

**CITY OF SAN LEANDRO**

**REQUEST FOR BID**

<b>SUBMIT BID TO:</b> City of San Leandro Purchasing Department 835 East 14th Street San Leandro, CA 94577	<b>FOR FURTHER INFORMATION CALL:</b> Don Brockman. Purchasing Agent (510) 577-3472 fax (510) 577-3312 dbrockman@ci.san-leandro.ca.us
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<b>BID NO:</b> 07-08.033	<b>DATE MAILED:</b> May 22, 2008	<b>THIS BID MUST BE DELIVERED TO THE CITY BEFORE:</b> 3:00 P.M. Tuesday, June 17, 2008
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QTY.	DESCRIPTION	UNIT PRICE	EXTENSION
	<p><b>REHABILITATION OF DIGESTER NUMBER 4 AND PROTECTIVE COATINGS</b></p> <p><b>Bid No. 07-08.033</b></p> <p><b>Notice to Bidders</b></p> <p>Sealed bids shall be received at the Purchasing Office, City Hall, 835 E. 14<sup>th</sup> Street, San Leandro, CA up to <b>3:00 PM local time, Tuesday, June 17, 2008</b> for providing all labor, materials, equipment and incidentals required to rehabilitate and recoat Digester Number 4 at the San Leandro Water Pollution Control Plant per the attached specifications and scope of work.</p> <p>The City reserves the right to waive minor variations in specifications bid.</p> <p><b><u>MANDATORY pre-bid meeting and site visit:</u></b> <b>10:00 AM local time, Thursday, June 5, 2008</b> at the Water Pollution Control Plant, 3000 Davis Street, San Leandro, CA.</p> <p>The City's project manager, Ray Busch, can be reached at 510-577-3437 or emailed at <a href="mailto:rbusch@ci.san-leandr.ca.us">rbusch@ci.san-leandr.ca.us</a> . Please refer all requests for information to him.</p> <p><b><u>This project requires the payment of prevailing wages.</u></b></p> <p><b><u>BID DEPOSIT.</u></b> A Bid Deposit equal to at least 10% of the total amount of the bid shall be placed in the sealed proposal. The Bid Deposit shall be in one of the following forms: cash, cashier's check or certified check payable to the City, or bidder's bond in favor of the City executed by an authorized surety company.</p> <p><b><u>PAYMENT AND PERFORMANCE BONDS:</u></b> Payment and performance guarantee bonds will be required from the successful bidder.</p> <p>Sealed bids shall be received at the Purchasing Office, City Hall, 835 E. 14<sup>th</sup> Street, San Leandro, CA up to <b>3:00 PM local time, Tuesday, June 17, 2008</b> at which time they will be publicly opened and read.</p>		<p>\$ _____</p> <p>Total Bid</p>

Any bid may be withdrawn at any time prior to the time fixed for the opening of bids only by written request for the withdrawal of the bid filed with the City. The request shall be executed by the bidder or bidder's duly authorized representative. The withdrawal of a bid does not prejudice the right of the bidder to file a new bid. Whether or not bids are opened exactly at the time fixed in the public notice for opening bids, a bid will not be received after that time nor may any bid be withdrawn after the time fixed in the public notice for opening of bids.

As stated in Public Contract Code Section 5100 to 5108, inclusive (State Contract Act) concerning relief of bidders and in particular to the requirement therein, that if the bidder claims a mistake was made in his bid, the bidder shall give the City written notice within five (5) days after the opening of the bids of the alleged mistake, specifying in the notice, in detail how the mistake occurred.

All bidders shall verify if any addendum for this project has been issued by the City. It is the bidder's responsibility to ensure that all requirements of contract addendum are included in the bidder's submittal.

The successful bidder shall submit a certificate of insurance showing compliance with the enclosed insurance requirements. This insurance shall be maintained at all times during the course of any resulting agreement. In addition, the successful bidder shall have the proper City of San Leandro business license and all other applicable licenses and permits.

