CITY OF ANN ARBOR PURCHASING BID OPENING TABULATION

INVITATION TO BID (ITB)# 4549 - Carbon Replacement in Odor Control Units

BIDDER NAME	ACKNOWLEDGED ADDENDA (YES/NO)	CONFLICT OF INTEREST (YES/NO)	NON- DISCRIMINATION DECLARATION (YES/NO)	LIVING WAGE DECLARATION (YES/NO)	TOTAL BASE BID
1.) Courbon Actuated Corp.	YES	YES	YES	YES	\$82,000.00
2.) Pure Air Filtmton	YES	YES	YES	YES	\$101,430.00
3.) W.S.I. Industrial Services, Inc.	YES	YES	YES	YES	\$102,000.00
4.) Nichem Co.	YES	YES	YES	YES	\$ 111,310.00
5.)					
6.)					
7.)					
8.)					
9.)					
10.)					
11.)					

Bid Recorded By: Hh



3774, Hoover Road, Blasdell, NY 14219. Tel: (716) 821 7830. Fax (716) 821 0790. www.activatedcarbon.com

City of Ann Arbor

September 10, 2018

Purchasing Department, Customer Sericices

301 East Huron Steet

Ann Arbor, MI 48104

Ref;- ITB NO. 4549

Dear Sir

Thank you for the invitation to bid for the carbon replacement of the odor control systems at the City's WWTP.

Carbon activated is a major supplier to the municipal water treatment market of both potable and odor control activated carbons. The company employs its own service teams to provide on- site carbon exchange services and operates its own carbon reactivation plants for the disposal / recycling of spent carbons.

Some of major projects in the Odor Control market are -

\$ 82000 with the City of Ann Arbor -2015

\$750000 contract with MWRA for the City Of Boston

\$50000 contract with Fairfax County in Virginia.

We have selected our pellet grade COL PA 60 HS3 product for this application as a superior alternative to the products given in the bid document, which has a very high hydrogen sulfide capacity and still maintains high adsorbent capacities for other odorous compounds present in sewer gases,(amines, voc's etc) We enclose a certified analysis of a batch of this material confirming the H_2S capacity as 0.3 gms/cc. –Batch LMC/LA/17/05

We enclose our completed bid document, bid bond and company summary for your review and please contact us for any additional information.

Sincerely.

Christopher Allen

INVITATION TO BID

City of Ann Arbor
Guy C. Larcom Municipal Building
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements, Vendor Conflict of Interest Form, Living Wage requirements, Instructions to Bidders, Bid Forms, Purchase Order Terms and Conditions, General Conditions, Detailed Specifications, and all Addenda, and understands them. The Bidder declares that it conducted a full investigation of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS	DAY OF SEPTEMBER, 201 3.
Canasa karunca Consention Bidder's Name	Authorized Signature of Bidder
3774 House Road Binivers Official Address N.Y. 142191	(Print Name of Signer Above)
7/6 311 7730 Telephone Number	Email Address for Award Notice

LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is:

* A corporation organized and doing business under the laws of the State of	
CALLEGORNIA, for whom Ellar 126 HAZA ALLEN, bea	aring the office title
of Nuccion, whose signature is affixed to this Bid, is authorized to e	execute contracts
NOTE: If not incorporated in Michigan, please attach the corporation's Certificate	of Authority
A limited liability company doing business under the laws of the State whom bearing the title of whose signature is affixed to this proposal, is authorized to execute contract of LLC.	of,
* A partnership, organized under the laws of the state of and of, whose members are (list all members and the street and reach) (attach separate sheet if necessary):	nailing address of
* An individual, whose signature with address, is affixed to this Bid: (initial	l here)
Date	_, 201_
(Print) Name Title	
Company:	
Address:	
Contact Phone () Fax ()	,
Email	

SPECIFICATIONS

1. REMOVAL AND DISPOSAL

The carbon in all three units shall be removed and disposed off-site in accordance with all local, state and federal regulations. Removal shall be done in accordance with the manufacturer's recommended procedure as indicated below. All hauling and disposal costs and all costs for any testing or analysis by a qualified laboratory that is necessary for disposal are included as part of this work. There will be approximately 33,500 pounds of carbon to be disposed of. The three units can be off at the same time for carbon removal if immediately followed by carbon installation. Use of City equipment other than the elevator is strictly prohibited. The elevator has a capacity of 10,000 lbs. and shall be protected with blankets to prevent any damage No vacuum hoses (if needed) can be placed in stairwells; they must be placed outside of the building to reach from the ground level to the third floor.

