

STATE OF OHIO
THE MAHONING VALLEY SANITARY DISTRICT
INFORMATION AND INSTRUCTIONS FOR BIDDERS, PROPOSAL,
CONTRACT AND BOND FORMS AND SPECIFICATIONS FOR
CONTRACT NO. M-546
FOR
FURNISHING PEBBLE QUICK LIME

Vernard Richberg	President of the Board
James A. Gibbs	Board Member
Matthew J. Blair	Board Member
Richard K. Hale	Board Member
Ramesh D. Kashinkunti, P.E.	Chief Engineer
Alan Tatalovich, CPA	Secretary/Treasurer



2018

STATE OF OHIO
THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-546

FOR

FURNISHING PEBBLE QUICK LIME

JULY 1, 2018 TO JUNE 30, 2019 (ONE YEAR CONTRACT)

OR

JULY 1, 2018, TO JUNE 30, 2020 (TWO YEAR CONTRACT)

OR

**JULY 1, 2018 TO JUNE 30, 2020 WITH ONE MORE YEAR OPTIONAL
RENEWAL (JUNE 30, 2021)**

Sealed bids for proposals for Furnishing Pebble Quick Lime in compliance with NSF/ANSI 60 and 61: Drinking Water Treatment Chemicals; Drinking Water System Components will be received at the office of The Mahoning Valley Sanitary District, Water Purification Plant, in Weathersfield Township, Trumbull County, Ohio (mail address: PO Box 4119, Youngstown, Ohio 44515 or 1181 Ohltown-McDonald Rd., Mineral Ridge, Ohio 44440), until 1:30 p.m., Eastern Standard Time on **Tuesday, May 29, 2018.**

The Water Purification Plant is located in Weathersfield Township, Trumbull County, Ohio, about two miles south of the center of the City of Niles, and near Mineral Ridge, Ohio.

The contract is for furnishing and delivering the above chemical as therein provided for use in connection with operation of the Water Purification Plant of the District for the

JULY 1, 2018 TO JUNE 30, 2019 (ONE YEAR CONTRACT)

OR

JULY 1, 2018, TO JUNE 30, 2020 (TWO YEAR CONTRACT)

OR

**JULY 1, 2018 TO JUNE 30, 2020 WITH ONE MORE YEAR OPTIONAL RENEWAL
(JUNE 30, 2021)**

FORM OF PROPOSAL. Bids shall be based on specifications and are to be made upon the blank form of proposal hereto attached. The form of proposal is not to be changed; each

blank space provided therein for the entries are to be filled in, and each bidder shall furnish all information called for in the proposal and specifications. The Board requests that no alterations or interlineations be made by the bidder. If, however, the contractor is unwilling to submit his bid on the regular form without qualification he shall submit the bid on the proposal herein accompanied by a letter setting forth the qualifying provisions and insert and attach the letter hereto.

The proposal must give the price for the chemical proposed both in writing and in figures FOR THE INTENDED CONTRACT TERM AS SHOWN ABOVE. BIDDER MAY BID EITHER ONE, TWO OR ALL OPTIONS AS SHOWN ABOVE.

The form shall not be separated from the Contract Documents nor altered in any way.

Proposals must be signed and enclosed in a sealed envelope which shall be endorsed with the name and address of the bidder and with the words “*Proposal for Furnishing Pebble Quick Lime*”, and addressed to the Board of Directors.

If the proposal is made by an individual, it shall be signed with his usual business signature, with his business address and place of residence; if by a firm, the co-partnership name shall be signed by a member of the firm, and the name and address of each member shall be given; if by a corporation, it shall be signed by a duly authorized officer, with the corporate name attested by the corporate seal, and the business address of the corporation shall be given.

FREIGHT RATES/FUEL CHARGES. Bidders *shall include* any freight rate and/or fuel charges within their bid.

BID GUARANTY REQUIRED. All Bid Proposals shall be accompanied by a *Bid Guaranty* in the amount of **10%** of the bid reflecting the highest estimated usage and in the form as prescribed herein. Documentation certifying the surety is licensed to do business in the State of Ohio shall be provided.

