

CITY OF STOCKTON
STANDARD AGREEMENT

Agreement Number:

1. This Agreement is entered into between the City of Stockton ("City") and KAAM Group Co. ("Contractor") to provide Aqueous Ammonia as set forth in Exhibit A to this Agreement.
2. The term of this Agreement is as follows, unless amended as described in Exhibit A and Exhibit C section 8:
Commences on: July 1, 2026 Terminates on: June 30, 2027
3. The maximum not to exceed amount to be paid to Contractor for the term of this Agreement, including if authorized, reimbursement of expenses, is: \$ 105,000.00
4. The complete Agreement consists of all the following Agreement documents which by reference are incorporated and made a part of this Agreement. The parties agree to comply with the terms and conditions of this Agreement.
 - (a) Exhibit A – Statement of Work
 - (b) Exhibit B – Insurance
 - (c) Exhibit C – General Terms and Conditions
 - (d) Exhibit D – Goods and Services Special Terms & Conditions
 - (e) Exhibit E – Compensation Schedule
 - (f) Exhibit F – Timeline
 - (g) Exhibit G – Discrimination and Harassment Policy (HR-15)
 - (h) Exhibit H – Bid Documents

IN WITNESS WHEREOF, the authorized parties have executed this Agreement.

CONTRACTOR

KAAM Group Co.

Contractor's Name (if other than an individual, state whether a corporation, partnership, etc.):

Heather Esposito

3/09/2026

Authorized Signature

Date

Heather Esposito, Chief of Operations

Printed Name and Title of Person Signing

300 Carlsbad Village Dr. Suite 108A-468, Carlsbad CA 92008

Address

CITY OF STOCKTON

Johnny Ford, City Manager

Date

ATTEST:

Katherine Roland, CMC, CPMC, City Clerk

APPROVED AS TO FORM:

Marci A. Arredondo, City Attorney

BY:

EXHIBIT A
STATEMENT OF WORK

1 **Project Objectives.**

The objective of this project is for the supply and delivery of Aqueous Ammonia as outlined in the bid specifications incorporated herein by reference from Exhibit H.

2 **Project Scope.**

The Contractor shall provide the goods and insurance as specified. The contractor shall supply Material Safety Data Sheets.

3 **Notices.**

Pursuant to Exhibit C – General Terms and Conditions, Paragraph 15 – Notices, the mailing address for all required notices is as follows:

Contractor: KAAM Group Co.

Attn: Heather Esposito

300 Carlsbad Village Drive

Suite 108A-468

Carlsbad, CA 92008

City: City of Stockton

Attn: City Manager

425 N. El Dorado Street

Stockton, CA 95202

4 **Option to Renew.**

The term of the Agreement may be extended on a yearly-to-year basis by a written amendment executed by both parties. However, the total term of the Agreement including the extended term shall not exceed four (4) years. The price for any succeeding period of service shall be agreed upon by both parties.

EXHIBIT B

INSURANCE REQUIREMENTS (Chemical Aqueous Ammonia)

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor, his agents, representatives, employees, or subcontractors. With respect to General Liability, Errors & Omissions, Contractors Pollution Liability, and/or Asbestos Pollution Liability, coverage should be maintained for a minimum of five (5) years after contract completion.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$3,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering any auto (Code 1), or if Contractor has no owned autos, hired (Code 8) and non-owned (Code 9) autos, with limit no less than **\$2,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease.
4. **Environmental Impairment/Pollution Liability** applicable to the work being performed, with a limit no less than **\$2,000,000** per claim or occurrence and **\$2,000,000** aggregate per policy period of one year.

If the contractor maintains broader coverage and/or higher limits than the minimums shown above, the City of Stockton requires and shall be entitled to the broader coverage and/or the higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City of Stockton.

Self-Insured Retentions

Self-insured retentions must be declared to and approved by the City of Stockton. The City of Stockton may require the Contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City of Stockton. The CGL and any policies, including Excess liability policies, may not be subject to a self-insured retention (SIR) or deductible that exceeds \$25,000 unless approved in writing by City of Stockton. Any and all deductibles and SIRs shall be the sole responsibility of Contractor or subcontractor who procured such insurance and shall not apply to the Indemnified Additional Insured Parties. City of Stockton may deduct from any amounts otherwise due Contractor to fund the SIR/deductible. Policies shall NOT contain any self-insured retention (SIR) provision that limits the satisfaction of the SIR to the Named Insured. The policy must also provide that Defense costs, including the Allocated Loss Adjustment Expenses, will satisfy the SIR or deductible. City of Stockton reserves the right to obtain a copy of any policies and endorsements for verification.

Other Insurance Provisions

A. The General Liability, Automobile Liability, Contractors Pollution Liability, and/or Asbestos Pollution policies are to contain, or be endorsed to contain, the following provisions:

1. **The City of Stockton, its officers, officials, employees, and volunteers are to be covered as additional insureds** with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used). Additional insured Name of Organization shall read "City of Stockton, its officers, officials, employees, and volunteers." Policy shall cover City of Stockton, its officers, officials, employees, and volunteers for all locations work is done under this contract.
2. For any claims related to this project, **the Contractor's insurance coverage shall be primary and non-contributory** insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the City of Stockton, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the City of Stockton, its officers, officials, employees, agents, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it. This requirement shall also apply to any Excess or Umbrella liability policies. The City of Stockton does not accept endorsements limiting the Contractor's insurance coverage to the sole negligence of the Named Insured.

3. Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the City of Stockton.
- B. The Automobile Liability policy shall be endorsed to include Transportation Pollution Liability insurance, covering materials to be transported by Contractor pursuant to the contract. This coverage may also be provided on the Contractors Pollution Liability policy.
- C. If General Liability, Contractors Pollution Liability and/or Asbestos Pollution Liability and/or Errors & Omissions coverages are written on a claims-made form:
 1. The retroactive date must be shown and must be before the date of the contract or the beginning of contract work.
 2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.
 3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, the Contractor must purchase an extended period coverage for a minimum of five (5) years after completion of contract work.
 4. A copy of the claims reporting requirements must be submitted to the City of Stockton for review.
 5. If the services involve lead-based paint or asbestos identification / remediation, the Contractors Pollution Liability shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification / remediation, the Contractors Pollution Liability shall not contain a mold exclusion and the definition of "Pollution" shall include microbial matter including mold.

Umbrella or Excess Policy

The Contractor may use Umbrella or Excess Policies to provide the liability limits as required in this agreement. This form of insurance will be acceptable provided that all of the Primary and Umbrella or Excess Policies shall provide all of the insurance coverages herein required, including, but not limited to, primary and non-contributory, additional insured, Self-Insured Retentions (SIRs), indemnity, and defense requirements. The Umbrella or Excess policies shall be provided on a true "following form" or broader coverage basis, with coverage at least as broad as provided on the underlying Commercial General Liability insurance. No insurance policies maintained by the Additional Insureds, whether primary or excess, and which also apply to a loss covered hereunder, shall be called upon to contribute to a loss until the Contractor's primary and excess liability policies are exhausted.

Acceptability of Insurers

Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best rating of no less than A:VII if admitted in the State of California.

Verification of Coverage

Contractor shall furnish the City of Stockton with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause **and a copy of the Declarations and Endorsements Pages of the CGL and any Excess policies listing all policy endorsements**. All certificates and endorsements and copies of the Declarations & Endorsements pages are to be received and approved by the City of Stockton before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The City of Stockton reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time. City of Stockton reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Waiver of Subrogation

Contractor hereby grants to City of Stockton a waiver of subrogation which any insurer may acquire against City of Stockton, its officers, officials, employees, and volunteers, from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City of Stockton has received a waiver of subrogation endorsement from the insurer.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City of Stockton for all work performed by the Contractor, its employees, agents, and subcontractors.

Subcontractors

Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City of Stockton is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.

Duration of Coverage

CGL & Excess liability policies **for any construction related work, including, but not limited to, maintenance, service, or repair work**, shall continue coverage for a minimum of 5 years for Completed Operations liability coverage. Such Insurance must be maintained and evidence of insurance must be provided **for at least five (5) years after completion of the contract of work**.

Special Risks or Circumstances

City of Stockton reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Certificate Holder Address

The address for mailing certificates, endorsements and notices shall be:

City of Stockton
Its Officers, Officials, Employees and Volunteers
425 N El Dorado Street
Stockton, CA 95202

EXHIBIT C

GENERAL TERMS AND CONDITIONS

- 1 **Goods, Equipment and Services.** Subject to the terms and conditions set forth in this Agreement, Contractor shall provide to City the services described in Exhibit A of the Agreement. Contractor shall provide said services at the time, place and in the manner specified in Exhibit A of the Agreement.
- 2 **City Assistance, Facilities, Equipment and Clerical Support.** Except as set forth in Exhibit A, Contractor shall, at its sole cost and expense, furnish and maintain all facilities and equipment that may be required for furnishing services pursuant to this Agreement. If applicable, City shall furnish to Contractor only the facilities and equipment listed in Exhibit A to the Agreement.
- 3 **Compensation.** City shall pay Contractor for services rendered pursuant to this Agreement as described more particularly in Exhibit A and Exhibit E to the Agreement.
 - 3.1 Invoices submitted by Contractor to City must contain a brief description of work performed, time spent and City reference number. Within thirty (30) days of receipt of Contractor's invoice, City will review the invoice, and if acceptable make payment on approved invoice.
 - 3.2 Upon completion of work and acceptance by the City, Contractor shall have sixty (60) days in which to submit final invoice(s) for payment. An extension may be granted by the City upon receiving a written request thirty (30) days in advance of said time limitation. The City shall have no obligation or liability to pay any invoice for work performed which the Contractor fails or neglects to submit within sixty (60) days, or any extension thereof granted by the City, after the work is accepted by the City.
- 4 **Sufficiency of Contractor's Work.** All Contractor services, work, and deliverables shall be performed in a good and workmanlike manner with due diligence in accordance with the degree of skill normally exercised by similar contractors supplying services and work of a similar nature, and in conformance with applicable laws, codes and professional standards. Contractor's work shall be adequate and sufficient to meet the purposes of this Agreement.
- 5 **Ownership of Work.** All reports, work product, all other documents completed or partially completed by Contractor or its approved subcontractors, in performance of this Agreement, and if applicable, drawings, designs, and plan review comments shall become the property of the City. Any and all copyrightable subject matter in all materials is hereby assigned to the City and the Contractor and its approved subcontractors agree to execute any additional documents that may be necessary to evidence such assignment. All materials shall be delivered to the City upon completion or termination of the work under this Agreement. If any materials are lost, damaged or destroyed before final delivery to the City, the Contractor shall replace them at its own

expense. The Contractor and its approved subcontractors shall keep materials confidential. Materials shall not be used for purposes other than the performance of services under this Agreement and shall not be disclosed to anyone not connected with these services, unless the City provides prior written consent.