The City will remove the lid and ductwork for access, only if the means, methods and equipment recommended by the manufacturer fail to work. The manufacturer recommends removing the lid only if absolutely necessary and utilizing the 8" ports for carbon replacement and inspection of the vessels and screens.

Media Removal

To Remove Media:

- 1. Make sure system fan is off.
- 2. Remove the media loading/unloading spin-off lids on top of the vessel.
- 3. Use appropriate media pneumatic vacuum system to suck media from vessel following vacuum equipment guidelines.
- 4. Once media is removed, inspect internal and media containment system for wear, damage or deformation. Inform City of Ann Arbor personnel if any failures, issues, or damages are found in the carbon vessels.
- 5. Dispose of spent media in appropriate and approved manner.
- 6. Install fresh media as described above.
- 7. Replace lids.
- 8. Follow system start up procedures.

2. ACTIVATED CARBON TO BE SUPPLIED

Bidder shall supply approximately 11,000 lbs (345.2 cubic feet) of High Capacity carbon per vessel as specified. A total of 33,500 pounds shall be supplied in a single delivery. Each lot of carbon shall be delivered with an accompanying analysis sheet. The carbon must be manufactured to adsorb vapor phase organic and malodorous compounds of the type typically generated in municipal wastewater. This media should have a 99% removal rate of H₂S and organic sulfides at the specified inlet concentrations. The media shall remove 95% minimum of non sulfide VOC at the specified concentrations. Acceptable carbon is Jacobi Carbon AddSorb® Sulfox-HC or approved equal meeting the following specifications:

Apparent Density (g/cc):

0.39 - 0.41

Moisture:

H₂S Breakthrough Capacity (g/cc of carbon):

Mean Particle Diameter:

8% max.

0.28 minimum

3.9 - 4.1 mm

Lab data to verify the alternative meets the carbon specification for absorption rate must be included with any proposed alternative and the following test method shall be used: ASTM D 6646 – Test Method for Determination of the Accelerated Hydrogen Sulfide Break Through Capacity of Granular and Pelletized Activated Carbon.

Vessel Design Calculations

Air Flow:

6,150 cubic feet per minute

Vessel Diameter:

108 inches

Carbon Volume:

345.4 cubic feet

Contact Time:

3.37 seconds

Safety Precautions

It has been confirmed that wet granular activated carbon confined in vessels creates an oxygen demand, which is hazardous to human health and can cause death unless proper safety precautions are taken. Studies conducted in vessels have shown that low oxygen content exists in vessels containing wet carbon. Laboratory experiments conducted also have revealed that commercial activated carbons in a wet or moist condition will lower the oxygen content of an isolated space. Preliminary indications of this research are:

== The phonomenon occurs with wet activated carpon of all common type	vith wet activated carbon of all co	mon types
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- The rate of oxygen uptake naturally varies with the degree of exposure of the wet carbon to the air. Thus it is relatively rapid in a drained enclosure.
- There is some indication of a limit to carbon's capacity for oxygen, but until
- more is known, it would be prudent to assume that all carbon (fresh, used,
- reactivated) will also exhibit this characteristic. Similarly, although these tests were run with water, it should be assumed that the phenomenon would occur in other liquid and vapor systems.

All confined spaces, including those containing activated carbon, should be presumed to be hazardous. Appropriate safety measures should always be taken before entering, as well as when workers are in, a confined space. OSHA regulations applicable to respiratory protection in oxygen-deficient atmospheres should be strictly adhered to.

3. INSTALLATION OF CARBON

The correct amount of Carbon shall be installed into each of the three vessels, which are located on the third floor of the Solids Handling Building. Installation of the carbon shall be done in accordance with the Manufacturer's recommended procedure.

Media Installation

Before Installation

- 1. Visually inspect the vessel interior and media support baskets for any visible defects. Ensure the baskets are centered and straight.
- 2. Visually inspect that the polypropylene screen covering the baskets is intact.

Installation

1. Media can be either dumped into the vessel directly from the sack, or can be

pumped.

2. Begin by carefully loading the inner media first. Open the four inner spinoff covers and fill the media through each one spin-off maintain approximately the same level in each of the fill points.

3. Fill the media until the solid part of the basket is filled.

4. Repeat the same procedure for the outer media. Make sure that the screen stays intact and does not allow any media to fall through.

