollution Prevention Roundtable newsletters and trade associations newsletters to amplify our efforts.

### **2. Environmental Results Measurement & Reporting P2 Recommendations and Actions Implemented**

NHPPP will collect baseline data and provide technical assistance and cost savings calculations to breweries, wineries, and distilleries to promote implementation of energy efficiency, water conservation and water pollution reduction projects. Energy efficiency project details including available incentives and return on investment calculations will be provided as well as recommendations for water and wastewater reductions. NHPPP will also promote best management practices to reduce the strength and volume of wastewater discharges and the use of safer cleaning chemicals. NHDES and NHPPP are committed to rigorous measurement in all programs, and routinely develop and use metrics systems to both, estimate expected results before a project begins and to measure actual results following completion of project activities. NHDES will utilize the P2 Grant Business Facility-Level Reporting spreadsheets provided by EPA to track progress of project activities. NHDES also utilizes an in-house Measures Tracking and Reporting System (MTRS) which houses programmatic data and quarterly measurement information. P2 actions adopted and reductions from these projects will be gathered via information from the utility and through follow-up, as outlined in the table below.

#### **Output Measures**

- Number of business facilities provided technical assistance.
- Number of facilities in or adjacent to underserved communities provided P2 technical assistance.
- Number of case studies and other P2 documentation products describing specific P2 best practices identified, developed, or implemented.
- Number of amplification activities that widely share P2 practices and documentation (*i.e.*, training, webinars, roundtables, other outreach.)
- Number of amplification activities that target underserved communities.
- Percentage of business facilities provided technical assistance followed-up with to determine which P2 practices were implemented.
- Percentage of business facilities that implemented at least one new P2 practice as a result of the technical assistance provided.
- Percentage of facilities in or adjacent to underserved communities that implemented at least

one new P2 practice as a result of the technical assistance provided.

- At least one outreach material made available in multiple languages to assist linguistically-isolated communities nearby if appropriate.
- Development of a video to promote brewery, winery, and/or distillery P2 efforts.
- Number of recommendations made to businesses.
- Number of P2 recommendations implemented.
- Number of innovations and/or best practices developed.
- Number of outreach materials developed (e.g., factsheets, leaflets, videos.)
- Number of businesses attending workshops, training, and courses offered.

**Outcome Measures**

- Reduction in pounds of hazardous materials used and of hazardous substances, pollutants and contaminants released at facilities as a result of implementing P2 actions.
- Reduction in pounds of hazardous materials used and of hazardous substances, pollutants and contaminants released at facilities in or adjacent to underserved communities.
- Reductions in metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>) resulting from implementing the P2 actions.
- Reductions in metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>) resulting from P2 actions implemented at facilities in or adjacent to underserved communities.
- Reductions in gallons of water used at facilities resulting from implementing P2 actions.
- Reductions in gallons of water used at facilities in or adjacent to underserved communities.
- The dollar savings associated with implementing P2 actions at facilities (e.g., reductions in costs from use or disposal of hazardous and non-hazardous materials, water use, energy use, and savings from reduced regulatory burden).
- The dollar savings associated with implementing P2 actions at facilities in or adjacent to underserved communities.

**Data Collection**

- Maintain EPA specified spreadsheets for each facility including P2 recommendations, previously implemented P2 practices, P2 practices implemented as a result of technical assistance, P2 practices to be implemented within 5 years, and what/why recommendations will not be implemented, including environmental and cost outcomes.
- All data conforms to the QA Plan and internal reviews.
- Follow up data will be collected as outlined in the table below (titled “Expected Outcomes”) for facilities that received technical assistance to determine what P2 practices were adopted.
- Calculations for savings using calculators recommended by EPA.

