

COUNTY OF ROCKLAND
Department of General Services
Purchasing Division

Contract Award Notification

Title: **Odor Control at Pump Station – Twin Lakes**

Contract Period: **December 29, 2023, through December 28, 2024, w/ (4) 1-year options**

Original Date of Issue: 12/29/2023

Date of Revision:

BID No: RFB-RC-2023-111

PRC #: 2023014148

Catalog: Wastewater

Authorized Users: County Agencies, All Political Subdivisions

Address Inquiries To:

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Title: Purchaser I
Phone: 845-364-2984
Fax: 845-364-3809
E-mail: phillipm@co.rockland.ny.us

Description

This contract is for removing, replacement and disposing of media from Rockland County Sewer District #1 Absorbers located at the Twin Lake Pump Station at 55 South Monsey Road, Monsey, NY 10952

Contract #	Vendor Number	Contractor & Address	Telephone No.
BID 23-111	0000012449	NRP Group, Inc. 9131 E. 37 th Street North Wichita, KS 67226 Contact: Gary R. Morgan gmorgan@nrpgroupinc.com	316-303-0505

<p style="text-align: center;"> COUNTY OF ROCKLAND DGS – PURCHASING DEPARTMENT BLDG. A, 6TH FLOOR, 50 SANATORIUM ROAD POMONA, NY 10970 TELEPHONE NO.: 845-364-3820 FAX NO.: 845-364-3809 </p> <p style="text-align: right;">VENDOR: NRP Group Inc.</p>								
LINE NO.	DESCRIPTION	ITEM NUMBER	Qty	Unit of Measure	UNIT PRICE	EXTENDED PRICE	MANUFACTURER if applicable	PRODUCT CODE if applicable
1	PureAir - Sulphasor XL Media or approved equal, FOB destination, SDS sheets must be submitted with Bid	88576300003	40	CF	\$ 135.15	\$ 5,406.00	General Carbon	Sulfursorb-A
2	PureAir - PureAir8 Polishing /Finishing Media or approved equal, FOB destination, SDS sheets must be submitted with Bid	88576300004	20	CF	\$ 143.10	\$ 2,862.00	General Carbon	GC-PPA8
3	Supply Lump Sum price to remove and replace and dispose of media at the carbon absorber located at the Twin Lakes Pump Station. Media to be installed in layers with carbon on the bottom and polishing media the top layer. Bidder shall check the carbon absorber for any issues. Pricing shall be Turnkey price for the absorber including labor.	93691000052	1	Each	\$ 3,000.00	\$ 3,000.00		
Additional REPAIR WORK not included in prices Lines 1-3						\$ 11,268.00		
4	REPAIR WORK- Labor Rate for Repairs (\$/Man/Hour) NOT INCLUDED IN PRICE FOR LINE 3 Regular Work Hours 8:00 AM to 4:00 PM	93691000053	10	Hour	\$ 35.00	\$ 350.00		
5	REPAIR WORK-Labor Rate for Repairs (\$/Man/Hour) NOT INCLUDED IN PRICE FOR LINE 3 Repair Work at Other than Regular Work Hours	93691000054	2	Hour	\$ 70.00	\$ 140.00		

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VENDOR: NRP Group Inc.									
LINE NO.	DESCRIPTION	ITEM NUMBER	Qty	Unit of Measure	UNIT PRICE	EXTENDED PRICE	MANUFACTURER if applicable	PRODUCT CODE if applicable	
6	REPAIR WORK- Percent Markup for parts needed for repairs not included in lines 1-3. PERCENT MARKUP SHALL NOT EXCEED 10%. BIDDER SHALL ENTER A PERCENTAGE BETWEEN 0% UP TO 10%	93691000055	ESTIMATED DOLLARS <u>EXPENDED</u> \$5,000.00	PERCENT MARKUP	0%	\$ 5,000.00			
7	Total Extended Price for Lines #'s One through six	<hr/> Total Extended Price Written Out						\$ 16,758.00	

COUNTY OF ROCKLAND - DGS-PURCHASING
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TELEPHONE: 845-364-3820 / TELEFAX: 845-364-3809

TITLE: Odor Control Media at Pump Station- Removal, Installation and Disposal and Repairs, **BID NUMBER: RFB-RC-2023-111**

PURCHASES BY OTHER

LOCAL GOVERNMENTS, SCHOOL DISTRICTS, AND NON PROFIT AGENCIES

As per the New York State General Municipal Law, all political subdivisions of New York State are allowed to make purchases through the resulting contract(s). As per Rockland County Procurement Policy, Non Profit Agencies approved to participate in New York State's Contract Extension Program are authorized to make purchases through the resulting contract(s).

