



MEMORANDUM

TO: All Interested Contractors

DATE: November 28, 2018

RE: Request for Quotes—Paving Services at Norton Apartments

The Pinellas County Housing Authority (PCHA) is accepting quotes from licensed and qualified contractors to perform paving services as further described in the attached scope of work dated November 1, 2018 at Norton Apartments, with its management office located at 1450 S. Martin Luther King, Jr. Avenue, Clearwater, Florida 33756.

SCOPE OF WORK

Paving services requirements as further described in the Scope of Work (SOW) dated November 1, 2018 located in Attachment #1.

PRE BID CONFERENCE

A Pre-Bid Conference will be held on Wednesday, December 5, 2018 at 10:00 a.m. at the Norton Apartments Management Office located at 1450 S. Martin Luther King, Jr. Avenue, Clearwater, Florida 33756. While not mandatory, it is strongly recommended that all interested bidders attend.

THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS.

Contractor is to include permitting fees in its bid proposal, if applicable. Work shall begin within five (5) business days of notice of award. This project must be completed **no later than Monday, December 31, 2018.**

The following items are applicable:

1. HUD 5370-EZ-General Contract Conditions for Small Construction/ Development Contracts (Attachment #2)
2. Certified payrolls to be submitted weekly in accordance with Davis Bacon Wage Decision FL180124 Modification 1 Published 10/05/2018 (Attachment #3)

3. 2 CFR 200.326 and Appendix II to Part 200-Contract Provisions for Non-Federal Entity Contracts Under Federal Awards (Attachment #4)
4. Current Certificate of Liability Insurance (please provide with your quote)

Please submit all questions regarding the scope of work to dleishman@pinellashousing.com. All questions will be answered in writing and distributed to all prospective bidders.

DUE DATE OF QUOTATIONS

Bids are due by 10:00 a.m. on Friday, December 14, 2018 and may be emailed, faxed, or delivered to the address listed below, or submitted through the Housing Agency Marketplace portal.

Pinellas County Housing Authority
Attn: Danielle Leishman, Contract Administrator
11479 Ulmerton Road
Largo, FL 33778
Phone: (727) 443-7684 ext. 3025
Fax: (727) 489-0799
Email: dleishman@pinellashousing.com

NOTES regarding Davis Bacon requirements:

1. ***Employee classifications on certified payrolls MUST correlate to the applicable wage decision. General Laborers are not permitted to use 'tools of the trade' on Davis Bacon projects. For example, if the employee is performing carpenter-related duties, they are to be paid at the carpenter rate; electrician duties must be paid at the electrician rate; etc.***
2. ***Executive Order 13658, referenced in the wage decision, does NOT apply to this project. Refer to the rates for each individual job classification.***

ATTACHMENT #1



NORTON APARTMENTS

1450 S. MARTIN LUTHER KING AVE
CLEARWATER, FL 33756

Paving, Sealing, and Striping

I. Scope Of Work:

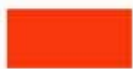
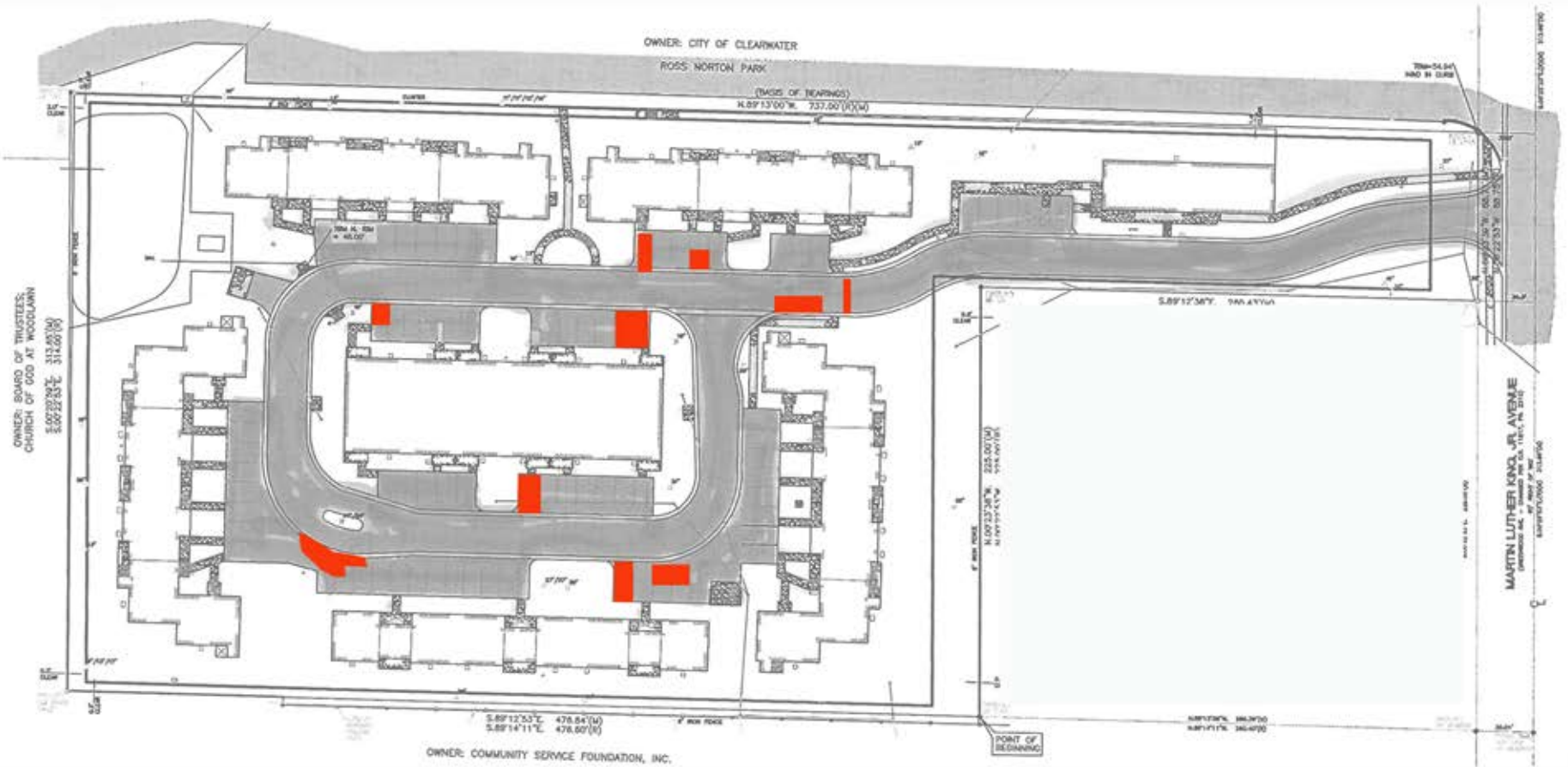
1. Saw-cut, mill, and repair approximately 800 square feet of damaged asphalt with GEM SEAL Tack Coat or approved equal.
 - a. Refer to attached map for locations- areas are marked onsite.
 - b. Contractor to Field Verify amount to complete project and report discrepancies prior to bid submittal.
 - c. Refer to attached technical data and safety data sheet.
 - d. All work shall be completed per manufacturer's specifications.
2. Repair all asphalt cracks larger than 1/8" thick (or deep) with GEM SEAL Hot Applied Crack-Flex PRO Sealant or approved equal.
 - a. Cracks are throughout the property.
 - b. Refer to attached technical data and specifications.
 - c. All work shall be completed per manufacturer's specifications.
3. Seal Coat approximately 44,000 square feet of roadways and parking with a minimum of two coats of GEM SEAL Sand Mix coal tar emulsion product or approved equal.
 - a. Contractor to Field Verify amount to complete project and report discrepancies prior to bid submittal.
 - b. Remove all sand and debris from asphalt.
 - c. Areas of extreme oil saturation shall be removed prior to seal coat installation.
 - d. Pavement to be seal coated using power blowers to ensure proper bonding of seal coat.
 - e. Refer to attached technical data, specifications, and safety data sheet.
 - f. All work shall be completed per manufacturer's specifications.
4. Restripe all pavement lines to match existing with GEM SEAL fast drying latex marking paint or approved equal.
 - a. This includes: parking stops (unit numbers), parking spaces, cross walks, storm covers, curbs, bollards, and speed bumps.
 - b. Refer to attached technical data and safety data sheet.
 - c. Paint shall be applied with commercial line marking machine.
 - d. All work shall be completed within manufacturer's specifications.
5. Show a line item price of repair items (#1 and #3) for deductive/additive purposes.

II. General Notes:

1. Work days and times to be 8:00 am to 5:00 pm Monday thru Friday.



2. Damages to surrounding areas: Contractor shall repair and/or replace any surrounding areas damaged while performing the scope of work.
3. Cleaning: Contractor shall leave all work areas clean at the end of each day. All construction debris shall be hauled off and disposed of offsite. Contractor shall perform a final cleaning of entire unit upon completion of the project.
4. Fees & other related costs: All permit fees and associated costs shall be included in contractor's proposal.
5. Job duration: Job to be completed within ten (10) business days from the Notice to Proceed, PO issue date or after receipt of building permit.
 - a. Work shall be completed in two to three phases to allow either:
 - i. One way traffic/parking throughout the property
 - ii. Or sections of road/parking to still be in use while work is completed in sections.
 - b. Contractor shall submit phasing map or description of how they will accomplish work on an active site with bid proposal.
 - c. Please submit any alternate solutions prior to submitting bid.
6. Liquidated damages: Shall be assessed at \$100.00 per day.
7. Warranty: Two (2) year warranty on labor and material.
8. The contractor shall visit the facility and become thoroughly familiar with the existing conditions and scope of work prior to bidding. Field verify all dimensions.
9. Site usage – use of the site for any construction staging or other operations shall be coordinated with PCHA. Take care not to block or adversely affect any public or adjacent owner areas, or other areas not within the construction limits.



REFER TO SCOPE OF WORK TACK COAT REPAIRS. RED AREAS ARE NEAR THE FOLLOWING LOCATIONS: PARKING SPOTS 203, 201, 701-702, 706, 506, 710, 502, 501, 601 AND (2) SPEED BUMPS. LOCATIONS ARE ALSO MARKED ONSITE.



NORTON APARTMENTS SITE PLAN



Tack Coat

(Asphalt Emulsion Type SS-1/SS-1H)

DESCRIPTION:

GemSeal® Tack Coat is an anionic slow setting asphalt emulsion which serves as a tack coat for better coating adhesion on asphalt pavement surfaces.

USES:

GemSeal® Tack Coat asphalt emulsion is used as a general-purpose tack emulsion and bonding agent between new bituminous asphalt and old. Other uses include prime, fog seal, dust control, and seed mulch treatment.

CHARACTERISTICS:

GemSeal® Tack Coat an asphalt cement dispersed in water with a colloid mill. It is a slow set type of asphalt emulsion that may be diluted with water. Caution do not use with rain impending. For best results diluted emulsion should be used within 7 to 10 days. Meets Florida DOT, AASHTO and ASTM D 977 specifications.

COLOR:

Black (when dry)

SPECIFICATIONS:

Tests on emulsions:	Min	Max
Viscosity, m PA	45	220
Sieve test, %		0.1
Residue by Distillation, %	57	
Oil distillate, % by volume of emulsion		1
Tests on residue from distillation test:		
Penetration, 77°F, 100g, 5s	100	200
Ductility, 77°F, 5cm/min, cm	40	
Solubility in trichloroethylene, %	97.5	

TYPICAL APPLICATION:

Clean surface of all loose materials, dirt, and dust. Mix well to a uniform consistency. May be applied by spray, brush, or squeegee. Apply only when air and ground temperature is 50°F and rising. Do not apply if rain is expected within eight hours.

For tack and prime coat dilute with equal parts water. Tack coat apply at a rate of 0.10 - 0.15 gal/yd². Hand application should be done with caution; do not over apply. Prime coat apply at a rate of about 0.25 gal/yd² to damp base. Fog Seal - dilute with equal parts water and apply at a rate of 0.10 - 0.12 gal/yd². Dust Control dilute one part SS-1 to 5 - 7 parts water and apply at 0.10 - 0.15 gal/yd² to previously dampened and compacted base. Typical application temperature is ambient.