**Expected Outcomes**

P2 Activity	Annual Savings from P2 Action (\$)	Hazardous Materials Used Reduced (lbs)	Hazardous Waste Reduced (lbs)	Air Emissions Reduced (lbs)	Water Pollution Reduced (lbs)	MTCO <sub>2e</sub> Emissions Reduced (tons)	Water Use Reduced (gallons)	Reduction at Facilities in or Adjacent to Underserved Communities
1. Wastewater reduction	\$83,265				115			28.8 lbs water pollution
2. Water use	\$3,593						186,000	46,500 gal

reduction								water
3. Energy use reduction	\$16,590					82.3		20.6 MTCO <sub>2</sub> e
Total	\$103,448				115	82.3	137,600	

The calculations of estimated results in the table on the previous page are based on technical assistance to small breweries, since wineries and craft distilleries have fewer documented reports about water use reduction and wastewater reduction potential. Technical assistance is expected to be primarily to small breweries and breweries in planning, resulting in smaller expected outcomes. Calculations of the Expected Outcomes are made using EPA tools, including the WARM model, GHG Equivalency Calculator, EJ Screen Tool. \*Please refer to Appendix A at the end of the document for calculations.

**3. a.b.c. Programmatic Capability & Environmental Results, Past performance Criteria**

NHDES and the NHPPP use proven strategies to achieve goals and have over 20 years of experience administering Pollution Prevention Grants. With Sara Johnson, Cynthia Nelson, Kathy Black, Laura Martel, Erin Waters, and Vincent Perelli, NHDES is providing nearly 90 years’ worth of pollution prevention experience (see qualifications below). NHPPP has extensive project management experience and track record to deliver successful projects that meet the goals, deliverables, budget, and timeline of complex projects. Through their efforts, NHPPP has a long track record of successful pollution prevention projects. For this proposal, NHDES will use a combination of assistance, partnerships, focused outreach, and technical expertise as tools to achieve project objectives. Grant projects will be managed by existing NHPPP staff with assistance and input from other NHDES program staff (solid and hazardous waste, water, air and grants accounting staff) and other partners.

In the past six years, NHDES has been awarded three P2 Grants from EPA, as follows:

- FFY 2020-2021 Pollution Prevention Assistance Agreement #NP00A00740
- FFY 2018-2019 Pollution Prevention Assistance Agreement #NP00A00278
- FFY 2016-2017 Pollution Prevention Assistance Agreement #NP00A00025

NHDES has a solid history of meeting all the requirements of past grants. Progress and final technical reports were submitted on time and included project outputs, outcomes, measurable results, and copies of all publications, presentations, and other deliverables. NHPPP frequently reviews timeline tasks and makes adjustments accordingly to ensure project objectives are met. NHDES and NHPPP use proven strategies to achieve their goals, and for over twenty years, have enjoyed a track record of successfully running Pollution Prevention Grant projects effectively and within budget. In addition, the NHPPP has been the recipient of several awards, including the NPPR’s “Most Valuable Pollution Prevention” Award (multiple times), EPA New England’s Environmental Merit Award (multiple times), and two “Champions for Change” awards from the Hospitals for a Healthy Environment organization.

**Examples of Past Successes**

From our work on the FFY 2018-2019 grant project, one brewery, looking to move to a new, larger location, installed LED lighting, variable speed motors, and implemented other energy efficiency projects that were highlighted in an Energy Audit provided by the business’ electric and gas utilities. The energy efficiency consultant from the electric utility accompanied us during this site visit, which was very helpful in getting these projects implemented. The brewery received \$12,000 in rebates and now benefits from additional savings each month in electricity and gas costs.

NHPPP encourages the businesses they work with to track a number of key metrics. This benchmarking is very effective in helping businesses understand how much energy and water they use so they can reduce waste. Breweries that participated in our benchmarking program are utilizing the data to find areas for improvement. One small brewery was concerned that it was not producing as much beer as expected and contacted NHPPP for assistance. Staff toured the facility and noted a 40-foot hose run to the cooler and made a suggestion to shorten the hose run. This is a great example of a simple P2 suggestion that saved over 800 pounds of product and reduced that amount of high-strength wastewater being discharged during each brewing process. Another brewery participating in our benchmarking project examined its water usage and seeing a need for improvement, installed an ionizing can rinse which saves 700 gallons of water per week, 36,400 gallons per year, saving \$708 per year on water and sewer costs.

