



May 11, 2021

Robert Emmett
City Of Imperial Chief Water Treatment Operator

RE: Imperial GAC proposal

Dear Mr. Emmett,

Calgon Carbon is pleased to offer a proposal for the turnkey exchange of Granular Activated Carbon for four of the Model 10 GAC vessels located at Imperial CA.

CMR400 Custom Reactivated Carbon:

Product: CMR Imperial in bulk trailer

Pricing: \$84,000 (\$1.05/lb x 80,000-lb carbon exchange)

Scope of Work:

- Calgon Carbon personnel onsite to perform turnkey carbon exchange
- Removal of spent carbon from four Adsorption Vessel (20,000 lbs each)
- Transport of spent carbon via bulk trailer to Calgon Carbon facility for thermal reactivation
 - Spent carbon shall be reactivated and stored at Calgon Carbon's facility for future reuse at the specific well site from which it was removed
- Delivery of fresh carbon to the well site will be in potable-dedicated trailers
- Installation of fresh CMR carbon into Adsorption Vessel performed by Calgon Carbon.
 - This carbon is currently being stored at Calgon Carbon's facility.
- All transfer equipment (media slurry hoses and connections) shall be provided by Calgon Carbon
- Owner shall be responsible for providing access to the vessels, air compressor for GAC slurry transfers and a clean water source for filling trailer, vessel and for adequate initial backwashing. Additionally, Owner will need to provide drain access for excess water from the slurry transfer process and drain for backwash water or adequate backwash water holding capacity for the initial backwash prior to start-up.

Delivery:

Typical lead time is approximately 2-3 weeks after receipt of order.

Notes:

1. Quote is valid for 30 days from the date of this Scope of Supply.
2. This Offer is made only under Calgon Carbon Corporation's General Terms and Conditions for Purchase, attached.
3. Pricing provided is exclusive of any Sales Tax.
4. Scope / Pricing do not include any Payment or Performance Bonds.
5. Upon acknowledgement of any Purchase Order; the Buyer may be requested to complete a Credit Application and provide Tax Exemption Documentation if project is Tax Exempt



Please feel free to contact me should you have any questions.

Sincerely,
Tim Brekke
310-740-7782
Tim.brekke@kuraray.com

CARBON SPECIFICATIONS

Product Specification: FILTRASORB 400M	Value	Test Method
Iodine Number (mg/g), min.	1000	ASTM D4607
Moisture, weight %, max.	2	ASTM D2867
Effective size, mm	0.55 – 0.75	ASTM D2862
Uniformity Coefficient, max.	1.9	ASTM D2862
Abrasion No., min.	75	AWWA B604
Trace Capacity Number, (mg/cc), min.	10	TM-79, TM-85 (converted to TCN)
Screen Size (US Sieve), weight %		
* Larger than No. 12, max.	5	ASTM D2862
* Smaller than No. 40, max.	4	ASTM D2862
Typical Property	Value	
Apparent Density, g/cc, min.	0.54	ASTM D2854
Ash	8%	ASTM D2866
Water Extractables	<1%	AWWA B604
Non-Wettable	<1%	AWWA B604

Product Specification: CMR 400	Value	Test Method
Iodine Number (mg/g), min. ¹	a) 800 (if spent was >550) or b) +250 (if spent was <550), minimum final blended value of at least 500	TM-4, ASTM D4607
Moisture, weight %, max. ²	8	TM-1, ASTM D2867
Uniformity Coefficient, max.	2.1	TM-47, ASTM D2862
Abrasion No., min.	70	TM-9, AWWA B604
Screen Size (US Sieve), weight %		
* Larger than No. 12, max.	5	TM-8, ASTM D2862
* Smaller than No. 40, max.	4	TM-8, ASTM D2862
Apparent Density, g/cc, min	0.20	TM-7, ASTM D2854

Notes:

1. Iodine Number is based on the final blend of custom reactivated GAC and make-up virgin GAC.
2. As the moisture content of reactivated GAC may increase during bulk shipment because of ambient conditions that may be beyond the control of the supplier, a moisture content exceeding 8% is permitted in the reference sample collected after the shipment is received.