The award will be made to the lowest responsible bidder whose bid complies with the specifications in a manner satisfactory to the City's best interests as determined by the City. The right is reserved, as the interest of the City may require, to reject any or all bids, any part of a bid, or to waive any informality or minor irregularity in the bids.

Payment shall be within 30 days following date of invoice.

To bid, complete and return these bid documents in a sealed envelope prior to the above-listed due date/time to the Purchasing Office, City Hall, 835 E. 14<sup>th</sup> Street, San Leandro, CA 94577. The envelope shall be marked with the bid name and number. The bid must be received by the date and time shown in order to be considered. Please note that there is a one-day delay in mail delivery to City Hall by the U.S. Postal Service.

**Project location is:**  
**City of San Leandro Water Pollution Control Plant**  
**3000 Davis Street, San Leandro, CA**

Firm \_\_\_\_\_

Date: \_\_\_\_\_

Address \_\_\_\_\_

Phone: \_\_\_\_\_

\_\_\_\_\_

FAX: \_\_\_\_\_

By (Signature) \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_



Don Brockman  
Purchasing Agent

**REHABILITATION OF DIGESTER NUMBER 4  
AND PROTECTIVE COATINGS  
Bid No. 07-08.033**

**PART 1 GENERAL**

**1.01 SCOPE OF WORK**

- A. Provide all labor, materials, equipment and incidentals required to remove all existing interior coatings on the steel by ultra high water jetting and or abrasive blasting, including all ferrous metals, framing, roof plates, piping, manways, steel skirt, piping, bracing, center column, interior of water trap, and interior of nozzles and 2' onto the concrete at the bottom of the steel skirt. After removal of the existing lining system, the steel shall be abrasive blasted to SSPC-Sp#5. The interior steel shall be coated with Endura-Flex 1988, 80.0 mils of expanded and 30.0 mils of solid. A polysulfide caulking or a butyl closed cell backing rod shall be applied at the bottom termination edge of the skirt between the concrete and steel lip prior to applying the Endura-Flex 1988 coating.
- B. Dispose of all wastes from abrasive blasting, and any other wastes generated during the Work. Sample and test wastes as required by regulatory agencies, and as necessary for classification of wastes prior to disposal. This work includes all costs for waste sampling, testing, accumulation, transport, and disposal, including the cost for wastes classified as hazardous and non-hazardous. The Contractor is solely responsible for all testing and disposal cost.
- C. The Contractor may expect that the entire surface under the existing coatings is corroded or has mill scale, and shall completely remove such materials down to bare steel, (SP#5) white metal blast to allow for proper adhesion of the interior coating system.
- E. A three-year anniversary inspection will be conducted by the City, for which the Contractor shall furnish lighting. Contractor shall also be present at the inspection.

**1.02 GOVERNING STANDARDS**

The following standards shall govern the work unless specified otherwise in these specifications. The latest version of each standard shall be used.

- A. SSPC Vol. 1, Steel Structures Painting Manual, Volume 1, Good Painting Practice.
- B. SSPC Vol. 2, Steel Structures Painting Manual, Volume 2, Systems and Specifications.
  - 1. SSPC-SP5-63      White Metal Blast Cleaning
  - 2. SSPC-SP6        Commercial Blast Cleaning

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3. SSPC-SP7            Brush-Off Blast Cleaning
4. SSPC-SP10        Near White Blast Cleaning
5. SSPC-SP11        Power Tool Cleaning to Bare Metal
6. SSPC-AB1         Mineral and Slag Abrasives
7. SSPC-PA1         Shop, Field and Maintenance Painting
8. SSPS-PA2         Measurement of Dry Paint Thickness with Magnetic Gages
9. SSPS-PA Guide 3   Guide to Safety in Paint Application
10. NACE RPO-188    Discontinuity Testing

C. All applicable Local, State, and Federal OSHA and safety standards.

### 1.03 **SUBMITTALS**

A. All submittals shall be prepared and submitted in accordance with the contract documents and Section 1.03 of this technical specification.