1. The County of Rockland shall make all contract award information available to other political subdivisions and non profit agencies through our website: www.rcpurchasing.com
2. Any other political subdivision or Rockland County non profit agency will issue purchase orders directly to vendors within the specified contract period referencing the County's contract and shall be liable for any payments due on such purchase orders; and shall accept sole responsibility for any payment due.
3. All purchases shall be subject to audit and inspection by the other political subdivisions and Rockland County non-profit agencies for which the purchase was made.
4. No officer, board or agency of a county, town, village, or school district shall make any purchase through the County when bids have been received for such purchase by such officer, board or agency, unless such purchase may be made upon the same terms, conditions and specifications at a lower price through the County.
5. All Bidders shall be on notice that as a condition of the award of a County contract, the successful bidder shall accept the award of a similar contract with any other political subdivision in New York State and Rockland County non-profit agencies authorized to use New York State's contracts, if called upon to do so. A listing of approved Rockland County non-profit agencies is available on the Purchasing Division's website at www.rcpurchasing.com. The County, however, will not be responsible for any debts incurred by the participants pursuant to this or any other agreement.
6. Necessary deviations from the County's specifications in the award of a participant contract, whether such deviations relate to quantities, or delivery points shall be resolved between the successful bidder and the other political subdivisions and Rockland County non profit agencies.

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 Installation and Disposal and Repairs**

BID NUMBER: RFB-RC-2023-111

SPECIFICATIONS

1. SCOPE

- 1.1. The purpose of this bid is for removing, replacement and disposing of media from Rockland County Sewer District #1 Absorbers located at the Twin Lake Pump Station at 55 South Monsey Road, Monsey, NY 10952.
- 1.2. Bidder must supply PureAir Sulfur Absorb XL and Polishing Media Pure Air 8 or approved equal.
- 1.3. This contract is subject to **New York State Labor Law 220, Article 8 Prevailing wages**. The Contractor shall submit with, each invoice, certified payrolls for all labor. Submission of Certified Payroll with invoice is a condition of payment.
- 1.4. This bid also covers hourly rates and parts for repair work needed. All repairs must be approved by the Sewer District in writing.

2. WORK SPECIFICATIONS

- 2.1. Supplier must provide Media as specified.
- 2.2. Replacement Media shall consist of:
 - 2.2.1. 40 cu. Ft. of Sulfur Absorbent such as SulfurAbsorb XL by PureAir or **Approved Equal**.
 - 2.2.2. 20 cu. ft. of Polishing Media such as PureAir 8 by PureAir or **Approved Equal**.
- 2.3. Supplier responsible for the removal, replacement and disposal of Media.
- 2.4. Media to be installed in layers with carbon on the bottom and potassium permanganate the top layer.
- 2.5. Bidder shall check the carbon absorbers for any issues.
 - 2.5.1. If any issues are found, see Specification 5, Repair Work.
 - 2.5.1.1. No repair work to be performed without authorization by authorized County of Rockland representative.
- 2.6. Services to be performed annually or on an as needed basis.

3. CARBON SPECIFICATIONS

3.1. Specifications for Activated Carbon

Mean Particle Diameter, mm: 4 (avg)
 Typical Density, lbs./cu.ft.: 28
 Hydrogen sulfite removal capacity: 0.30 g/cc min

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Hydrogen sulfide removal capacity, weight on weight, %: 50% (min)

3.2. Specifications for Polishing Media

Particle Diameter, mm 4-6

Nominal Density, lbs./cu.ft.: 50

Removal Capacity Hydrogen Sulfite 0.112 g/cc, or 14% min by weight

Potassium Permanganate (KMNO₄) Content, %: 8 (min)

4. **WORK SCHEDULE**

- 4.1. Bidder shall schedule and perform the requested work within three (3) weeks of notification by the authorized Rockland County Sewer District #1 representative.
- 4.2. Work shall be performed on date and time agreed upon with the authorized Rockland County Sewer District #1 representative.