CLEAN-UP:

Clean tools with water immediately after use. Dried material remaining on tools may be removed with mineral spirits.

STORAGE:

Keep from freezing. Do not store in direct sunlight. Recommended storage temperature is 50°F – 130°F.

PACKAGING:

Available in 5-gallon pails and 55-gallon drums. Also available in bulk.

SERVICE:

Timely service is available within a 300-mile radius of our manufacturing facilities.



Tack Coat (Asphalt Emulsion Type SS-1/SS-1H)

CAUTION:

WARNING: This product may contain trace amounts of chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Three percent of the mixture consists of ingredient(s) of unknown acute toxicity.

MANUFACTURING & CUSTOMER SERVICE:

Call (866) 264-8273 to find the nearest GemSeal location to purchase Tack Coat Asphalt Emulsion Type SS-1/SS-1H.

GemSeal Pavement Products
Corporate Headquarters:
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273

GemSeal Pavement Products warrants that for a period of one (1) year from date of purchase this product shall be free from manufacturing defects and shall meet or exceed performance standards listed in the technical data sheet for the product at the time of sale, if used as directed and within the stated shelf life. This Limited Warranty applies only if the product is stored, used, and applied over a properly prepared substrate in strict accordance with applicable specifications and instructions issued by GemSeal Pavement Products. The Limited Warranty will not apply if the product is altered, modified, or misused after it has left the control of GemSeal Pavement Products. GemSeal Pavement Products will not be responsible for defects caused by factors beyond its control, including but not limited to workmanship, application equipment, weather, acts of God, structural failure, condition or movement of substrate, improper additives, poor drainage, ponded water, improper maintenance, damage from snow removal equipment, and normal wear and tear. GemSeal Pavement Products does not warrant that the product or any method of use or application would be suitable for any particular site conditions.

All warranty claims must be submitted in writing, with proof of purchase, to the following address: 3700 Arco Corporate Drive, Suite 425, Charlotte, NC 28273. Unused portions of product must be returned upon request. Replacement of defective product or, at GemSeal Pavement Products' option, refund of the purchase price of defective product shall be the buyer's sole remedy under this Limited Warranty. In no event shall GemSeal Pavement Products be liable for any damages in excess of the purchase price of the defective product.

This Limited Warranty does not cover labor costs for product application, replacement, or repair. GEMSEAL PAVEMENT PRODUCTS SHALL IN NO EVENT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOST SALES OR PROFITS, BUSINESS INTERRUPTION, DELAYS, PHYSICAL DAMAGE TO OTHER MATERIALS OR PROPERTY, OR LOSS OF USE OF PROPERTY. THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GEMSEAL PAVEMENT PRODUCTS EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No modification or extension of this Limited Warranty shall be valid unless given in writing and signed by an authorized officer of GemSeal Pavement Products. Sales personnel and product distributors are not authorized to modify or extend this Limited Warranty.



GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 02/01/2016 Version: 1.0

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

1.1. Product identifier

Product name & Product code : GemSeal® Tack Coat Asphalt Emulsion Type SS-1h
 Product code: 60310074 – 55gal / 60310075 – 5gal / 60310081 – 1gal
 GemSeal® Primer SS1 Tackcoat
 Product code: 60310008 – 55gal drum / 6031007 – 5 gal

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

Use of the substance/mixture : Various

1.3. Details of the supplier of the safety data sheet

GemSeal Pavement Products
 3700 Arco Corporate Drive, Suite 425
 Charlotte, NC 28273 - USA
 T 866-264-8273 Tech Service: Monday - Friday; 8:00am - 5:00pm EST

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Carcinogenicity 2

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS08

Hazard statements (GHS-US) : Suspected of causing cancer

Precautionary statements (GHS-US) : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear suitable protective clothing, gloves and eye/face protection. If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents/container in accordance with all local, state, provincial, and federal regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h : 3% of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Asphalt	(CAS No) 8052-42-4	30-60	Carc. 2

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.

First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

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 may include redness, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

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

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.2. For emergency responders

No additional information available

6.2. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container.

6.3. Reference to other sections

No information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing vapour or mist. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands before eating, drinking or smoking. Launder contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Asphalt (8052-42-4)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³

8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Hand protection : Wear suitable gloves.
- Eye protection : Safety glasses or goggles are recommended when using product.
- Skin and body protection : Wear suitable protective clothing.

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Colour	: No data available.
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)	: Not Flammable.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available.
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.

9.2. Other information

VOC content	: < 50 g/L
-------------	------------

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Based on available data, the classification criteria are not met.
----------------	---

Asphalt (8052-42-4)

LD50 oral rat	> 5000 mg/kg
---------------	--------------

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Asphalt (8052-42-4)	
LD50 dermal rabbit	> 2000 mg/kg

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat	
ATE (oral)	7677 mg/kg
ATE (dermal)	3037 mg/kg
ATE (inhalation)	>20 mg/L (4 h)

Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Suspected of causing cancer.

Asphalt (8052-42-4)	
IARC group	2B

Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
-------------------	---

12.2. Persistence and degradability

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.
--------------------------------	---

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 15: Regulatory information

15.1. US Federal regulations

Asphalt (8052-42-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

GemSeal® Tack Coat Asphalt Emulsion Type SS-1h / GemSeal® Primer SS1 Tackcoat

State or local regulations

This product may contain trace amounts of chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Indication of changes : None.
Other information : None.

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



CRACK-FLEX® PRO

DESCRIPTION: GemSeal® CRACK-FLEX® PRO is a hot applied joint and crack sealing compound formulated with selected asphaltic resins, synthetic polymeric rubber, plasticizers, stabilizers, and a blend of organic reinforcing fillers. This economical material is a one part sealer that provides excellent results under extremely difficult conditions. GemSeal CRACK-FLEX PRO is designed specifically for asphalt pavements experiencing a high degree of pedestrian foot traffic and the action of power steering twisting and turning.

FEATURES:

- Economical quality joint and crack sealing compound for asphaltic pavements.
- Cost effective preventative maintenance treatment.
- Seals cracks and joints from water penetration
- Will not track or pick-up
- Resists scuffing from power steering
- Foot traffic “friendly”

USE:

- City Streets
- Parking Lots
- Walk Ways

APPLICATIONS

GemSeal® CRACK-FLEX PRO is recommended for sealing of joints and cracks in asphaltic pavements and parking lots. It is designed for use in sealing expansion and contraction joints as well as random cracks.

TYPICAL PROPERTIES:

Recommended Pour Temperature	370°F - 390°F
Maximum Heating Temperature	400°F
Recommended Extended Heating	6 Hours
Penetration (150g/5 sec.)	90 max.
Flow at 140°F	3 mm max.
Softening Point Temperature	176°F min.
Bond - 50% Ext	Passes 3 cycles
Asphalt Compatibility	Compatible

SURFACE PREPARATION:

To facilitate proper adhesion, the joint or crack should be dry and clear of any dirt, dust or other contaminants. Substrate and ambient temperatures must be 40°F or above. Proper sizing of the joint will cause the maximum extension/compression to not exceed 50% of the width. Joints or random cracks of ¼” or less are difficult to properly clean prior to applying the sealant.

EQUIPMENT:

Use an agitated oil-jacketed unit that has separate temperature gauges for both the sealant and the heat transfer fluid. Take the 30 lb. plastic bag of sealant and load into the kettle one at a time. Melt only enough material for the day’s activities. Once melted, additional material can be added as needed. Material can be safely reheated within the sealants service life.

NOTE: Prolonged heating of the sealant above the maximum safe heating temperature may cause it to gel in the kettle.

SPECIFICATION STANDARDS:

GemSeal® CRACK-FLEX PRO meets the following standards:

- ASTM D 6690, type I & II
- ASTM D-3405
- AASHTO M-301
- AA P-605
- FAA P-605

SERVICE LIFE

The service life (pot-life) at application temperatures is approximately 12 hours. Adding fresh material to the melter as sealant is being used will extend the service life. Material that has been overheated can thicken and gel in the melter. Any material that has exceeded the service life should be removed from the melter and discarded.

COVERAGE RATE:

Width	Depth	Pounds/100 lineal feet
3/8”	3/8”	6.9
3/8”	1/2”	9.3
1/2”	1/2”	12.3
1/2”	1”	24.7
3/4”	1/2”	18.6
3/4”	3/4”	27.8

PACKAGING

- 30 lb carton
- 10.5 lbs per gallon



Crack-Flex® Pro

CAUTION:

This product is heated to high temperatures during application. Skin contact with heated material can cause severe burns. Wear protective clothing, safety glasses and gloves at all times while using this product.

MANUFACTURING & CUSTOMER SERVICE:

Call (866) 264-8273 to find the nearest GemSeal location to purchase Crack-Flex Pro.

GemSeal Pavement Products
Corporate Headquarters:
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273

GemSeal Pavement Products warrants that for a period of one (1) year from date of purchase this product shall be free from manufacturing defects and shall meet or exceed performance standards listed in the technical data sheet for the product at the time of sale, if used as directed and within the stated shelf life. This Limited Warranty applies only if the product is stored, used, and applied over a properly prepared substrate in strict accordance with applicable specifications and instructions issued by GemSeal Pavement Products. The Limited Warranty will not apply if the product is altered, modified, or misused after it has left the control of GemSeal Pavement Products. GemSeal Pavement Products will not be responsible for defects caused by factors beyond its control, including but not limited to workmanship, application equipment, weather, acts of God, structural failure, condition or movement of substrate, improper additives, poor drainage, ponded water, improper maintenance, damage from snow removal equipment, and normal wear and tear. GemSeal Pavement Products does not warrant that the product or any method of use or application would be suitable for any particular site conditions.

All warranty claims must be submitted in writing, with proof of purchase, to the following address: 3700 Arco Corporate Drive, Suite 425, Charlotte, NC 28273. Unused portions of product must be returned upon request. Replacement of defective product or, at GemSeal Pavement Products' option, refund of the purchase price of defective product shall be the buyer's sole remedy under this Limited Warranty. In no event shall GemSeal Pavement Products be liable for any damages in excess of the purchase price of the defective product. This Limited Warranty does not cover labor costs for product application, replacement, or repair. GEMSEAL PAVEMENT PRODUCTS SHALL IN NO EVENT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOST SALES OR PROFITS, BUSINESS INTERRUPTION, DELAYS, PHYSICAL DAMAGE TO OTHER MATERIALS OR PROPERTY, OR LOSS OF USE OF PROPERTY.

THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GEMSEAL PAVEMENT PRODUCTS EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No modification or extension of this Limited Warranty shall be valid unless given in writing and signed by an authorized officer of GemSeal Pavement Products. Sales personnel and product distributors are not authorized to modify or extend this Limited Warranty.

GemSeal Crack-Flex Pro

DETAILED APPLICATION BULLETIN



PART 1 - GENERAL

1.1 SCOPE

This recommended practice covers the application of GemSeal Crack-Flex Pro, a high performance, polymer enhanced, hot applied joint and crack-sealing compound formulated with selected asphaltic resins, synthetic polymeric rubber, plasticizers, stabilizers, and a blend of organic and man-made reinforcing fillers. This construction-grade material is a one-part sealant that provides excellent results under extremely varying conditions. It is perfect for use in applications that are susceptible to heavy traffic, parked traffic, and extremes such as pedestrian foot traffic and vehicle power steering turns.

GemSeal Crack-Flex Pro is formulated to be used in a variety of climactic conditions such as resisting migration in hot temperatures and remaining flexible in cold temperatures.