B. Provide a separate submittal for each material to be used in the work. At a minimum provide submittals for:

1. Abrasive material
2. Paint system
3. Minimum and Maximum re-coat times
4. Dehumidification Equipment
5. Waste Disposal
6. Storage of Paint Materials

C. Submittals should include technical data documenting that the material to be provided complies with these specifications. Submittals will not be accepted until all requirements of this specification have been confirmed.

D. Interior coating system submittal shall include the following data:

1. Weight in pounds/gallon - ASTM D-2196
2. Percent solids by volume - ASTM D-2369
3. Percent solids by weight - ASTM D-2369
4. Air cure dry time to re-coat - ASTM D-1640
5. Adhesion to steel substrate - ASTM D-4541

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6. Minimum adhesion value of full system - ASTM D-4541

7. Manufacturer's batch numbers and dates of manufacture for materials to be furnished as part of this project.

E. Provide manufacturer's recommended handling and installation instructions for the proposed paint system including:

1. Storage - including maximum and minimum storage temperatures
2. Surface preparation
3. Coating repair
4. Application equipment
5. Mixing and application of coating system - including a table of minimum and maximum time to re-coat as a function of temperature
6. Curing - including curing time required before holiday testing, and curing time required before immersion as function of temperature and coating thickness. Minimum and maximum re-coat times.
7. Ventilation
8. Acceptable temperatures at the time of application

F. Equipment

1. Submit details of vacuum system for removing dust and abrasive from abrasive blast cleaned surfaces.
2. Air Compressor-submit manufacturer's latest written operation instructions including recommendations for air filter maintenance and change interval.

G. Reports

1. Submit actual weight of blast cleaning abrasive used for field abrasive blast cleaning. Submit immediately after blasting is completed.
2. Submit quantity of coating material used for each coat. Submit immediately after completion of each coat.
3. Submit the name of laboratories proposed to be used to test wastes materials.

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4. Before removing any waste materials from the job site, Contractor shall submit laboratory test results for representative waste samples as required by the owner of the disposal facility. At a minimum, the samples shall be tested for total concentrations of the 17 metals identified in Title 22, for comparison to Total Threshold Limit Concentrations (TTLC) values. The California Waste Extraction Test (WET) shall be performed for each analyze of each sample for which the total concentration exceeds 10 times the STLC value, if any, specified in Title 22. Toxicity Characteristic Leaching Procedure (TCLP) testing shall be performed for each analyte of each sample for which the total concentration exceeds 20 times the TCLP values, if any, specified in the Federal Resource Conservation and Recovery Act. Reactivity, Corrosively, and Ignitability testing shall be performed as required by Title 22 and/or the owner of the disposal facility.
5. Submit receipts from disposal site for all wastes. Receipts shall identify disposed material and source, show quantity of disposed material in tons or cubic yards, and show method used for final disposition as buried, incinerated, and chemically treated and /or other means.

#### H. Disposal Plan

1. Submit a materials disposal plan that complies with all applicable requirements of: the Federal Resource Conservation and Recovery Act; Title 22 and Title 26 of the California Administrative Code; and all applicable regulations of all local, state and federal agencies having jurisdiction over the disposal of spent abrasive blast media, removed coating materials, and other waste, whether hazardous or non-hazardous.
2. Submit name and Environmental Laboratory Accreditation Program Certificate number of laboratory that will sample and test spent abrasive blast media and removed coating materials. Include statement of laboratory's certified testing areas and analyses that laboratory is qualified to perform.
3. Submit permission to dispose of material from disposal site owner. Include name, address, and telephone number of disposal site and of owner.
4. The Disposal Plan shall be acceptable to the City Project Engineer prior to disposal or removal of any wastes from the site.

#### 1.04 **QUALITY ASSURANCE**

##### A. Qualifications

1. Contractor shall be regularly engaged in application of similar plural component coatings.
2. Foreman and workers on-site shall be experienced and knowledgeable in preparation for and application of high performance plural equipment and industrial coatings.

