



ERIE COUNTY WATER AUTHORITY

INTEROFFICE MEMORANDUM

May 22, 2018

To: Jerome D. Schad, Chairman and Mark S. Carney, Vice Chairman

From: Terrence McCracken, Secretary to the Authority

Subject: Award of Contract for Hydrofluorosilicic Acid to ControlChems

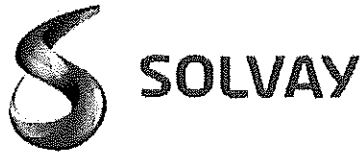
Attached please find a memo from John Mogavero, Chemist/Chief WPTO regarding hydrofluorosilicic acid, used to add fluoride to the water system. As you may recall, this matter went out to bid in February of 2018. Five companies responded to the bids with products meeting the minimum requirements as set forth by the AWWA. ControlChem, one of the five bidders, provided a superior product and consequently, submitted the highest bid.

Based on Mr. Mogavero's recommendation, the Board set aside these bids and directed, by resolution on April 5, 2018, a new bid solicitation be posted based on the superior, more expensive product. The February 2018 bidders have expressed their dissatisfaction with the Board's action. Attached is a letter received from one of these bidders. Another bidder has requested and has been provided with copies of the bids submitted during the February 2018 bid opening.

On May 8, 2018, seven companies submitted materials in response to the new bid solicitation. ControlChem was the only responsible, responsive bidder. The other bids were submitted either in protest or did not meet the bid specifications.

Russ Stoll advises that all forms of hydrofluorosilicic acid introduce certain impurities into the water system. These impurities cannot be removed because fluoridation occurs at the end of the treatment process. ControlChem's product is superior because it contains fewer or less potent impurities. However, the February 2018 bidders all submitted products meeting AWWA requirements and their products have been approved for use by the Erie County Department of Health.

The Board must decide whether to approve both the use and cost of this alternative product, weighing its costs against its benefits.



April 19, 2018

Erie County Water Authority
Attn: Mr. Joseph T. Burns
Secretary to the Authority
295 Main Street, Room 350
Buffalo, NY 14203-2434

Dear Mr. Burns,

Solvay Fluorides, LLC is writing you in response to your letter dated April 9, 2018 RE: Rejection of Bids Furnishing and Delivering of Fluorosilicic Acid to the Erie County Water Authority for use in the treatment of water for two years from March 15, 2018 through March 14, 2020 Project No. 201800015.

While we were not the lowest bidder on the bid referenced above Solvay is very concerned about the basis for the rejection and the revised specifications that are contained in the re-advertised Project. Solvay is formally requesting a formal review of the actions taken by the Authority.

We believe that the Authority is taking action that is not in the best interest of the Authority or its community.

Solvay is a past supplier to the Authority and has been one of the largest manufacturers and marketers of Fluorosilicic Acid for over 40 years and have been long time members of the AWWA Standards Committee on Fluoridation that set the Standards for drinking water additives.

The basis of our concern is as follows:

We find that in the revised bid documents dated March 28, 2018 The Technical Specifications (PS5-1) in Section 2. Character of Hydrofluorosilicic Acid have been revised to set source requirements and impurity limits to specifically favor one specific bidder for this requirement. In fact we are not aware of any other bidder in North America that can meet the Authority's revised specifications.

The highest bidder (by over \$270 per ton) on the rejected bid is a company called Control Chem based in Canada. This Canadian distributor is importing Fluorosilicic Acid from Spain for water fluoridation in the Toronto, Canada market. The Spanish product is a co-product of the reaction of calcium fluoride (fluorspar ore) with sulfuric acid for the production of hydrofluoric acid. Control Chem is marketing this product as being superior to fluorosilicic acid that is produced from any other process. Control Chem also has told some customers that their product is from "virgin" raw material. This is very misleading. The truth is that at least 98% of all fluorosilicic acid added to municipal water supplies in the US and Canada is a co-product of phosphoric acid production manufactured from phosphate ore.

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It is the source of the ore being processed that determines the level of impurities in the product as each ore body has different level of contaminants. All ore is "virgin" and this is the reason that the AWWA and NSF Std. 60 requirements do not stipulate the process or origin of the fluorosilicic acid but rather set limits on impurities contained in the product.

By the Authority setting specifications that requires bidders to "furnish fluorosilicic acid manufactured from calcium fluoride production made from virgin raw materials" it would appear the Authority is following the false narrative promoted by Control Chem.