1.2 REFERENCES

GemSeal CRACK-FLEX PRO meets or exceeds criteria in the following standards:

- A. American Society for Testing and Materials (ASTM)
 - D 6690 Specification for Concrete Joint Sealant
 - D-3405
- B. Federal Aviation Administration standard:
 - 1. FAA P-605
- C. AASHTO M-301

PART 2 – PRODUCTS/ MATERIAL

2.1 MATERIAL

- A. The contractor should use GemSeal Crack-Flex Pro in an oil-jacketed melter with constant mechanical agitation. These sealants are specially formulated for use where parking and foot traffic occur. Also formulated for non-tracking performance under these conditions.
- B. Hot applied elastomeric crack/joint sealant for asphaltic and concrete pavements.
- C. Physical Properties

Recommended Pour Temperature	Crack-Flex Pro 370°F to 390°F
Maximum Heating Temperature	400°F
Maximum Extended Heating	6 Hours
Penetration (150g/5 sec.)	90 max.
Flow at 140°F	3 mm max.
Softening Point Temperature	176°F min.
Bond - 50% Ext.	Passes
Asphalt Compatibility	Compatible
Concrete Compatibility	Compatible

D. Coverage Rates - Typical

Width	Depth	Pounds/100 lineal feet
3/8"	3/8"	6.9
3/8"	1/2"	9.3
1/2"	1/2"	12.3
1/2"	1"	24.7
3/4"	1/2"	18.6
3/4"	3/4"	27.8

PART 3 - EXECUTION

3.1 CONDITIONS

- A. Cracks and joints under one-quarter (1/4) inch width are not covered under this specification unless stipulated in writing by Architect/Engineer.
- B. If cracks and joints under one-quarter (1/4) inch or less are to be addressed, then they should be routed or saw cut.

3.2 EQUIPMENT

- A. Use an agitated oil-jacketed unit that has separate temperature gauges for both the sealant and the heat transfer fluid. The space between the inner and outer shells filled with high flash point heat transfer oil or other indirect heating means.
- B. The melter to be used must have constant agitation any time material is over 300°F.
- C. Melt only enough material for the day's activities. Once melted, additional material can be added as needed which also extends pot life.
- D. Material can be safely reheated within the sealant's service pot life.
- E. Installed melter safety equipment features must be in good operable condition.

3.3 INSPECTION

- A. Contractor shall examine the substrates and conditions under which materials are to be installed.
- B. All crack seal to be protected by appropriate traffic barriers, lighted if necessary, so located as to prohibit parking and traffic until all sealant has cured.

3.4 PREPARATION

- A. Apply sealant only to clean, dry, properly prepared cracks and joints.
- B. Remove vegetation and all incompressible materials from cracks and joints by means of compressed air or hot compressed air lance.

3.4 PREPARATION (cont.)

- Routing cracks prior to sealing has shown to add many years of service life to sealants especially in colder climate regions with extreme movements.
- C. Under ANY circumstances, compressed air used for cleaning MUST be oil free.
- D. Cracks and joints less than one-quarter (1/4) inch in width must be routed or saw cut to a minimum one-half (1/2) inch by one-half (1/2) inch in shape.
- E. Cracks may need to be prepared using specialized backing material after cleaning to maintain minimum 1 to 1 depth to width profile as specified by engineer or owner.

3.5 INSTALLATION

- A. At ambient temperatures below 40°F and above freezing, use a hot compressed air lance to achieve clean, dry, warm space for sealant installation.
- B. The use of a pump or wand system for sealant application is highly recommended. For best results, the sealant depth to width ratio should not exceed 2 to 1 (i.e. 2-inch deep to 1-inch wide).
- C. Cracks shall be filled from the bottom up to the top of the pavement surface.
- D. Excess or spilled sealant shall be removed from the pavement by approved methods and shall be discarded properly.
- E. Control thickness to a maximum one-eighth (1/8) inch above pavement surface.
- F. Finished sealed cracks and joints will be uniformly level to achieve flush to one-eighth (1/8) inch concave surface appearance.

3.6 COMPLETION

- A. Upon completion, all surplus material and debris shall be removed from the site.

PART 4 –SUPPLEMENTAL CONDITIONS

4.1 SAFETY

- A. Contractor shall be responsible for on-site safety of all their personnel, equipment, equipment rental personnel, and all associated subcontractors. Safety requirements shall comply with Code of Federal Regulations Title 29 Occupational Safety and Health Administration (OSHA) safety and health regulations for construction.
- B. Accident Prevention Responsibility
- It shall be the responsibility of the employer to initiate and maintain such programs as may be necessary to comply with applicable OSHA requirements.
 - Such programs shall provide for a Competent Person designated by the employer to instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to injury.

4.2 PERMITS

- A. Contractor is responsible for all necessary permits.

4.3 CODE COMPLIANCE

- A. Contractors shall comply with all Local, State and Federal applicable codes and regulations as pertaining to each facility.
- B. Provide materials in accordance with code requirements.

4.4 QUALITY ASSURANCE

- A. The contractor will take completion photos and have available upon request for up to one year.
- B. Upon request, contractor shall submit a letter stating that equipment used to heat the material meets requirements of this specification.
- C. Upon request, the contractor shall submit manufacturer's quality assurance results on products used.

LIMITED WARRANTY:

GemSeal Pavement Products warrants that for a period of one (1) year from date of purchase this product shall be free from manufacturing defects and shall meet or exceed performance standards listed in the technical data sheet for the product at the time of sale, if used as directed and within the stated shelf life. This Limited Warranty applies only if the product is stored, used, and applied over a properly prepared substrate in strict accordance with applicable specifications and instructions issued by GemSeal Pavement Products. The Limited Warranty will not apply if the product is altered, modified, or misused after it has left the control of GemSeal Pavement Products. GemSeal Pavement Products will not be responsible for defects caused by factors beyond its control, including but not limited to workmanship, application equipment, weather, acts of God, structural failure, condition or movement of substrate, improper additives, poor drainage, ponded water, improper maintenance, damage from snow removal equipment, and normal wear and tear. GemSeal Pavement Products does not warrant that the product or any method of use or application would be suitable for any particular site conditions.

All warranty claims must be submitted in writing, with proof of purchase, to the following address: 3700 Arco Corporate Drive, Suite 425, Charlotte, NC 28273. Unused portions of product must be returned upon request. Replacement of defective product or, at GemSeal Pavement Products' option, refund of the purchase price of defective product shall be the buyer's sole remedy under this Limited Warranty. In no event shall GemSeal Pavement Products be liable for any damages in excess of the purchase price of the defective product. This Limited Warranty does not cover labor costs for product application, replacement, or repair. GEMSEAL PAVEMENT PRODUCTS SHALL IN NO EVENT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOST SALES OR PROFITS, BUSINESS INTERRUPTION, DELAYS, PHYSICAL DAMAGE TO OTHER MATERIALS OR PROPERTY, OR LOSS OF USE OF PROPERTY.

THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GEMSEAL PAVEMENT PRODUCTS EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No modification or extension of this Limited Warranty shall be valid unless given in writing and signed by an authorized officer of GemSeal Pavement Products. Sales personnel and product distributors are not authorized to modify or extend this Limited Warranty.

CAUTION:

Keep out of reach of children. Do not take internally. Avoid prolonged or repeated contact with skin or breathing of vapors. In case of contact with eyes, flush with plenty of water, and seek immediate medical attention. Use with adequate ventilation. Do not use in confined areas.

MANUFACTURING & CUSTOMER SERVICE:

Call (866) 264-8273 to find the nearest GemSeal location to purchase Crack-Flex Pro.

GemSeal Pavement Products
Corporate Headquarters
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273



Sand Mix Pavement Sealer Concentrate

DESCRIPTION:

GemSeal® Sand Mix is a premium refined concentrated coal tar emulsion sealer, designed for application to asphalt pavement surfaces. GemSeal Sand Mix extends the service life and enhances the appearance to provide a cost effective preventative maintenance coating.

FEATURES:

- Formulated specifically for commercial application
- Exhibits outstanding wear resistance
- Weatherproofs and seals porous asphalt surfaces, preventing damaging effects of water penetration
- Protects pavements from oxidation by forming a tough protective skin
- Manufactured in a regulated continuous process for consistent emulsion particle size and distribution
- Resists gasoline and oil penetration
- Colloid milled for superior wearability and consistency

MIX DESIGNS:

GemSeal® Sand Mix is a concentrate containing base coal tar emulsion, water, latex modifiers and graded mineral aggregates. It is designed to be further blended with potable water in proportions shown in the table below:

GemSeal® Sand Mix	Water	Latex Polymer ¹
(GAL)	(GAL)	(GAL)
100	20-30	0 - 2

¹ GemSeal® Ultra 3 Latex or GemSeal® AQS 3

APPLICATION RATE:

0.12-0.20 Gal/Sq.Yd. (per coat)

Pavement Use	Application Rate gal/sq.yd.	ft ² /gal	Coats
Low Traffic	.12 - .15	60 - 75	2
Moderate Traffic	.15 - .17	53 - 60	2
High Traffic	.15 - .17	53 - 60	3

Fueling or truck maintenance areas may require an additional lightly sanded coat.

SURFACE PREPARATION:

Pavement surface must be sound, free of debris, vegetation, dust, oils, grease and detergent residues. Accumulations of petroleum deposits, tree sap and dirt should be scraped clean and treated with GemSeal® Oil Spot Primer. Narrow surface cracks should be filled with GemSeal® Pourable Crack Filler, GemSeal® Trowelable Crack Filler, or a suitable hot-applied joint sealant. Wide cracks, severely distressed, alligatored or deteriorated pavement surfaces should be repaired. New asphalt paving or repair patches should be allowed to cure a minimum of 90 days at temperatures of 60°F or above before seal coating begins.

PHYSICAL PROPERTIES:

GemSeal Sand Mix meets properties and specifications listed below:

Property	Max.	Min.
Water (%)	43	38
Non-Volatile (%)	62	57
Ash (%)	61	56
Sp. Gr. @ 77°	1.43	1.33

SPECIFICATIONS:

Meets or exceeds requirements for:

ASTM D 5727

Emulsified Refined Coal-Tar (Mineral Colloid Type)
{replaces Federal Specification R-P-355e}

ASTM D 6945

Emulsified Refined Coal-Tar (Commercial Grade), Type I and Type II



Sand Mix Pavement Sealer Concentrate

APPLICATION:

GemSeal® Sand Mix can be applied using spray or mechanical squeegee equipment capable of controlled, uniform distribution of material conforming to mix designs and application rates specified. Material can also be applied with brush or rubber squeegee applicator designed for these products.

GemSeal® Sand Mix should be applied only when pavement and ambient temperatures are continuously above 50°F for at least 24 hours following application and no rain is forecast for that period. Allow adequate drying time between successive coats. Cooler temperatures (below 70°F) and/or damp or overcast conditions will lengthen curing times.

Notes: Sealcoating is not recommended for enclosed or permanently shaded parking areas such as underground parking garages.

PACKAGING:

Available in 55-gallon drums and tank truck up to 4,500 gallons.

SERVICE:

Timely service is available within 300 mile radius of our manufacturing facilities.

ATTENTION:

GemSeal® Sand Mix should be protected from freezing.

CAUTION:

Both surface and ambient temperature shall be a minimum of 50°F and rising during application. Do not apply if temperature is expected to drop below 50°F, or if rain is expected in the forecast within a 24 hour period.

MANUFACTURING & CUSTOMER SERVICE:

Call (866) 264-8273 to find the nearest GemSeal location to purchase Sand Mix Pavement Sealer Concentrate.

GemSeal Pavement Products
Corporate Headquarters:
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273

GemSeal Pavement Products warrants that for a period of one (1) year from date of purchase this product shall be free from manufacturing defects and shall meet or exceed performance standards listed in the technical data sheet for the product at the time of sale, if used as directed and within the stated shelf life. This Limited Warranty applies only if the product is stored, used, and applied over a properly prepared substrate in strict accordance with applicable specifications and instructions issued by GemSeal Pavement Products. The Limited Warranty will not apply if the product is altered, modified, or misused after it has left the control of GemSeal Pavement Products. GemSeal Pavement Products will not be responsible for defects caused by factors beyond its control, including but not limited to workmanship, application equipment, weather, acts of God, structural failure, condition or movement of substrate, improper additives, poor drainage, ponded water, improper maintenance, damage from snow removal equipment, and normal wear and tear. GemSeal Pavement Products does not warrant that the product or any method of use or application would be suitable for any particular site conditions.

All warranty claims must be submitted in writing, with proof of purchase, to the following address: 3700 Arco Corporate Drive, Suite 425, Charlotte, NC 28273. Unused portions of product must be returned upon request. Replacement of defective product or, at GemSeal Pavement Products' option, refund of the purchase price of defective product shall be the buyer's sole remedy under this Limited Warranty. In no event shall GemSeal Pavement Products be liable for any damages in excess of the purchase price of the defective product. This Limited Warranty does not cover labor costs for product application, replacement, or repair. GEMSEAL PAVEMENT PRODUCTS SHALL IN NO EVENT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOST SALES OR PROFITS, BUSINESS INTERRUPTION, DELAYS, PHYSICAL DAMAGE TO OTHER MATERIALS OR PROPERTY, OR LOSS OF USE OF PROPERTY.

THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GEMSEAL PAVEMENT PRODUCTS EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No modification or extension of this Limited Warranty shall be valid unless given in writing and signed by an authorized officer of GemSeal Pavement Products. Sales personnel and product distributors are not authorized to modify or extend this Limited Warranty.

GEMSEAL SAND MIX PAVEMENT SEALER CONCENTRATE DETAILED APPLICATION SPECIFICATION

1. Scope:

This recommended practice covers GemSeal Sand Mix, a colloid milled, refined tar pavement sealer with proprietary polymers and sand for increased durability and skid resistance. The application of GemSeal Sand Mix provides weather protection, beautification of surface, and aliphatic-solvent (petroleum distillates such as gas, oil and diesel) resistant seal for asphalt pavement surfaces including parking lots, driveways, taxiways, fueling aprons and airport ramps. GemSeal Sand Mix extends the service life and enhances the appearance to provide a cost effective, preventative maintenance coating.

2. References:

- 2.1. Federal Specification R-P-355e; Pitch, Refined Tar Emulsion (Coating for Bituminous Pavements)
- 2.2. ASTM D 5727 Standard Specification for Emulsified Refined Tar (Mineral Colloid Type) {replaces Federal Specification R-P-355e}
- 2.3. ASTM D 6945 Standard Specification for Emulsified Refined Tar (Ready to Use, Commercial Grade)
- 2.4. ASTM D 6948 Standard Practice for Application of Refined Tar (Ready to Use, Commercial Grade)
- 2.5. ASTM D-3320 Standard Specification for Emulsified Refined Tar Pitch (Mineral Colloid Type)
- 2.6. ASTM D-490 Standard Specification for Road Tar
- 2.7. ASTM D-3423 Standard Practice for Application of Emulsified Refined Tar Pitch
- 2.8. ASTM D-2939 Standard Methods of Testing Emulsified Bitumens Used as Protective Coatings
- 2.9. ASTM D-4866 Standard Performance Specification for Refined Tar Pitch Emulsion Pavement Sealer Formulations (sp) Containing Mineral Aggregates and Optional Polymeric Admixtures
- 2.10. FAA Advisory Circular 150/5370-10B, Item P-630 Refined Tar Emulsion, Without Additives Slurry Seal Surface Treatment; and Item P-631 Refined Tar Emulsion, With Additives Slurry Seal Surface Treatment
- 2.11. FAA Engineering Brief No. 46 Item P-625 and No. 46A, Item P-627 - Refined Tar Pitch Emulsion Seal Coat

3. Materials:

- 3.1 Emulsified Refined tar pavement sealer will conform to the following requirements:
 - 3.1.1 ASTM D 5727 Standard Specification for Emulsified Refined Tar (Mineral Colloid Type) {replaces Federal Specification R-P-355e}
 - 3.1.2 The refined tar prior to emulsification shall conform to ASTM D-490, grade RT-12. The refined tar shall be derived from high temperature coke oven tar. Oil and water gas tars shall not be used even though they might comply with ASTM D-490, grade RT-12.
 - 3.1.3 The **emulsion shall be produced using a colloid mill** to ensure homogeneity and appropriate size of the particles in suspension.
 - 3.1.4 The contractor and/or his supplier will provide a certification with each bulk emulsion delivery indicating compliance with the above requirements. Further, the certificate will indicate the non-volatiles (solids) content and ash content of that particular transport lot as determined by results of tests performed on material loaded. Such certifications shall be subject to verification by testing samples of the emulsion received for use on the project. Costs of verification testing should be borne by the Project Administrators.
- 3.2. Dilution water shall be potable and free of excessive minerals and contaminants. Water will be provided by the Project Administrator and available within a reasonable distance from the job site.
- 3.3. GemSeal Sand Mix requires no additional sand or modifier and if added may invalidate warranty at GemSeal's sole discretion.

4. Equipment: All tools and equipment necessary to perform the contract in accordance with the specified terms and conditions, such as brushes, hand squeegees, pumps and hose equipment, storage tanks, mixing tanks, water distributors, power sweepers, blowers, barricades and applicator equipment shall be provided as required by the contractor. All methods employed in performing the work and all equipment necessary for executing any part of the work shall be subject to approval by the Project Administrator before work is started, and when found unsatisfactory will be corrected. All equipment will be in good working condition.

- 4.1. Spray equipment used on the job shall have mechanical mixing devices incorporated in their construction to assure homogeneous mixing of the emulsion. The pumping system must be adequate to apply a uniform coating at the specified rates of application. Equipment requiring pressurization of the mixing tank for distribution will not be used.
- 4.2. Motorized squeegee application equipment used on the job will have two or more devices such as squeegees and/or drag broom assemblies to assure even distribution of GemSeal Sand Mix. Mechanical mixing devices will be incorporated into the construction of the applicator to assure homogeneous mixing of the emulsion.
- 4.3. Mixing or agitating equipment may be either portable powered or a tank-type power mixer. In any case, mixers shall be of sufficient capacity to assure homogeneous mixing of the emulsion and required additives and to maintain complete suspension of mineral aggregate until the emulsion system is applied to the pavement. All storage tanks or drop tankers shall be equipped with mechanical agitators or circulation systems sufficient to keep the refined tar emulsion homogenous during storage.

5. Preparation of Surfaces:

- 5.1. Allow new asphalt to cure. Cure time varies with type of asphalt, aggregate, weather conditions, and construction procedures. Hot mix asphalt will usually cure in 30 -90 days. Cold mix pavements should have at least 90 days to cure. Required cure time should be determined by the Project Administrator, and a written order to proceed will be furnished to the contractor.
- 5.2. Wide cracks, extensive alligator cracking patterns, soft or sunken spots indicate that the pavement and/or base should be repaired or replaced. Extensive patching shall be allowed to cure prior to seal coating in accordance with 5.1.
- 5.3. Thoroughly inspect the pavement for minor cracks and other imperfections. Ignore hairline cracks. Cracks of approximately 1/4 -3/4 inch wide should be cleared of debris and filled with an approved GemSeal hot pour crack sealant in accordance with manufacturer's specification. (OPTIONAL)
- 5.4. Remove oil and grease spots that have not permanently damaged or softened the pavement by scrubbing with a detergent and flushing with water until a water-break-free surface is obtained. Oil and grease spots with deeper penetration will be treated by burning with hand held propane torch, and then coating the spot with an approved oil spot primer such as GemSeal Tar-Prime. If the oil spot is so severe as to cause permanent deterioration of the pavement, or if the pavement has failed due to other causes, the pavement shall be removed to the full depth of the damage and replaced with new asphalt pavement in accordance with paragraph 5.1.
- 5.5. Old traffic control lines may be blackened with black epoxy or black acrylic coatings. Excessive build-up of lines should be abraded before any prime coats of tar emulsion are applied. (OPTIONAL)
- 5.6. Highly oxidized or weathered surfaces shall be primed. Prime with SS-1, SS-1h, CSS-1, CSS-1h asphalt emulsions or with GemSeal Tar Prime. Asphalt emulsions shall be diluted one part asphalt emulsion to 5 parts potable water and uniformly applied to the pavement at a rate of 0.10 ± 0.02 gallon per square yard. Tar Prime shall be diluted one part Tar Prime to two parts water and applied at a rate of 0.07 -0.10 gallons per square yard. The prime shall be allowed to cure for 24 hours before applying pavement sealer. (OPTIONAL)
- 5.7. Immediately before application of sealer, clean the surface of all loose dust, dirt, leaves, and any other foreign materials by sweeping, blowing, flushing with water, or any combination of the three.

6. Mix Design and Application Rates:

6.1.

Use	Coats	GemSeal Sand Mix Gallon	Water Gallon	Application Mix Gal/Sq. Yd
Low Traffic	1 st	100	25-30	0.10-0.12
	2 nd	100	25-30	0.10-0.12
Moderate Traffic	1 st	100	25-30	0.12-0.15
	2 nd	100	25-30	0.12-0.15
High Traffic	1 st *	100	25-30	0.12-0.15
	2 nd	100	25-30	0.12-0.15
	3 rd	100	25-30	0.12-0.15

NOTE: Seal coating is not recommended for enclosed or permanently shaded parking areas such as underground parking garages.

WARNING: Sealcoats, when improperly applied and/or under certain environmental conditions, may become slippery. As with any paint-like coating, repeated applications reduce texture. Skid resistance can be improved by adherence to the manufacturer's recommended mix design and application rate. **CAUTION MUST BE EXERCISED**, particularly when skid resistance is a major safety factor.

- 6.2. Latex additives: No additional additives or sand are required and if added may invalidate warranty at GemSeal's sole discretion.
- 6.3. No additional water shall be added after the recommended mix design water in table 6.1 without the expressed permission of the project manager.
- 6.4. Slow mixing shall be continuous from the time all materials are placed into the mixer until the pavement sealer mix is applied by the application equipment. During the entire mixing process, no breaking, segregating, or hardening of the emulsion, and no balling or lumping of the aggregate shall be permitted.
- 6.5. The coating shall be applied uniformly over the entire pavement surface and free of voids and pinholes. When pavement temperatures are in excess of 120°F, fog spraying of pavement with clean water is recommended to achieve better bond and even spreading of material. Fog spray shall dampen pavement without leaving puddles. (OPTIONAL)
- 6.6. Subsequent coats will be applied only after the previous coat is dried, preferably 24 hours later, but no less than 4 hours under ideal conditions. Ideal conditions are temperatures in excess of 70°F, sunshine, and less than 60% relative humidity. Marginal conditions can require curing times greater than 24 hours. Subsequent coats should be applied at right angles to the previous coat, if possible.
- 6.7. Sealer will not be applied unless the pavement temperature is a minimum 50°F and rising, pavement temperature is 60°F and rising for at least 24-48 hours following application and no rain is forecast for that period of time. Work will be completed so that there is a minimum of two hours of direct sunlight remaining after completing the day's work. Sealer will not be applied under rainy or wet conditions such as an overcast sky with high humidity. Work shall **UNDER NO CIRCUMSTANCES** be performed in cold and/or wet conditions, nor will tar emulsion be used that has been subjected to freezing weather.

7. Incidentals:

- 7.1. The contractor and Project Administrator will coordinate their activities with each other to ensure the availability of the work area so as not to delay the execution of the project, to maintain traffic flow, and to minimize activities that might be detrimental to the work in progress such as automatic sprinkler systems, other customer or construction traffic, etc.
- 7.2. The contractor will notify the Project Administrator of pavement areas that he feels have so deteriorated or have other outside factors such as poor drainage, improper construction, etc., that will render the application of a seal coat ineffective.

- 7.3. Striping will be done with a latex or acrylic paint approved by the manufacturer. No striping will commence until the seal coat to be striped has cured for at least 24 hours.
 - 7.4. The contractor shall submit with his proposal at least three (3) references of previously completed projects, proof of workers compensation and liability insurance coverage, and all local business licenses and permits as required by local authorities.
 - 7.5. The contractor will provide a performance and payment bond to the Project Administrator -OR-waivers of lien from suppliers will be provided with each invoice for payment. (OPTIONAL)
8. **Job Site Location and Scope of the Project:** See Exhibit "A". (To be drawn and attached by property owner, or manager, or architect/engineer).
9. **Basis of Payment:** These prices shall be full compensation for furnishing materials, preparation, mixing, and applying materials in compliance with this specification, and for all the tools, equipment, labor, and incidentals necessary to complete this project.

The proposal shall indicate by line item:

1. The approximate square yards and cost of patching to be performed.
2. The approximate lineal feet and cost of crack sealing to be performed.
3. The approximate square yards and cost of the seal coating to be performed.
4. The approximate lineal feet and cost of the traffic striping to be performed. -OR-A lump sum cost when performed in accordance with painting diagrams provided by the Project Administrator.
5. Total cost of project. (State and local taxes shall be identified by type and amount.)