- B. Workmanship shall conform to standards and recommendations of SSPC Vol. 1, especially Chapters 5.1 and 6.
- C. Testing: The City may use any method deemed necessary to test the work. A specialized coatings inspection firm shall perform inspections for the City. The District's Engineer will monitor the quality of Work under this Section.
- D. Materials Handling and Use: Coating materials shall be labeled and used in accordance with SSPC-PA 1, Paragraphs 5.1.1 thru 5.1.5, except all coating system materials without a stated shelf life shall be delivered and used within six months of the date of manufacture; and certification, from any source, that the coating system materials are still suitable for use beyond the stated shelf life or beyond the six month period specified above will not be accepted.
- E. Contractor shall perform the necessary quality assurance in accordance with the approved plan. The Contractor is solely responsible for all surface preparation, coating application, curing, and coating repairs, re-work and will be completed solely at the Contractors expense.

F. Wastes

1. All testing of spent abrasive blast media and removed coating materials to classify these wastes as hazardous or non-hazardous shall be performed by a laboratory that complies with and is certified under the Environmental Laboratory Accreditation Program (ELAP) of the Nevada Department of Health Services.
2. The Laboratory shall perform all analyses needed for comparison to TTLC, STLC, TCLP limits, and RCA limits, and to all other applicable regulatory limits. Laboratory shall retain samples at least ninety (90) calendar days after all analyses are complete.
3. The Contractor shall collect as many representative samples as required by the owner of the disposal facility, but not less than 4 total.
4. Each sample shall have an identifying sample number assigned by the Contractor when the sample is taken. Sample number shall be included on the sampling chain of custody and in all reports, correspondence, and other documentation related to the sample. Each sample shall have a sampling chain of custody. Chain of custody shall show the name and organization of each person having custody of the sample, and shall also show the sample number, job name and location, time of day and date sample was taken, material sampled, and tests to be performed.
5. The City Engineer will witness sampling and may take samples for additional analyses if required. Notify the City at least 24 hours prior to sampling.

G. Manufacturer's Representative

1. A qualified technical representative of the coating system manufacturer shall be made

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available at the job-site as required by the City to resolve problems related to the coating system or the application of the system.

#### 1.05 **DELIVERY, STORAGE, AND HANDLING**

##### A. Delivery

1. Deliver abrasive grit in original moisture-proof bags or airtight bulk containers.
2. Deliver coating system materials in original, unopened containers with seals unbroken and labels intact. Labels shall identify type of material, color, and batch number. No material shall be more than six months from manufacturing date.

##### B. Storage

1. Store materials in a single, approved location.
2. Store coating system materials in enclosed and ventilated structures. Maintain temperature inside the structure within the temperature range recommended by the manufacturer.
3. Keep storage location clean, neat, and free of fire hazards.

##### C. Handling

1. Do not spill thinners, solvents, paint products or other materials that contain toxic substances.
2. Remove discarded thinners, solvents, and paint products from the job-site daily

#### 1.06 **SAFETY**

- A. The Contractor shall comply with all Federal, State, and Local applicable safety regulations and requirements.

#### 1.07 **EXISTING INTERIOR COATINGS**

- A. It is the Contractor's responsibility to estimate the quantity and classification of the wastes resulting from the Work, and to accumulate, transport, and dispose of all wastes at no additional cost to the City.
- B. The digester lid was last coated in 1994

#### 1.08 **WARRANTY**

- A. Anniversary inspection requirements and failure criteria shall be five years.