Furthermore, by the Authority specifying that bidders meet revised product specifications such as heavy metals as lead at 0.001% maximum, lead as PB <1.0 mg/L, and Arsenic <3.0 mg/L they are again catering to the published marketing specifications of Control Chem.

Solvay and other suppliers of fluorosilicic acid have product that is well below the contaminant levels set by AWWA and NSF Std. 60 and the New York State Department of Health.

It would seem that the Authority's Chemist and Chief WTPO, John Mogavero, has tailored the new specifications on fluorosilicic acid to favor Control Chem and eliminate other suppliers to participate in a true competitive bid process.

It is our hope that the information we have provided clarifies any misconceptions you have received and will motivate Erie County Water Authority to once again revise its specifications for Project 201800015.

Thank you for considering this protest and taking the appropriate action.

Sincerely,



Mark E. Looney
Solvay Vice President Sales and Marketing

Cc: John Mogavero
Gary Murray
Shari Zajdel



ERIE COUNTY WATER AUTHORITY

INTEROFFICE MEMORANDUM

May 18, 2018

To: Terrence D. McCracken, Secretary to the Authority

From: John J. Mogavero, Chemist/Chief WTPO

Subject: Furnishing and Delivering of Hydrofluorosilicic Acid
to the ECWA for Use in the Treatment of Water
for Two Years from March 15, 2018 through March 14, 2020
ECWA Project No. 201800015
Re-bid of Contract

Control Chem Canada LTD fluorosilicic acid product was pilot tested during the past months at Sturgeon Point and Van de Water. Control Chem Canada LTD has a minimal concentration or non detectable of heavy metals (lead, arsenic, copper etc.). The plants' fluoride chemical feed systems were able to maintain a consistent fluoride concentration 0.65 to 0.70 mg/L as regulated by the NYSDOH for the potable water supply. Maintaining a consistent fluoride dosage allows for a steady caustic soda feed rate and maintain a potable water pH 8.0 for corrosion control. Control Chem Canada LTD in past years have entered into the northeast areas with a manufactured fluorosilicic acid product having minimized heavy metals contaminants such as lead, copper, and arsenic. This additional benefit shall assist the Authority in meeting drinking water regulations for lead and copper control.

The other suppliers Mosaic, Solvay, Thatcher, and Univar provide fluorosilicic acid which contains a byproduct from the production of soil fertilizers. In the past years, these suppliers were the only providers to supply the byproduct fluoride to the market.

The Authority solicited bids in January, 2018. My recommendation, based on water quality parameters, was to award the fluorosilicic acid contract (ECWA Project Number 201800015) to Control Chem Canada LTD.

In order to do this, the current bids (February, 2018 bid opening) were rejected, and we changed the parameters of our spec to require a higher grade purity product.

The bid opening for this new bid with the revised specs was advertised and opened on May 8, 2018. A review of the bid submittal documentation and tabulation shows that the hydrofluosilicic acid product offered only by Control Chem Canada Ltd. meets the Technical Specifications (Section 5 of the Project Manual). Other bidders: Thatcher, Mays, Shannon, Univar, and DuBois offer hydrofluorosilicic acid which is a byproduct from production of soil

fertilizers

On page PS3-14, Information Required from Bidders – Experience, Shannon Chemical Corporation noted “too many to list” and offered no further information. Also, they did not submit a certificate of analysis of their product, which is not manufactured as calcium fluoride but as a fertilizer by-product.

Univar USA, Inc./Mays Chemical Co., Inc. suppliers: Mays bid and certificate analysis shows Univar as the supplier to Mays Chemical. The determination is same, these suppliers do not meet the specifications as manufacture product of calcium fluoride.

It should be noted that Univar’s rejected bid cost was \$345 per ton and their bid submittal on May 8, 2018 shows a cost of \$510 per ton, increase of \$165 per ton. Their bid documentation lacks noting if the grade of hydrofluorosilicic acid differs to product bid on April 6, 2018.

Thatcher product is not a manufactured as calcium fluoride product. Thatcher’s hydrofluorosilicic product is a fertilizer by-product. Thatcher’s certificate of analysis states that their hydrofluosilicic acid is a Pencco product. Thatcher previous bid on April 6, 2018 and past contracts had Mosaic as a supplier of hydrofluorosilicic acid to Thatcher.

Based on water quality parameters and meeting the technical specifications I recommend to award the hydrofluorosilicic acid contract (ECWA Project Number 201800015) to Control Chem Canada Ltd in the amount of \$527,680.00. Control Chem provides a manufactured product of calcium fluoride, has the least percent of containments, and lowest concentrations of lead and arsenic.