One New Hampshire brewery participating in our benchmarking program was reviewing their water bill and noticed a huge spike. They checked their operation for major leaks but did not find any. This brewery was in a building that housed other businesses and it was discovered that another tenant had a leaking toilet. All parties were astonished at the effect of one continuously running toilet had on water use in the complex. A leaking toilet results in as much as 300 gallons of water lost in a day and for a month that's 9,000 gallons! In short, a simple adjustment and this costly problem disappeared. By tracking water use, this brewery was able to reduce waste and save money.

NHPPP partnered with EPA Region 1 and EPA ENERGY STAR to hold a three-session webinar series. More than 300 people registered for these webinars and the recordings have been viewed more than 160 times as of this writing. As a result, one ENERGY STAR treasure hunt has been scheduled. One webinar highlighted innovative technology; as a result, one brewery installed a carbon capture system which resulted in a 17.7 metric tons reduction in CO<sub>2</sub> emissions.

### **3.d. Staff Expertise**

Kathy Black is the Section Administrator for the Pollution Prevention Program. She started working NHDES in January of 2016 and was hired in January of 2019 as the Pollution Prevention Specialist where she managed the Green Hospitality and Brewery grant work. Prior to joining the Pollution Prevention team, she has 20 years of professional experience as a biologist, researcher, educator, and environmental project manager primarily focused on water-related issues, sustainability, and pollution prevention. Kathy is a certified hazardous waste coordinator and holds a Master of Environmental Management degree from Duke University and a bachelor's degree in Marine Science.

Vincent Perelli has been with NHDES for 33 years, serving for the last 23 years as Chief of Planning and Policy, and most recently, as Administrator of the Planning, Prevention & Assistance Unit within the Office of the Commissioner. Vince's duties also include Co-Coordination of the department's Continuity of Operations Plan and Quality Assurance Systems. He also helps oversee the department's strategic plan, Performance Partnership Agreement, comprehensive work plan and measurement system, and other management system support activities. He has been active in NHDES Title VI Nondiscrimination/ Environmental Justice Team since its inception. Prior to his current position, Vince served as manager of the NHPPP for almost 12 years. He holds a M.S. degree in Resource Management and Administration (a "Green MBA") from Antioch University New England and a B.S. in Conservation and Applied Ecology from Cook College - Rutgers University. He currently holds Lean Green and Yellow Belts from the NH Bureau of Education and Training.

Cynthia Nelson is the Program Manager for the Pollution Prevention Program. She was hired as NHPPP’s P2 Specialist in February 2016 and has been the Program Manager since 2019. During that time, she managed the Green Hospitality and Brewery Programs. Prior to that time, she worked for 10 years in the agricultural industry, implementing sustainable principles and pollution prevention practices. Cynthia has a B.S. in Science and Environmental Education from Cornell University.

Erin Waters is the Pollution Prevention Specialist for the Pollution Prevention Program. She earned a bachelor’s degree in Environmental Science from St. Lawrence University. She has six years’ experience in research, sustainability, and outreach. Her sustainability expertise will guide the grant work.

Sara Johnson is the NHDES Small Business Technical Assistance Program Manager/ Small Business Ombudsperson. She spent eight years as the NHPPP Manager, and prior to that she was the program’s P2 Specialist. Sara has been involved in P2 and small business assistance programs at the NHDES for 23 years. She has a Master’s Degree in (Natural) Resource Management & Administration from Antioch University New England. She is also active on the NHDES Title VI Nondiscrimination/Environmental Justice Team.

Laura Martel is the Program Assistant for the Planning, Prevention & Assistance Unit and has worked for NHDES for 33 years, 25 of those on waste and pollution prevention issues.

