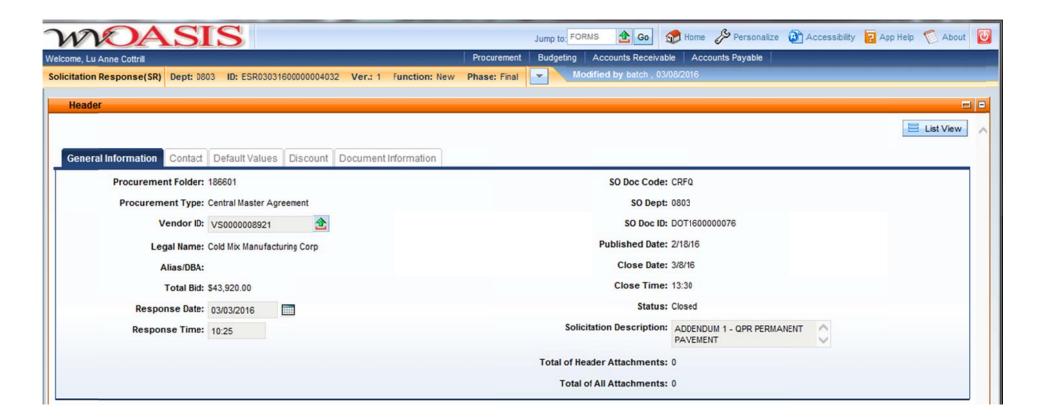


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026 Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Solicitation Response

Proc Folder: 186601

Solicitation Description: ADDENDUM 1 - QPR PERMANENT PAVEMENT

Proc Type: Central Master Agreement

Date issued	Solicitation Closes	Solicitation No	Version
	2016-03-08 13:30:00	SR 0803 ESR03031600000004032	1

VENDOR

VS0000008921

Cold Mix Manufacturing Corp

FOR INFORMATION CONTACT THE BUYER

Misty Delong (304) 558-8802 misty.m.delong@wv.gov

Signature X FEIN # DATE

All offers subject to all terms and conditions contained in this solicitation

Page: 1 FORM ID: WV-PRC-SR-001

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	QPR, OR EQUIVALENT, BAGGED PATCHING MIXTURE	6000.00000	BAG	\$7.320000	\$43,920.00

Comm Code	Manufacturer	Specification	Model #	
30121600				
Extended Descrip	tion: QPR, OR EQUAL	, BAGGED PATCHING MIXTURE		



GREENPATCH

Specifications for Cold Mix Asphalt

The patching material shall be composed of a suitable aggregate, plant-mixed with GreenPatch®. The bituminous material shall be available in various grades so that one such grade will enable a stockpile to remain pliable and workable at a temperature of -15 degrees F. The patching material shall be capable of maintaining adhesive qualities in patched areas, which are damp at time of application, after remaining in an uncovered stockpile for 6 to 12 months. GreenPatch® will remain workable in a bag or pail for a period of 12 months.

% Passing	Sieve Size (Metric)
90-100	3/8 Inch (9.5-mm)
20 - 85	Number 4 (4.75-mm)
5 – 40	Number 8 (2.36-mm)
3 - 25	Number 16 (1.18-mm)
0 - 12	Number 50 (0.18-mm)
0 – 10	Number 100
0 – 7	Number 200

Materials

Preproduction Aggregate: Will consist of a crushed limestone or approved equal and RAP (fractionated recycled asphalt product)

ASTM C-88	Soundness Loss (Sodium-5 Cycles)	12.0% Maximum
ASTM C-131	Los Angeles Abrasion Loss:	40.0% Maximum
ASTM C-127,128	Absorption:	1.0%-2.5%
ASTM C-127,128	Specific Gravity	2.55-2.75
	Other Deleterious Matter	
ASTM C-123	Soft Pieces	3.0% Maximum
ASTM C-295	Coal and Lignite	1.0% Maximum
ASTM C-142	Shale, Chert, Shady Material, etc.	2.5% Maximum

Bituminous Material:

The bituminous material shall be GreenPatch Liquid. It shall meet the following requirements:

ASTM D-1310	Flash Point (Tag Open Cup)	250 F Minimum
ASTM D-2170	Kinematic Viscosity at 60 C (140° F)	100-150 cP
ASTM –D95	Water	0.2% Minimum
ASTM D-402	Distillate Test (Volume of Original Sample):	
	To 225 degrees C (437° F)	None
	To 260 degrees C (500° F)	None
	To 315 degrees C (600° F)	None
	Residue from distillate at 360° C (680° F)	95% Minimum
	Tests on Residue from Distillation:	
ASTM D-5	Penetration	200 Minimum
ASTM D-2042	Solubility in Trichloroethylene	99.0% Minimum