- 6 **Timeliness.** Time is of the essence in this Agreement. Further, Contractor acknowledges that the failure of Contractor to comply with the time limits described in Exhibit A and Exhibit F may result in economic or other losses to the City.
- 7 **Changes.** Both parties to this Agreement understand that it may become desirable or necessary during the term of this Agreement for City to modify the scope of services provided for under this Agreement. Any material extension or change in the scope of work shall be discussed with the City and the change and cost shall be memorialized in a written amendment to the original contract prior to the performance of the additional work. Until the amendment is so executed, the City will not be responsible for paying any charges Contractor may incur in performing such additional services, and Contractor shall not be required to perform any such additional services.
- 8 **Amendment.** No variation of the terms of this Agreement shall be valid unless an amendment is made in writing and signed by both parties.
- 9 **Contractor's Status.**
 - 9.1 In performing the obligations set forth in this Agreement, Contractor shall have the status of an independent contractor and Contractor shall not be considered to be an employee of the City for any purpose. All persons working for or under the direction of Contractor are its agents and employees and are not agents or employees of City. Contractor by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of the City. Except as expressly provided in Exhibit A, Contractor has no authority or responsibility to exercise any rights or power vested in the City. No agent, officer or employee of the City is to be considered an employee of the Contractor. It is understood by both Contractor and City that this Agreement shall not be construed or considered under any circumstances to create an employer-employee relationship or a joint venture.
 - 9.2 Contractor shall determine the method, details and means of performing the work and services to be provided by Contractor under this Agreement. Contractor shall be responsible to the City only for the requirements and results specified in this Agreement and, except as expressly provided in this Agreement, shall not be subjected to the City's control with respect to the physical action or activities of Contractor in fulfillment of this Agreement. Contractor has control over the manner and means of performing the services under this Agreement. If necessary, Contractor has the responsibility for employing other persons or firms to assist Contractor in fulfilling the terms and obligations under this Agreement.

- 9.3 If in the performance of this Agreement any third persons are employed by Contractor, such persons shall be entirely and exclusively under the direction, supervision and control of Contractor. All terms of employment including hours, wages, working conditions, discipline, hiring and discharging or any other term of employment or requirements of law shall be determined by the Contractor.
- 9.4 It is further understood and agreed that Contractor must issue W-2 forms or other forms as required by law for income and employment tax purposes for all of Contractor's assigned personnel under the terms and conditions of this Agreement.

10 **Subcontractor.**

- 10.1 Subcontractors shall not be recognized as having any direct or contractual relationship with the City. Contractor shall be responsible for the work of subcontractors, which shall be subject to the provisions of this Agreement. Subcontractors will be provided with a copy of the Agreement and will be bound by its terms. Contractor is responsible to the City for the acts and omissions of its subcontractors and persons directly or indirectly employed by them.
- 10.2 If in the performance of this Agreement any third persons are employed by Contractor, such persons shall be entirely and exclusively under the direction, supervision and control of Contractor. All terms of employment including hours, wages working conditions, discipline, hiring, and discharging or any other term of employment or requirement of law shall be determined by Contractor.
- 10.3 It is further understood and agreed that Contractor must issue W-2 forms or other forms as required by law for income and employment tax purposes for all of the Subcontractors' personnel.

11 **Termination.**

- 11.1 Termination for Convenience of City. The City may terminate this Agreement at any time by mailing a notice in writing to Contractor. The Agreement shall then be deemed terminated, and no further work shall be performed by Contractor. If the Agreement is so terminated, the Contractor shall be paid for the work actually completed at the time the notice of termination is received.
- 11.2 Should either party default in the performance of this Agreement or materially breach any of its provisions, the other party, at that party's option, may terminate this Agreement by giving written notification to the other party.
- 11.3 Funding- Non-Appropriation. It is mutually understood between the Parties that payment to the Contractor for performance shall be dependent upon the availability of appropriations by the City Council for the purposes of this Agreement. No legal liability on the part of the City for any payment may arise

under this Agreement until funds are made available and until the Contractor has received funding availability, which will be confirmed in writing. If funding for any fiscal year is reduced or deleted, or if the City loses funding for any reason, the City, in its sole discretion, shall have the option to either (a) cause this Agreement to be canceled or terminated pursuant to applicable provisions of the Agreement; or (b) offer to amend the Agreement to reflect the reduced funding for this Agreement.

- 12 **Non-Assignability.** The Contractor shall not assign, sublet, or transfer this Agreement or any interest or obligation in the Agreement without the prior written consent of the City, and then only upon such terms and conditions as City may set forth in writing. Contractor shall be solely responsible for reimbursing subcontractors.
- 13 **Indemnity and Hold Harmless.** To the fullest extent permitted by law, Contractor shall hold harmless, defend and indemnify City of Stockton and its officers, officials, employees and volunteers from and against any and all liability, loss, damage, expense, costs (including without limitation costs, attorney fees, and fees of litigation) of every nature arising out of or in connection with Contractor's performance of work hereunder or its failure to comply with any of its obligations contained in this Agreement, except such loss or damage which was caused by the sole negligence or willful misconduct of the City of Stockton. This obligation is independent of, and shall not in any way be limited by, the minimum Insurance obligations contained in this Agreement. These obligations shall survive the completion or termination of this Agreement.
- 14 **Insurance.** During the term of this Agreement, Contractor shall maintain in full force and effect at its own cost and expense the insurance coverage as set forth in the attached Exhibit B to this Agreement and shall otherwise comply with the other provisions of Exhibit B to this Agreement.
- 15 **Notices.** All notices required herein shall be in writing and shall be sent by certified or registered mail, postage prepaid, addressed in Exhibit A to this Agreement.
- 16 **Conformance to Applicable Laws.** Contractor shall comply with all applicable Federal, State, and Municipal laws, rules, and ordinances. Contractor shall not discriminate in the employment of persons or in the provision of services under this Agreement on the basis of any legally protected classification, including race, color, national origin, ancestry, sex or religion of such person.
- 17 **Licenses, Certifications and Permits.** Prior to the City's execution of this Agreement and prior to the Contractor's engaging in any operation or activity set forth in this Agreement, Contractor shall obtain a City of Stockton business license, which must be kept in effect during the term of this Agreement. Contractor covenants that it has obtained all certificates, licenses, permits and the like required to perform the services under this Agreement. Such licenses, certificates and permits shall be maintained in full force and effect during the term of this Agreement.

- 18 **Records and Audits.** Contractor shall maintain all records regarding this Agreement and the services performed for a period of three (3) years from the date that final payment is made. At any time during normal business hours, the records shall be made available to the City to inspect and audit. To the extent Contractor renders services on a time and materials basis, Contractor shall maintain complete and accurate accounting records, in a form prescribed by City or, if not prescribed by City, in accordance with generally accepted accounting principles, such records to include, but not be limited to, payroll records, attendance cards, time sheets, and job summaries.
- 19 **Confidentiality.** Contractor shall exercise reasonable precautions to prevent the unauthorized disclosure and use of City reports, information or conclusions.
- 20 **Conflicts of Interest.** Contractor covenants that other than this Agreement, Contractor has no financial interest with any official, employee or other representative of the City. Contractor and its principals do not have any financial interest in real property, sources of income or investments that would be affected in any manner of degree by the performance of Contractor's services under this Agreement. If such an interest arises, Contractor shall immediately notify the City.

Pursuant to Government Code 1090, California Assembly Bill 334: Contractor or Consultants duties and services under this agreement shall not include preparing or assisting the public entity with any portion of the public entity's preparation of a request for proposals, request for qualifications, or any other solicitation regarding a subsequent or additional contract with the public entity. The public entity entering this agreement shall at all times retain responsibility for public contracting, including with respect to any subsequent phase of this project. Contractor or Consultants participation in the planning, discussions, or drawing of project plans or specifications shall be limited to conceptual, preliminary, or initial plans or specifications. Contractor/consultant shall cooperate with the public entity to ensure that all bidders for a subsequent contract on any subsequent phase of this project have access to the same information, including all conceptual, preliminary, or initial plans or specifications prepared by the contractor pursuant to this agreement.