#### 4. Timeline

##### Task, Milestone Marker, and Goals Timeline

Task	Timeline	Milestone Marker	Goals and Objectives
<b>Task 1: Technical Assistance</b>	10/2022	<ul style="list-style-type: none"> <li>Meet with NHBA and NHSCO to promote assistance</li> </ul>	<ul style="list-style-type: none"> <li>Support NHBA and NHCSO members in implementing P2 practices</li> </ul>
	10/2022	<ul style="list-style-type: none"> <li>Meet with NH utility and energy partners to promote energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Support utility and energy partners in promoting P2 related energy efficiency opportunities to manufacturers</li> </ul>
	Ongoing	<ul style="list-style-type: none"> <li>Conduct (10) site visits and respond to calls and emails for assistance</li> </ul>	<ul style="list-style-type: none"> <li>Provide technical assistance, assess energy efficiency, and minimize CO<sub>2</sub> leaks at facilities</li> </ul>
	Ongoing	<ul style="list-style-type: none"> <li>Follow up (Refer to Table in Section 1.e.)</li> </ul>	<ul style="list-style-type: none"> <li>Track progress, offer additional assistance and document P2 measures metrics</li> </ul>
	03 & 09/2023 03 & 09/2024	<ul style="list-style-type: none"> <li>Compile data, calculate metrics and write grant reports</li> </ul>	<ul style="list-style-type: none"> <li>Analyze data and report waste reduction projects completed by craft beverage producers</li> </ul>
<b>Task 2: Application of P2 Strategies &amp;</b>	10/2022 to 09/2024	<ul style="list-style-type: none"> <li>Train intern to use National Brewers</li> </ul>	<ul style="list-style-type: none"> <li>Document resource use to develop goals for waste reduction</li> </ul>

Task	Timeline	Milestone Marker	Goals and Objectives
<b>Task 1: Technical Assistance</b>	10/2022  10/2022  Ongoing  Ongoing  03 & 09/2023 03 & 09/2024	<ul style="list-style-type: none"> <li>• Meet with NHBA and NHSCO to promote assistance</li> <li>• Meet with NH utility and energy partners to promote energy efficiency</li> <li>• Conduct (10) site visits and respond to calls and emails for assistance</li> <li>• Follow-up (Refer to Table in Section 1.e.)</li> <li>• Compile data, calculate metrics and write grant reports</li> </ul>	<ul style="list-style-type: none"> <li>• Support NHBA and NHCSO members in implementing P2 practices</li> <li>• Support utility and energy partners in promoting P2 related energy efficiency opportunities to manufacturers</li> <li>• Provide technical assistance, assess energy efficiency, and minimize CO<sub>2</sub> leaks at facilities</li> <li>• Track progress, offer additional assistance and document P2 measures metrics</li> <li>• Analyze data and report waste reduction projects completed by craft beverage producers</li> </ul>
<b>Tools</b>		Association Benchmarking tool	