5. **REPAIR WORK (Lines 4-6)**

- 5.1. **Pricing must be submitted for hourly rates for repair work and parts not included in lines 1-3.**
- 5.2. The contractor shall only perform repair work which is required. Repairs shall only be performed with the authorization of an authorized County of Rockland representative. Should any work be performed without authorization, payment will not be made.
 - 5.2.1. Prior to the commencement of work, contractor shall submit a written estimate. The estimate shall contain the following:
 - 5.2.1.1. Project scope of work.
 - 5.2.1.2. Name of authorizing Rockland County Department and representative name.
 - 5.2.1.3. Estimate of labor hours by trade and hourly rates.
 - 5.2.1.4. Estimate shall include warranty.

6. **LABOR**

- 6.1. Only workers who are skilled and experienced in the work specified shall be allowed to work under this contract.
 - 6.1.1. The contract is required to have a labor force adequate to perform the work in an efficient and expeditious manner.

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7. SUB-CONTRACT WORK

7.1. Sub-contracting for any of the services or labor required to perform the work shall not be permitted without written consent from an authorized representative of the Rockland County Sewer District #1.

8. WORK HOURS

8.1. Work must be performed between the hours of 8:00 AM and 4:00 PM, Monday through Friday. No work is to be performed outside of these hours without authorization from the authorized County of Rockland representative. The contractor shall notify authorized County of Rockland representative twenty-four (24) hours in advance prior to the scheduled service date.

9. EQUIPMENT

9.1. The contractor shall be responsible for providing all tools and equipment necessary to efficiently perform all work in a professional manner and workmanlike manner.

9.2. Pricing submitted shall include all necessary tools and equipment to complete the work as specified.

10. REFERENCES

10.1. All bidders shall submit a list of references demonstrating at least three (3) year's experience in similar work performed as specified in this bid. The Company Name, Contact, Telephone and Email address shall be included. (Forms attached)

10.2. All bidders shall submit a certificate of equipment. Forms are attached to facilitate the bidder's compliance with these requirements.

11. LICENSES

11.1. The Bidder and their service personnel shall possess all licenses required to perform this work.

11.2. Bidder shall perform work in conformance with Federal, State and Local Laws and Regulations.

12. CONTRACTOR REQUIREMENTS

12.1. The County of Rockland may inspect the facilities of the apparent low bidder prior to determine their capacity to perform this work. The successful bidder shall maintain or have the ability to obtain material, parts and equipment for work as specified in this bid.

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13. USE OF WORK SITE

- 13.1. On or about the work site and adjacent areas, the Bidder shall ensure that all apparatus, storage of materials, and activities of workers be confined to the limits indicated by law, ordinances, permits and the direction of the authorized County of Rockland representative and shall not encumber or permit the premises or adjacent areas to be encumbered with such materials or apparatus.
- 13.2. The work site shall be kept in an orderly and safe fashion so as not to interfere with the progress of the work.
- 13.3. The bidder shall be responsible for repairing and replacing anything damaged by his operations within 10 days of notification by the authorized County of Rockland representative that damage has occurred.
- 13.4. It will be the responsibility of the Contractor to report, to the authorized County of Rockland representative, any damages found prior to any work at this site.

14. CLEAN UP

- 14.1. The Bidder shall at all times keep the premises and adjacent areas free from accumulations of waste material or rubbish. At the completion of work, bidder shall remove, from and about the premises, including adjacent areas, all rubbish, tools and surplus materials. In case of dispute, County of Rockland may remove rubbish and clean up, then may charge the bidder either by deduction of amounts unpaid to the bidder or by other means as determined to be fair and equitable by the authorized County of Rockland representative.

15. LABOR AND MATERIAL COSTS FOR REPAIRS

- 15.1. All labor and materials shall be invoiced and paid, as bid, on the proposal pages.
- 15.2. Detailed billings must be received by the County of Rockland within Forty-Five (45) days after completion of each job.
- 15.3. This contract is subject to **New York State Labor Law 220, Article 8 Prevailing wages**. The Contractor shall submit with, each invoice, certified payrolls for all labor. Submission of Certified Payroll with invoice is a condition of payment.