- 21 **Waiver.** In the event either City or Contractor at any time waives any breach of this Agreement by the other, such waiver shall not constitute a waiver of any other or succeeding breach of this Agreement, whether of the same or of any other covenant, condition or obligation. No payment, partial payment, acceptance, or partial acceptance by City shall operate as a waiver on the part of City of any of its rights under this Agreement.
- 22 **Governing Law.** California law shall govern any legal action pursuant to this Agreement with venue for all claims in the Superior Court of the County of San Joaquin, Stockton Branch or, where applicable, in the Federal District Court of California, Eastern District, Sacramento Division.

- 23 **No Personal Liability.** No official or employee of City shall be personally liable to Contractor in the event of any default or breach by the City or for any amount due Contractor.
- 24 **Severability.** If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction or if it is found in contravention of any federal, state or city statute, ordinance or regulation the remaining provisions of this Agreement or the application thereof shall not be invalidated thereby and shall remain in full force and effect to the extent that the provisions of this Agreement are severable.
- 25 **Non-Discrimination.** During the performance of this Agreement, Contractor and its officers, employees, agents, representatives or subcontractors shall not unlawfully discriminate in violation of any federal, state, or local law, rule or regulation against any employee, applicant for employment or person receiving services under this Agreement because of race, religion, color, national origin, ancestry, physical or mental disability, medical condition (including genetic characteristics), marital status, age, political affiliation, gender identity, gender expression, sex or sexual orientation, family and medical care leave, pregnancy leave, or disability leave. Contractor and its officers, employees, agents, representative or subcontractors shall comply with all applicable Federal, State and local laws and regulations related to non-discrimination and equal opportunity, including without limitation the City's nondiscrimination policy; the Fair Employment and Housing Act (Government Code sections 12990 (et seq.); California Labor Code sections 1101, 1102 and 1102.1; the Federal Civil Rights Act of 1964 (P.L. 88-352), as amended; and all applicable regulations promulgated in the California Code of Regulation or Code of Federal Regulations. Title VI of the Civil Rights Act of 1964 requires that "no person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." (42 USC Section 2000d). <http://www.dol.gov/oasam/regs/statutes/titlevi.htm>. The City requires compliance with the requirements of Title VI in all of its programs and activities regardless of funding source.
- 26 **Force Majeure.** Neither party shall be responsible for delays or failures in performance resulting from acts of God, acts of civil or military authority, terrorism, fire, flood, strikes, war, epidemics, pandemics, shortage of power or other acts or causes reasonably beyond the control of that party. The party experiencing the force majeure event agrees to give the other party notice promptly following the occurrence of a force majeure event, and to use diligent efforts to re-commence performance as promptly as commercially practicable.
- 27 **Taxes and Charges.** Contractor shall be responsible for payment of all taxes, fees, contributions or charges applicable to the conduct of the Contractor's business.

28 **Cumulative Rights.** Any specific right or remedy provided in this Agreement will not be exclusive but will be cumulative of all other rights and remedies to which may be legally entitled.

29 **Advice of Attorney.** Each party warrants and represents that in executing this Agreement, it has received independent legal advice from its attorneys or the opportunity to seek such advice.

30 **Dispute Resolution; Attorney Fees.** Any dispute arising out of or relating to the terms and provisions of this Agreement shall be addressed in good faith by the parties. If a dispute cannot be resolved through informal negotiations, either party may pursue all remedies available under applicable law.

In the event of any dispute between the parties concerning the terms and provisions of this Agreement, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred, including reasonable attorneys' fees.

31 **Heading Not Controlling. Headings** used in this Agreement are for reference purposes only and shall not be considered in construing this Agreement.

32 **Entire Agreement. Integration. and Modification.**

32.1 This Agreement represents the entire integrated agreement between Contractor and the City; supersedes all prior negotiations, representations, or agreements, either written or oral between the parties and may be amended only by a written Amendment signed by the Contractor and City Manager.

32.2 All Exhibits to this Agreement and this Agreement are intended to be construed as a single document.

33 **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original. All counterparts shall be construed together and shall constitute one agreement.

34 **Authority.** The individual(s) executing this Agreement represent and warrant that they have the legal capacity and authority to do so on behalf of their respective legal entities.

EXHIBIT D

GOODS AND SERVICES TERMS AND CONDITIONS

- 1 **Definitions.** The following words and phrases have the following meanings for purposes of this Agreement:
 - 1.1 "Services" means, collectively, the services, duties, and responsibilities described in Exhibit A of this Agreement and any and all work necessary to complete them or carry them out fully and to the standard of performance required in this Agreement.
 - 1.2 "Deliverable" means quantifiable goods or services that will be provided upon completion of a project. A deliverable is any tangible material, work, or thing delivered by one party to the other, including associated technical documentation. A deliverable can be a tangible or intangible part of the development process and often are specified functions or characteristics of the project.
- 2 **General.** The following terms and conditions are applicable for the purchase of goods and services only. The special conditions shall be read in conjunction with the Standard Agreement, General Terms and Conditions ("GTC") Exhibit C, and all other Exhibits identified in the Standard Agreement.
 - 2.1 Where any portion of the GTC is in conflict to or at variance with any provisions of the Special Conditions of the Agreement, then unless a different intention stated, the provision(s) of the Special Conditions of the Agreement shall be deemed to override the provision(s) of GTC only to the extent that such conflict or variations in the Special Conditions of the Agreement are not possible of being reconciled with the provisions of the GTC.
 - 2.2 In the case of modification of a part or provision of the GTC, the unaltered part or provision, or both, shall remain in effect. The Special Conditions shall relate to a particular project and be peculiar to that project, but shall not weaken the character or intent of the GTC.
- 3 **Time for Performance.**
 - 3.1 Contractor shall perform the services according to the schedule contained in Exhibit F.
 - 3.2 Timeliness of Performance
 - i) Contractor shall provide the Services and Deliverables within the term and within the time limits required under this Agreement, pursuant to the provisions of Exhibit A and Exhibit F.
 - ii) Neither Contractor nor Contractor's agents, employees, nor subcontractors are entitled to any damages from the City, nor is any party entitled to be

reimbursed by the City, for damages, charges, or other losses or expenses incurred by Contractor by reason of delays or hindrances in the performance of the Services, whether or not caused by the City.

4 **Standard of Performance.**

In addition to Exhibit C, Section 4 and 17, Contractor agrees as follows:

- 4.1 Contractor's Services shall be performed in accordance with generally accepted professional practices and principles and in a manner consistent with the level of care and skill ordinarily exercised by members of Contractor's profession currently practicing under similar conditions. Contractors shall comply with the profession's standard of performance, applicable laws, regulations, and industry standards. By delivery of completed work, Contractor certifies that the work conforms to the requirements of this Agreement and all applicable federal, state, and local laws. If Contractor is retained to perform services requiring a license, certification, registration, or other similar requirement under California law, Contractor shall maintain that license, certification, registration, or other similar requirement throughout the term of this Agreement.
- 4.2 Contractor acknowledges that it is entrusted with or has access to valuable and confidential information and records of the City and with respect to that information, Contractor agrees to be held to the standard of care of a fiduciary. Contractor shall ensure that all services that require the exercise of professional skills or judgment are accomplished by professionals qualified and competent in the applicable discipline and appropriately licensed, if required by law. Contractor must provide copies of any such licenses. Contractor remains responsible for the professional and technical accuracy of all Services or Deliverables furnished, whether by Contractor or its subcontractors or others on its behalf. All Deliverables must be prepared in a form and content satisfactory to the Using Agency and delivered in a timely manner consistent with the requirements of this Agreement.

If Contractor fails to comply with the foregoing standards, Contractor must perform again, at its own expense, all Services required to be re-performed as a direct or indirect result of that failure. Any review, approval, acceptance, or payment for any of the Services by the City does not relieve Contractor of its responsibility for the professional skill and care and technical accuracy of its Services and Deliverables. This provision in no way limits the City's rights against Contractor either under this Agreement, at law or in equity.

5 **Compensation.**

- 5.1 In addition to Section 3 Compensation in Exhibit C – GTC, the Contractor shall be compensated for the services provided under this Agreement as follows:

5.1.1 Contractor shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears on a not to exceed basis, based upon the rates set forth in Exhibit E attached hereto and made a part of this Agreement. Contractor may vary the compensation for each task in Exhibit E provided that the total project compensation listed in Exhibit E and the Standard Agreement is not exceeded.

6 Reports and Information.

Contractor shall, at such times and in such forms as the City may require, furnish the City with such periodic reports as it may request pertaining to the work or services undertaken pursuant to this Agreement, the costs and obligations incurred or to be incurred in connection therewith, and any other matters covered by this Agreement as specified in Exhibit A and Exhibit E.

7 Findings Confidential.

All the reports, information, data, et cetera, prepared or assembled by the Contractor under this Agreement are confidential and the Contractor agrees that they shall not be made available to any individual or organization without the prior written approval of the City. Contractor shall not be required under the provisions of this paragraph to keep confidential any data or information which is or becomes publicly available, is required by applicable law or by proper legal or governmental authority, is already rightfully in the Contractor's possession without obligation of confidentiality, is independently developed by Contractor outside the scope of this Agreement or is rightfully obtained from third parties. Contractor shall give City prompt notice of any such legal or governmental demand and reasonably cooperate with City in any effort to seek a protective order or otherwise to contest such required disclosure.

8 Right of Inspection.

All Deliverables furnished by the Contractor must be as specified in Exhibit A and will be subject to inspection and approval of the City after delivery. City reserves the right to reject and return, at the risk and expense of Contractor, the portion of any Deliverable which may be defective or fail to comply with specifications in Exhibit A without invalidating the remainder of the Deliverables. If rejected, the Deliverable will be held for disposition at the expense and risk of Contractor. Payment for Deliverables prior to inspection shall not constitute acceptance of the Deliverables.