## 1.09 **WARRANTY INSPECTION**

- A. A first anniversary warranty inspection will be conducted by the City, approximately three years following initial acceptance of the work, which starts the three-year warranty. At the end of the three-year warranty period the City will conduct a re-inspection and issue a final acceptance of the project. The City will establish the date of the inspection and will notify the Contractor at least thirty (30) calendar days in advance of the inspection. The digester will be drained for inspection.
- B. Contractor shall furnish ventilation, lighting equipment as necessary for warranty inspections, and shall be present for such inspections.
- C. Inspection Report: City will prepare and deliver to the Contractor a report of the warranty inspection. The inspection report will set forth the number and types of failures observed, the percentage of surface area where failures have occurred, and the names of the persons making the inspections. Photographs or reports of the coating imperfections or failures shall be considered acceptable evidence of failure.
- D. Failure: Any location where coating has delaminated, peeled, blistered, or cracked, and any location where rusting is evident will be considered a failure of the coating system.
- E. Remedial Work: The Contractor shall repair all failures by removing the deteriorated coating, blast cleaning the surface, and re-coating with the same system in accordance with this Section. With the approval of the City, Surface preparation of small failures (areas less than 1 sq/in.) may be made by cleaning to bare metal in accordance with appropriate SSPC-SP/11 standards if approved by the manufacture.
- F. Schedule of Remedial Work: The City will establish a starting date and reasonable time of completion for the remedial work. The starting will be no more than thirty (30) calendar days after the submittal of the inspection report to the Contractor. Should the Contractor fail to start the remedial work within five (calendar days) after the starting date established by the City, the City may at its option perform the remedial work, and the Contractor shall pay to the City the actual cost of such work, plus 20 percent to cover added engineering and administrative cost.
- G. Warranty inspections of the remedial work shall be at the sole expense of the Contractor.

## **PART 2 PRODUCTS**

### 2.01 **INTERIOR COATING SYSTEM MATERIALS**

- 1. A. The new interior coating system shall be 100 solids urethane recommended for corrosion protection of the interior of steel digesters. Solids content shall not be less than 100% by weight.
- B. The coating shall be "certified non-lead" (less than 0.06 percent lead by weight in the

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dried film) as defined in part 1303 of the consumer products safety act.

## 2.02 **ABRASIVE**

- A. Abrasive grit for field blast cleaning shall conform to the following:
  - 1. Produce a surface profile of 3.5 to 4.0 mils
  - 2. New, clean and free of contaminants.
  - 3. Certified by California Air Resources Board, Executive Order G-565.

## **PART 3 EXECUTION**

### 3.01 **QUALITY CONTROL**

- C. Provide adequate lighting, without shadows, during all phases of work to insure that work is performed as specified. Illuminate entire area of work. The Contractor shall be responsible for all quality control and provide all inspection equipment. The City shall provide quality assurance.
- D. Provide lighting, and manpower to move lighting and scaffolding as determined by the Inspector, to facilitate visual and instrument inspection by the Inspector of each phase of the work and of the completed work. Place as directed to minimize glare and shadows.
- E. The Contractor shall test the steel after abrasive blasting for Chloride, Nitrates and Sulfates, if the levels exceed the maximum levels the Contractor shall neutralize with a product such as Chlor-Rid or equal. Acceptable levels:

Chloride: less than 4ug/cm<sup>2</sup>

Sulfate: less than 10ug/cm<sup>2</sup>

Nitrate: less than 10ug/cm<sup>2</sup>

- F. Contractor shall inspect surfaces first. Inspector will verify surfaces after blast cleaning to verify that all deposits of contaminants have been removed. Contractor shall blow down, and or vacuum all surfaces prior to inspection or as determined by the Engineer.
- G. Verify at a minimum of two times daily that air supply is free of oil and moisture contamination. Effective oil and water separators and dryers shall be used in all main compressor- airlines and shall be placed as close as practicable to the equipment. Prior to using compressed air, quality of air downstream of the separators shall be tested at suitable outlets by blowing the air on clean white blotter for 2 minutes to check for any contamination, oil, or moisture.
- H. Measure air temperature, humidity, relative humidity, and metal surface temperature, and

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determine dew point and relative humidity prior to abrasive blasting or painting each day. Provide portable temperature / humidity recorders to provide twenty-four hour continuous conditions, recording will be equal to Munters exact air remote monitoring. Repeat measurements and determination of dew point as often as the Inspector deems necessary but not less often than every four hours.