GREENPATCH

Specifications for Cold Mix Asphalt

Composition of Mixture

The approved formula shall have an allowable variation of not more than the following minimum and maximum ranges:

Job Mix Formula	Minimum	Maximum
Liquid Content	2.5%	7.0%
Virgin Aggregate	30%	70%
Recycled Asphalt Product (FRAP)	20%	60%
*Recycled Product from Aspha	lt Millings	

PREPARATION OF MIXTURE

It may be necessary to heat approved aggregates. When heat is applied, the mixture **SHOULD NOT EXCEED 220 DEGREES F.**

The GreenPatch Liquid shall be heated to a temperature between 100 and 170 degrees F in accordance with the instructions of the liquid Supplying Company representative.

The mixture shall be mixed until all of the aggregates are uniformly coated.

PLANTS AND EQUIPMENT

Storage facilities and all equipment used in the preparation of the mixture shall be approved by the appropriate local governing agency. An approved drier shall be available for surface drying the aggregate when needed. The materials for individual batches shall be measured accurately either by volume or by weight, by approved methods and equipment.

A batch plant or a continuous mixer of approved design and capacity shall be used in mixing the ingredient materials.

STRIPPING TEST

After material reaches ambient temperature, the mixture shall meet the requirements of ASSHTO T-182, whereby not more than 5% of the aggregate particles shall remain uncoated.

HANDLING PRECAUTIONS

During the production of GREENPATCH Cold Patch, and the production/handling of GREENPATCH liquid Asphalt Blend, normal industry-wide safety precautions such as prohibition of smoking, and any other source of ignition, spark, or open flame, shall be strictly enforced in the vicinity of such operations.

CONTACT
COLD MIX MANUFACTURING
For additional information:
PHONE (718) 463 -1444 FAX (718) 463-0292

SAFETY DATA SHEET



GreenPatch 50 Pound Bag - Item #39F846 GreenPatch 40 Pound Pail - Item #39F847 Page 1 of 7; SDS, 39F84X, Rev. 1; 8/22/14

Section 1. Identification

1.1 Product Identifier

Product Name: Cold Mix Asphalt

Synonym: Cold Mix/Pothole Patching Material

1.2 Uses and uses advised against

Use: Repairing asphalt pavement, parking lots, and driveways.

1.3 Details of the supplier of the safety data sheet

Supplier name Cold Mix Manufacturing

Address 65 Edison Avenue Mount Vernon, NY 10550

Telephone 718-463-1444

1.4 Emergency Telephone number

Emergency 718-463-1444 (8 a.m. – 5 p.m. EST)

Emergency (A/H) 845-216-1926

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

GHS classifications Eye Irritation: Category 2

Skin Irritation: Category 3 Inhalation Irritation: Category 1

2.2 Label elements

Signal Word DANGER

Pictograms





Hazard Statements Harmful by inhalation (contains crystalline silica).

Airborne particulates may cause immediate or delayed irritation or inflammation.

May cause skin irritation and dermatitis upon prolonged contact.

Prevention Statement Use proper engineering controls, work practices, and personal protective equipment.

Other Hazards Product is designed for use and application at ambient temperatures. The product should not be

heated. If the product is heated, the release of toxic hydrogen sulfide (H₂S) may occur. Heated

content may result in thermal burns.



Section 3. Composition Information on Ingredients

Ingredient	CAS Number	Percent by Weight
Aggregate (Dolomite)	7000-29-5	40 – 60
Reclaimed Asphalt Pavement (RAP)	Various	40 – 60
Asphalt (as fume)	8052-42-4	<10
Crystalline Silica (as quartz)	14808-60-7	>1
(naturally in Aggregate & RAP)	14808-00-7	71
Fatty Acid Alkyl esters	Various	<4

Section 4. First Aid Measures

4.1 Description of first aid measures

Eyes

• In case of contact, hold eyelids open and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

<u>Skin</u>

Remove contaminated clothing and shoes. Wash affected areas with soap and water, or a mild detergent. Get
medical attention if symptoms develop.

<u>Inhalation</u>

Remove person from the contaminated area to fresh air. If breathing is difficult, give oxygen. If not breathing, give
artificial respiration. Get medical attention immediately. Seek medical attention for discomfort or if coughing or
other symptoms do not subside.