4. WORK HOURS AND SAFETY EQUIPMENT

1. Work hours are Monday through Friday from 7:00 a.m. to 6:30 p.m. for any work that requires outdoor equipment (i.e., vactors and other noisy equipment). Saturday outside work hours require pre-approval by the City and would be from 10:00 a.m. to 5:30 p.m. All work that can be done inside the building with minimal noise and no equipment running outdoors may be done outside of the hours indicated previously with pre-approval by the City.

 The contractor shall be responsible to supply any equipment needed to complete the project, which includes any and all safety equipment. All personnel working on the project will be required to wear hard hats, high

visibility safety vests, safety glasses and steel toes boots.

3. The contractor is required to provide any engineering controls necessary to mitigate carbon dust at all times during the project.

BID FORM

VENDOR NAME: CANBON ATIVOTIS CONSO ANTION	
Section 1 - Schedule of Prices	
Company: CANDON ACTIVATES CORVERIZION	
Project: Carbon Revencement IN GOOD CONTROL UNITS	
BID: 4549	
For the entire work outlined in these documents, complete as specified, using equipment and materials only of the type and manufacturers where specifically named.	ent
(\$) \$82,000.00 Dollars	
REFERENCES: Please list at least three (3) entities for which you have done similar work:	
<u>Organization</u> <u>Address</u> <u>Contact Person</u> <u>Telephone</u>	
1. CITY OF ANN ANDOR (2015) Mr. Guy C.	_
2. SIM CONTURET WITH MWKG - DECK ISLAWS WWIP - CITY OF BUSTON MIL	-
3. \$500,000 CONNECT WITH SOUTH BESSOT SCHOOLING PRESTIETT. SALEM MA.	

CITY OF ANN ARBOR DECLARATION OF COMPLIANCE

Non-Discrimination Ordinance

The "non discrimination by city contractors" provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor's Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.
- (b) To post the City of Ann Arbor's Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

CAMBON ACTIVATION CONVOMETION
Company Name
Shulf (20) 9/7/18
Signature of Authorized Representative Date
Print Name and Title
3774 HOUSEN ROAD BLASNELL, NY 14219 Address, City, State, Zip
716 821 1830 - Callen O activated carbon con

Questions about the Notice or the City Administrative Policy, Please contact:

Procurement Office of the City of Ann Arbor

(734) 794-6500



Vendor Conflict of Interest Disclosure Form

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

- 1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
- 2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
- 3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
- 4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.

Conflict of Interest Disclosure*

5. Please note any exceptions below:

Name of City of Ann Arbor employees, elec	tea	elationship to employee
officials or immediate family members with whom there may be a potential conflict of interest.		terest in vendor's company
	() 0	ther (please describe in box below)
None		
*Disclosing a potential conflict of interest does not conflicts of interest and they are detected by the City	lisqualify vendor, vendor will be	rs. In the event vendors do not disclose potenti exempt from doing business with the City.
I certify that this Conflict of Interest Di contents are true and correct to my kn certify on behalf of the Vendor by my sig	owledge and	belief and I have the authority to so
Chapor Activation Convolation	7	16 821 7830
Vendor Name		Vendor Phone Number
Under Oder	9/1/18	CHAISTBOOK ALL SW
Signature of Vendor Authorized Representative	Date	Printed Name of Vendor Authorized

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500, procurement@a2gov.org

Representative

CITY OF ANN ARBOR LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelvementh contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here [___] No. of employees____

The	Contractor	or	Grantee	adrese.
1110	Contractor	OI	Grantee	agrees;

(a)	To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as \$13.22/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less that \$14.75/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).
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	Check the applicable box below which applies to your workforce
	Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits
كنا	Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits

- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

Signature of Authorized Representative Process 71	1774 Bouch Rom t Address State Line 187 14219 State, Zip 6 8217930 - Collew actuated Carbon Come/Email address
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GENERAL CONDITIONS

ESTIMATED QUANTITIES

Quantities stated are estimated and not guaranteed. The quantities stated will be used for award purposes only and are based up an average of actual annual usage.

DOWN PAYMENTS

Any bid proposal submitted which requires a down payment or prepayment of any kind prior to delivery and acceptance of the item, as being in conformance with the specifications will not be considered for award.