9 Warranty.

Contractor warrants that (i) any Deliverable created or performed by Contractor for City

under this Agreement will conform to specifications, drawings or samples furnished by City to Contractor for a minimum period of one year, and (ii) any standard Deliverable sold by Contractor to other customers besides City will meet or exceed any of the standards for such types of product in industry, any express or implied warranty stated or advertised by Contractor or the actual manufacturer of such Deliverable, or any warranties implied by law. Contractor's warranty shall survive delivery of the Deliverable and shall not be deemed waived by City's failure to discover defects, acceptance of the Deliverable, or payment, therefore.

10 **Ownership.**

Contractor shall have title to and bear the risk of any loss or damage to the Deliverable until the Deliverable is delivered and accepted by City in conformity with this Agreement. Upon delivery and acceptance, the Deliverable delivered by the Contractor shall become the exclusive property of the City. The ownership rights described herein shall include, but not be limited to, the right to copy, publish, display, transfer, or otherwise use the Deliverable. All artwork, patterns, dies, models, samples, materials, drawings, specifications, technical material, advertising material, and any other personal property furnished by City to Contractor, or specifically paid for by City for use in performance of the Agreement, shall be and remain the property of City and said property shall be used only for Deliverables benefiting City. Contractor shall return to the City or shall dispose of this property only according to the City's instructions.

11 **Applicable Laws.**

Under guidelines specified in 29 CFR 1910.1200 (f) and (g) City requests that Contractor label applicable Deliverables accordingly and provide associated Safety Data Sheets ("SDS") to City.

Deliverables must conform to all applicable federal, state, and local laws. Such conformity includes compliance with federal sanctions, and Contractor certifies that it has not and will not engage in prohibited transactions with sanctioned persons or entities.

Per Executive Order N-6-22, all contractors and grantees that have agreements valued at \$5 million or more with agencies/departments subject to the California Governor's authority are directed to report to their contracting or grantor agency or department regarding their compliance with economic sanctions imposed by the U.S. government in response to Russia's actions in Ukraine, as well as sanctions imposed under state law, if any.

12 Prevailing Wage.

It shall be the responsibility of the Contractor to comply, when applicable, with the prevailing wage rates in accordance with the State of California Department of Industrial Relations. It shall further be the responsibility of the Contractor to monitor the prevailing wage rates as established by the California Department of Industrial Relations for any increase in rates during the term of this Agreement and adjust wage rates accordingly.

CONTRACTOR REGISTRATION REQUIREMENTS- Pursuant to Labor Code Section 1771.1(a): A Contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Labor Code Section 1725.5. It is not a violation of this section for an unregistered Contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the Contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5. Department of Industrial Relations- Contractor Registration information and web link: <https://www.dir.ca.gov/public-works/publicworks.html>. In compliance with Senate Bill 854 and the California Labor Code, all Bidders shall include with their Bid proof of registration from the Department of Industrial Relations (DIR) that includes the contractor's Legal Name, Registration Number, License Type/Number, Registration Date, and Expiration Date, for every contractor and subcontractor, regardless of tier.

This project may be subject to compliance monitoring and enforcement by the Department of Industrial Relations. Contractors must submit their certified payroll records directly to the Division of Labor Standards Enforcement Compliance Monitoring Unit, as well as the City of Stockton.

13 Shipping Terms.

City shipment terms are F.O.B. Destination, Freight Prepaid and Added unless otherwise specified in the Agreement. Contractor shall observe shipping instructions and, unless otherwise stated in the instructions, shall ship Deliverables in the safest and most economical manner necessary to meet the delivery date specified in the Agreement. Contractor shall provide an itemized packing list showing the Agreement number with the shipment. Contractor shall include the Agreement number on all packages, boxes, invoices, and shipping documents. Contractor shall label all individual boxes with stock number and quantity and items with different stock numbers shall be boxed separately. City reserves the right to refuse, at Contractor's expense, any shipments not containing the Agreement number or stock numbers as required under this section.

14 Deliveries.

TIME IS OF THE ESSENCE IN THE PERFORMANCE OF ANY ORDER. If Deliverable is not provided or performed within the times specified in the Agreement, City may cancel the Agreement and hold Contractor liable for damages incurred due to the untimely delivery, including but not limited to the additional costs resultant from City procuring substitute Deliverables elsewhere.

15 Price and Quantities.

Prices and quantities set forth in this Agreement may not be altered by Contractor without the prior written authorization of City, with the exception that quantities of custom paper or printed Deliverables, chemicals, or fuel may deviate from those in the Agreement by the lesser of standard industry practices.

EXHIBIT E

COMPENSATION SCHEDULE

The Contractor shall be compensated for the services identified in Exhibit A, Exhibit C, and Exhibit D to this Agreement as follows:

1 Project Price.

1.1 The maximum the Contractor shall be paid on this Agreement is \$105,000.00 (hereafter the “not to exceed” amount). The “not to exceed” amount includes all payments to be made pursuant to this Agreement, including City approved reimbursable expenses, if any. Nothing in this Agreement requires the City to pay for work that does not meet the Standard of Performance identified in Exhibit D section 4 or other requirements of this Agreement.

1.2 The Contractor shall be entitled to receive payments for its work performed pursuant to the Agreement. The City will pay Contractor based on invoices for acceptable work performed and approved until the “not to exceed” amount is reached. Thereafter, Contractor must complete services based on the Agreement without additional compensation unless there is a material change to the Statement of Work and Scope by a written Amendment.

1.3 Annual cost adjustments may be made, as necessary, to increase or decrease the unit cost. The annual increase shall not exceed three percent (3%) for each succeeding year. Any increase requested must be submitted at least sixty (60) days before requested implementation date. In the event that the supplier finds it necessary to increase the base price in any given year, the supplier shall provide evidence satisfactory to the City documenting the reason(s) for and actual cost of the cost increase. Annual cost decreases are allowed with written notice to the City.

2 Item Price. Below is the price for the products as described in Exhibit A of this Agreement.

Item	Description	Item Price
1	Aqueous Ammonia (19%)	\$1.20/gallon

3 Invoice to Address. Each invoice submitted shall identify the specific task(s) listed in Exhibit A and this Exhibit, and the completed work product/deliverable for the agreed upon price listed in this Exhibit. Invoices shall be submitted to the address below:

City of Stockton Municipal Utilities Department
Attention: Program Manager III - Wastewater
2500 Navy Drive
Stockton, CA 95206

Email: MUDFinance@stocktonca.gov;
Kathryn.garcia@stocktonca.gov

EXHIBIT F

TIMELINE

- 1 Contractor shall complete the requested services identified in Exhibit A as follows:

Contractor shall confirm all orders received by email or phone within twenty-four (24) hours of the request.

Orders are to be delivered on the date requested for delivery or on the soonest available date if the date requested is unavailable. If no date is requested, the order will be delivered within seven (7) days.

Orders delivered through a subcontracted delivery service may not be canceled or rescheduled without prior notification to the City and may not be rescheduled more than once per order.

Contractor shall notify the City in advance of holiday closures that may affect order delivery.

EXHIBIT G

DISCRIMINATION AND HARASSMENT POLICY (HR-15)

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 1 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/96, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

I. PURPOSE

The purpose of this policy is to reaffirm the City's commitment to demonstrating respect for all individuals by strictly prohibiting discrimination and harassment, including sexual harassment in the workplace. This policy defines prohibited behavior and conduct, and sets forth a procedure for reporting, investigating and resolving complaints of discrimination, harassment, in the workplace, including retaliation and hostile work environment.

II. POLICY

- A. The City of Stockton prohibits any form of discrimination and/or harassment of any person based on race, religious creed, color, national origin, ancestry, military and veterans status, physical or mental disability, medical condition, genetic characteristics or information, denial of family and medical care leave, marital status, sexual orientation, sex (including gender, gender identity, gender expression, transgender, pregnancy, childbirth and breastfeeding), political affiliation, age (40 and older), concerted labor activity, or any other category or attribute consistent with state or federal law. All such discrimination and harassment is unlawful and shall not be tolerated. In addition, under the federal Affordable Care Act (ACA), the City of Stockton prohibits discrimination and/or harassment, or retaliation against an employee who obtains coverage, receives a tax credit or subsidy through the Health Care "Market Place" or "Exchange."
- B. It is an unlawful employment practice to discriminate against or to harass an unpaid intern or volunteer on the basis of any legally protected classification unless an exception applies, such as a bona fide occupational qualification.
- C. The City will neither tolerate nor condone discrimination and/or harassment of employees by managers, supervisors, co-workers, or non-employees with whom City employees have a business service, or professional relationship.
- D. All City employees and non-employees share a responsibility to assist in

**CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE**

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 2 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-016 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/96
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

maintaining an employment environment free of discrimination and harassment. This policy applies to all aspects of City employment, including, but not limited to, hiring, reassignment, placement, promotion, employment action, disciplinary action, layoff, reemployment, transfer, leave of absence, compensation and benefits, training; or other terms of treatment of that person in an unpaid internship, or another limited duration program to provide unpaid work experience for that person, or the harassment of an unpaid intern or volunteer.