- I. Maintain a written record of measurements and dew points, and time that measurements were taken. Make record available to Inspector immediately on request.
- J. Contractor shall provide ratio checks in clean measuring cups prior to daily start up of coating application operations, and at anytime at the request of the Engineer. Ratio checks shall be conducted at the end of the spray lines.
- K. All gauges on pump shall be in working order prior to start up, if a defective gauge is found, coating operations will not begin until gauge is removed and replaced.
- H. Inspector will evaluate surface preparation using field abrasive blasting standards, and Testex tape. Evaluation will include inspection of blasted surfaces for dust and abrasive residue, using clear adhesive coated tape. Evaluation will be made immediately prior to coating application. The Contractor will furnish 2 rolls of Testex tape 1.5 to 4.5 mils X-course prior to the start of abrasive blasting.
- I. Verify cleanliness of all spray application equipment prior to, or no later than, time of mixing coating material.
- J. Measure wet film thickness during coating application of coating to ensure adequate coating thickness. Take at least five measurements every 100 square feet; all measurements shall meet the minimum dry film thickness requirement.
- K. Measure dry film thickness after each coat using a destructive core sample as requested by the Engineer on concrete.
- L. Inspector will evaluate cleanliness of coated surface immediately prior to application of a subsequent coat.
- M. Contractor shall test all coated surfaces for pinholes and holidays after application of the final coat in accordance with the following:
  - 1. Perform test in presence of Inspector. The City reserves the right to perform holiday testing itself at any time during the testing.
  - 2. Perform test after coating has cured as recommended by the manufacturer. Contractor shall provide Barcoal hardness testing after each application. Hardness shall be a minimum of 70 prior to holiday testing.
  - 3. Use an appropriate detector, such as a D.E Sterns Model 14/20 or as approved by the

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District's representative. Contractor shall provide one 14" wire brush wand for unit. All interior coated surfaces shall be tested 100%, and re-tested until no holidays are located.

4. Re-test after coating repairs until clear.

### 3.03 **LIMITING ENVIRONMENTAL CONDITIONS**

- A. Do not abrasive blast when air temperature and or steel temperature are less than 5 degrees F above dew point.
- B. Apply coatings only when conditions are within the limits prescribed by the manufacturer but, do not apply coatings when:
  1. Metal temperature is less than 55 degrees F. or when expected to drop below 55 degrees 48 hours after application.
  2. Relative humidity is greater than 45 percent.

### 3.04 **DEHUMIDIFICATION**

1. A. Provide dehumidification as required to establish and maintain the specified temperature and relative humidity inside the Digester. The Contractor will have **60 days to complete** ? all blasting and coating operations. No time extension will be granted for weather delays. The City will assume no responsibility for re-blasting due to dehumidification equipment failure, breakdown, or downtime. The Contractor shall provide required power for dehumidification. All D/H equipment shall have properly working hour meters.
- B. Provide dehumidification continuously from start of white metal (SP #5) abrasive blasting, until a minimum of 48 hours after application of final coat and all repairs are completed, or for a longer period as recommended by the coating system's manufacturer.
- C. Dehumidification equipment shall be a solid desiccant (not liquid, granular, or loose lithium chloride) design having a single rotary desiccant bed capable of continuous operation, fully automatic with drip-proof electrical controller. Air heaters (only) are not acceptable as dehumidification units.
- D. Relative humidity of processed air from dehumidification unit shall not exceed forty percent.
- E. Dehumidification equipment shall provide a minimum of two complete air changes inside the digester every sixty minutes.
- F. Areas adjacent to the surface that is to be blasted and coated shall not be exposed to a relative humidity greater than forty-five percent at any time during blasting, cleaning, coating, or curing.
- G. During blast cleaning and coating, and for 48 hours after final coat and all repairs are

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completed, dehumidification units shall maintain an air temperature of 55F minimum inside the digester.

- H. Place dehumidification equipment as close to digester manhole as possible.
- I. Clean dehumidification filters prior to start of dehumidification and clean weekly there after.
- J. Dehumidification Tubing
  - 1. Mechanically connected and sealed with duct tape at joints.
  - 2. Extend to the center of the pipe and attach to a diffuser that will distribute air equally throughout digester.
  - 3. Have no dust or other foreign matter inside tubing.

