

**Memorandum  
Public Works Department**



**To:** City Manager  
**Subject:** Anthracite Coal Purchase  
**Date:** August 19<sup>th</sup>, 2011  
**Number:** 2011-252

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The water treatment plant performs an annual filter coal inventory/inspection in each of its sixteen (16) filter beds. Our current inventory indicated that the anthracite coal depth in each bed has been reduced due to filter backwashing and other natural occurrences. Based on filter design, it is recommended that the average level of anthracite coal in each filter be maintained between 24"-27" in depth. Our current average depth is 20.95", approximately 3" below the recommended minimum operating depth. If we continue to allow the filters to operate below the recommended levels, the overall effluent water quality could be impacted negatively.

In order to return each filter to the recommended minimum coal depth, forty (40) tons of anthracite coal would need to be added and divided accordingly into each filter. According to previous purchase records, the last time anthracite coal was purchased was in 2005.

Accompanying this memorandum is the filter inventory spreadsheet showing the measurements taken in each filter and the cost quote provided by Unifilt Corporation. Anthracite coal is included in the annual joint purchase council chemical bid; therefore, Unifilt Corporation has been awarded all purchases for the 2011 calendar year. This proposal is valid for thirty (30) days from August 18<sup>th</sup>, 2011.

**Recommendation**

The Public Works Department recommends that the City Council approve the purchase of forty (40) tons of Anthracite Coal in the amount of \$13,800.00.

Vendor: Unifilt Corporation  
Payment Amount: \$13,800.00  
Account Chargeable:  
Fund: 501 Water Operations/Maintenance  
Division: 618 Utilities Services  
Cost Center: 352 Water Treatment Plant  
Object Code: 52217 Chemicals/Treatment Plant

Requisition Number: R002561  
Purchase Order Number:

**Submitted by:** Robert T. Hawes, P.E., Assistant City Manager/Public Works Director  
Larry P. Cook, Utilities Superintendent

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**Approved by:** John C. Phillips, City Manager

Filter Coal Inventory - June 2011  
Bed Depth Measurement in Inches

Filter	LF Corner	LR Corner	LF Sweep	LR Sweep	Center	RF Sweep	RR Sweep	RR Corner	RF Corner	Average Depth	Estimated CU FT	Min CU FT Missing	Max CU FT Missing	Min Tons Needed	Max Tons Needed	1 Ton Bags Per	1 Ton Bags Per
1	17.5	18.5	17.5	18	19	18	17.25	18	17	17.86	544.02	185.98	280.98	5.31	8.03	5	8
2	21.5	20.5	20.5	20.5	20.25	19	19.5	19.75	17.5	19.89	605.78	124.22	219.22	3.55	6.26	4	6
3	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service										
4	17.5	19	17.5	15	15	18	18	18.5	17	17.28	526.25	203.75	298.75	5.82	8.54	5	8
5	22.25	22.75	24	22.5	23.5	24	23	24	23.25	23.25	708.16	21.84	116.84	0.62	3.34	1	3
6	26.5	25.25	25.5	24.5	Not Measured	23.75	24.25	24.75	24.5	24.88	757.65	-27.65	67.35	-0.79	1.92	0	2
7	21.5	20.75	22	21	17.75	19	24.25	21	20.25	20.83	634.55	95.45	190.45	2.73	5.44	3	5
8	20.75	21.75	20.5	21.25	20	20.75	21	21.5	21	20.94	637.93	92.07	187.07	2.63	5.34	3	5
9	17.5	17.5	18	19	19	18	17.25	18.5	17	17.97	547.40	182.60	277.60	5.22	7.93	5	8
10	21	21.75	21.5	22.24	23	22	21.75	22	21.25	21.83	664.97	65.03	160.03	1.86	4.57	2	4
11	22.75	22	23	23	23	23	22.75	22.5	22.5	22.72	692.08	37.92	132.92	1.08	3.80	1	4
12	22.75	19	23.5	19	18	23.5	20.5	25	24.25	21.72	661.62	68.38	163.38	1.95	4.67	2	4
13	22.25	22.25	23	23	23	23	22.75	22.25	22.25	22.64	689.54	40.46	135.46	1.16	3.87	1	4
14	22	22.5	23	22	25.5	21.5	22.5	21.5	22	22.50	685.31	44.69	139.69	1.28	3.99	1	4
15	19	18.25	17.5	18	Not Measured	16	16.5	17.5	21.5	18.03	549.20	180.80	275.80	5.17	7.88	5	8
16	21	21.5	22	22	23	21.5	22.5	22	21	21.83	665.01	64.99	159.99	1.86	4.57	2	4

39.44	80.16	40.00	77.00
Total Min	Total Max		

# UNIFILT CORPORATION

P.O. Box 614

WEBSITE: [www.unifilt.com](http://www.unifilt.com)

Ellwood City, Pennsylvania 16117 EMAIL: [jnocera@unifilt.com](mailto:jnocera@unifilt.com)

Phone (724) 758-3833 (800) 223-2882 Fax (724) 758-3870

August 18, 2011

via email: [cook.larry@rigov.org](mailto:cook.larry@rigov.org)

CITY OF ROCK ISLAND

Attention: Mr. Larry Cook

Re: Rock Island, Illinois  
Filter Anthracite

Dear Mr. Cook:

We propose to furnish the following Filter "Anthrafilt" Anthracite:

**FILTER ANTHRACITE -**

Effective Size - 0.60 - 0.80 mm

Uniformity Coefficient - 1.70 or less

TOTAL: 40.00 tons

Material meets applicable provisions of American Water Works Association Standard B100-09 for Filtering Material and listed under the National Sanitation Foundation Standard 61 - Process Media. Samples and/or in-house test report of each gradation or size can be provided for review and the final written approval for payment must be received at our plants prior to release for shipment. Any additional testing will be at the expense of others.

Material will be packaged in semi-bulk containers with lifting straps and bottom discharge spout, containing approximately 2,000-pounds per sack, non-palletized. The weight of the packaged anthracite is the weight at the time of packaging at the production facility and includes moisture, which may or may not be present after transportation and storage.

We do not include any taxes that may be applicable. Prices good for 30 days.

NOTE: Due to the fuel situation, we find it necessary to document that the applicable fuel surcharge (if any) in effect at the time of shipment will be added to all freight. Also the freight listed below is an estimate of the freight cost and will be billed at the actual cost at time of shipment.

UNIFILT can furnish the necessary equipment and labor required for removal (on-site disposal) and the "hydraulic" installation of the new media. Pricing available upon request.

Overseeing the installation of the filter media, by a qualified field technical representative to instruct, monitor, and advise the Contractors' personnel in proper placement of the filtering material, can be provided at an additional cost of \$700/day plus travel expenses from Wilkes-Barre, Pennsylvania.

TOTAL PRICE:--FOB Shipping Point (Packaged Material) =**\$10,100**  
**ADD** for truck freight to jobsite =**\$ 3,700**  
**\$13,800**

Terms: Net 30 days from date of invoice with approved credit.

Should you have any questions, please feel free to contact us at your earliest convenience.

Sincerely yours,

UNIFILT CORPORATION

*Julie K. Nocera*

Julie K. Nocera  
VP of Sales

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Acknowledge and accept on this \_\_\_\_ day of August, 2011.

CITY OF ROCK ISLAND

Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Signature: \_\_\_\_\_

Purchase Order No. (if applicable): \_\_\_\_\_

Please advise ship to and bill to addresses:

**SHIP TO:**

**BILL TO:**

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9604

Material is available for shipment in late September, early October, but we would need an order in the next day or two to hold that.