<b>Task 2: Application of P2 Strategies &amp; Tools</b>	Ongoing	<ul style="list-style-type: none"> <li>• Use ENERGY STAR energy guides for breweries and distilleries &amp; Energy Treasure Hunt</li> </ul>	<ul style="list-style-type: none"> <li>• Improve energy efficiency</li> </ul>
	Ongoing	<ul style="list-style-type: none"> <li>• Use ENERGY STAR guide to find leaks and stop water waste</li> </ul>	<ul style="list-style-type: none"> <li>• Improve water conservation</li> </ul>
	Ongoing	<ul style="list-style-type: none"> <li>• Case study development</li> </ul>	<ul style="list-style-type: none"> <li>• Provide detailed information on a successful P2 approach derived from P2 tools and technical assistance</li> </ul>
<b>Task 3: Recognition Program</b>	10/2022 to 09/2024	<ul style="list-style-type: none"> <li>• Recognize sustainable craft beverage manufacturers in NH</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage other manufacturers to implement P2 approaches to become more sustainable</li> </ul>
	Ongoing	<ul style="list-style-type: none"> <li>• Amplification using social media and NHBA Beer Trail Map</li> </ul>	<ul style="list-style-type: none"> <li>• Promote NH recognition program members and their P2 practices</li> </ul>
	10/2022	<ul style="list-style-type: none"> <li>• Meet with regional partners to develop a Regional Recognition Program</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration improves the effectiveness of the data collected and assistance provided</li> </ul>
	10/2022	<ul style="list-style-type: none"> <li>• Meet with regional partners to create a shared regional map of recognized members</li> </ul>	<ul style="list-style-type: none"> <li>• Amplify results of the program and sustainable craft beverage manufacturers by sharing their P2 practices</li> </ul>
Ongoing	<ul style="list-style-type: none"> <li>• Create one video highlighting innovative approaches</li> </ul>	<ul style="list-style-type: none"> <li>• Amplify successful, innovative approaches to other manufacturers, partners, and P2 grantees</li> </ul>	
<b>Task 4: Outreach and Training</b>	10/2022 to 09/2024	<ul style="list-style-type: none"> <li>• Webinar series (Regional and NHBA series)</li> </ul>	<ul style="list-style-type: none"> <li>• Promote Best Practices and P2 opportunities</li> </ul>
	Ongoing	<ul style="list-style-type: none"> <li>• Develop guidance documents</li> <li>• Train craft beverage producers in P2 practices (videos and in person)</li> <li>• Support/participate in Regional Brewery Workshop (MA project)</li> <li>• Teach classes &amp; attend industry conferences</li> <li>• Participate in EPA, NPPR and other P2 meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Amplify innovative practices</li> <li>• Share knowledge with craft beverage producers, partners, trade associations, P2 Grantees, and P2 Programs</li> </ul>
<b>Reporting</b>	03 & 09/2023 03 & 09/2024	<ul style="list-style-type: none"> <li>• Calculate metrics, prepare progress and final reports</li> </ul>	<ul style="list-style-type: none"> <li>• Report progress and results of work accomplished during grant.</li> </ul>

### Task Timeline by Month and Year

Task	2022			2023												2024									
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
<b>Task 1: Technical Assistance</b>																									
Site visits (10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Follow up (refer to Follow Up Schedule 1.e.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Technical assistance via phone, email and visits	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Compile metric data and prepare grant reports					X	X						X	X				X	X				X	X	X	X
<b>Task 2: Application of P2 Strategies &amp; Tools</b>																									
Benchmarking	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Develop case studies		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ENERGY STAR Tools – energy/water focus		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Task 3: Recognition Program</b>																									
Recognize sustainable craft beverage producers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Social media posts and update member maps		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Regional Recognition Program & Member Map		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Create video to highlight innovative approach		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Task 4: Outreach and Training</b>																									
Webinar Series (NHBA and Regional)			X	X	X	X	X	X							X	X	X	X	X	X					
Develop guidance documents									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Train manufacturers on P2 practices		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Support/participate in Regional Workshop (MA)									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Attend industry conferences		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Teach P2 for breweries – UNH Brewing Program			X	X								X	X											X	X
Participate in EPA, NPPR, and other P2 meetings	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Grant Reporting				X	X							X	X				X	X				X	X	X	X

### 5. Budget

NHPPP is requesting a total of \$200,000 over two years and the State of New Hampshire will provide matching funds for Personnel Time of \$133,180 and Fringe Benefits of \$66,820. Project expenses follow the eligibility requirements specified in the RFA Appendix G and are deemed appropriate to conduct the tasks outlined in Section 1.e. Project Strategy.