PERFORMANCE BOND REQUIRED. A bond in the form hereto attached in the full amount of the contract will be required of the successful bidder for the faithful performance of the contract and to indemnify and save harmless the District and its officers and agents from claims, suits, and actions. **The full amount of the contract will be based on the highest estimated usage.** The bond shall be signed by the contractor and by a surety company or companies authorized to do business in the State of Ohio and satisfactory to the Board. Should any surety upon the contract at any time be deemed by the Board to be unsatisfactory, notice to the effect shall be given to the contractor, who shall forthwith substitute a new surety or sureties satisfactory to the Board; in such case, no further payment shall become due or be made under the contract until the new surety shall have been accepted by the Board.

EXECUTION OF CONTRACT. The bidder to whom the contract is awarded will be required to execute and deliver the contract and bond within ten (10) days from the date that notice of such award is given by the Board to him either personally or by mail directed to the business address stated in the proposal, and in case of failure or neglect to do so shall be deemed to have abandoned the contract.

APPROXIMATE QUANTITY. The maximum estimated quantity of use as given in the specifications is approximate and is given only as a basis for the uniform comparison of bids. The actual quantity required to be furnished under this contract may be greater or less than the quantity estimated as may be necessary in the judgment of the Board for the proper operation of the District works; and an increase or decrease in the quantity shall not be regarded as ground for a change in the unit price or claim by the contractor for loss or damage.

To aid the Engineer in determining the quantities of chemical to be paid for, the contract shall give him access to his records and shall provide assistance for weighing and measuring the chemical furnished hereunder.

In considering the various proposals received the Board will take into account the unit price proposed, the quality (including contents of impurities) and properties of the chemical offered in the proposal, and the previous use thereof in water purification operations.

Along with the proposal, the contractor shall submit analyses results from a certified representative sample of all contents including impurities

No proposals from recalcinated lime will be accepted

STATE OF OHIO
THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-546

FOR

FURNISHING PEBBLE QUICK LIME

JULY 1, 2018 TO JUNE 30, 2019 (ONE YEAR CONTRACT)

OR

JULY 1, 2018, TO JUNE 30, 2020 (TWO YEAR CONTRACT)

OR

**JULY 1, 2018 TO JUNE 30, 2020 WITH ONE MORE YEAR
OPTIONAL RENEWAL (JUNE 30, 2021)**

PROPOSAL

To the Board of Directors of
THE MAHONING VALLEY SANITARY DISTRICT

The undersigned, as bidder, declares that the only persons or parties interested in the proposal as principals are those named, that this proposal is made without collusion with any other person, firm or corporation, and is in all respects fair and without collusion or fraud; that he has carefully examined the annexed form of contract and the specifications therein contained, and has read the Information and Instructions for Bidders hereto attached; that he proposes and agrees that if this proposal is accepted, he will contract with The Mahoning Valley Sanitary District in form of contract hereto annexed, to furnish the chemical herein proposed to be furnished and required by the District for their next fiscal year(s) in accordance with the terms and provisions of the contract, and that he will take in full payment therefore the following price or prices, to wit:

For Furnishing Pebble Quick Lime, prepaid f.o.b. by truck, at District Plant, Mineral Ridge, Ohio, the sum of _____ Dollars
(\$ _____) per ton (2,000 pounds) for FY2019

OR

For Furnishing Pebble Quick Lime, prepaid f.o.b. by truck, at District Plant, Mineral Ridge, Ohio, the sum of _____ Dollars
(\$ _____) per ton (2,000 pounds) for FY2019 and FY2020

OR

For Furnishing *Pebble Quick Lime*, prepaid f.o.b. by *truck*, at District Plant, Mineral Ridge, Ohio, the sum of _____ Dollars (\$_____) per ton (2,000 pounds) for FY2019 and FY2020 and Optional FY2021

An alternate bid for furnishing *Pebble Quick Lime*, prepaid f.o.b. by truck, including any chemical safety training to the District Plant, Mineral Ridge, in the sum of _____ Dollars (\$_____) per ton (2000 pounds).

A deduction of _____ percent (_____) on the above bid price shall be allowed on all shipments paid for by the District by the tenth day of the month following delivery.

The chemical proposed will be manufactured by: _____ (Name of Manufacturer), _____ (Location of Works), and is known as _____ (Brand).