10. WARNINGS and Miscellaneous Notes:

- 10.1. Skid Resistance: Sealcoats, when improperly applied and/or under certain environmental conditions, may become slippery. As with any paint-like coating, repeated applications reduce texture. Skid resistance can be improved by adherence to the manufacturer's recommended mix design and application rate. CAUTION MUST BE EXERCISED, particularly when skid resistance is a major safety factor. Bonsal American does not recommend seal coating asphalt pavements with the following characteristics: main thoroughfares, runways, steep inclines, poor drainage, and vehicles traveling at speeds in excess of 25 mph that are subject to rapid stops or hydroplaning. Bonsal American recommends applying refined tar emulsion to asphalt pavement surfaces only.
 - 10.2. Container Warning: Containers, regardless of being empty, half full, or full of product, may retain a residue of liquid and/or vapor and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged, and promptly returned to a drum re-conditioner. Empty pails should have a hole punched in the pail bottom to prevent drowning of small children. All other containers should be disposed in an environmentally safe manner and in accordance with governmental regulations. For work on tanks refer to OSHA regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations.
- **Container refers to any vessel, can, drum, tanker, distributor tank, etc., that may be used for handling and/or storing any of the products covered by this guideline specification or any product of unknown origin.
- 10.3. Health and Environmental: GemSeal Sand Mix is not considered a hazardous waste and meets all current Federal requirements for industrial waste. AS AN APPLICATOR you should be familiar with all potential hazards prior to entering the workplace. Toxicity Characterization Leaching Procedure information and Material Safety Data Sheets will be provided upon request. In case of accidental spill, contain with absorbent material, allow drying; and disposing of according to local, state and federal regulations. Precautions should be taken to prevent surface runoff from entering storm drainage system or ponds.
 - 10.4. Maintenance of coating can prolong its life and attractive appearance. Sand, gravel and other debris should be removed as they accumulate. Oil drippings, antifreeze, etc. can be scrubbed with mild detergents and flushed with clean water.
 - 10.5. Technical assistance available upon request.
 - 10.6. Do not allow to freeze.

LIMITED WARRANTY

GemSeal Pavement Products warrants that for a period of one (1) year from date of purchase this product shall be free from manufacturing defects and shall meet or exceed performance standards listed in the technical data sheet for the product at the time of sale, if used as directed and within the stated shelf life. This Limited Warranty applies only if the product is stored, used, and applied over a properly prepared substrate in strict accordance with applicable specifications and instructions issued by GemSeal Pavement Products. The Limited Warranty will not apply if the product is altered, modified, or misused after it has left the control of GemSeal Pavement Products. GemSeal Pavement Products will not be responsible for defects caused by factors beyond its control, including but not limited to workmanship, application equipment, weather, acts of God, structural failure, condition or movement of substrate, improper additives, poor drainage, ponded water, improper maintenance, damage from snow removal equipment, and normal wear and tear. GemSeal Pavement Products does not warrant that the product or any method of use or application would be suitable for any particular site conditions.

All warranty claims must be submitted in writing, with proof of purchase, to the following address: 3700 Arco Corporate Drive, Suite 425, Charlotte, NC 28273. Unused portions of product must be returned upon request. Replacement of defective product or, at GemSeal Pavement Products' option, refund of the purchase price of defective product shall be the buyer's sole remedy under this Limited Warranty. In no event shall GemSeal Pavement Products be liable for any damages in excess of the purchase price of the defective product. This Limited Warranty does not cover labor costs for product application, replacement, or repair. GEMSEAL PAVEMENT PRODUCTS SHALL IN NO EVENT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOST SALES OR PROFITS, BUSINESS INTERRUPTION, DELAYS, PHYSICAL DAMAGE TO OTHER MATERIALS OR PROPERTY, OR LOSS OF USE OF PROPERTY.

THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GEMSEAL PAVEMENT PRODUCTS EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No modification or extension of this Limited Warranty shall be valid unless given in writing and signed by an authorized officer of GemSeal Pavement Products. Sales personnel and product distributors are not authorized to modify or extend this Limited Warranty.

CAUTION:

Contains Refined tar; a skin irritant. Keep out of reach of children. Do not take internally. Avoid prolonged or repeated contact with skin or breathing of vapors. In case of contact with eyes, flush with plenty of water, and seek immediate medical attention. Use with adequate ventilation. Do not use in confined areas.

MANUFACTURING & CUSTOMER SERVICE:

Call (866) 264-8273 to find the nearest GemSeal location to purchase Sand Mix Pavement Sealer

GemSeal Pavement Products
Corporate Headquarters
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273



GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 02/01/2016 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name & code : GemSeal® Sealer TarBase IL-520
Product Code: 60310020 - 1 gal / 60310021 - 55gal

GemSeal® Sand Mix Sealer
Product Code: 60310024 - 1gal

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

Use of the substance/mixture : Various

1.3. Details of the supplier of the safety data sheet

GemSeal Pavement Products
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273 - USA
T 866-264-8273 Tech Service: Monday - Friday; 8:00am - 5:00pm EST

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute toxicity 4 (Oral)
Serious Eye Irritation 2A
Skin Sensitisation. 1
Germ Cell Mutagenicity 1B
Carcinogenicity 1A
Reproductive Toxicity 1B
Specific Target Organ Toxicity After Repeated Exposure 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye irritation. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to lungs through prolonged or repeated exposure.

Precautionary statements (GHS-US) : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. If on skin: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

GemSeal® Sealer TarBase IL-520: 41 % of the mixture consists of ingredient(s) of unknown acute toxicity.

GemSeal® Sand Mix Sealer: 31 % of the mixture consists of ingredient(s) of unknown acute toxicity.

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Pitch, coal tar, high-temperature	(CAS No) 65996-93-2	10 - 30	Carc. 1A
Quartz	(CAS No) 14808-60-7	10 - 30	Acute Tox. 4 (Oral) Carc. 1A STOT RE 1
Aluminum silicate	(CAS No) 1327-36-2	1 - 5	Skin Irrit. 2 Eye Irrit. 2A
Feldspar	(CAS No) 68476-25-5	1 - 5	Eye Irrit. 2A STOT SE 3
Titanium dioxide	(CAS No) 13463-67-7	0.1 - 1	Acute Tox. 4 (inhalation) Carc. 2
Naphthalene	(CAS No) 91-20-3	0.1 - 1	Acute Tox. 4 (Oral) Carc. 2
Benz[a]anthracene	(CAS No) 56-55-3	0.1 - 1	Carc. 2
Indeno(1,2,3-cd)pyrene	(CAS No) 193-39-5	0.1 - 1	Carc. 2
Chrysene	(CAS No) 218-01-9	0.1 - 1	Carc. 2 Muta. 2
Benzo(b)fluoranthene	(CAS No) 205-99-2	0.1 - 1	Carc. 2
Benzo(a)pyrene	(CAS No) 50-32-8	0.1 - 1	Skin Sens. 1 Carc. 1A Muta. 1B Repr. 1B
9H-Carbazole	(CAS No) 86-74-8	0.1 - 1	Muta. 2 Carc. 2
Dibenzo(a,h)pyrene	(CAS No) 189-64-0	0.1 - 1	Muta. 2 Carc. 1B
Benzo(j)fluoranthene	(CAS No) 205-82-3	0.1 - 1	Carc. 2
Benzo(k)fluoranthene	(CAS No) 207-08-9	0.1 - 1	Carc. 2

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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 may include redness, drying, defatting and cracking of the skin. May cause sensitisation by skin contact.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : Harmful if swallowed. May cause stomach distress, nausea or vomiting.

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

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.2. For emergency responders

No additional information available

6.2. Methods and material for containment and cleaning up

For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Scoop up material and place in a disposal container.

6.3. 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 skin and eyes. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Pitch, coal tar, high-temperature (65996-93-2)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.2 mg/m ³ (benzene soluble fraction)
Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³
Titanium dioxide (13463-67-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³
Naphthalene (91-20-3)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	50 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm
Chrysene (218-01-9)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.2 mg/m ³
Benzo(a)pyrene (50-32-8)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.2 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear suitable gloves.

Eye protection : Safety glasses or goggles are recommended when using product.

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available.
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)	: Not flammable.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available.
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.

9.2. Other information

VOC content	: < 50 g/L
-------------	------------

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Harmful if swallowed.
----------------	-------------------------

Quartz (14808-60-7)

LD50 oral rat	500 mg/kg
---------------	-----------

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg

Naphthalene (91-20-3)	
LD50 dermal rabbit	> 20 g/kg
LC50 inhalation rat (mg/l)	> 340 mg/m ³ (1 h)

9H-Carbazole (86-74-8)	
LD50 oral rat	> 5000 mg/kg

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer	
ATE (oral)	1320 mg/kg
ATE (dermal)	>2000 mg/kg
ATE (inhalation)	>20 mg/l (4 h)

Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.

Pitch, coal tar, high-temperature (65996-93-2)	
IARC group	1

Quartz (14808-60-7)	
IARC group	1

Titanium dioxide (13463-67-7)	
IARC group	2B

Naphthalene (91-20-3)	
IARC group	2B

Benz[a]anthracene (56-55-3)	
IARC group	2B

Indeno(1,2,3-cd)pyrene (193-39-5)	
IARC group	2B

Chrysene (218-01-9)	
IARC group	2B

Benzo(b)fluoranthene (205-99-2)	
IARC group	2B

Benzo(a)pyrene (50-32-8)	
IARC group	1

9H-Carbazole (86-74-8)	
IARC group	2B

Dibenzo(a,h)pyrene (189-64-0)	
IARC group	2B

Benzo(j)fluoranthene (205-82-3)	
IARC group	2B

Benzo(k)fluoranthene (207-08-9)	
IARC group	2B

Reproductive toxicity	: May damage fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Causes damage to lungs through prolonged or repeated exposure.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause sensitisation by skin contact.

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Symptoms/injuries after eye contact	: Causes serious eye irritation.. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: Harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Persistence and degradability	Not established.
-------------------------------	------------------

12.3. Bioaccumulative potential

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Bioaccumulative potential	Not established.
---------------------------	------------------

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

Pitch, coal tar, high-temperature (65996-93-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Aluminum silicate (1327-36-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Feldspar (68476-25-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Titanium dioxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Naphthalene (91-20-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on SARA Section 313 (Specific toxic chemical listings)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
--------------------------	--

SARA Section 313 - Emission Reporting	0.1 %
---------------------------------------	-------

Benz[a]anthracene (56-55-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 313 - Emission Reporting	0.1 %
---------------------------------------	-------

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Indeno(1,2,3-cd)pyrene (193-39-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %

Chrysene (218-01-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %

Benzo(b)fluoranthene (205-99-2)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %

Benzo(a)pyrene (50-32-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %

9H-Carbazole (86-74-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Dibenzo(a,h)pyrene (189-64-0)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %

Benzo(j)fluoranthene (205-82-3)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %

Benzo(k)fluoranthene (207-08-9)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %

15.2. US State regulations

GemSeal® Sealer TarBase IL-520 / GemSeal® Sand Mix Sealer

State or local regulations	This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
----------------------------	--

SECTION 16: Other information

Indication of changes : None.

Other information : None.

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



Fast Dry Latex Traffic Marking Paint - White and Yellow

DESCRIPTION: Fast Dry Latex Traffic Paint

COLOR(S): White & Yellow

APPLICABLE SPECIFICATIONS: Federal Specification TT-P-1952E, Type I

TYPICAL USE: Roadways, Airports and Parking Lots

DRY TIME: 10 Minutes @ 77°F for 2 minutes when applied @ 140°F

COVERAGE: Approximately 320 Linear Feet of 4" Line Applied @15 Mils

GENERAL INFORMATION:

The following information has been provided as a general guideline for the use and disposal of GemSeal traffic marking paints. It is also very beneficial to run a small test in a non-critical area in order to ensure the surface preparation: weather conditions, equipment and product are suitable and working properly.

SURFACE PREPARATION:

Care should be taken to ensure that the surface is clean, dry and free of loose material. A simple leaf blower is typically sufficient to remove gravel and dust in most instances. When applying over previously coated areas however, take special care to remove any loose or peeling paint. Other surface conditions, such as areas with large amounts of engine oil buildup or existing epoxy coatings, may require a power-washing procedure or abrading the surface before application of the paint. New concrete and asphalt should be aged for a minimum of 30 days prior to painting. Use caution when striping over a freshly sealed surface. Sealers can affect the adhesion and cure of traffic marking paints. For more information on the surface, please consult with the supplier or applicator of the surface.