15.3.1. Labor Cost

- 15.3.1.1. Detailed Description of all completed service work must accompany all invoices.

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- 15.3.1.2. The bidder agrees and hereby certifies that all labor charges contained in the invoices and vouchers shall be only those that was required and necessary to complete the work. The invoice must list specifically the type of employee or laborer utilized and the number of hours each worked. The Contractor's labor charges must correspond to the rates which were supplied on the cost proposal pages. All labor shall be billed from the time bidder's employee arrives at, to the time he departs from the Rockland County job site. There shall be no allowance for travel and/or expenses.
- 15.3.1.3. Invoices for labor must be billed to the next quarter hour of actual time worked (example: 8:00 AM to 9:10 AM would be billed at 1 hour and 15 minutes). Invoices rounded to the next full hour will not be approved for payment.

15.3.2. Parts and Material Cost

- 15.3.2.1. The invoices for payment must list specifically all parts and materials, and cost to contractor for each item.
- 15.3.2.2. The County of Rockland shall require verification of these costs by copy of the invoice as submitted to the contractor for payment.
- 15.3.2.3. The contractor agrees and hereby certifies that all parts and materials purchased shall be at lowest price available at the time considering the prevailing conditions and circumstances for which it is required that purchase be made.
- 15.3.2.4. The County of Rockland reserves the right to supply material when deemed in the best interest of the County of Rockland.
- 15.3.2.5. Parts and Materials are to be invoiced at the Contractor's cost plus the mark-up. **The mark-up is not to exceed 10%.**

16. AMENDMENTS TO BID

- 16.1. Any verbal information obtained from or statements made by the Representative of the County of Rockland or his designee at the time of examinations of the documents or site shall not be construed as, in any way, amending Contract documents. Only such corrections or addenda as are issued by the Director of Purchasing in writing to all Bidders and shall become a part of the Contract.
- 16.2. Any addendum issued during the time of bidding shall be included in bids and become a part of the Contract Agreement.

17.0. CONTRACT PRICE ADJUSTMENTS

The County recognizes this product or service has a price component that may have a commodity with changing costs. The Contractor/Supplier may request a Price Adjustment no more frequently than once each six (6) month period.

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A Price Adjustment request must be made in writing and include the reason for the request, documentation supporting the request (ie, commodity increases), the current pricing, and the requested revised pricing.

The County will review the Price Adjustment request. If the Price Adjustment is deemed reasonable the Price Adjustment request will be accepted by written acknowledgement. If the request is not accepted the County may entirely reject the request or may counter with revised pricing. In either case the County will provide a written explanation in support of the decision.

The Director of Purchasing may use available indexes (e.g. CPI or PPI) to determine if the requested Price Adjustment is reasonable. Typically, a Price Adjustment that exceeds 5% will not be approved unless very unusual and significant changes have occurred in the industry.

In the event industry costs decline, the County shall have the right to receive, from the Contractor, a reasonable reduction in prices/pricing that reflect such cost changes in the industry. The County will make a written request to the Contractor for a Price Adjustment in writing with supporting documentation.

18.0. AWARD

Award shall be made in its entirety to the bidder providing the lowest responsive responsible bid meeting the stated requirements.

Bidder must submit pricing for ALL line items 1-6 to be considered for award.

19.0. MINIMUM SPECIFICATIONS

Bidders must complete this section (next two pages) to be sent with bid. Failure to complete this section may result in your bid being deemed non-responsive.

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<i>MINIMUM SPECIFICATIONS</i>	BIDDER TO NOTE COMPLY OR LIST ALTERNATIVE SPECIFICATION
SULPHASORB XL ACID GAS ADSORBENT or Approved Equal	NAME - Mfg. Product being offered
PROPERTIES	
H ₂ S Removal Capacity by Volume: 0.30 g/cc	
Removal Capacity (by weight): H ₂ S: 50 %	
CTC Value: 70% min	
Surface Area: 1050 m ² /g	
Density: 0.44 g/ml	
Moisture Content: 15% max	
Hardness: 95 Min	
Ignition Temperature: >400 C	
Iodine No.: 1050 mg/g	
Butane Activity, (weight%) 26 %	
Mean Particle Diameter: 4 mm	