The Total Project Object Class Category Expenses for the Application are as follows: Personnel: \$109,062, Fringe Benefits (46.6%, COLA 3.57% 7.5% FICA): \$46,212, Supplies: \$1,922, Travel: \$4,053, Other: \$27,680, Contractual: \$5,000 and Indirect Costs (3.5%): \$6,071. Grant Request: \$200,000 Grant Match: \$200,000 and Grant Total: \$400,000. A detailed table is on the next page.

### Detailed Budget by Task

Object Class Category	Detail	Unit Request	Unit Match	Application Request	Application Match
<b>Task 1: Technical Assistance – 10 site visits, follow-up, data compilation, program reporting*</b>					
Personnel	P2 Specialist, Temp Staff (Match: P2 Manager, P2 Administrator, Environmentalist IV, Administrator III)	30%	50%	\$32,719	\$66,590
<b>Task 1 Subtotal</b>				<b>\$32,719</b>	<b>\$66,590</b>
<b>Task 2: P2 Application of P2 Tools – Benchmarking and case studies</b>					
Personnel	P2 Specialist, Interns, Temp Staff (Match: P2 Manager, P2 Administrator)	20%	10%	\$21,812	13,318
<b>Task 2 Subtotal</b>				<b>\$21,812</b>	<b>\$13,318</b>
<b>Task 3: Recognition Program – recognize members, social media, map, regional program, videos</b>					
Personnel	P2 Specialist, Interns, Temp Staff (Match: P2 Manager, P2 Administrator, Program Assistant)	20%	20%	\$21,812	\$26,636
<b>Task 3 Subtotal</b>				<b>\$21,812</b>	<b>\$26,636</b>
<b>Task 4: Outreach/Training – webinars, guidance documents, training, regional workshop, videos</b>					
Personnel	P2 Specialist, Interns Temp Staff (Match: P2 Manager, P2 Administrator, Program Assistant)	20%	15%	\$21,812	\$19,977
<b>Task 4 Subtotal</b>				<b>\$21,812</b>	<b>\$19,977</b>
<b>Grant Administration, Invoicing, Reporting, Measurement, Travel, Supplies, Indirect Costs</b>					
Program Administration/Invoicing		5%	2.5%	\$5,453	\$3,330
Program Reporting/Measurement Costs		5%	2.5%	\$5,453	\$3,330
Contract with NEWMOA for assistance with Tasks 2, 3, 4				\$5,000	-
Fringe Benefits: annual leave, holiday pay, health insurance, retirement contributions 46.6%, COLA 3.57% and the employer's portion of FICA Insurance 7.65%				\$46,212	\$66,820
Travel: In-State travel (2,280 miles/\$1,334), Out-of-State (852 miles/\$498), conference registration fees (\$750), airline ticket (\$800), hotel 2 nights* (\$434), meals days* (\$237) – assumption 1 person travel to National P2 Meeting in Chicago, miles for travel to regional workshop hosted by the University of Massachusetts Boston, mileage for travel to two industry conferences and related industry conference registration fees.				\$4,053	-
Supplies: phone, copying, printing, postage, paper, poster/display materials, certificates, window decals, coasters				\$1,922	-
Other: rent, IT support, audit set aside				\$27,680	-
<b>Program Indirect Costs</b>				<b>\$6,071</b>	
<b>Grant Request and Grant Match</b>				<b>\$200,000</b>	<b>\$200,000</b>
<b>Grant Total:</b>				<b>\$400,000</b>	

\*Based on Federal GSA Travel Rates and Per Diem Rates

NHPPP has procedures and controls in place to appropriately manage, expend and account for Federal funds in a timely manner. NHPPP has successfully administered EPA grants for the last 20 years and will continue to modify the process as needed. Without funding from EPA, NHPPP would not be able to offer

technical assistance, application of P2 tools such as benchmarking, recognition for manufacturers who implement P2 practices, and outreach and training to craft beverage manufacturers in New Hampshire and EPA Region 1. This grant offers an opportunity to both help this rapidly growing industry and guide long-term pollution prevention behavior change.