For the aforesaid unit price proposed for furnishing *Pebble Quick Lime*, the undersigned bidder agrees to furnish Lime containing a minimum of 92 % of water soluble calcium oxide in each carload lot* furnished, as determined by the analysis of a composite sample of the material collected upon delivery of each carload lot* and made up from portions sampled at not less than ten* distributed locations throughout the mass of the material; and the undersigned bidder agrees that the sampling and analysis shall be performed under the direction of the chemist of the District at the laboratory of the Water Purification Plant of the District, with use of the so-called "sugar method" of analysis as outlined in the 9th Edition (1962) Water Supply and Water Treatment, Bulletin 211, published by National Lime Association, and that the determination of the Engineer based thereon shall be final.

SUGAR TEST. Dissolve 0.5 grams of finely pulverized sample in 100 ml of a 10 percent sugar solution and shake for one hour on shaking machine. Filter this solution through a dry filter. Titrate 25 ml with N/10 sulfuric acid, using phenolphthalein indicator. The burette reading multiplied by 2.244 = percent CaO.

Following is a statement of slaking test of the Lime proposed to be furnished:

100 grams of a sample of the Lime proposed to be furnished hereunder, and of the sizing specified in Section 7 of the specifications herein, was added to 400 cubic centimeters of distilled water at a temperature of 25° Centigrade; the mixture was constantly stirred and its temperature at the end of a period of three minutes was _____ degrees Centigrade.

See paragraph, bottom of page 19.

***When diluted sufficiently with water, all of the lime is expected to go into solution.**

Following is a list of municipal water purification plants in the United States where chemical of the brand proposed has been used successfully in operation:

_____	_____
_____	_____
_____	_____

The full names and residences of all persons and parties interested in this proposal are as follows:

(Note: For each person, give first and last name in full. Record each member of a co-partnership. In the case of a corporation, give the names of the President, Secretary, Treasurer, and Manager, and state the place of incorporation.)

Company Name _____ Federal Tax ID No. _____

Signature of Bidder _____

Business Address of Bidder _____

***** REMIT ADDRESS:** _____

_____ Telephone No.: _____

PURCHASING DEPARTMENT CONTACT

PHONE NUMBER (FOR ORDERING PRODUCT)

Dated at _____ the _____ day of _____, 20____.

STATE OF OHIO
THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-546

FOR

FURNISHING PEBBLE QUICK LIME

JULY 1, 2018 TO JUNE 30, 2019 (Check for multiple year contract dates if selected)

AGREEMENT

THIS AGREEMENT made and entered into this _____ day of _____ 2018, by and between The Mahoning Valley Sanitary District, a legally incorporated political subdivision of the State of Ohio, with offices at District Purification and Pumping Plant, Mineral Ridge, Ohio, address PO Box 4119, Youngstown, Ohio 44515, acting through its Board of Directors, duly authorized in the premises, Party of the First Part, and _____ with legal address and principal place of business at _____ hereinafter designated as the Contractor, Party of the Second Part.

WITNESSETH: That the parties to these presents, each in consideration of the undertakings, promises and agreements on the part of the other herein contained, have undertaken, promised and agreed, and do hereby undertake, promise and agree, the Party of the First Part for itself and for its successors and assigns, and the Party of the Second Part for itself and for its heirs, executors, administrators, successors and assigns, as follows:

ARTICLE I. Wherever the words defined in this Article, or pronouns used in their stead, occur in this contract they shall have the meanings here given:

The word "District" shall mean the corporation of The Mahoning Valley Sanitary District, organized and existing under the "Sanitary District Act of Ohio", Sections 6115.01 to 6115.99 inclusive of the Revised Code of Ohio.

The word "Board" shall mean the Board of Directors of The Mahoning Valley Sanitary District, or any agency or officer duly authorized to act for the District in execution of the work required by this contract.

The word "Engineer" shall mean the Chief Engineer of The Mahoning Valley Sanitary District or such other person as may be performing the duties of that position, acting directly or through property authorized agents, such agents acting within the scope of the particular duties entrusted to each.