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<i>MINIMUM SPECIFICATIONS</i>	BIDDER TO NOTE COMPLY OR LIST ALTERNATIVE SPECIFICATION
PUREAIR 8 ADSORBENT MEDIA or Approved Equal	
REMOVAL CAPACITY	
Hydrogen Sulfide: 14% min by weight	
Sulfur Dioxide: 7% min by weight	
Nitric Oxide: 5% by weight	
Formaldehyde: 2.5% by weight	
MANUFACTURING QUALITY ASSURANCE STANDARDS	
Leach Test (indication of porosity)- 180 minutes or less	
Permanganate Content: 8% minimum	
Moisture Content: 20% Maximum	
Crush Strength: 10 lb min	
Abrasion Loss: 3% maximum	
Nominal Pellet Diameter: 1/8" (approximately 4 mm), 85% after screening	
Nominal Density: 50 lbs/ft ³ (0.80 g/cc)	

"CLEANING THE WORLD WITH ACTIVATED CARBON"



SAFETY DATA SHEET

Section 1 - Identity

Identity (As Used on Label and List): GC Activated Carbon (Including, but not limited to GC C-40, GC 4 x 8B, GC 4 x 8S, GC 6 x 12, GC 6 x 12S, GC 8 x 30, GC 8 x 30AW, GC 8 x 30S, GC 8 x 30SAW, GC 12 x 40, GC 12 x 40AW, GC 12x40SAW, GC 20 x 50, GC 20 x 50S, GC Powdered, GC WDC activated carbons)

Manufacturers Name: General Carbon Corporation
33 Paterson Street
Paterson, NJ 07501
Tel: (973)523-2223
www.generalcarbon.com
Date Prepared: April 2, 2021

Section 2 - Hazardous Identification

2.1 GHS-US Classification

Eye Irritation	2B H320
STOT	SE 3 H335

2.2 Label Elements



Hazard Pictograms

Signal word (GHS-US)

Hazard Statements

Precautionary statements (GHS-US)

: Warning
: H320- Causes eye irritation
: H335- May cause respiratory irritation
: P261- Avoid breathing dust
: P264- Wash thoroughly after handling
: P271- Use in well-ventilated area
: P280- Wear protective gloves/clothing/eye & face protect
: P304&340: IF INHALED: Remove person to fresh air
: P305&351&P338: If in eyes, Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.
: P312- Call Poison Control Center/Doctor if you feel sick
: P403& P233- Store in well-ventilated place. Keep container tightly closed
: P405- Store locked up
: P501- Dispose of container to appropriate receptacle

2.3 Other Hazards

No additional information available

2.4 Unknown acute toxicity (GHS-US)

No data available

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixture

<u>Name</u>	<u>CAS #</u>	<u>%</u>	<u>GHS US classification</u>
Carbon	7440-44-0	100	Not classified

Section 4 – First Aid Measures

4.1 Description of first aid measures

First aid after inhalation	Remove person to fresh air. If not breathing, administer CPR or artificial respiration. Get immediate medical attention.
First aid after skin contact	If skin reddening or irritation develops, seek medical attention
First aid after eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.
First aid after ingestion	If the material is swallowed, get immediate medical attention or advice. DO NOT induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	May cause respiratory irritation
Symptoms/injuries after skin contact	May cause skin irritation
Symptoms/injuries after eye contact	Causes serious eye damage
Symptoms/injuries after ingestion	May be harmful if swallowed

4.3 Indication of any immediate medical attention and special treatment needed

No additional information available.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	If involved with fire, flood with plenty of water
Unsuitable extinguishing media	None

5.2 Special hazards arising from substance or mixture

Fire hazard	None known
Explosion hazard	None known
Reactivity	Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, etc. may result in fire.

5.3 Advice for firefighters

Protection during firefighting	Firefighters should wear full protective gear
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Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures

Avoid contact with the skin and eyes

6.1.1 For non-emergency personnel

No additional information available

6.1.2 For emergency responders

No additional information available

6.2 Environmental precautions

None

6.3 Methods and material for containment and cleaning up

For containment

If possible, stop flow of product

Methods for cleaning up

Shovel or sweep up and put in closed container for disposal

6.4 Reference to other sections

No additional information available

Section 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling

Avoid contact with eyes. Wet activated carbon removes oxygen from air causing severe hazard to workers inside carbon vessels or confined spaces

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Protect containers from physical damage. Store in dry, cool, well-ventilated area.