- E. All allegations of discrimination and/or harassment shall be investigated immediately by the City, in accordance with this policy. If it is determined that any prohibited activity has occurred, remedial action shall be taken. Such action may include discipline up to and including discharge. In addition, under applicable law, individual supervisors and employees may be subject to personal liability and/or punitive damages in any litigation arising as a result of such conduct.
- F. All new hires shall attend harassment awareness training, and supervisors and managers shall attend harassment awareness and prevention training for supervisors every two years.
- G. The City of Stockton prohibits retaliation against any employee or non-employee by another employee, non-employee, supervisor, or manager for reporting, filing, testifying, assisting or participating in any manner in any investigation, proceeding, or hearing conducted by the employer or a federal or state enforcement agency.
- H. This policy applies to all officials, employees, volunteers, unpaid interns, agents, or contractors of the City.
- I. This policy shall be administered by the Director of Human Resources.

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 3 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

III. DEFINITION AND EXAMPLES OF DISCRIMINATION AND HARASSMENT

- A. "Discrimination," as used in this policy, is any action, behavior, practice, or process that is intended to deny, or results in the denial of, employment rights, privileges, or benefits because of a person's race, religious creed, color, national origin, ancestry, military and veterans status, physical or mental disability, medical condition, genetic characteristics or information, denial of family and medical care leave, marital status, sexual orientation, sex (including gender, gender identity, gender expression, transgender, pregnancy, childbirth and breastfeeding), political affiliation, age (40 and older), concerted labor activity, or any other prohibition identified under state and federal law. The following are examples of conduct that may constitute discrimination:
1. Soliciting applications from a source where all or most of potential workers are of the same race or color.
 2. Considering a person's gender as the basis for differences in pay, work assignments, performance evaluations, training, discipline, or any other area of employment; and
 3. Questioning a job applicant about the existence, nature and severity of a disability.
- B. "Harassment," as used in this policy, consists of any conduct affecting another person because of his or her race, religious creed, color, national origin, ancestry, military and veterans status, physical or mental disability, medical condition, genetic characteristics or information, denial of family and medical care leave, marital status, sexual orientation, sex (including gender, gender identity, gender expression, transgender, pregnancy, childbirth and breastfeeding), political affiliation, age (40 and older), concerted labor activity, or any other category or attribute identified under state and federal law when such conduct has the purpose or the effect of: (1) creating an intimidating, hostile or offensive work environment; (2) unreasonably interfering with the employee's or non-employee's work performance; or (3)

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 4 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
 PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

otherwise adversely affecting an employee's or non-employee's employment opportunities.

Harassment may take many forms, including, but not limited to, the following examples:

1. Verbal Harassment: Epithets, derogatory and offensive comments or slurs based on race, religion, color, national origin, ancestry, physical or mental disability, marital status, pregnancy, medical condition, gender, sexual orientation, political affiliation, age, or any other category or attribute identified under state and federal law.
2. Physical Harassment: Assault, impeding or blocking movement that results in the physical interference with normal work or movement on the basis of race, religion, color, national origin, ancestry, physical or mental disability, marital status, pregnancy, medical condition, gender, sexual orientation, political affiliation, age, or any other category or attribute identified under state and federal law.
3. Visual Harassment: The displaying of posters, photography, notices, bulletins, e-mails, cartoons or drawings with derogatory and offensive content based on race, religion, color, national origin, ancestry, physical or mental disability, marital status, pregnancy, medical condition, gender, sexual orientation, political affiliation, age, or any other category or attribute identified under state and federal law.

C. "Sexual harassment," as used in this policy, is a subcategory of harassment, and is specifically defined by law as unwanted sexual advances, requests for sexual favors or visual, verbal or physical conduct of a sexual nature when:

1. Submission to such conduct is made a term or condition of employment; or
2. Submission to or rejection of such conduct is used as a basis for employment decisions affecting the individual; or

**CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE**

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 5 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
 PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

3. Such conduct has the purpose or effect of unreasonably interfering with an employee's or non-employee's work performance or creating an intimidating, hostile or offensive working environment because of the persistent, severe or pervasive nature of the conduct.

Examples of Sexual Harassment include, but are not limited to the following:

- a. Unwelcome sexual overtures or propositions.
- b. Offering employment benefits or status in exchange for sexual favors.
- c. Making or threatening retaliation after a negative response to sexual advances.
- d. Visual conduct such as leering, making sexual gestures, displaying sexually suggestive objects or pictures, cartoons, calendars or posters.
- e. Verbal conduct such as using epithets or slurs, telling sexually explicit jokes, or making derogatory or suggestive comments about a person's body or dress.
- f. Written communications of a sexual nature distributed in hard copy, soft copy or via a computer network.
- g. Verbal abuse of a sexual nature, graphic verbal commentary about an individual's body, sexually degrading words to describe an individual, suggestive or obscene letters, notes or invitations.
- h. Physical conduct such as touching, assaulting, impeding or blocking movements.

**CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE**

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 6 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
 PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

- i. Retaliation for making harassment reports or threatening to report harassment.

D. Affordable Care Act (ACA) Anti-Retaliation

Pursuant to section §1558 of the Affordable Care Act, the City prohibits discrimination or retaliation towards any employee who:

1. Receives a health insurance tax credit or subsidy through the Health Care "Marketplace" or "Exchange", by which can trigger a penalty payable by the employer;
2. Reports potential violations of protections afforded under Title I of the Act, which provides guaranteed availability protections among other things;
3. Testifies in a proceeding concerning such violation;
4. Assists or participates in a proceeding concerning a violation; or
5. Objects to, or refuses to participate in, any activity, policy, practice, or assigned task that the employee reasonably believes to be in violation of any provision of the Title I of the Act.

An employee who believes that he or she has been discharged or otherwise discriminated against in violation of section §1558 of the Affordable Care Act may seek relief in accordance with the procedures, notifications, burdens of proof, remedies, and statutes of limitation set forth in section 2087(b) of title 15, United States Code.

IV. REPORTING AND COMPLAINT PROCEDURES

A. Immediate Action Required

The City's reporting and complaint procedures provide for an immediate, thorough and objective investigation of discrimination or harassment claims, appropriate disciplinary action taken against any person found to have engaged in prohibited behavior, and appropriate alternative remedies to any

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 7 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

employee or non-employee subject to discrimination or harassment. To accomplish this, such incidents must be reported immediately to a supervisor or manager.

1. Employee's and Non-Employee's Responsibilities when Subjected to Discrimination and/or Harassment
 - a. Employees or non-employees who believe they have been subjected to discrimination or harassment, or are aware of discrimination or harassment against others, shall report the situation immediately to his/her supervisor or manager, except as specified in subsection (b), below. Employees and non-employees shall report any such incidents occurring in the workplace, whether committed by coworkers, supervisors or managers, or third persons doing business with the City, such as customers or vendors, or other non-employees. If comfortable doing so, an employee or non-employee who has a complaint of discrimination or harassment is encouraged to directly inform the person(s) engaging in the behavior that such conduct is offensive and insist the behavior to stop.
 - b. Employees and non-employees must immediately contact a supervisor or manager to register a complaint of discrimination or harassment, unless that supervisor or manager is the individual engaging in the unwanted behavior. In that case, the employee or non-employee may contact someone at the next supervisory level. If the employee or non-employee feels uncomfortable dealing directly with his or her immediate supervisor or manager, he or she may contact the department head, or the Director of Human Resources (or either of their designees) to register a complaint of discrimination or harassment.
 - c. Employees and non-employees may file a formal complaint of harassment or discrimination with their department head or

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 8 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
 PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

with Human Resources. To assist the City in conducting a thorough investigation, complaints shall be submitted in writing and shall include specific details of the incident(s), the names of the individuals involved, the names of any witnesses, and any documentary evidence (notes, pictures, cartoons, etc.) that will corroborate the allegations.

- d. Employees and non-employees shall immediately report any retaliation to a supervisor, manager, department head or Director of Human Resources (or designee). All retaliation complaints shall be immediately, objectively and thoroughly investigated in accordance with the investigation procedures. If a report of retaliation is substantiated, appropriate disciplinary action, up to and including discharge shall be taken.

2. Supervisor's or Manager's Responsibilities to Eliminate Discrimination and/or Harassment

- a. A supervisor or manager is responsible for enforcing the City's discrimination and harassment policy. Supervisors or managers must ensure that all employees and non-employees are aware of the City's policy through open discussion of the policy at staff meetings and by posting the policy in a conspicuous location accessible to all staff members.
- b. A supervisor or manager shall be cognizant of employees' and non-employees' behavior and shall not permit any employee or non-employee under their supervision to be subjected to or engage in any conduct prohibited by this policy.
- c. A supervisor or manager who observes conduct prohibited by this policy shall immediately direct the employee or non-employee to cease the conduct.

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 9 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
 PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

d. A supervisor or manager who receives a complaint of prohibited conduct is required to take the complaint seriously, and report the matter immediately to the department head; be supportive of the complainant; ensure there is no retaliation against the complainant; conduct an internal fact-finding review into the allegations; obtain as much detailed information as possible; thoroughly document the findings; communicate in written form to the parties the resolution of the complaint; and report to and consult with the Human Resources Department promptly, without delay.

B. Confidentiality. The City will make every effort to protect the privacy and confidentiality of all parties involved, as well as any information and/or documentation obtained, to the extent possible consistent with a thorough investigation.

C. Penalty for Non-Compliance. The City shall take disciplinary action, up to and including discharge, against any supervisor or manager who fails in his/her responsibility to take immediate action in response to an employee's or non-employee's complaint of discrimination or harassment. Further, such disciplinary action shall be taken against a supervisor or manager who fails to stop discriminatory or harassing conduct committed in his/her presence or to stop such conduct about which the supervisor or manager has knowledge.