The word "Contractor" shall mean the Party of the Second Part, heretofore designated, entering into this contract and the legal representatives of said Party, or the Agent appointed to act for said party in the performance of the work.

The word “Contract” shall mean, collectively, all of the covenants, terms and stipulations in these Articles of Agreement and in the five supplementary documents hereto attached which constitute essential parts of the agreement and are hereby made such parts thereof, to wit:

- Information and Instructions for bidders
- Proposal
- Agreement
- Bid Bond
- Performance Bond
- Certificates
- Specifications

The word “Specifications” shall mean, collectively, all of the terms and stipulations contained in the “Specifications” appended to this agreement.

ARTICLE II. All work necessary for furnishing and delivering the chemical under this contract shall be done to the satisfaction of the Engineer, who shall in all cases determine the amount, quality, acceptability, and fitness of the chemical which is to be paid for hereunder, and shall decide all questions which may arise as to measurement of quantities, and the fulfillment of the conditions of this contract on the part of the Contractor, and his determination and decision thereon shall be final and conclusive and such determination and decision, in case any questions shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

ARTICLE III. The Contractor shall keep the work under his personal control, and shall not assign, transfer, convey, sublet, or otherwise dispose of this contract, or his right, title, or interest in or to the same or any part thereof, without previous consent in writing of the Board, and he shall not assign, by power of attorney or otherwise, any of the moneys to become due and payable under this contract, unless by and with the like consent of the Board; provided, that nothing herein contained shall be construed to hinder, prevent, or affect an assignment by the Contractor for the benefit of his creditors, made pursuant to the Statutes of the State of Ohio.

ARTICLE IV. If the Contractor shall fail to furnish and deliver the chemical as provided by this contract, or shall sublet the contract, or if he shall violate any of the provisions of this contract, the Board may notify the Contractor to discontinue the contract, or any part thereof, as the Board may designate; and thereupon the Contractor shall discontinue such contract, or part thereof, and the District may thereupon by contract or otherwise as it may determine to complete the contract, or such part thereof, and charge the expense thereof to the contract, which expense shall be deducted and paid by the District out of any money then due or to become due to the Contractor under this contract, and in case such expense is less than the sum which would have been payable under this contract, if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference; and in case such expense shall exceed the latter sum the Contractor, or in case of his default, his surety, shall pay the amount of such excess to the District.

ARTICLE V. The District shall pay and the Contract shall accept as full compensation for everything furnished and done by the Contractor under this contract and for well and faithfully completing the contract, as herein provided, the following price or prices, to wit:

For Furnishing Pebble Quick Lime, prepaid f.o.b. by truck, at District Plant, Mineral Ridge, Ohio, the sum of _____ Dollars (\$ _____) per ton (2,000 pounds) for FY2019

OR

For Furnishing Pebble Quick Lime, prepaid f.o.b. by truck, at District Plant, Mineral Ridge, Ohio, the sum of _____ Dollars (\$ _____) per ton (2,000 pounds) for FY2019 and FY2020

OR

For Furnishing Pebble Quick Lime, prepaid f.o.b. by truck, at District Plant, Mineral Ridge, Ohio, the sum of _____ Dollars (\$ _____) per ton (2,000 pounds) for FY2019 and FY2020 and Optional FY2021

An alternate bid for furnishing Pebble Quick Lime f.o.b. via truck (prepaid), Mineral Ridge, Ohio, the sum of _____ Dollars (\$ _____) per ton of 2000 pounds which includes any chemical safety training.

The aforesaid prices shall be the price per ton to be paid by the District and accepted by the Contractor as full compensation for Pebble Quick Lime containing 92% percent of water soluble calcium oxide, and shall be modified as provided in Section 9 &10 of the Specifications if the Lime furnished shall be determined to contain a different percentage of water soluble calcium oxide.

ARTICLE VI. From time to time during the fulfillment of the contract, generally once in each month, the District shall pay to the Contractor the amount determined to be due to the Contractor for the chemical furnished hereunder during the preceding month.

If payment shall be made by the District to the Contractor by the tenth day of the month following deliver, the unit price shall be reduced by the deduction of _____ percent (_____%) thereof, and such unit price so reduced shall be the full compensation to be paid by the District and accepted by the Contractor for such chemical.