7.3 Specific end use(s)

No additional information available

Section 8: Exposure controls/ personal protection

8.1 Control parameters

No additional information available

8.2 Exposure controls

Appropriate engineering controls

: Local exhaust and general ventilation must be adequate to meet exposure standards

Hand Protection

: None required under normal product handling conditions

Eye Protection

: safety glasses

Skin and body protection

: Wear suitable working clothes

Respiratory protection

: If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Particulate
Color	: Black
Odor	: No data available
Odor threshold	: No data available
Ph	: No data available
Relative evaporation rate	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor density @ 20 deg C	: No data available
Relative Density	: 28-33 lb/ cubic foot
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2 Other information

No additional information available

Section 10: Stability and reactivity

10.1 Reactivity

Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, etc. may result in fire

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

Will not occur

10.4 Conditions to avoid

None

10.5 Incompatible materials

Strong oxidizing and reducing agents such as ozone, liquid oxygen or chlorine.

10.6 Hazardous decomposition products

Carbon monoxide may be generated in the event of a fire.

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity : Not classified

Carbon (7440-44-0)

LD50 oral rat : >10000 mg/kg

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes eye irritation

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity : May cause respiratory irritation (single exposure)

Specific target organ toxicity : Not classified (repeated exposure)

Aspiration hazard : Not classified

Section 12: Ecological Information

12.1 Toxicity

No additional information available

12.2 Persistence and degradability

No additional information available

12.3 Bioaccumulative potential

No additional information available

12.4 Mobility in soil

No additional information available

12.5 Other adverse effects

No additional information available

Section 13: Disposal concerns

13.1 Waste treatment methods

Waste Disposal recommendations : Dispose of contents/container in accordance with local/ regional/ international regulations

Section 14: Transportation information

In accordance with DOT/ADR/RID/ADNR/IMDG/ICAO/IATA

14.1 UN Number

Not applicable. See Note 1 below.

14.2 UN proper shipping name

Not applicable

Note 1: Under the UN classification for activated carbon, all activated carbons have been identified as a class 4.2 product. However, This product has been tested according to the United Nations Transport of Dangerous Goods test protocol for a "self-heating substance" (United Nations Transportation of Dangerous Goods, Manual of Tests and Criteria, Part III, Section 33.3.1.6 - Test N.4 - Test Method for Self Heating Substances) and it has been specifically determined that this product does not meet the definition of a self heating substance (class 4.2)

or any other hazard class, and therefore should not be listed as a hazardous material. This information is applicable only for the Activated Carbon Product identified in this document.

Section 15: Regulatory information

15.1 US Federal regulations

Carbon (7440-44-0)

Listed on the United States TSCA inventory

15.3 US State regulations

No additional information available

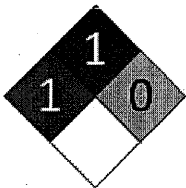
Section 16: Other information

Full text of H-phrases:

Eye Irrit. 2B
STOT SE 3
H335

Serious eye damage/eye irritation Category 2B
Specific target organ toxicity (single exposure) Category 3
May cause respiratory irritation

NFPA®



NFPA health hazard
NFPA fire hazard

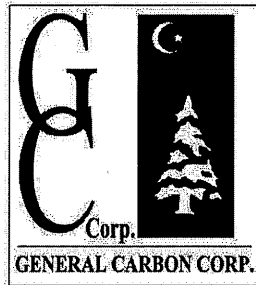
: 1-Exposure could cause irritation but only minor residual injury even if no treatment is given
: 1- Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur (e.g. mineral oil). Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F)

NFPA reactivity

: 0- Normally stable, even under fire exposure conditions, and are not reactive with water

The information contained herein is accurate to the best of our knowledge. General Carbon Corporation makes no warranty with respect hereto said information and disclaims all liability from reliance there in.