Ingestion

• Get medical attention immediately. DO NOT INDUCE VOMITING. If conscious, have person drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Product is designed for use and application at ambient temperatures. Contact with heated content may cause burns. This product or one of its ingredients present at 0.1% or more, are listed as a carcinogen by NTP, ARC, or OSHA.

4.3 Immediate medical attention and special treatment needed

If ingestion occurs, DO NOT induce vomiting. Ingestion may cause stomach distress, nausea, or vomiting. If conscious, drink water. Seek medical attention or contact Poison Control Center immediately.

Section 5. Fire Fighting Measures

5.1 Extinguishing media

In case of fire, use carbon dioxide, water spray (with caution) or dry chemical extinguisher.

5.2 Special hazards arising from the chemical

Combustible. During a fire, carbon monoxide, carbon dioxide, oxides of nitrogen and sulfur, hydrogen sulfide and irritating and/or toxic gases may be generated.

5.3 Advice for firefighters

A SCBA and full protection gear is recommended to limit exposure to combustion products when fighting any fire.



Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protection equipment as described in Section 8.

6.2 Environmental precautions

Avoid release to waterways and sewers.

6.3 Methods and materials for containment and cleaning up

Collect and dispose in accordance with applicable regulations. Use a shovel to scoop up and place in a suitable sturdy container for recovery or disposal.

Section 7. Handling and Storage

7.1 Precautions for safe handling

Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Thoroughly wash hands and exposed skin if exposed. Remove and launder clothing that is soiled.

7.2 Conditions for safe storage, including any incompatibilities

Keep metal containers tightly closed. Store in cool, dry, well-ventilated areas. DO NOT expose to heat, open flames, strong oxidizers or sources of ignition.

Section 8. Exposure Controls / Personal Protection

8.1 Exposure standards

Occupational Exposure Limits for Individual Ingredients (if applicable)

<u>Ingredient</u>	OSHA PEL – TWA	ACGIH TLV-TWA
Asphalt (fume)	5 mg/m ³	0.5mg/m ³ Benzene soluble aerosol
Silica (quartz)	10 mg/m³/%SiO₂+2 Respirable dust	0.25 mg/m ³

8.2 Engineering Controls

Use with adequate and local exhaust ventilation.

Personal Protection Equipment (PPE)

• Eye and Fire Protection; ANSI approved glasses, safety goggles or fire shield recommended.

Skin Protection

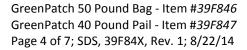
Use protective gloves and apron to prevent skin contact.

Foot Protection

Wear ANSI approved safety footwear.

Respiratory Protection

• None normally required. Respiratory protection equipment use may be required for secondary operation, such as cutting or operations causing dust or fumes. The level of respiratory protection required should be based on the evaluation of chemical exposure by a health or safety professional.





Section 9. Physical and Chemical Properties

Appearance: Black granulated solid

Explosive limits: Not explosive

Odor: Slight petroleum odor

Vapor Pressure:N/AOdor Threshold:N/AVapor Density:N/ApH:N/ARelative density:>2.3Melting Point/Freezing Point:N/A

Solubility: Not Soluble

Initial Boiling Point and boiling range: N/A
Flash Point: N/A
Evaporation Rate: N/A

Flammability: Combustible

Partition Coefficient: n-octanol/water N/A
Auto-ignition temperature: N/A
Decomposition temperature: N/A
Viscosity: N/A

Section 10. Stability and Reactivity

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable. Avoid contact with heat, sources of ignition and open flame.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to avoid

Sources of ignition, open flame and strong oxidizing agents.

10.5 Incompatible materials

May be incompatible with strong acids, bases and oxidizing agents.

10.6 Hazardous decomposition products

Not expected to occur if handled and stored properly.



Section 11. Toxicological Information

11.1 Information on the likely routes of exposure

Testing has not been conducted on this product. Available data for individual ingredients are noted below.

Component	OSHA-PEL-TWA (mg/m³)	ACGIH TLV-TWA (mg/m³)	LD ₅₀ (rat, oral)	LC ₅₀
Asphalt (fume)	N/A	0.5	N/A	N/A
Crystalline Silica (quartz)	[(10) / (%SiO ₂ +2)] (R); [(30) / (%SiO+2)] (T)	0.025 (R)	N/A	N/A
Fatty acid alkyl ester	N/A	N/A	17.G/kg	N/A

11.2 Description of the delayed, immediate, or chronic effects from short- and long-term exposure, Carcinogenicity

Chronic/Carcinogenicity

- IARC classifies the below listed ingredients as carcinogenic to humans
- Silica, quartz (Group 1)
- Asphalt as Fume (Group 3A)
- ACGIH (A2) NTP (Group 2) have designated silica, quartz as suspected human carcinogens

Section 12. Ecological Information

12.1 Toxicity

The environmental impact (Eco-toxicity) of this product has not been investigated.