#### **Appendix A – Calculation of Expected Outcome Results**

**Wastewater Reduction:** Nationally, on average, about 70% of the water entering a brewery is discharged as some kind of effluent and is high in organic and solid waste, discharges of process wastewater from a brewery can potentially create adverse impacts. P2 is essential to controlling the strength, volume and costs of process wastewater discharges. P2 strategies such as side-streaming and screening, breweries can reduce the strength and volume of their wastewater discharge. Based on the National Brewers Association wastewater to beer ratio, the average brewery generates approximately 167 gallons of wastewater (gww) per barrel (31 gallons) of beer brewed. With good P2 strategies wastewater could be reduced to 93 gww per barrel. This would be a reduction of 74 gww per barrel brewed. For these calculations, assume each brewery produces 93,000 gallons of beer per year.

**Wastewater Savings:** 93,000 gallons of beer brewed x 74 gww reduced = 6,882,000 gww reduced annually. **Pollutant Reduction:** 6,882,000 gww X 8.34 divided by 500,000 = **115 lbs. pollutants.**

**Wastewater Savings:** 93,000 gallons of beer brewed x 74 gww reduced = 6,882,000 gww reduced divided by 748 (sewer conversion factor) = 9,200 units x \$9.05 sewer rate = **\$83,265**

**Water Use Reduction:** Calculations will be based on using a starting ratio of 7:1 (Based on the average from the National Brewers Association) with a reduction goal of 5:1. Assume a brewery produces 3,000 barrels (93,000 gallons) of beer/yr (1 barrel=31 gallons). Proposed water savings through reduction projects at 5:1 ratio: 93,000 gal/yr x 5 gal H<sub>2</sub>O = 465,000 gallons H<sub>2</sub>O/yr. Compared to 7:1 ratio: 93,000 gal/yr x 7 gal H<sub>2</sub>O = 651,000 gallons H<sub>2</sub>O/yr. **Water savings: 186,000 gal/yr. Cost savings: 186,000 gal divided by 748 (sewer conversion factor) x \$14.45 (water/sewer rate) = \$3,593**

**Energy Use Reductions:** Energy efficiency opportunities such as insulation, heat recovery, variable frequency motors, reducing the use of hot water in certain applications, lighting upgrades and refrigeration, and compressor and boiler maintenance are some of NHPPP's P2 strategies. **Example 1:** Replace a 75-hp old, inefficient modulating compressor with a new VFD compressor that costs \$7,500 more than the low-cost option. The facility operates at approximately 70% flow and 4,320 hours per year. The simple annual cost savings estimated by [VFD cost savings online calculator](#) using the following parameters: 12 hours of operation/day at 70% flow, 75 HP motor with 90% efficiency, 360 days per year operation, \$0.15 kWh commercial utility rate \$7,500/\$14,705= .5 year payback (6 months). Projected **yearly** savings metrics: **\$14,705** savings (6 month ROI), **98,035 kWh** saved. **Example 2:** Convert metal halide (MH) warehouse lighting to LED: (12) 400W metal halide fixtures retrofitted with (12) 156W LED lamps with occupancy sensors. 12 LED-fixtures x 156 W each x 10 hours/day x 360 days/yr. x 30% occupancy sensor savings= 4,717 kWh/yr - Operating cost at \$.15/kWh= \$708/yr. Compared to 12 MH fixtures x 400 W each x 10 hours/day x 360 days/yr= 17,280 kWh/yr - Operating cost at \$.15/kWh= \$2,592/yr. Projected **yearly** savings metrics: **12,563 kWh**, **\$1,885** energy expenses. **Combined savings: 110,598 kWh x \$0.15 = \$16,590. Using EPAs GHG Equivalency Calculator: 110,598kWh saved = 82.3 MTCO<sub>2</sub>e reduced.** Reduction at Facilities in or Adjacent to Underserved Communities calculation is assumed to be 25 percent of the total based on the number of facilities in or adjacent to underserved communities.