V. INVESTIGATION PROCEDURES

A. Determination of Responsibility for Investigation

If a formal complaint is filed with the department head or the Director of Human Resources (or either of their designees), the department head and the Director of Human Resources shall consult with one another to determine whether the department or Human Resources shall conduct the fact-finding investigation into the allegations. Either the department head or the Director of Human Resources (or either of their designees), depending on who is

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 10 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-016 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

responsible for the investigation, shall issue written notification to the complainant and alleged harasser(s). The notification shall specify the nature of the complaint, and inform the parties that an investigation into the allegations of discrimination and/or harassment shall be conducted.

B. Investigative Guidelines

The investigation shall include the following steps taken in the order best suited to the circumstances:

1. Identify and preserve the evidence.
2. Confirm the name and position of the complainant. Interview the complainant.
3. Allow the complainant the opportunity to place the complaint in writing.
4. Obtain the identity of the alleged harasser(s).
5. Obtain as many details as possible regarding the incident(s) that prompted the complaint, including the number of occurrences, dates, times, locations, and witnesses (if applicable).
6. Ascertain how the complainant felt about the alleged incident when it occurred; complainant's response(s) to the alleged behavior; and witness statements (if applicable).
7. Ascertain if any threats or promises were made in connection with the alleged harassment.
8. Ascertain if the complainant knows of or suspects that there are other victims of harassment by the same person(s).
9. Ascertain whether the complainant has spoken to anyone, especially

**CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE**

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 11 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
 PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

supervisors, about the harassment.

10. Ascertain what resolution would be acceptable to the complainant.
11. Interview the alleged harasser to get his or her side of the story, including any possible motivation for a false allegation.
12. Interview witnesses who were identified by the complainant regarding the alleged harasser or other persons identified during the investigation.
13. Interview witnesses who were identified by the alleged harasser or other persons identified during the investigation.
14. Advise all participants that the investigation is "confidential" and not to engage in any retaliatory conduct, as such conduct is subject to disciplinary action up to and including discharge. Confidentiality will be maintained to the extent possible. An individual who is interviewed during the course of an investigation is prohibited from discussing the substance of the interview, except as otherwise directed by a supervisor or the Director of Human Resources. Any individual who discusses the content of an investigatory interview will be subject to discipline or other appropriate sanction.
15. Conduct follow-up interviews, if warranted.
16. Prepare report of findings and discuss with management and designated legal staff.

VI. RESPONDING TO THE COMPLAINT

- A. Following the completion of the fact-finding investigation, either the department head or the Director of Human Resources (or either of their designees), depending on who is responsible for the investigation, shall

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 12 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

make a report of findings, along with a recommendation regarding the appropriate remedial action to be taken, if warranted. The recommendation shall be made after reviewing the findings of the investigation, giving consideration to all factual information, the nature of the alleged conduct, and the totality of the circumstances. If the investigation was conducted by the Director of Human Resources, or designee, the Director, or designee, shall confer with the affected department head and both shall concur on the remedial action to be taken, if any. If the investigation was conducted by the department head, the department head shall confer with the Director of Human Resources prior to making the report of findings and both shall concur on the remedial action to be taken, if any.

- B. If either the department head or the Director of Human Resources does not concur with the findings and recommendation of the other, the City Attorney (or designee) shall review and resolve the matter in dispute.
- C. Report of findings and recommendation shall be treated as a confidential document and no other distribution shall be made without first consulting with the City Attorney's Office. A completed investigation report will not be disclosed, except as it is deemed necessary to support a disciplinary action, to take remedial action, to defend the City in adversarial proceedings, or to comply with the law or court order.
- D. Either the department head or the Director of Human Resources (or either of their designees), depending on who is responsible for the investigation shall provide a written response to the complainant and the person alleged to have committed the misconduct, discrimination and/or harassment. The response shall include a copy of the City's discrimination and harassment policy and a memorandum indicating the City's determination as to whether the complaint is:
 - 1. Unsustained: The investigation failed to disclose sufficient evidence to substantiate the allegation(s).
 - 2. Unfounded: The investigation proved that the act(s) or omission(s)

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 13 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

complained of did not occur. The finding also applies when the individual employee(s) named in the complaint were not involved in the act(s) or omission(s) alleged.

3. Sustained: The investigation disclosed sufficient evidence to substantiate the allegation(s) made in the complaint; appropriate action will be taken.

E. Details regarding any specific fact-findings or disciplinary action to be taken will not be communicated to the complainant. The City Attorney shall review the response for legal sufficiency before dissemination.

F. The City shall close and retain the investigation file, in accordance with applicable laws, regulations, and City policy regarding retention of City records.

VII. DISCIPLINE

Disciplinary action imposed as a result of any investigation conducted pursuant to this policy shall be commensurate with the severity of the offense, up to and including discharge, even for a first offense.

VIII. ALTERNATIVE REMEDIES

If upon exhausting all internal remedies to file, investigate, and respond to a charges of discrimination/harassment, pursuant to title VII of the Federal Civil Rights Act of 1964 (42 U.S.C §§ 2000e *et seq.*), any person has a right to file a charge of discrimination/harassment with the Equal Employment Opportunity Commission ("EEOC"). In addition, pursuant to the California Fair Employment and Housing Act (Gov. Code §§ 12900 – 12996.) a person may also file a complaint of discrimination/harassment with the California Department of Fair Employment and Housing ("DFEH"). Employees or non-employees who believe that they have been subjected to discrimination/harassment may file a complaint with either of these

CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY	Directive No. HR-15	Page No. 14 of 14
	Effective Date: 5/1/2015	Revised From: 7/27/09 4/6/09 3/1/2010 (see below)

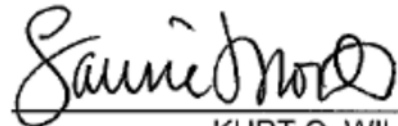
PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

agencies. Both the EEOC and DFEH serve as neutral fact-finders and attempt to assist parties in resolving disputes voluntarily.

IX. COMMUNICATION OF POLICY

This policy shall be provided to all managers, supervisors, employees, volunteers, unpaid interns, agents or contractors of the City and shall be posted in the appropriate places. All employees shall participate in City approved harassment awareness training as directed by management or Human Resources; and all supervisors, as required by law, shall participate in City approved interactive harassment awareness training and education sessions at least once every two years, or as otherwise specified by law.

APPROVED:



KURT O. WILSON
CITY MANAGER

::ODMA\GRPWISE\ICOS.PER.PER_Library:96180.1

**BAY AREA CHEMICAL CONSORTIUM
STANDARD AGREEMENT, PAGE 1 OF 2
BID NO. 03-2026
SUPPLY AND DELIVERY OF AQUEOUS AMMONIA**

I hereby agree to furnish AQUEOUS AMMONIA identified in the attached bid forms, as solicited by the Bay Area Chemical Consortium (BACC), to one or more of the participating BACC Agencies.

Company: KAAM Group Co
Address: 300 Carlsbad Village Dr., Suite 108A-468, Carlsbad, CA 92008
City, State, ZIP: Carlsbad, CA 92008
Phone: 760-814-2050
Email: orders@kaamgroup.com
Authorized Representative: Heather Esposito
Signature: *Heather Esposito*
Date: 02/19/2026

WE ACKNOWLEDGE RECEIVING ADDENDUM/ADDENDA NUMBER _____ THROUGH _____.

SPECIFIC DEVIATIONS:

This box must be checked if bidder has any proposed specific deviations. Per Section 2.12 Proposed Deviations from the Specifications by the Bidder, the absence of a proposed change in the specifications will hold the bidder strictly accountable to the specifications as described in the bid document, including any addendum.

Describe the specific deviations below. A copy of the proposed specifications must be attached to this Standard Agreement at the time of submission, with bidder's name clearly shown on each document.

Description of Emergency Supply Plan: Provide a summary of vendor's plans to continue to supply product in the event of an unexpected disaster or urgent emergency event.
We have several sourcing options and logistical options to prevent any supply disruptions.

STANDARD AGREEMENT, PAGE 2 OF 2

BIDDER INFORMATION

1. Legal Name of Bidder:
KAAM Group Co

2. Bidder's Street Address:
300 Carlsbad Village Dr., Suite 108A-468, Carlsbad, CA 92008

3. Mailing Address:
300 Carlsbad Village Dr., Suite 108A-468, Carlsbad, CA 92008

4. Business Telephone: 760-814-2050 Fax Number: _____

5. Type of Supplier:
 Sole Proprietor Partnership Corporation LLC
If Corporation, indicate State where incorporated: Deleware

6. Business License Number issued by the City where the Supplier's principal place of business is located.
Number: BLOS015446-04-2024 Issuing City: Carlsbad

7. Supplier Federal Tax Identification Number: 87-2144408

8. Emergency Contact: Name: Heather Esposito
Phone Number: 480-658-6549

9. Order Contact: Name: Vangie
Address: 300 Carlsbad Village Dr., Suite 108A-468, Carlsbad, CA 92008
Phone Number: 760-814-2050 Fax Number: _____
Email: orders@kaamgroup.com

10. References:

<u>Company/Agency Name</u>	<u>Contact Name</u>	<u>Phone Number</u>
1) <u>UCSD</u>	<u>Keenan Mrozek</u>	<u>619-792-0182</u>
2) <u>SDGE Palomar</u>	<u>Ann Kim</u>	<u>760-432-2522</u>
3) <u>Arizona Solar One</u>	<u>Michael Plichta</u>	<u>928 482 7880</u>

11. Chemical Manufacturer's name and address (if different from Bidder):

**Non-Collusion Affidavit
To Be Executed By Bidder and Submitted With Bid**

State of California)
County of Riverside) ss.