One last note, three of the seven current bidders reside on the AWWA Fluoride Committee. This committee sets the standards of what byproducts are acceptable. The Authority is seeking a product that is of higher quality than the current standards of AWWA.

Bidder (Bids opened on 05/08/2018)	Unit Price	Total Cost	Bid Bond Check	C of A*	Manufacture d as Fertilizer By-Product	Manufacture Product as Calcium Fluoride	Approved to Specifications
Thatcher	\$329.00	\$319,130.00	No check	Yes	Yes	No	No
DuBois	\$407.77	\$395,536.90	No check	No	Yes	No	No
Mays (Supply by Univar)	\$495.00	\$480,150.00	yes	Yes	Yes	No	No
Univar	\$510.00	\$494,700.00	No check	Yes	Yes	No	No
Control Chem	\$544.00	\$527,680.00	Yes	Yes	No	Yes	Yes
Shannon ship cost to SP	\$787.87						
Shannon ship cost to VW	\$814.14	\$770,801.40	No Check	No	Yes	No	No
Solvay				No Bid Submitted			

*C of A – Certificate of Analysis

Bidder	% Fluoride	Phosphorous	P ₂ O ₅ (Phosphate)	Arsenic	Lead	% Containment
Thatcher	24.1	1.72	3.62	1.2	0.11	No Results
DuBois	No Certificate of Analysis					
Mays (supply by Univar)	25.4	2.04	No Results	1.05	0.09	2
Univar	25.4	2.04	No Results	1.05	0.09	2
Control Chem	25.0	Not Detected		< 3	< 1	< 0.001%
Shannon	No Certificate of Analysis					
Solvay	No Bid Submitted					


Cost Comparison of Bid of April 6, 2018 (rejected) to Bid Opening May 8, 2018

Per Ton

Previous Bid 4/6/18	Unit Price	Increase Cost	Decrease Cost	Resubmitted Bid Opening May 6, 2018
Mosaic	\$278.00			No Bid
Solvay	\$317.00			No Bid
Thatcher	\$333.00		\$4.00	Yes
Univar	\$345.00	\$165.00		Yes
Control Chem	\$549.00		\$5.00	Yes

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**American Water Works
Association**

ANSI/AWWA B703-11
(Revision of ANSI/AWWA B703-06)

The Authoritative Resource on Safe Water®

AWWA Standard

Fluorosilicic Acid



Effective date: Nov. 1, 2011.

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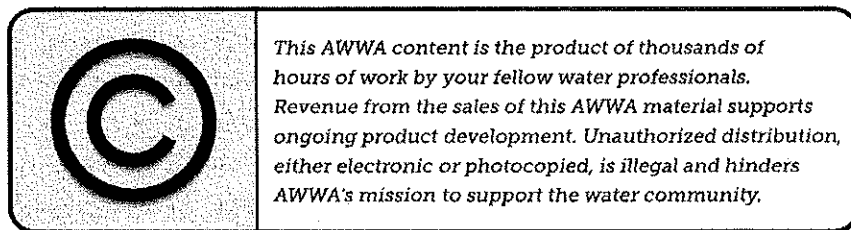
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Committee Personnel

The AWWA Standards Committee on Fluorides, which reviewed and approved this standard, had the following personnel at the time of approval:

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Gus Navar, *Secretary*

General Interest Members

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H.C. Liang, Tetra Tech, Denver, Colo. (AWWA)

M.L. Magnant, Department of Public Health, Des Moines, Iowa (AWWA)

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S.J. Posavec,* Standards Group Liaison, AWWA, Denver, Colo. (AWWA)

L.F. Vaughn,* Linda Vaughn Inc., Chapel Hill, N.C. (AWWA)

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Producer Members

R.L. Horne, Pennco Inc., Sealy, Texas (AWWA)

M.E. Looney, Solvay Fluorides, Houston, Texas (AWWA)

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User Members

J.E. Fields, Metropolitan Water District of Southern California, Whittier, Calif. (AWWA)

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D.W. Heumann, Los Angeles Department of Water & Power, San Gabriel, Calif. (AWWA)

G. Pihera, Clayton County Water Authority, Jonesboro, Ga. (AWWA)

S. Rezanian, City of Minneapolis, Minneapolis, Minn. (AWWA)

C.E. Stringer, Dallas Water Utilities, Dallas, Texas (AWWA)

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J.S. Trotter, City of Bloomington Utilities, Bloomington, Ind. (AWWA)

* Liaison, nonvoting