The acceptance by the Contractor of any such payment as aforesaid shall operate as and shall be a release to the District, the Board and each member of the Board and its agents, from all claim and liability to the Contractor for anything done or furnished for or relating to the material for which such is made, or for any act or neglect of the District, or of any person, relating to or affecting such work.

ARTICLE VII. The Contractor's address given in the Proposal is designated as the place to which notices, letters, and other communications to the Contractor shall be mailed or delivered. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter, or other communication upon the Contractor personally.

IN WITNESS WHEREOF, the parties to this Agreement hereunto set their hands and seals in Duplicate, the day and year first above written.

THE MAHONING VALLEY SANITARY DISTRICT

(Seal)

BY: _____
President, Board of Directors

BY: _____
Attorney for MVSD

ATTEST:

Secretary, Board of Directors

VENDOR:

(Seal)

ATTEST:

STATE OF OHIO
THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-546

FOR

FURNISHING PEBBLE QUICK LIME

**JULY 1, 2018 TO JUNE 30, 2019 (amend fiscal years if
multiple contract years are accepted)**

BID BOND

KNOW ALL MEN BY THESE PRESENT: That _____

_____ as Principal, hereinafter called

Bidder, and _____ as
Surety, hereinafter called Surety, are held and firmly bound unto The Mahoning Valley Sanitary
District, Mineral Ridge, Ohio, as Obligee, hereinafter called Owner, in the amount of

_____ Dollars (\$_____),
for the payment whereof Bidder and Surety bind themselves, their heirs, executors,
administrators, successors, and assigns, jointly and severally, firmly by these presents.

Whereas, Bidder has signed and submitted to or is about to submit to the Owner the
attached Proposal dated _____, 20 ____ for the furnishing and delivery of
said chemical in accordance with the Contract Documents referred to in the Proposal, which
Proposal is by reference made a part hereof and is hereinafter referred to as the Bid;

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the
Bidder shall, within ten (10) days of the date of Notice of Award of Contract, deliver to the
owner the Performance Bond specified in the contract documents, and enter into a contract with
The Mahoning Valley Sanitary District in accordance with the terms of said Proposal and the
other Contract Documents then this obligation shall be null and void; otherwise it shall remain in
full force and effect, and the full amount of this Bid Bond shall be paid to the Owner, not as a
penalty, but as stipulated damages to the Owner.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Owner named herein or its successors.

Dated this ____ day of _____, 20 ____.

Witness

Bidder

By _____

Title

Witness

Surety

By _____

Title

NOTICE: Proof of the authority of the person signing this Bond on behalf of the Surety shall be attached hereto.

STATE OF OHIO
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**JULY 1, 2018 TO JUNE 30, 2019 (amend fiscal years if
multiple contract years are accepted)**

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

_____ as Principal, and

_____ as Surety, are held and firmly bound unto The Mahoning Valley Sanitary District, a political sub-division of the State of Ohio with its principal place of business located at District Plant, Mineral Ridge, Ohio, and address PO Box 4119, Youngstown, Ohio 44515, in the sum of

_____ Dollars (\$ _____) lawful money of the United States of America, to be paid to The Mahoning Valley Sanitary District, or to its certain attorney, successors or assigns, for which payment, well and truly to be made, we hereby bind ourselves, and our several and respective heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

Sealed with our seals, signed and dated at _____ this _____ day of _____, 20 ____.

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT WHEREAS, the above named Principal did on the _____ day of _____, 20 ____, enter into a contract with The Mahoning Valley Sanitary District for furnishing the above mentioned chemical which said contract is annexed hereto and is made a part of this bond the same as though set forth herein.

NOW, THEREFORE, if the above named Principal shall pay to all persons, firms, or corporations, the amounts justly due for performing labor of furnishing equipment, materials and supplies for use in the work under the said contract, and shall satisfy all claims against The Mahoning Valley Sanitary District howsoever originating from any of the operations under the said contract, and shall fully indemnify and save harmless the said District from all cost and damage which it may suffer by reason of the failure of the said principal so to do, and in all other particulars shall well and faithfully do and perform all of the things agreed by him to be done and performed under the said contract according to the terms, covenants and conditions thereof, all and singular, then this obligation shall be void; otherwise it shall remain in full force and effect.