Heather Esposito, being first duly sworn, deposes and says that he or she is the
(Bidder's Authorized Representative)

Office Manager of KAAM Group Co the party making the
(Title of Representative) (Legal Name of Bidder)

foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bid, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

I declare under penalty of perjury under the laws of the state of California that the foregoing is true and correct.

Heather Esposito
Signature of: President, Secretary,
Manager, Owner, or Representative

Subscribed and sworn to before me this, day of , 20

Signature of Notary Public In and For

The County of see attached Notary
State of

All Signatures Must Be Witnessed By Notary

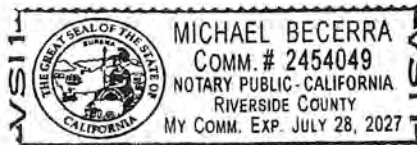
JURAT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }
County of Riverside }

Subscribed and sworn to (or affirmed) before me on this 21 day of February,
2021 by Heather Esposito
proved to me on the basis of satisfactory evidence to be the person(s) who appeared
before me.


Notary Public Signature



(Seal)

ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages _____ Document Date _____

Additional Information

INSTRUCTIONS

The wording of all Jurats completed in California after January 1, 2015 must be in the form as set forth within this Jurat. There are no exceptions. If a Jurat to be completed does not follow this form, the notary must correct the verbiage by using a jurat stamp containing the correct wording or attaching a separate jurat form such as this one which does contain the proper wording. In addition, the notary must require an oath or affirmation from the document signer regarding the truthfulness of the contents of the document. The document must be signed AFTER the oath or affirmation. If the document was previously signed, it must be re-signed in front of the notary public during the jurat process.

- State and county information must be the state and county where the document signer(s) personally appeared before the notary public.
- Date of notarization must be the date the signer(s) personally appeared which must also be the same date the jurat process is completed.
- Print the name(s) of the document signer(s) who personally appear at the time of notarization.
- Signature of the notary public must match the signature on file with the office of the county clerk.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different jurat form.
- Additional information is not required but could help to ensure this jurat is not misused or attached to a different document.
- Indicate title or type of attached document, number of pages and date.
- Securely attach this document to the signed document with a staple.

**BAY AREA CHEMICAL CONSORTIUM
BID FORM FOR BID NO. 03-2024
FOR SUPPLY AND DELIVERY OF AQUEOUS AMMONIA**

Sealed bids must be submitted in a PDF format and bidders must enter bid prices into the electronic bid platform (Line Item page)
<https://bacwa.org/about-bacc/>

No later than 4:00 PM. PT
Thursday, February 22, 2024

Legal Name of Bidder:
KAAM Group Co

Business Address
300 Carlsbad Village Dr. Suite 108A-468
Carlsbad, CA 92008

Telephone Number: 760-804-2050

Facsimile Number: N/A

Email Address: Orders@kaamgroup.com

Authorized Representative (Please Print):

Heather Esposito

Signature: Heather Esposito

Date: February 21, 2024

I. All costs except California State sales tax for the purchase of AQUEOUS AMMONIA must be included in the amount shown entered into the electronic bid platform (Line Item page), including any and all mill assessments, fees, excise taxes, transportation charges, etc. Any exceptions to the bid must be noted under Specific Deviations on the Standard Agreement. Bidders shall submit bids per unit of measure as specified in the electronic bid platform (Line Item page).

II. Bidders must submit all of the following, attached to this Bid Form:

- a. All requirements listed in Section 2.21 Manufacturer's Info.
- b. If applicable, the name, address, and contact information for the third party hauling company as well as an affidavit signed by the Bidder that the third party hauler can and will deliver the chemical to each and every participating BACC Agency.

III. Bidder Obligations

By signing this Bid Form and entering into individual purchase orders, purchase agreements and /or contracts with BACC agencies, the bidder expressly agrees to be bound by all the provisions of the bid solicitation, including Sections I-IV.

SAFETY DATA SHEET

Aqua Ammonia (20-30%)

Section 1. Identification

GHS product identifier	: Aqua Ammonia (20-30%)
Other means of identification	: Aqua Ammonia, Ammonium Hydroxide
Product type	: Liquid.
Product use	: Synthetic/Analytical chemistry.
Synonym	: Aqua Ammonia, Ammonium Hydroxide
SDS #	: 001195
Supplier's details	: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road Suite 100 Radnor, PA 19087-5283 1-610-687-5253 Inside the US: 1-800-424-9300 (Chemtrec, 24 hours) Outside the US: 1-703-527-3887 (Chemtrec, 24 hours)
24-hour telephone	: Airgas Emergency Response Center 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 1

GHS label elements

Hazard pictograms	: 
--------------------------	---

Signal word	: Danger
Hazard statements	: Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause respiratory irritation. Very toxic to aquatic life.

Precautionary statements

General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Wear protective gloves, protective clothing and eye or face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Response	: Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Section 2. Hazards identification

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Aqua Ammonia, Ammonium Hydroxide

Product code : 001195

Ingredient name	%	CAS number
Ammonium Hydroxide	100	1336-21-6
Water	70 - 80	7732-18-5
Ammonia	20 - 30	7664-41-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

Section 4. First aid measures

- Skin contact** : Causes severe burns.
- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
- Ingestion** : Harmful if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
nitrogen oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Avoid release to the environment. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Do not breathe vapor or mist.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Ammonium Hydroxide Water Ammonia	None. None. California PEL for Chemical Contaminants (Table AC-1) (United States). PEL: 25 ppm 8 hours. STEL: 35 ppm 15 minutes. ACGIH TLV (United States, 1/2022). [Ammonia] TWA: 25 ppm 8 hours. TWA: 17 mg/m ³ 8 hours. STEL: 35 ppm 15 minutes. STEL: 24 mg/m ³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). [Ammonia] STEL: 35 ppm 15 minutes. STEL: 27 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2020). [AMMONIA] TWA: 25 ppm 10 hours. TWA: 18 mg/m ³ 10 hours. STEL: 35 ppm 15 minutes. STEL: 27 mg/m ³ 15 minutes. OSHA PEL (United States, 5/2018). [Ammonia] TWA: 50 ppm 8 hours. TWA: 35 mg/m ³ 8 hours. CAL OSHA PEL (United States, 5/2018). STEL: 27 mg/m ³ 15 minutes. STEL: 35 ppm 15 minutes. TWA: 18 mg/m ³ 8 hours. TWA: 25 ppm 8 hours.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Clear liquid. Ammonia vapor is clear or fog-like.
- Odor** : Pungent.
- Odor threshold** : 5 ppm
- pH** : 11.6 for 1.7% NH₃ soln. in water
- Melting point** : Approx. -110 dF (30% soln.)
- Boiling point** : 81 dF (30% soln.)
- Critical temperature** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Aqua soln. is not flammable; Ammonia vapor is flammable @16-25% ammonia concentration in air.
- Lower and upper explosive (flammable) limits** : Lower: 16%
Upper: 25%
- Vapor pressure** : 720 mm Hg @ 80 dF (30% soln.)
- Vapor density** : Relative Vapor Density: 0.6 (ammonia) [Air = 1]
- Gas Density (lb/ft³)** : 0.0481
- Relative density** : Specific Gravity (SG): 0.8974 (29.4% @ 60 deg. F)
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : 651°C (1203.8°F)
- Decomposition temperature** : Not available.
- Flow time (ISO 2431)** : Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

Aqua Ammonia (20-30%)

Section 10. Stability and reactivity

Conditions to avoid : Do not cut, weld, braze, drill, grind, or heat vessels.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ammonium hydroxide	LD50 Oral	Rat	350 mg/kg	-
ammonia	LC50 Inhalation Gas.	Rat	7338 ppm	1 hours

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ammonium hydroxide	Eyes - Severe irritant	Rabbit	-	0.5 minutes 1 mg	-
	Eyes - Severe irritant	Rabbit	-	250 ug	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
ammonium hydroxide	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

Skin contact : Causes severe burns.

Section 11. Toxicological information

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	500 mg/kg
Inhalation (gases)	4500 ppm

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ammonium hydroxide ammonia	Acute LC50 37 ppm Fresh water	Fish - <i>Gambusia affinis</i> - Adult	96 hours
	Acute EC50 29.2 mg/l Marine water	Algae - <i>Ulva fasciata</i> - Zoea	96 hours
	Acute LC50 2080 µg/l Fresh water	Crustaceans - <i>Gammarus pulex</i>	48 hours
	Acute LC50 0.53 ppm Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 300 µg/l Fresh water	Fish - <i>Hypophthalmichthys nobilis</i>	96 hours
	Chronic NOEC 0.204 mg/l Marine water	Fish - <i>Dicentrarchus labrax</i>	62 days

Section 12. Ecological information

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
WATER	-1.38	-	Low

Mobility in soil









Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN2672	UN2672	UN2672	UN2672	UN2672
UN proper shipping name	Ammonia solution	AMMONIA SOLUTION	AMONIACO EN SOLUCION	AMMONIA SOLUTION	Ammonia solution
Transport hazard class(es)	8  	8  	8 	8  	8 
Packing group	III	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