WEATHER CONDITIONS & APPLICATION:

Air temperature, surface temperature, humidity and the weather conditions following application are extremely important factors in the success of the products. GemSeal formulates these coatings to be applied without further reduction. The can be used in conjunction with the application of glass beads to improve reflectivity without sacrificing other properties. Protect fresh lines from traffic until thoroughly dry. These, as well as all water-based coatings, should not be applied to surfaces

less than 60°F, when the relative humidity is greater than 80% and/or less than 24 hours before any expected precipitation. Evening and night applications should be avoided whenever possible due to cooler temperatures. At lower temperatures or higher humidity, a significant amount of extra time will be needed for the paints to dry.

EQUIPMENT:

Tip size, fluid pressure, atomizing air pressure, paint viscosity and paint temperature are all critical to the appearance, consistency and performance of the paint. The equipment must be matched to the paint being applied in order to achieve the proper film thickness and coverage. When using a water-based product, the equipment must be made with stainless steel or some other material that will not react with the paint and cause application or storage problems. Typical tip sizes for "airless" machines use .019"-.021", while "air-atomized" machines use .086"-.11" at 60 lbs. pressure. For more information, please consult with the equipment manufacturer.

PAINT SELECTION & SAFETY:

Protect these and all water-based coatings from freezing. use only paint recommended or specified for each application. Shelter the containers when possible and avoid prolonged outside storage. Agitation of the paints by stirring or shaking should be performed in order to ensure uniform consistency, application and performance. When storing partially filled containers, a small amount of water may be added and allowed to stand on top in order to avoid "skinning." Always be sure the containers are sealed tightly during transportation or storing in order to avoid spillage, risk of fire and solvent evaporation. Keep paints away from heat and flame. Consult the MSDS and/or labels for further safety, first aid, and spill or leak procedures.



Fast Dry Latex Traffic Marking Paint - White and Yellow

PHYSICAL PROPERTIES:

	<u>White</u>	<u>Yellow</u>
Viscosity @ 77°F, Kreb Units:	80-90	80-90
Weight Per Gallon @ 77°F, Lbs.:	13.06± 0.2	13.00± 0.2
Pigment, % by Weight:	60-62	60-62
Total Solids, % by Weight:	70.0 Min.	70.0 Min.
pH	9.6± 0.4	9.6± 0.4
Volume Solids, %:	60.0 Min.	60.0 Min.
Dry Opacity, 5-Mil Bird:	0.92 Min.	0.92 Min.
Directional Reflectance, %:	85 Min.	50 Min.
Drying Time @ 77°F, Minutes:	10 Max.	10 Max.
V.O.C. (Minus Water)	1.25 GAL. Max.	1.25 Gal. Max. (150g/Liter) (150g/Liter)

CLEANUP SOLVENT:

Mixture of water and mild household detergent.

NOTE: These products are not recommended for crosswalks or other “high-traffic” auxiliary markings on public roadways.

WASTE DISPOSAL:

Comply with all regulations regarding handling, storage, and disposal of all hazardous materials and waste. Consult local agencies or disposal companies for individual instructions and requirements. **Improper disposal of paint and their related materials is illegal and may result in large fines.** Please comply with all regulations and minimize waste whenever possible.

WARNING:
This product contains chemicals known to the State of California to cause cancer.
Thirty-five percent of the mixture consists of ingredient(s) of unknown acute toxicity.

MANUFACTURING & CUSTOMER SERVICE:

Call (866) 264-8273 to find the nearest GemSeal location to purchase Fast Dry Latex Traffic Marking Paint.

GemSeal Pavement Products
 Corporate Headquarters:
 3700 Arco Corporate Drive, Suite 425
 Charlotte, NC 28273

GemSeal Pavement Products warrants that for a period of one (1) year from date of purchase this product shall be free from manufacturing defects and shall meet or exceed performance standards listed in the technical data sheet for the product at the time of sale, if used as directed and within the stated shelf life. This Limited Warranty applies only if the product is stored, used, and applied over a properly prepared substrate in strict accordance with applicable specifications and instructions issued by GemSeal Pavement Products. The Limited Warranty will not apply if the product is altered, modified, or misused after it has left the control of GemSeal Pavement Products. GemSeal Pavement Products will not be responsible for defects caused by factors beyond its control, including but not limited to workmanship, application equipment, weather, acts of God, structural failure, condition or movement of substrate, improper additives, poor drainage, ponded water, improper maintenance, damage from snow removal equipment, and normal wear and tear. GemSeal Pavement Products does not warrant that the product or any method of use or application would be suitable for any particular site conditions. All warranty claims must be submitted in writing, with proof of purchase, to the following address: 3700 Arco Corporate Drive, Suite 425, Charlotte, NC 28273. Unused portions of product must be returned upon request. Replacement of defective product or, at GemSeal Pavement Products’ option, refund of the purchase price of defective product shall be the buyer’s sole remedy under this Limited Warranty. In no event shall GemSeal Pavement Products be liable for any damages in excess of the purchase price of the defective product. This Limited Warranty does not cover labor costs for product application, replacement, or repair. GEMSEAL PAVEMENT PRODUCTS SHALL IN NO EVENT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOST SALES OR PROFITS, BUSINESS INTERRUPTION, DELAYS, PHYSICAL DAMAGE TO OTHER MATERIALS OR PROPERTY, OR LOSS OF USE OF PROPERTY. THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GEMSEAL PAVEMENT PRODUCTS EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No modification or extension of this Limited Warranty shall be valid unless given in writing and signed by an authorized officer of GemSeal Pavement Products. Sales personnel and product distributors are not authorized to modify or extend this Limited Warranty.



GemSeal Fast Dry Latex Traffic Paint

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 03/09/2018

Revision date: 05/05/2014

Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : GemSeal Fast Dry Latex Traffic Paint
Product code : Blue #60310048; White #60310035; Yellow #60310035

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

Use of the substance/mixture : Paint

1.3. Details of the supplier of the safety data sheet

GemSeal Pavement Products
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273 - USA
T 866-264-8273 Tech Service: Monday - Friday; 8:00am - 5:00pm EST

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300
CHEMTREC International +1 (703) 527-3887 24 hr

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Carcinogenicity 1A

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : May cause cancer.

Precautionary statements (GHS-US) : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

35 % of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Limestone	(CAS No) 1317-65-3	40 - 70	Not classified
Titanium dioxide	(CAS No) 13463-67-7	3 - 7	Acute Tox. 4 (Inhalation), H332 Carc. 2, H351
Quartz	(CAS No) 14808-60-7	0.1 - 1	Acute Tox. 4 (Oral), H302 Carc. 1A, H350 STOT RE 1, H372

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

GemSeal Fast Dry Latex Traffic Paint

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth and drink plenty of water. Get medical advice/attention if you feel unwell.

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 may include redness, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : May cause stomach distress, nausea or vomiting.

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

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Closed containers may burst if exposed to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing vapour or mist. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation. Launder contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Keep from freezing. Store locked up.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Limestone (1317-65-3)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total); 5 mg/m ³ (resp)
Titanium dioxide (13463-67-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust)

GemSeal Fast Dry Latex Traffic Paint

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Kaolin (1332-58-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	((10 mg/m ³)/(%SiO ₂ +2) (resp)) ((30 mg/m ³)/(%SiO ₂ +2) (total)) ((250)/(%SiO ₂ +5) mppcf (resp))

8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear suitable gloves.
Eye protection	: Safety glasses with side shields.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Appearance	: Paint.
Colour	: Various.
Odour	: Odourless.
Odour threshold	: No data available.
pH	: No data available.
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: ~0 °C (32°F)
Boiling point	: 100 °C (212 °F)
Flash point	: Not applicable.
Self ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Not flammable.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: 1.65-1.75
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	: Not applicable.

9.2. Other information

VOC content	: <100 g/l
-------------	------------

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Keep from freezing. Incompatible materials.

GemSeal Fast Dry Latex Traffic Paint

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

GemSeal Fast Dry Latex Traffic Paint	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	No data available.

Limestone (1317-65-3)	
LD50 oral rat	6450 mg/kg

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg

Quartz (14808-60-7)	
LD50 oral rat	500 mg/kg

Skin corrosion/irritation : Based on available data, the classification criteria are not met.
Serious eye damage/irritation : Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation : Based on available data, the classification criteria are not met.
Germ cell mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : May cause cancer.

Titanium dioxide (13463-67-7)	
IARC group	2B

Quartz (14808-60-7)	
IARC group	1
National Toxicity Program (NTP) Status	2

Reproductive toxicity : Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure) : Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met.
Aspiration hazard : Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion : May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

GemSeal Fast Dry Latex Traffic Paint	
Persistence and degradability	No additional information available.

12.3. Bioaccumulative potential

GemSeal Fast Dry Latex Traffic Paint	
Bioaccumulative potential	No additional information available.

12.4. Mobility in soil

GemSeal Fast Dry Latex Traffic Paint	
Ecology - soil	No additional information available.

12.5. Other adverse effects

Other adverse effects : No additional information available.

GemSeal Fast Dry Latex Traffic Paint

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

SECTION 14: Transport information

In accordance with DOT:

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

Limestone (1317-65-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Titanium dioxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.3. US State regulations

GemSeal Fast Dry Latex Traffic Paint

State or local regulations : This product contains chemicals known to the State of California to cause cancer.

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

IARC	International Agency for Research on Cancer.
	1 - Carcinogenic to humans; 2A - Probably carcinogenic to humans; 2B - Possibly carcinogenic to humans; 3 - Not classifiable; 4 - Probably not carcinogenic to humans.
NTP	National Toxicology Program.
	1 - Evidence of Carcinogenicity; 2 - Known Human Carcinogens; 3 - Reasonably anticipated to be Human Carcinogen; 4 - Substances delisted from report on Carcinogens; 5 - Twelfth Report - Items under consideration.

SECTION 16: Other information

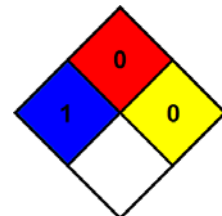
Date of issue : 05/05/2014

Data sources : SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

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

NFPA fire hazard : 0 - Materials that will not burn.

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

ATTACHMENT #2

General Contract Conditions for Small Construction/Development Contracts

U.S. Department of Housing and Urban
Development
Office of Public and Indian Housing
OMB Approval No. 2577-0157 (exp. 1/31/2017)

Applicability. The following contract clauses are applicable and must be inserted into small construction/development contracts, greater than \$2,000 but not more than \$100,000.

1. Definitions

Terms used in this form are the same as defined in form HUD-5370

2. Prohibition Against Liens

The Contractor is prohibited from placing a lien on the PHA's property. This prohibition shall apply to all subcontractors at any tier and all materials suppliers. The only liens on the PHA's property shall be the Declaration of Trust or other liens approved by HUD.

3. Disputes

- (a) Except for disputes arising under the **Labor Standards** clauses, all disputes arising under or relating to this contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this clause.
- (b) All claims by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision. A claim by the PHA against the Contractor shall be subject to a written decision by the Contracting Officer.
- (c) The Contracting Officer shall, within 30 days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
- (d) The Contracting Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in the PHA in accordance with the PHA's policy and procedures, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within 30 days after receipt of the Contracting Officer's decision.
- (e) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

4. Default

- (a) If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with the diligence that will insure its completion within the time specified in this contract, or any extension thereof, or fails to complete said work within this time, the Contracting Officer may, by written notice to the Contractor, terminate the right to proceed with the work (or separable part of the work) that has been delayed. In the event, the PHA may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, equipment, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the PHA resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the PHA in completing the work.

- (b) The Contractor's right to proceed shall not be terminated or the Contractor charged with damages under this clause if –
 - (1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor; and
 - (2) The Contractor, within 10 days from the beginning of such delay notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of the delay. If, in the judgment of the Contracting Officer, the findings of Fact warrant such action, time for completing the work shall be extended by written modification to the contract. The findings of the Contracting Officer shall be reduced to a written decision which shall be subject to the provisions of the **Disputes** clause of this contract.
- (c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligation of the parties will be the same as if the termination had been for convenience of the PHA.