CONTRACT TERM

The pricing provided for this ITB shall be firm for one (1) year



Department of Licensing and Regulatory Affairs

This is to Certify That

CARBON ACTIVATED CORPORATION

a corporation existing under the laws of the State of CALIFORNIA was validly authorized to transact business in Michigan on the 8th day of May, 2015, in conformity with 1972 PA 284, as amended.

Said corporation is authorized to transact in this state any business of the character set forth in its application which a domestic corporation formed under this act may lawfully conduct. The authority shall continue as long as said corporation retains its authority to transact such business in the jurisdiction of its incorporation and its authority to transact business in this state has not been surrendered, suspended or revoked.

This certificate is in due form, made by me as the proper officer, and is entitled to have full faith and credit given it in every court and office within the United States.



Sent by Facsimile Transmission 60834G

In testimony whereof, I have hereunto set my hand, in the City of Lansing, this 8th day of May, 2015.

Alan J. Schefke, Director Corporations, Securities & Commercial Licensing Bureau



Professional Analytical and Consulting Services, Inc. 409 Meade Drive Coraopolis PA 15108

Sample Analysis • GC/MS • R & D • Consulting • Training Courses • Activated Carbon Services

To:

Prasad Galhena

From: Henry Nowicki, Ph.D.

Date: May 15, 2018

Subject: H2S Breakthrough Capacity

ASTM standard method D-6646 was used for testing. Results are below.

Carbon Activated

PACS

Av. H2S

Sample ID

Sample ID

Capacity g/cc

LMC/LA/17/05

HH-404

0.3

PACS holds all samples for at least six months before disposal should you need additional work on these samples.

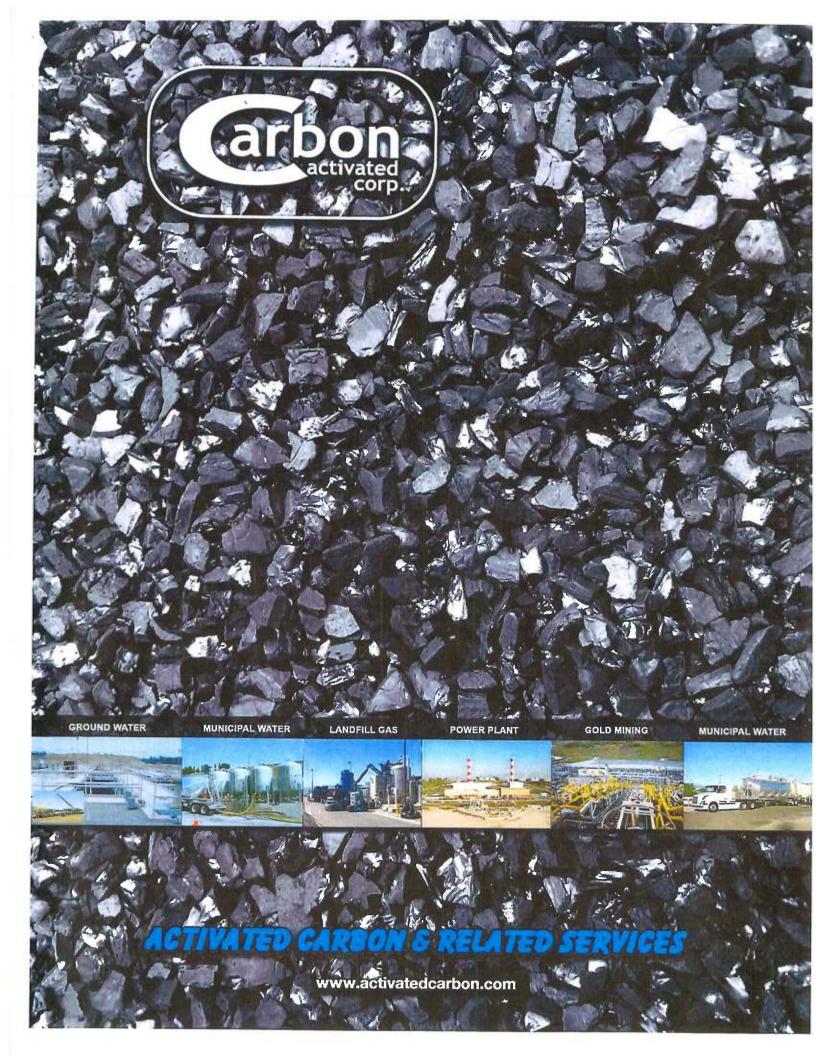
Please keep PACS in mind for your total activated carbon services: routine and GAED advanced testing services for aqueous- and vapor- applications, R&D, waste materials to unique activated carbons, GAED best available test for activated carbon performance testing aqueous-and vapor-full characterizations, marketing, technical consulting, training courses either scheduled public or at your time and place, and the 42nd International Activated Carbon Conference Sept 20-21, 2018 in Pittsburgh, PA in conjunction with the Activated Carbon School. Please see our website at www.pacslabs.com for course descriptions and registration forms.