12.2 Persistence and degradability

The fatty acid alkyl ester is biodegradable.

12.3 Bioaccumulative potential

This product has not been tested for bioaccumulation potential.

12.4 Mobility in soil

Studies such as adsorption or leaching have not been conducted on this product.

12.5 Other adverse effects

Potential adverse effects have not been investigated.

Section 13. Disposal Considerations

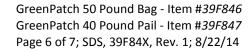
13.1 Waste Disposal Method

Dispose in accordance with applicable federal, state, and local regulations. Refer to **Section 7 for Handling Procedures** and **Section 8 for exposure controls and PPE recommendations**. Do not incinerate. EPA Waste Numbers are not available for this product or its components. Prevent contamination of drains and waterways. Dispose contaminated packaging in accordance with local regulations.

Section 14. Transport Information

Not classified as a dangerous good by the criteria of the TDG code, US DOT, IMDG or IATA.

14.1 UN number: None allocated





14.2 UN proper shipping name: None allocated

14.3 Transport hazard classes: None allocated

14.4 Packing Group: None allocated

14.5 Environmental hazards: None allocated

14.6 Special precautions for user: None allocated

Section 15. Regulatory Information

U.S. Regulatory Information

OSHA/MSHA Hazard Communication: This product is considered by OSHA/MSHA to be a hazardous chemical and

should be in the employees' hazard communication package.

CERCLA/Superfund: Neither this product nor its components are listed as a CERCLA hazardous

substance.

EPCRA SARA Title III

Component	SARA 311/312	SARA 313 Title III
Aggregate (Silica)	Acute health hazard (irritation)	
Asphalt	Delayed (chronic) health effects	

RCRA: If discarded as purchased, this product is not hazardous waste either by listing or characteristic.

TSCA Components of this product are listed on the Toxic Substances Control Act, (TSCA) inventory.

Commonant		Ingred	ients/Components	State Regulated by	/ <u>State</u>	
Component	<u>CA</u> ¹	MA	MN	<u>NJ</u>	<u>PA</u>	<u>RI</u>
Silica, quartz	Yes	Yes	NK	Yes	Yes	NK
Asphalt	Yes	Yes	Yes	Yes	Yes	Yes

Contains substances crystalline silica and asphalt; known by State of California to cause cancer. California's Proposition 65.

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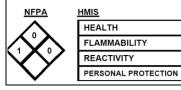
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Canadian Regulatory Information

Classification of this product by hazardous criteria of CPA component crystalline silica as D2A – very toxic and is subject to WHMIS requirements.

WHMIS – Canada Pictograms)







 LD_{50}

mg/m3

Lethal Dose

Milligrams per cubic meter

Section 16: Other Information Abbreviations: Greater than **MSHA** Mine Safety and Health Administration Less than N/A Not Applicable American Conference of Governmental Industrial NFPA ACGIH National Fire Protection Association **Hygienists** ANSI American National Standards Institute NTP National Toxicology Program ARC **American Red Cross OSHA** Occupational Safety and Health Administration CAS No. Chemical Abstract Service Number PEL Permissible Exposure Limit Comprehensive Environmental Response, CERCLA рΗ Negative log of hydrogen ion Compensation and Liability Act CPA PPE Consumer Protection Agency Personal Protective Equipment DOT U.S. Department of Transportation Respirable Particulate R **EPA RCRA Environmental Protection Agency** Resource Conservation and Recovery Act Emergency Planning and Community Right-to-**EPCRA** SARA Superfund Amendments and Reauthorization Act **Know Act EST** Eastern Standard Time **SCBA** Self-Contained Breathing Apparatus **HMIS** Hazardous Materials Identification System **Total Purchase** IARC International Agency for Research on Cancer TDG Transportation of Dangerous Goods IATA International Air Transport Association. TLV Threshold Limit Value **IMDG** International Maritime Dangerous Goods Code **TSCA Toxic Substances Control Act** LC_{50} Lethal Concentration TWA Total Weighted Average (8 hour) VOC

This SDS was created on August 22, 2014 by PRI Asphalt Technologies, Inc.; Tampa, FL 33610.

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WHMIS

Volatile Organic Compound

Workplace Hazardous Materials Information System

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