### 3.05 **PREPARATION (Interior)**

- A. Prepare surfaces to be coated in accordance with the manufacturer's instructions but not less than specified herein. Steam clean with a bio degradable detergent to remove oil and grease to existing surfaces prior to abrasive blasting.
- B. After the existing lining is removed the Contractor shall abrasive blast (SSPC-SP#5).
- C. Cleaning. Remove all visible oil, grease, dirt, welding residue, and other contaminants from areas to be coated. Inspection shall use a black light to locate oil and grease. All slag and weld metal accumulation and splatters shall be removed by chipping or grinding as required by the Engineer.
- D. Blast Cleaning. Remove existing coating, under film corrosion, corrosion, and other corrosion products from all areas to be coated. Prepare all surfaces to be coated by abrasive blast cleaning to SSPC-SP #5 with a surface profile of 3.5 to 4.0 mils.
- E. Complete abrasive blast cleaning of metal prior to application of coating system.
- F. Do not reuse abrasive blast media unless the media is specifically designed for reuse.
  - 1. Abrasive Blasting Equipment
  - 2. Exterior roof shall be abrasive blasted to a profile of 3.5 to 4.0.
- I. Install an inline dryer and oil moisture separator in the airline between compressor and blast pot.

- G. All surfaces to be blast cleaned shall be electrically grounded during blast cleaning.
- H. Provide exhaust air dust collector to prevent discharge of dust to outside air.
- I. Mask-off and protect all exposed machined metal surfaces, plastic, and other surfaces not to be painted or that may be damaged by abrasive blasting.
- J. Remove all dust and abrasive from freshly blasted surfaces. Use approved vacuum system.
- K. Dispose of abrasive blast media and other waste materials off-site and in accordance with approved material disposal plan.
- L. Contractor shall have a minimum of 95 P.S.I minimum at the end of the blast nozzle.
  - 1. Discard abrasives directly from digester to a portable container and remove container from site. Do not place media on ground or other intermediate location.

### 3.06 **APPLICATION**

#### A. General

- 1. Mix and apply all coatings in accordance with the manufacturer's recommendations and instructions, the applicable requirements of SSPC-PA 1, and as specified herein.
- 2. Obtain Inspector's evaluation and approval of steel surface preparation immediately prior to application of first coat. No thinning shall be allowed at any time. The minimum adhesion of the system entire shall be 900 P.S.I. minimum as per ASTM-D4541 utilizing a model 108 adhesion tester.
- 3. Obtain Inspector's evaluation and approval of cleanliness of previous coat immediately prior to application of a subsequent coat.
- 4. Apply coatings by airless spray except: Areas of pinhole repair
- 5. Apply coatings at a temperature recommended by manufacturer. Contractor shall premix each Drum A and drum B before use.
- 6. Finish coat shall be uniform in color and gloss over the entire surface. Finish coat shall be smooth to touch with no sags, runs, over-spray, cracks, pinholes or other surface defects.

#### B. Color (Interior Dome)

- 1. Expanded coat: White
- 2. Solid coat: White

### C. Dry Film Thickness (DFT)

1. Expanded Coat/ Endura Flex 1988 expanded: 80.0 mils minimum.
2. Solid Coat/ Endura Flex 1988 solid: 30.0 mils minimum

Additional coats may be required to achieve specified minimum on edges and voids dry film thickness.

### D. Application Equipment:

1. Use plural component equipment. All gauges shall be in working order prior to start up each day.
2. Ratio check shall be performed at the start of each application.
3. Sample shall be sprayed on plastic prior to each application.
4. Contractor shall perform hardness testing after each application.
5. Concrete surfaces specified for membrane application shall be mechanically anchored to a dry, clean saw cut to a minimum depth of 1/4 inch and width of 1/8inch. The area shall be abrasive blasted to re-establish the required anchor profile specified. The EF-1988 solid base coat shall be applied into the saw cut to full depth. After installation of the leading edge, the area shall be top coated with EF-1988 material. Adjacent areas not scheduled for coating shall be taped off and protected from overspray.