Sincerely,

Henry Nowicki, Ph.D.

E-mail: henrypacs@aol.com

Henry Nowicki





ABOUT US

Carbon Activated Corp. (CAC) is a global leader in supplying high-quality activated carbon and related services. We are one of the forerunners in providing various types of activated carbon and filter media, carrying NSF-61 certification and manufacturing to A.W.W.A. Standards.

Our specialties and fields of expertize include:

- Manufacturing and supplying coal, coconut shell, and wood base activated carbon in granular, extruded, and powdered forms
- Offering special grades and sizes of activated carbon for numerous unique applications
- Various impregnated types of carbon
- Activated carbon related services including slurry tanker change outs and vacuum removal / replacement
- Spent carbon regeneration services
- Onsite media testing laboratory services
- Technical support

CAC commenced operations in 1993 as a distributor of bulk activated carbon to OEM's and other carbon companies.

Throughout the years, CAC has shown tremendous growth, amassing over 50 years of collective experience and adding options such as turnkey change out services, rental and sale of adsorption and filtration systems, and the supply of various types of filter media and equipment.

Our strategy since inception has been to market and sell our products globally. We strive to provide the most efficient service in our industry, supplying high quality products at cost effective prices in the least amount of time.

CAC is currently ISO 9001:2008 certified. All of the company's procedures, from material handling, to service change outs, to the reactivation process and office administration are directed by ISO regulations.

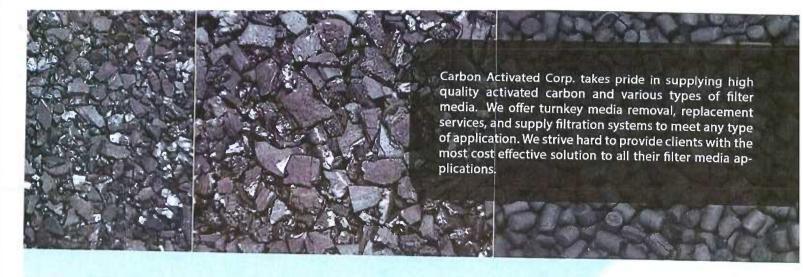
SERVICE



CAC owns slurry trailers for potable water change out services. The trailers are only used for non-hazardous drinking water and potable water services.



Activated carbon for gold mining industry.



CAC uses custom designed & built vacuum-loaders when conducting spent carbon change out services at vapor phase carbon plants. Vacuum loaders are transported to your site via trailer. The use of high-powered vacuum machines creates higher suction. This significantly reduces on-site change out time, as compared to typical carbon PTO blowers installed on other carbon service trucks. Reduced downtime allows your process to go back on-line faster.



OUR LABORATORY

CAC operates a test laboratory capable of measuring carbon specifications for quality control purposes. The laboratory is staffed by employees with over 27-years of experience in manufacturing of carbon.



PRODUCTS

Activated carbon products are available in the following ASTM mesh sizes. Special particle sizes are available.

ris in inesit sizes. 5	pecial particle sizes	are available.
4x6	8x30	50x200
476mm x 3.36mm	2 35mm x 0,60mm	0.30mm x 0.074mm
4x8	12x20	80x325
4 76mm x 2 38mm	1 68fron x 0.84nm	0.18mm.x 0.044mm
4×10	12x30	-325
4.76nun x.2mm	1 68nm x 0 60mm	= 0.044mm
6x10	12x40	1.50 mm
3.36mm x 2mm	1 68mm x 0 42mm	Diameter Pallets
6x12	20x50	2.00 mm
3.36mm x 1.68mm	0.84mm x 0.30mm	Diameter Pallets
6x16	30×60	3.00 mm
3.36mm x 1.19mm	0 30mm × 0.25mm	Diameter Pallets
8x16	40x80	4.00 mm
2.38mm x 1.19mm	0.42min x 0.18min	Diameter Pallets
8x20	50×150	9.00 mm
2.38mm x 0.84mm	0.30mm × 0.10mm	Diameter Pallets