Additional information

Section 14. Transport information

- DOT Classification** : This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.
Reportable quantity 1000 lbs / 454 kg [2493.4 gal / 9438.7 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
Limited quantity Yes.
Packaging instruction Exceptions: 154. Non-bulk: 203. Bulk: 241.
Quantity limitation Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.
Special provisions 336, IB3, IP8, T7, TP2
- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark).
The marine pollutant mark is not required when transported by road or rail.
Explosive Limit and Limited Quantity Index 5
Passenger Carrying Road or Rail Index 5
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-A, _S-B_
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 852. Cargo Aircraft Only: 60 L. Packaging instructions: 856. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y841.
Special provisions A64, A803
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

- U.S. Federal regulations** :
- TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
Clean Water Act (CWA) 311: Ammonium Hydroxide; ammonia
Clean Air Act (CAA) 112 regulated toxic substances: ammonia
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
ammonia	20 - 30	Yes.	500	-	100	-

Section 15. Regulatory information

SARA 304 RQ : 400 lbs / 181.6 kg [997.4 gal / 3775.5 L]

SARA 311/312

Classification : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Ammonium Hydroxide ammonia	1336-21-6 7664-41-7	100 20 - 30
Supplier notification	Ammonium Hydroxide ammonia	1336-21-6 7664-41-7	100 20 - 30

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: AMMONIUM HYDROXIDE; HOUSEHOLD AMMONIA; AMMONIUM WATER; AMMONIA

New York : The following components are listed: Ammonium hydroxide; Ammonia

New Jersey : The following components are listed: AMMONIUM HYDROXIDE; AMMONIA

Pennsylvania : The following components are listed: AMMONIUM HYDROXIDE; AMMONIA

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Eurasian Economic Union : **Russian Federation inventory**: Not determined.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.
Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Thailand : All components are listed or exempted.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	3
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Expert judgment
ACUTE TOXICITY (inhalation) - Category 4	Expert judgment
SKIN CORROSION - Category 1B	Expert judgment
SERIOUS EYE DAMAGE - Category 1	SKIN CORROSION/ IRRITATION
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method

History

Date of printing : 4/16/2024
Date of issue/Date of revision : 4/16/2024
Date of previous issue : 4/10/2024
Version : 0.12

Key to abbreviations

: ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References

: Not available.

Section 16. Other information

[Notice to reader](#)

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

Aqua Ammonia (5-19.9%)

Section 1. Identification

GHS product identifier	: Aqua Ammonia (5-19.9%)
Other means of identification	: Aqua Ammonia, Ammonium Hydroxide
Product type	: Liquid.
Product use	: Synthetic/Analytical chemistry.
Synonym	: Aqua Ammonia, Ammonium Hydroxide
SDS #	: 001196
Supplier's details	: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road Suite 100 Radnor, PA 19087-5283 1-610-687-5253 Inside the US: 1-800-424-9300 (Chemtrec, 24 hours) Outside the US: 1-703-527-3887 (Chemtrec, 24 hours)
24-hour telephone	: Airgas Emergency Response Center 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 1

GHS label elements

Hazard pictograms	: 
--------------------------	---

Signal word : Danger

Hazard statements : Harmful if swallowed or if inhaled.
Causes severe skin burns and eye damage.
May cause respiratory irritation.
Very toxic to aquatic life.

Precautionary statements

General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Wear protective gloves, protective clothing and eye or face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Response	: Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Section 2. Hazards identification

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Aqua Ammonia, Ammonium Hydroxide

Product code : 001196

Ingredient name	%	CAS number
Ammonium Hydroxide	100	1336-21-6
Water	80.1 - 95	7732-18-5
Ammonia	5 - 19.5	7664-41-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

Section 4. First aid measures

- Skin contact** : Causes severe burns.
- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
- Ingestion** : Harmful if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
nitrogen oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Avoid release to the environment. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Do not breathe vapor or mist.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Ammonium Hydroxide Water Ammonia	None. None. California PEL for Chemical Contaminants (Table AC-1) (United States). PEL: 25 ppm 8 hours. STEL: 35 ppm 15 minutes. ACGIH TLV (United States, 1/2022). [Ammonia] TWA: 25 ppm 8 hours. TWA: 17 mg/m ³ 8 hours. STEL: 35 ppm 15 minutes. STEL: 24 mg/m ³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). [Ammonia] STEL: 35 ppm 15 minutes. STEL: 27 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2020). [AMMONIA] TWA: 25 ppm 10 hours. TWA: 18 mg/m ³ 10 hours. STEL: 35 ppm 15 minutes. STEL: 27 mg/m ³ 15 minutes. OSHA PEL (United States, 5/2018). [Ammonia] TWA: 50 ppm 8 hours. TWA: 35 mg/m ³ 8 hours. CAL OSHA PEL (United States, 5/2018). STEL: 27 mg/m ³ 15 minutes. STEL: 35 ppm 15 minutes. TWA: 18 mg/m ³ 8 hours. TWA: 25 ppm 8 hours.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Clear liquid. Ammonia vapor is clear or fog-like.
- Odor** : Pungent.
- Odor threshold** : 5 ppm
- pH** : 11.6 for 1.7% NH₃ soln. in water
- Melting point** : -30.8 dF (19.3% soln.)
- Boiling point** : 120 dF (19.7% soln.)
- Critical temperature** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Aqua soln. is not flammable; Ammonia vapor is flammable @16-25% ammonia concentration in air.
- Lower and upper explosive (flammable) limits** : Lower: 16%
Upper: 25%
- Vapor pressure** : 1 atm. @ 120 dF; 19.7% solution
- Vapor density** : Relative Vapor Density: 0.6 (ammonia) [Air = 1]
- Gas Density (lb/ft³)** : 0.0481
- Relative density** : Specific Gravity (SG): 0.9278 (19.5% @ 60 deg. F)
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : 651°C (1203.8°F)
- Decomposition temperature** : Not available.
- Flow time (ISO 2431)** : Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

Aqua Ammonia (5-19.9%)

Section 10. Stability and reactivity

Conditions to avoid : Do not cut, weld, braze, drill, grind, or heat vessels.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ammonium hydroxide	LD50 Oral	Rat	350 mg/kg	-
ammonia	LC50 Inhalation Gas.	Rat	7338 ppm	1 hours

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ammonium hydroxide	Eyes - Severe irritant	Rabbit	-	0.5 minutes 1 mg	-
	Eyes - Severe irritant	Rabbit	-	250 ug	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
ammonium hydroxide	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

Skin contact : Causes severe burns.

Section 11. Toxicological information

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	500 mg/kg
Inhalation (gases)	4500 ppm

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ammonium hydroxide ammonia	Acute LC50 37 ppm Fresh water	Fish - <i>Gambusia affinis</i> - Adult	96 hours
	Acute EC50 29.2 mg/l Marine water	Algae - <i>Ulva fasciata</i> - Zoea	96 hours
	Acute LC50 2080 µg/l Fresh water	Crustaceans - <i>Gammarus pulex</i>	48 hours
	Acute LC50 0.53 ppm Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 300 µg/l Fresh water	Fish - <i>Hypophthalmichthys nobilis</i>	96 hours
	Chronic NOEC 0.204 mg/l Marine water	Fish - <i>Dicentrarchus labrax</i>	62 days

Section 12. Ecological information

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
WATER	-1.38	-	Low

Mobility in soil









Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN2672	UN2672	UN2672	UN2672	UN2672
UN proper shipping name	Ammonia solution	AMMONIA SOLUTION	AMONIACO EN SOLUCION	AMMONIA SOLUTION	Ammonia solution
Transport hazard class(es)	8  	8  	8 	8  	8 
Packing group	III	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

Additional information

Section 14. Transport information

- DOT Classification** : This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.
Reportable quantity 1000 lbs / 454 kg [2493.4 gal / 9438.7 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
Limited quantity Yes.
Packaging instruction Exceptions: 154. Non-bulk: 203. Bulk: 241.
Quantity limitation Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.
Special provisions 336, IB3, IP8, T7, TP2
- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.
Explosive Limit and Limited Quantity Index 5
Passenger Carrying Road or Rail Index 5
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-A, _S-B_
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 852. Cargo Aircraft Only: 60 L. Packaging instructions: 856. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y841.
Special provisions A64, A803
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

- U.S. Federal regulations** :
- TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
Clean Water Act (CWA) 311: Ammonium Hydroxide; ammonia
Clean Air Act (CAA) 112 regulated toxic substances: ammonia
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
ammonia	5 - 19.5	Yes.	500	-	100	-

Section 15. Regulatory information

SARA 304 RQ : 816.3 lbs / 370.6 kg [2035.5 gal / 7705 L]

SARA 311/312

Classification : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Ammonium Hydroxide ammonia	1336-21-6 7664-41-7	100 5 - 19.5
Supplier notification	Ammonium Hydroxide ammonia	1336-21-6 7664-41-7	100 5 - 19.5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: AMMONIUM HYDROXIDE; HOUSEHOLD AMMONIA; AMMONIUM WATER; AMMONIA

New York : The following components are listed: Ammonium hydroxide; Ammonia

New Jersey : The following components are listed: AMMONIUM HYDROXIDE; AMMONIA

Pennsylvania : The following components are listed: AMMONIUM HYDROXIDE; AMMONIA

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Eurasian Economic Union : **Russian Federation inventory**: Not determined.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.
Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Thailand : All components are listed or exempted.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	3
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Expert judgment
ACUTE TOXICITY (inhalation) - Category 4	Expert judgment
SKIN CORROSION - Category 1B	Expert judgment
SERIOUS EYE DAMAGE - Category 1	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method

History

Date of printing : 4/16/2024

Date of issue/Date of revision : 4/16/2024

Date of previous issue : 4/11/2024

Version : 0.15

Key to abbreviations

: ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References

: Not available.

Section 16. Other information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.