"CLEANING THE WORLD WITH ACTIVATED CARBON"



GC-PPA8

potassium permanganate impregnated media for odor and corrosion control

GC-PPA8 is a spherical activated alumina impregnated with 8% potassium permanganate. It is ideal for applications where activated carbon is ineffective like the adsorption of polar or lower molecular weight compounds. Because it is spherical, it is advantageous to similar granular products for use in certain types of panel filters and in applications where lower pressure drop is required. GC-PPA8's 8% KMnO₄ concentration is higher than other similar products giving it longer service life.

Specifications

Particle Diameter, mm	4-6
Bulk Density, lbs./cu.ft:	53-56
g/cc:	.85 -.90
Moisture Content, %:	20 (max)
Potassium Permanganate (KMnO ₄) Content, %:	8 (min)
Hardness, %:	80 (min)
Pressure Drop @ 50 fpm, ft. of bed depth:	1.0 (max)

*Standard packaging is in 55 vinyl bags. Other packaging is available upon request.

Caution!

Wet activated carbon removes oxygen from air causing a severe hazard to workers inside carbon vessels. Confined space/low oxygen procedures should be put in place before any entry is made. Such procedures should comply with all applicable Local, State and Federal guidelines.



GC PPA-8/12 Safety Data Sheet

Revision date : 10/1/2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 - Product Identifier

Product Name: GC PPA 8 / GC PPA 12

1.2 - Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Filtration

1.3 - Details of the supplier of the safety data sheet

General Carbon Corporation
33 Paterson Street Paterson, NJ 07501
T: 973-523-2223

Emergency number : 1-847-844-0680

Section 2: Hazards Identification

2.1 - Classification of the substance or mixture

GHS-US classification Ox. Sol. 2
H272
STOT SE 3 H335

2.2 - Label Elements

GHS-US labelling
Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger
Hazard statements (GHS-US) :

H272 - May intensify fire; oxidizer H335 -
May cause respiratory irritation

Precautionary statements (GHS-US) :

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P220 - Keep/Store away from clothing/.../combustible materials
P221 - Take any precaution to avoid mixing with combustibles/...
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER/doctor/.../if you feel unwell
P370+P378 - In case of fire: Use ... for extinction
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to ...

2.3 - Other Hazards

No additional information available

2.4 - Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixture

Name	Product Identifier	%	GHS-US Classification
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Activated Alumina	(Cas no.) 1344-28-1	79.5 - 81.5	Not classified
Sodium Bicarbonate	(Cas no.) 144-55-8	12.5 - 14.5	Not classified
Potassium permanganate	(CAS No.) 7722-64-7	8-12	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302

SECTION 4: First aid measures

4.1 - Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air. If not breathing, administer CPR or artificial respiration. Get immediate medical attention.

First-aid measures after skin contact : If skin reddening or irritation develops, seek medical attention.

First-aid measures after eye contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.

First-aid measures after ingestion : If the material is swallowed, get immediate medical attention or advice. DO NOT induce vomiting unless directed to do so by medical personnel.

4.2 - Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation. May stain body tissue.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May be harmful if swallowed.

4.3 - Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None.

5.2 - Special hazards arising from the substance or mixture

Fire hazard : May intensify fire; oxidizer.

Explosion hazard : None known.

5.3 - Advice for firefighters

Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with the skin and the eyes.

For non-emergency personnel : No additional information available

For emergency responders : No additional information available

6.2 - Environmental precautions

None.

6.3 - Methods and material for containment and cleaning up

For containment : If possible, stop flow of product.

Methods for cleaning up : Shovel or sweep up and put in a closed container for disposal.

6.4 - Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes.

7.2 - Conditions for safe storage, including any incompatibilities

Storage conditions : Protect containers from physical damage. Store in dry, cool, well-ventilated area.

7.3 - No additional information available

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

No additional information available

8.2 - Exposure controls

Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards.

Hand protection : Use impervious gloves to minimize skin contact

2014 EN (English) 3/5

Eye protection : Safety glasses.

Skin and body protection : Wear suitable working clothes.

Respiratory protection : If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state : Solid
Appearance : Granules
Colour : Purple
Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available Freezing point : No data available Boiling point : No data available Flash point : No data available Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : 59-61 lb/ft3 Solubility : No data available Log Pow : No data available Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.1 - Other information

No additional information available

SECTION 10: Stability and reactivity

10.1 - Reactivity

None known.