IT IS FURTHER EXPRESSLY AGREED AND UNDERSTOOD by all parties hereto that no modifications, omissions or additions in or to the terms of said contract, or in or to the specifications thereof, shall in any wise affect the obligation of the surety on this bond; and that the liability of said surety for any and all claims hereunder shall in no event exceed the amount of the obligations as herein stated.

Signed, sealed and acknowledged in the presence of:

ATTEST:

Witness

(Seal)

Contractor's Signature

(Seal)

Surety

CERTIFICATE OF AWARD OF CONTRACT

I hereby certify that execution of the foregoing contract on the part of The Mahoning Valley Sanitary District has been duly authorized by Resolution No. ____ of the Board of Directors passed on the ____ day of _____ 2018.

Dated: _____, 2018

Alan Tatalovich
Secretary, Board of Directors

=====

CERTIFICATE OF FUNDS

I hereby certify that the estimated amount of money required to meet the obligations of the foregoing contract, to wit: _____
AND ___/100 DOLLARS (\$_____) has been lawfully appropriated for such purpose and is in the Treasury of The Mahoning Valley Sanitary District or in process of collection, credited to the appropriate fund and free from any previous encumbrances.

Dated: _____, 2018

Alan Tatalovich, Treasurer
The Mahoning Valley Sanitary District

STATE OF OHIO
THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-546

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FURNISHING PEBBLE QUICK LIME

JULY 1, 2018 TO JUNE 30, 2019 (ONE YEAR CONTRACT)

OR

JULY 1, 2018, TO JUNE 30, 2020 (TWO YEAR CONTRACT)

OR

**JULY 1, 2018 TO JUNE 30, 2020 WITH ONE MORE YEAR OPTIONAL
RENEWAL (JUNE 30, 2021)**

SPECIFICATIONS

SECTION 1. All chemicals furnished under this contract shall be delivered to the District Purification Plant, Mineral Ridge, Ohio. The Contractor shall prepay all freight charges to the point of delivery.

It is expected that the chemical to be furnished under this contract will be taken by the District at an approximately uniform rate throughout the period of the contract, but the Contractor shall deliver the chemical in such quantities and at such times as may be designated – either in writing, by telephone, or to contractor’s agent in person – from time to time, and the contractor shall make delivery, by truck, on the date specified. If contractor is unable to meet above requirements, the District shall be notified by telephone to arrange for alternate date or alternate means of delivery. **The Typical Analysis of Pebble Quicklime required under this contract is attached as Exhibit A including analysis of impurities. Provide product compliance certificate with NSF/ANSI 60 and 61: Drinking Water Treatment Chemicals certificate; Drinking Water System Components.**

SECTION 2. APPROXIMATE QUANTITIES. Following is an approximate statement based upon the estimate of the Engineer of the quantity of chemical to be furnished under this contract for the fiscal year:

Estimated Annual Use of 1400 tons – 3500 tons

SECTION 3. The chemical to be furnished under this contract shall be produced by the manufacturer and at the works stated in the proposal, and the contract shall not change the manufacturer or location of production of the chemical without the previous consent in writing of the Board.

SECTION 4. If any lot of material as delivered be found to fail to comply with the requirements of these specifications, it shall be rejected and shall be removed by the Contractor at his expense, and any cost which may have been incurred by the District in connection with the

unloading and reloading of the material shall be deducted from the amount payable to the Contractor under this contract.

SECTION 5. The lime shall be delivered in pneumatic blower trucks capable of delivering this chemical to the chemical bins. Special care shall be taken to close all openings so as to prevent loss of lime by shifting, circulation of air, and admission of moisture. It is the responsibility of the Contractor to furnish trucks that are in good condition, clean inside and out, free of debris on top, and with chemical discharge gates readily operative.

SECTION 6. The lime to be furnished under this contract shall be freshly burned rotary kiln quick lime, usually known as *Pebble Lime*. **No recalcinated lime will be accepted.** It shall be a brand which has previously been used successfully in operation of municipal water softening plant of the United States. It shall be of the quality known as quick slaking and shall slake satisfactorily with the continuous admixture of water of temperature of 50°F, without production of objectionable amounts of impurities, undissolved material or unslaked lime in the water.