5. Termination for Convenience

- (a) The Contracting Officer may terminate this contract in whole, or in part, whenever the Contracting Officer determines that such termination is in the best interest of the PHA. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which the performance of the work under the contract is terminated, and the date upon which such termination becomes effective.
- (b) If the performance of the work is terminated, either in whole or in part, the PHA shall be liable to the Contractor for reasonable and proper costs resulting from such termination upon the receipt by the PHA of a properly presented claim setting out in detail: (1) the total cost of the work performed to date of termination less the total amount of contract payments made to the Contractor; (2) the cost (including reasonable profit) of settling and paying claims under subcontracts and material orders for work performed and materials and supplies delivered to the site, payment for which has not been made by the PHA to the Contractor or by the Contractor to the subcontractor or supplier; (3) the cost of preserving and protecting the work already performed until the PHA or assignee takes possession thereof or assumes responsibility therefore; (4) the actual or estimated cost of legal and accounting services reasonably necessary to prepare and present the termination claim to the PHA; and (5) an amount constituting a reasonable profit on the value of the work performed by the Contractor.
- (c) The Contracting Officer will act on the Contractor's claim within days (60 days unless otherwise indicated) of receipt of the Contractor's claim.
- (d) Any disputes with regard to this clause are expressly made subject to the provisions of the Disputes clause of this contract.

6. Insurance

- (a) Before commencing work, the Contractor and each subcontractor shall furnish the PHA with certificates of insurance showing the following insurance is in force and will insure all operations under the Contract:

(1) Workers' Compensation, in accordance with state or Territorial Workers' Compensation laws.

(2) Commercial General Liability with a combined single limit for bodily injury and property damage of not less than \$ 500,000 [Contracting Officer insert amount] per occurrence to protect the Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others. This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under (3) below. If the Contractor has a "claims-made" policy, then the following additional requirements apply: the policy must provide a "retroactive date" which must be on or before the execution date of the Contract; and the extended reporting period may not be less than five years following the completion date of the Contract.

(3) Automobile Liability on owned and non-owned motor vehicles used on the site(s) or in connection therewith for a combined single limit for bodily injury and property damage of not less than \$ 500,000 [Contracting Officer insert amount] per occurrence.

(b) Before commencing work, the Contractor shall furnish the PHA with a certificate of insurance evidencing that Builder's Risk (fire and extended coverage) Insurance on all work in place and/or materials stored at the building site(s), including foundations and building equipment, is in force. The Builder's Risk Insurance shall be for the benefit of the Contractor and the PHA as their interests may appear and each shall be named in the policy or policies as an insured. The Contractor in installing equipment supplied by the PHA shall carry insurance on such equipment from the time the Contractor takes possession thereof until the Contract work is accepted by the PHA. The Builder's Risk Insurance need not be carried on excavations, piers, footings, or foundations until such time as work on the superstructure is started. It need not be carried on landscape work. Policies shall furnish coverage at all times for the full cash value of all completed construction, as well as materials in place and/or stored at the site(s), whether or not partial payment has been made by the PHA. The Contractor may terminate this insurance on buildings as of the date taken over for occupancy by the PHA. The Contractor is not required to carry Builder's Risk Insurance for modernization work which does not involve structural alterations or additions and where the PHA's existing fire and extended coverage policy can be endorsed to include such work.

(c) All insurance shall be carried with companies which are financially responsible and admitted to do business in the State in which the project is located. If any such insurance is due to expire during the construction period, the Contractor (including subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to the Contracting Officer. All certificates of insurance, as evidence of coverage, shall provide that no coverage may be canceled or non-renewed by the insurance company until at least 30 days prior written notice has been given to the Contracting Officer.

7. Contract Modifications

(a) Only the Contracting Officer has authority to modify any term or condition of this contract. Any contract modification shall be authorized in writing.

(b) The Contracting Officer may modify the contract unilaterally (1) pursuant to a specific authorization stated in a contract clause (e.g., Changes); or (2) for administrative matters which

do not change the rights or responsibilities of the parties (e.g., change in the PHA address). All other contract modifications shall be in the form of supplemental agreements signed by the Contractor and the Contracting Officer.

(c) When a proposed modification requires the approval of HUD prior to its issuance (e.g., a change order that exceeds the PHA's approved threshold), such modification shall not be effective until the required approval is received by the PHA.

8. Changes

(a) The Contracting Officer may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract including changes:

(1) In the specifications (including drawings and designs);

(2) In the method or manner of performance of the work;

(3) PHA-furnished facilities, equipment, materials, services, or site; or,

(4) Directing the acceleration in the performance of the work.

(b) Any other written order or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating (1) the date, circumstances and source of the order and (2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no proposal for any change under paragraph (b) above shall be allowed for any costs incurred more than 20 days (5 days for oral orders) before the Contractor gives written notice as required. In the case of defective specifications for which the PHA is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after (1) receipt of a written change order under paragraph (a) of this clause, or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting a written statement describing the general nature and the amount of the proposal. If the facts justify it, the Contracting Officer may extend the period for submission. The proposal may be included in the notice required under paragraph (b) above. No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(f) The Contractor's written proposal for equitable adjustment shall be submitted in the form of a lump sum proposal supported with an itemized breakdown of all increases and decreases in the contract in at least the following details:

(1) Direct Costs. Materials (list individual items, the quantity and unit cost of each, and the aggregate cost); Transportation and delivery costs associated with materials; Labor

breakdowns by hours or unit costs (identified with specific work to be performed); Construction equipment exclusively necessary for the change; Costs of preparation and/ or revision to shop drawings resulting from the change; Worker's Compensation and Public Liability Insurance; Employment taxes under FICA and FUTA; and, Bond Costs - when size of change warrants revision.

- (2) Indirect Costs. Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.
- (3) Profit. The amount of profit shall be negotiated and may vary according to the nature, extent, and complexity of the work required by the change.

The allowability of the direct and indirect costs shall be determined in accordance with the Contract Cost Principles and Procedures for Commercial Firms in Part 31 of the Federal Acquisition Regulation (48 CFR 1-31), as implemented by HUD Handbook 2210.18, in effect on the date of this contract. The Contractor shall not be allowed a profit on the profit received by any subcontractor. Equitable adjustments for deleted work shall include a credit for profit and may include a credit for indirect costs. On proposals covering both increases and decreases in the amount of the contract, the application of indirect costs and profit shall be on the net-change in direct costs for the Contractor or subcontractor performing the work.

- (g) The Contractor shall include in the proposal its request for time extension (if any), and shall include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the contract in its entirety.
- (h) The Contracting Officer shall act on proposals within 30 days after their receipt, or notify the Contractor of the date when such action will be taken.
- (i) Failure to reach an agreement on any proposal shall be a dispute under the clause entitled Disputes herein. Nothing in this clause, however, shall excuse the Contractor from proceeding with the contract as changed.
- (j) Except in an emergency endangering life or property, no change shall be made by the Contractor without a prior order from the Contracting Officer.

9. Examination and Retention of Contractor's Records

The HA, HUD, or Comptroller General of the United States, or any of their duly authorized representatives shall, until three years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.

10. Rights in Data and Patent Rights (Ownership and Proprietary Interest)

The HA shall have exclusive ownership of, all proprietary interest in, and the right to full and exclusive possession of all information, materials, and documents discovered or produced by Contractor pursuant to the terms of this Contract, including but not limited to reports, memoranda or letters concerning the research and reporting tasks of this Contract.

11. Energy Efficiency

The Contractor shall comply with all mandatory standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub.L. 94-163) for the State in which the work under this contract is performed.

12. Procurement of Recovered Materials

- (a) In accordance with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, the Contractor shall procure items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition. The Contractor shall procure items designated in the EPA guidelines that contain the highest percentage of recovered materials practicable unless the Contractor determines that such items: (1) are not reasonably available in a reasonable period of time; (2) fail to meet reasonable performance standards, which shall be determined on the basis of the guidelines of the National Institute of Standards and Technology, if applicable to the item; or (3) are only available at an unreasonable price.
- (b) Paragraph (a) of this clause shall apply to items purchased under this contract where: (1) the Contractor purchases in excess of \$10,000 of the item under this contract; or (2) during the preceding Federal fiscal year, the Contractor: (i) purchased any amount of the items for use under a contract that was funded with Federal appropriations and was with a Federal agency or a State agency or agency of a political subdivision of a State; and (ii) purchased a total of in excess of \$10,000 of the item both under and outside that contract.

13. Training and Employment Opportunities for Residents in the Project Area (Section 3, HUD Act of 1968; 24 CFR 135)

- (a) The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- (b) The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 regulations.
- (c) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the

-
- qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- (d) The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135.
 - (e) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 135.
 - (f) Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

14. Labor Standards - Davis-Bacon and Related Acts

(a) Minimum Wages.

(1) All laborers and mechanics employed under this contract in the construction or development of the project(s) involved will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the regular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in

a prominent and accessible place where it can be easily seen by the workers.

- (2) (i) Any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:
 - (a) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (b) The classification is utilized in the area by the construction industry; and
 - (c) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employee Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- (iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- (iv) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (a)(2)(ii) or (iii) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (4) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; **provided**, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(b) **Withholding of Funds.** HUD or its designee shall, upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working in the construction or development of the project, all or part of the wages required by the contract, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due.

(c) **Payrolls and Basic Records.**

(1) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working in the construction or development of the project. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv), that the wages of any laborer or mechanic include the amount of costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of

the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (2) (i) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under subparagraph (c)(1) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1214-0149.)
- (ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (A) That the payroll for the payroll period contains the information required to be maintained under paragraph (c)(1) of this clause and that such information is correct and complete;
- (B) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3; and
- (C) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirements for submission of the "Statement of Compliance" required by subparagraph (c)(2)(ii) of this clause.
- (iv) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.
- (3) The Contractor or subcontractor shall make the records required under subparagraph (c)(1) available for inspection, copying, or transcription by authorized representatives of HUD or its designee, the Contracting Officer, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

- (d) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services (OATELS), or with a State Apprenticeship Agency recognized by OATELS, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.
- The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (e) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate

specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (f) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- (g) Compliance with Copeland Act Requirements. The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.
- (h) Contract Termination; Debarment. A breach of the labor standards clauses in this contract may be grounds for termination of the contract and for debarment as a Contractor and a subcontractor as provided in 29 CFR 5.12.
- (i) Compliance with Davis-Bacon and related Act Requirements. All rulings and interpretations of the Davis-Bacon and related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (j) Disputes Concerning Labor Standards. Disputes arising out of the labor standards provisions of this clause shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the PHA, HUD, the U.S. Department of Labor, or the employees or their representatives.
- (k) Certification of Eligibility.
- (1) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a United States Government

contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(3) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.

(l) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts all the provisions contained in this clause, and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all these provisions.

(m) Non-Federal Prevailing Wage Rates. Any prevailing wage rate (including basic hourly rate and any fringe benefits), determined under State law to be prevailing, with respect to any employee in any trade or position employed under the contract, is inapplicable to the contract and shall not be enforced against the Contractor or any subcontractor, with respect to employees engaged under the contract whenever such non-Federal prevailing wage rate exceeds:

- (i) the applicable wage rate determined by the Secretary of Labor pursuant to the Davis-Bacon Act (40 U.S.C. 3141 et seq.) to be prevailing in the locality with respect to such trade;
- (ii) an applicable apprentice wage rate based thereon specified in an apprenticeship program registered with the U.S. Department of Labor (DOL) or a DOL-recognized State Apprenticeship Agency; or
- (iii) an applicable trainee wage rate based thereon specified in a DOL-certified trainee program.

ATTACHMENT #3

General Decision Number: FL180124 10/05/2018 FL124

Superseded General Decision Number: FL20170124

State: Florida

Construction Type: Residential

County: Pinellas County in Florida.