10.2 - Chemical stability

Stable under normal conditions.

10.3 - Possibility of hazardous reactions

Will not occur

10.4 - Conditions to avoid

None

10.5 - Incompatible materials

None

10.6 - Hazardous decomposition products

None

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity : Not classified

Activated Alumina (1344-28-1)	
LD50 oral rat	>5000 mg/kg

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified

Potassium permanganate (7722-64-7)	
LD50 oral rat	750 mg/kg

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified

Sodium Bicarbonate (144-55-8)	
LD 50 oral rat	4,220 mg/kg

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Activated Alumina (1344-28-1)	
LC50 fishes 1	1800 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
EC50 Daphnia 1	1000 - 1800 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	18 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
LC50 fish 2	3200 - 5600 mg/l (Exposure time: 96 h - Species: Oryzias latipes [semi-static])

Potassium permanganate (7722-64-7)	
LC50 fishes 1	3.3 - 3.93 mg/l (Exposure time: 96 h - Species: Carassius auratus [static])
LC50 fish 2	2.97 - 3.11 mg/l (Exposure time: 96 h - Species: Cyprinus carpio)

12.2 - Persistence and degradability

No additional information available

12.3 - Bioaccumulative potential

12.4 - Mobility in soil

No additional information available

Sodium Bicarbonate (144-55-8)	
Log Pow	0.65

12.5 - Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

In accordance with DOT / ADR / RID / ADNR / IMDG / ICAO / IATA

14.1 - UN number

Not applicable

14.2 - UN proper shipping name

Not applicable

SECTION 15: Regulatory information

15.1 - US Federal regulations

15.2 - US State regulations

SECTION 16: Other information

Potassium permanganate (7722-64-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Full text of H-phrases:

Potassium permanganate (7722-64-7)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Acute Tox. 3 (Oral)	0.65
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Corr. 1A	skin corrosion/irritation Category 1A
Skin Irrit. 2	skin corrosion/irritation Category 2
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



GC Sulfursorb

Activated carbons for H₂S treatment

The **GC Sulfursorb** series of activated carbon are three grades of carbon that are nonimpregnated, catalytic, coal-based, activated carbon which has been specially developed for removing Hydrogen Sulfide (H₂S) and Sulfur compounds from vapor streams. All are well suited for use in sewage treatment plants and pumping stations where these compounds are typically found. **GC Sulfursorb** carbons give you the high loading rates of impregnated carbons without the thermal risks associated with some chemically treated carbons. Additionally, by water washing this product, some of their H₂S capacity can be restored.

	<u>GC Sulfursorb-A</u>	<u>GC Sulfursorb-B</u>	<u>GC Sulfursorb-C</u>
Pellet Diameter, mm:	3.9 - 4.1	3.9 - 4.1	3.9 - 4.1
Moisture, % (as packed, max.):	5	5	5
Hardness, %:	95 min	95 min	95 min
CTC, %: (min.)	65	65	55
BET Surface Area, M ² /g:	950 (min)	950 (min)	900 (min)
Apparent Density, lbs./cu.ft.:	28 - 31	28 - 31	30-32
g/cc:	0.45 - 0.50	0.45 - 0.50	0.48 - 0.52
H ₂ S Breakthrough Capacity*, gH ₂ S/cc carbon (min.):	0.30	0.20	0.10

*H₂S capacity is measured using ASTM standard method D6646-01. Testing requires passing a moist air stream containing 1% by volume H₂S through an appropriately sized column (per ASTM requirements) packed with activated carbon and monitoring to a 50 ppmv H₂S breakthrough. Results are reported as grams of H₂S adsorbed per gram of activated carbon.

Standard packaging is in 55 or 1100 lb. vinyl bags. Other packaging is available upon request.

Safety Precautions

Wet activated carbon scavenges oxygen. Exercise caution when changing media vessels and working in areas with poor ventilation. Ensure adequate ventilation for personal safety. Activated carbon adsorption is exothermic and releases heat as chemicals are adsorbed. Proper air flow through the carbon bed can assist in removing any heat generated. Oxygen may aggravate this condition. If the air flow is below 30 fpm or the contaminate concentrations are high, proper safety measures should be taken. If you have questions, contact General Carbon Corp.