SECTION 7. The lime shall be crushed and screened so that the **lumps will range in size from 3/8" to 3/4"**, or shall be of such other sizing as may be ordered. The lime shall be suitable for handling by pneumatic conveying equipment, storage in closed hopper bottomed concrete bins, and measurement and application through dry feed machines; and shall have no characteristics or shall contain no impurities or foreign matter which would interfere with such handling, storage and application.

SECTION 8. The content of water soluble calcium oxide of each four truckload lot of lime, as determined under the direction of the District's chemist, shall be not less than 92% by weight, and if any truckload lot of the material as delivered shall be so determined to contain less than 92% of water soluble calcium oxide or if in any other respect it shall be found to fail to comply with the requirements of these specifications, it shall be rejected and shall be removed by the Contractor at his expense, and any cost which may have been incurred by the District in connection with unloading and reloading of the material shall be deducted from the amount payable to the Contractor under this contract.

SECTION 9. The District has four lime storage silos each capable of holding four truck loads of lime. Each four-truckload lot shall be considered as a unit for the purpose of determining the water soluble calcium oxide content of the lime and in determining the amount payable to the Contractor under this contract.

For any truckload lot determined, as herein provided, to contain the percentage of water soluble calcium oxide which is agreed to be furnished by the Contractor in the proposal, the full compensation to be paid by the District, and accepted by the Contractor, shall be the same price per ton set forth in the proposal.

SECTION 10. The quantity of *Pebble Quick Lime* to be paid for shall be the actual quantity delivered based upon freight bill weights determined by the carrier.

SECTION 11. The supplier shall have successfully furnished *Pebble Quick Lime* in quantities needed by the District for a minimum of 4 years.

SECTION 12. All chemicals, materials, or substances furnished shall conform to American National Standards Institute/National Sanitation Foundation Standard 60 and 61 for Water Treatment. **Documentation shall be submitted with Bid Proposal.**

SECTION 13. As part of the alternate bid the Contractor shall provide chemical safety training to the employees of The Mahoning Valley Sanitary District. The Chemical Safety Training shall consist of course work addressing Chemical and Physical properties of the Chemical, the safe handling and feeding and any emergency training associated with the usage and storage of the chemical.

For any carload lot* determined as herein provided to contain a percentage of water soluble calcium oxide less than that agreed to be furnished by the Contractor in the proposal, the full compensation to be paid by the District and accepted by the Contractor shall be the price per ton determined as follows:

$$Pb = K(2L - D)$$

Pb = Price per ton to be paid for carload lot*
containing percentage of water
soluble Calcium Oxide less than
agreed to be furnished in proposal.

L = % CaO in Lime

$$K = \frac{B}{D}$$

B = Contract Price per Ton

D = Guarantee Analysis in % CaO

The unit price so determined shall include the furnishing and delivering of lime as herein before specified.

The quantity of *Pebble Quick Lime* to be paid for shall be the actual quantity delivered based upon freight bill weights determined by the carrier.

*See 1st paragraph on Page 6.

SUPPLIER MUST BE COMPLIANT WITH THE GHS – OSHA PROGRAM SUPPLYING PROPER LABELS AND SDS SHEETS.

EXHIBIT A



Typical Analysis of Pebble Quicklime

CHEMICAL ANALYSIS	3 / 4" x 1 / 4" PEBBLE QUICKLIME
Total CaO	93.00
Available CaO	88.50
MgO	2.65
Total Oxides	95.65
SiO ₂	1.95
R ₂ O ₃	0.86
Fe ₂ O ₃	0.16
Al ₂ O ₃	0.70
Sulfur	0.045
P	0.004
Loss on Ignition Total	1.50
CO ₂	1.10
H ₂ O	0.40

PHYSICAL ANALYSIS SCREEN SIZE	% PASSING
1 / 4"	100.0
1 / 2"	48.0
3 / 8"	18.0
1 / 4"	10.0
1 / 8"	8.0
#50	7.0

In addition, submit certified impurities analyses such as chromium (total), trivalent chromium, lead, etc. that can have impact on treated water quality.