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2018
1	10/05/2018

ENGI0925-008 06/01/2013

Rates	Fringes
-------	---------

Rates	Fringes
POWER EQUIPMENT OPERATOR:	
Crawler Cranes; Truck Cranes; Pile Driver Cranes; Rough Terrain Cranes; and Any Crane not otherwise described below...	
\$ 29.61	11.50
Hydraulic Cranes Rated 100 Tons or Above but Less Than 250 Tons; and Lattice Boom Cranes Less Than 150 Tons if not described below.	
\$ 30.61	11.50
Lattice Boom Cranes Rated at 150 Tons or Above; Friction Cranes of Any Size; Mobile Tower Cranes or Luffing Boom Cranes of Any Size; Electric Tower Cranes; Hydraulic Cranes Rated at 250 Tons or Above; and Any Crane Equipped with 300 Foot or More of Any Boom Combination.....	
\$ 31.61	11.50
Oiler.....	11.50
\$ 22.91	

 * IRON0397-004 07/01/2018

	Rates	Fringes
IRONWORKER, REINFORCING.....	\$ 29.85	15.97

 SUFL2009-120 06/08/2009

	Rates	Fringes
BRICKLAYER.....	\$ 20.00	0.00
CARPENTER, Includes Form Work....	\$ 11.67	2.25
CEMENT MASON/CONCRETE FINISHER...	\$ 15.63	0.00
DRYWALL FINISHER/TAPER.....	\$ 18.27	0.00
DRYWALL HANGER.....	\$ 15.00	0.00
ELECTRICIAN.....	\$ 11.98	0.00
FENCE ERECTOR.....	\$ 14.00	0.75
GLAZIER.....	\$ 15.88	0.00
INSULATOR: Batt and Blown.....	\$ 12.41	0.00
IRONWORKER, ORNAMENTAL.....	\$ 15.25	0.00
IRONWORKER, STRUCTURAL.....	\$ 14.53	0.00
LABORER: Common or General.....	\$ 8.80	0.00
LABORER: Mason Tender - Brick...	\$ 11.51	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 11.29	0.00
LABORER: Pipelayer.....	\$ 15.14	0.00
LABORER: Roof Tearoff.....	\$ 9.00	0.00
LABORER: Landscape and Irrigation.....	\$ 10.97	0.00
OPERATOR: Asphalt Paver.....	\$ 12.40	0.00
OPERATOR: Backhoe Loader Combo.....	\$ 17.04	0.00
OPERATOR: Backhoe/Excavator.....	\$ 15.25	0.00
OPERATOR: Bulldozer.....	\$ 12.67	0.00
OPERATOR: Distributor.....	\$ 11.41	0.00
OPERATOR: Forklift.....	\$ 17.50	0.00
OPERATOR: Grader/Blade.....	\$ 14.00	0.00
OPERATOR: Loader.....	\$ 11.50	0.00
OPERATOR: Roller.....	\$ 10.62	0.00

OPERATOR: Screed.....	\$ 10.93	0.00
OPERATOR: Trackhoe.....	\$ 14.81	0.00
OPERATOR: Tractor.....	\$ 10.20	0.00
PAINTER, Includes Brush, Roller and Spray (Excludes Drywall Finishing/Taping).....		
	\$ 13.59	0.00
PLASTERER.....	\$ 13.91	0.00
PLUMBER.....	\$ 12.97	0.00
ROOFER, Includes Built Up, Modified Bitumen, and Shake & Shingle Roofs (Excludes Metal Roofs).....		
	\$ 15.98	0.00
ROOFER: Metal Roof.....	\$ 16.99	0.00
SHEET METAL WORKER, Includes HVAC Duct Installation (Excludes Metal Roof Installation).....		
	\$ 14.82	0.00
TILE SETTER.....	\$ 16.00	0.00
TRUCK DRIVER, Includes Dump Truck.....		
	\$ 10.22	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 12.10	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current

negotiated/CBA rate of the union locals from which the rate is based.

 WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
 Wage and Hour Division
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

Instructions For Completing Payroll Form, WH-347

General: Form WH-347 has been made available for the convenience of contractors and subcontractors required by their Federal or Federally-aided construction-type contracts and subcontracts to submit weekly payrolls. Properly filled out, this form will satisfy the requirements of Regulations, Parts 3 and 5 (29 C.F.R., Subtitle A), as to payrolls submitted in connection with contracts subject to the Davis-Bacon and related Acts. While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) requires contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) Regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Under the Davis-Bacon and related Acts, the contractor is required to pay not less than prevailing wage, including fringe benefits, as predetermined by the Department of Labor. The contractor's obligation to pay fringe benefits may be met either by payment of the fringe benefits to bona fide benefit plans, funds or programs or by making payments to the covered workers (laborers and mechanics) as cash in lieu of fringe benefits.

This payroll provides for the contractor to show on the face of the payroll all monies to each worker, whether as basic rates or as cash in lieu of fringe benefits, and provides for the contractor's representation in the statement of compliance on the payroll (as shown on page 2) that he/she is paying for fringe benefits required by the contract and not paid as cash in lieu of fringe benefits. Detailed instructions concerning the preparation of the payroll follow:

Contractor or Subcontractor: Fill in your firm's name and check appropriate box.

Address: Fill in your firm's address.

Payroll No.: Beginning with the number "1", list the payroll number for the submission.

For Week Ending: List the workweek ending date.

Project and Location: Self-explanatory.

Project or Contract No.: Self-explanatory.

Column 1 - Name and Individual Identifying Number of Worker: Enter each worker's full name and an individual identifying number (e.g., last four digits of worker's social security number) on each weekly payroll submitted.

Column 2 - No. of Withholding Exemptions: This column is merely inserted for the employer's convenience and is not a requirement of Regulations, Part 3 and 5.

Column 3 - Work Classifications: List classification descriptive of work actually performed by each laborer or mechanic. Consult classification and minimum wage schedule set forth in contract specifications. If additional classifications are deemed necessary, see Contracting Officer or Agency representative. An individual may be shown as having worked in more than one classification provided an accurate breakdown or hours worked in each classification is maintained and shown on the submitted payroll by use of separate entries.

Column 4 - Hours worked: List the day and date and straight time and overtime hours worked in the applicable boxes. On all contracts subject to the Contract Work Hours Standard Act, enter hours worked in excess of 40 hours a week as "overtime".

Column 5 - Total: Self-explanatory

Column 6 - Rate of Pay (Including Fringe Benefits): In the "straight time" box for each worker, list the actual hourly rate paid for straight time worked, plus cash paid in lieu of fringe benefits paid. When recording the straight time hourly rate, any cash paid in lieu of fringe benefits may be shown separately from the basic rate. For example, "\$12.25/.40" would reflect a \$12.25 base hourly rate plus \$0.40 for fringe benefits. This is of assistance in correctly computing overtime. See "Fringe Benefits" below. When overtime is worked, show the overtime hourly rate paid plus any cash in lieu of fringe benefits paid in the "overtime" box for each

worker; otherwise, you may skip this box. See "Fringe Benefits" below. Payment of not less than time and one-half the basic or regular rate paid is required for overtime under the Contract Work Hours Standard Act of 1962 if the prime contract exceeds \$100,000. In addition to paying no less than the predetermined rate for the classification which an individual works, the contractor must pay amounts predetermined as fringe benefits in the wage decision made part of the contract to approved fringe benefit plans, funds or programs or shall pay as cash in lieu of fringe benefits. See "FRINGE BENEFITS" below.

Column 7 - Gross Amount Earned: Enter gross amount earned on this project. If part of a worker's weekly wage was earned on projects other than the project described on this payroll, enter in column 7 first the amount earned on the Federal or Federally assisted project and then the gross amount earned during the week on all projects, thus "\$163.00/\$420.00" would reflect the earnings of a worker who earned \$163.00 on a Federally assisted construction project during a week in which \$420.00 was earned on all work.

Column 8 - Deductions: Five columns are provided for showing deductions made. If more than five deduction are involved, use the first four columns and show the balance deductions under "Other" column; show actual total under "Total Deductions" column; and in the attachment to the payroll describe the deduction(s) contained in the "Other" column. All deductions must be in accordance with the provisions of the Copeland Act Regulations, 29 C.F.R., Part 3. If an individual worked on other jobs in addition to this project, show actual deductions from his/her weekly gross wage, and indicate that deductions are based on his gross wages.

Column 9 - Net Wages Paid for Week: Self-explanatory.

Totals - Space has been left at the bottom of the columns so that totals may be shown if the contractor so desires.

Statement Required by Regulations, Parts 3 and 5: While the "statement of compliance" need not be notarized, the statement (on page 2 of the payroll form) is subject to the penalties provided by 18 U.S.C. § 1001, namely, a fine, possible imprisonment of not more than 5 years, or both. Accordingly, the party signing this statement should have knowledge of the facts represented as true.

Items 1 and 2: Space has been provided between items (1) and (2) of the statement for describing any deductions made. If all deductions made are adequately described in the "Deductions" column above, state "See Deductions column in this payroll." See "FRINGE BENEFITS" below for instructions concerning filling out paragraph 4 of the statement.

Item 4 FRINGE BENEFITS - Contractors who pay all required fringe benefits: If paying all fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor, show the basic cash hourly rate and overtime rate paid to each worker on the face of the payroll and check paragraph 4(a) of the statement on page 2 of the WH-347 payroll form to indicate the payment. Note any exceptions in section 4(c).

Contractors who pay no fringe benefits: If not paying all fringe benefits to approved plans, funds, or programs in amounts of at least those that were determined in the applicable wage decision of the Secretary of Labor, pay any remaining fringe benefit amount to each laborer and mechanic and insert in the "straight time" of the "Rate of Pay" column of the payroll an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the application wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringe benefits, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on basic or regular rate, plus the required cash in lieu of fringe benefits at the straight time rate. In addition, check paragraph 4(b) of the statement on page 2 the payroll form to indicate the payment of fringe benefits in cash directly to the workers. Note any exceptions in section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the covered worker as cash in lieu of fringe benefits. Enter any exceptions to section 4(a) or 4(b) in section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid each worker as cash in lieu of fringe benefits and the hourly amount paid to plans, funds, or programs as fringe benefits. The contractor must pay an amount not less than the predetermined rate plus cash in lieu of fringe benefits as shown in section 4(c) to each such individual for all hours worked (unless otherwise provided by applicable wage determination) on the Federal or Federally assisted project. Enter the rate paid and amount of cash paid in lieu of fringe benefits per hour in column 6 on the payroll. See paragraph on "Contractors who pay no fringe benefits" for computation of overtime rate.

Public Burden Statement: We estimate that it will take an average of 55 minutes to complete this collection of information, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection of information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, ESA, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)



Rev. Dec. 2008

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

OMB No.: 1235-0008
Expires: 04/30/2021

NAME OF CONTRACTOR	OR SUBCONTRACTOR	ADDRESS
--------------------	------------------	---------

PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
-------------	-----------------	----------------------	-------------------------

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT OR ST	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS					(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY										FICA	WITH- HOLDING TAX	OTHER	TOTAL DEDUCTIONS		
			O																
			S																
			O																
			S																
			O																
			S																
			O																
			S																
			O																
			S																
			O																
			S																

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

Date _____

I, _____
(Name of Signatory Party) (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

_____ on the
(Contractor or Subcontractor)

_____ ; that during the payroll period commencing on the
(Building or Work)

_____ day of _____, _____, and ending the _____ day of _____, _____,
all persons employed on said project have been paid the full weekly wages earned, that no rebates have
been or will be made either directly or indirectly to or on behalf of said

_____ from the full
(Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly
from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part
3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948,
63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are
correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the
applicable wage rates contained in any wage determination incorporated into the contract; that the classifications
set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship
program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and
Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered
with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

- in addition to the basic hourly wage rates paid to each laborer or mechanic listed in
the above referenced payroll, payments of fringe benefits as listed in the contract
have been or will be made to appropriate programs for the benefit of such employees,
except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

- Each laborer or mechanic listed in the above referenced payroll has been paid,
as indicated on the payroll, an amount not less than the sum of the applicable
basic hourly wage rate plus the amount of the required fringe benefits as listed
in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR
SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE
31 OF THE UNITED STATES CODE.

ATTACHMENT #4

§200.326 Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in Appendix II to Part 200—Contract Provisions for non-Federal Entity Contracts Under Federal Awards.

Part 200, Appendix II

Appendix II to Part 200—Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

(G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201).

(I) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1986 Comp., p. 189) and 12689 (3 CFR Part 1989 Comp., p. 235), "Debarment and Suspension." The Excluded Parties List System in SAM contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(J) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(K) See § 200.322 Procurement of recovered materials.

§ 200.322 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.