### E. Coating Repairs

1. Touch-up or refinish all unsatisfactory portions of the work in accordance with the manufacturer's recommendations.
3. Re-coating or touch-up or areas that have cured beyond the maximum time recommended by the manufacturer require special preparation.
  - a. Sweep blast area and 3-inches into the surrounding area. Sweep blast under low pressure to uniformly abrade surface and feather edges. Feathered edges by sanding or other means acceptable to the Inspector.
  - b. Remove abrasive blast residue from blasted area with special attention to marginal areas of intact coating.
  - c. Clean area with a bond solvent recommend by the manufacturer.

### 3.11 **DISPOSAL OF EXISTING COATINGS AND SPENT ABRASIVE BLAST MEDIA.**

- A. Disposal of spent abrasive blast media and removed coating materials shall be in accordance with the disposal plan approved by the City.
- B. Coordinate and pay all costs for all sampling and testing of spent abrasive blast media and

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removed coating materials in order to document waste class. Minimum sampling and testing requirements are listed previously in this Section.

- C. Before any wastes are removed from the site, Contractor shall allow the City time for review of laboratory test results, as well as the time required to obtain a Hazardous Waste Generator's U.S. EPA ID Number if required.
- D. The City will give Contractor written notice to dispose of all or a portion of the spent abrasive blast media and/or removed coating materials as hazardous waste if the City determines that such disposal is required.
- E. The Contractor shall be responsible for all costs associated with accumulating, transporting, and disposing of spent abrasive blast media and removed coating materials.

### 3.12 **CLEAN-UP**

- A. Upon completion of the work Contractor shall make a detailed inspection of all work.
- B. The Contractor shall be solely responsible for all paint over-spray or dust fallout claims.
- C. Remove all spattering, spits, and blemishes from areas that did not require coating.
- D. Upon completion, of work all staging, tarps, and containers shall be removed from the site. Paint and thinner containers and excess paint and thinners shall be disposed of in conformance to all current regulations. Paint spots shall be removed and the entire job site cleaned. All damage to surfaces resulting from the work from this section shall be cleaned, repaired or refinished to the complete satisfaction of the City and the project Engineer at no cost to the City. All clean up shall be completed within 7 calendar days starting at the last day of holiday testing of the Digester.

END OF SECTION

## SPECIAL CLAUSES

1. **PAYMENT BOND**: Successful Bidder shall furnish a Payment Bond in an amount equal to one hundred percent (100%) of the total amount of the contract prior to commencement of work, executed by an authorized surety company.
2. **PERFORMANCE BOND**: Successful Bidder shall furnish a Performance Bond in an amount equal to one hundred percent (100%) of the total amount of contract.
3. **LIQUIDATED DAMAGES**: Time is of the essence of this contract. Failure to start and complete all work specified within the time allowed shall constitute material breach of contract. The “time allowed” will be sixty (60) days from the start of the job. Failure of the successful Bidder to complete the work within the sixty (60) days allowed will result in the damages, and for each consecutive day in excess, the contractor shall pay to the City of San Leandro the sum of \$1000.00 per calendar day. Such amount shall not be construed as a penalty but as a minimum value of liquidated damages that may be deducted from payment due to the contractor if such delay occurs.

## INSURANCE REQUIREMENTS

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, their agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor's bid.

1. Minimum Scope of Insurance. Coverage shall be at least as broad as:
  - A. Insurance Services Office form number GL 0002 (Ed. 1/73) covering Comprehensive General Liability and Insurance Services Office form number GL 0404 covering Broad Form Comprehensive General Liability; or Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 0001.)
  - B. Insurance Services Office form number CA 0001 (Ed. 1/78) covering Automobile Liability, code 1 "any auto" and endorsement CA 0025.
  - C. Worker' Compensation insurance as required by the Labor Code of the State of California and Employers Liability insurance.
2. Minimum Limits of Insurance. Contractor shall maintain limits no less than:
  - A. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
  - B. Automobile liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
  - C. Workers' Compensation and Employers Liability: Workers' compensation limits as required by the Labor Code of the State of California and Employers Liability Limits of \$1,000,000 per accident.
3. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either the insure shall reduce or eliminated such deductibles or self-insured retentions as respects the City, its officers, officials, employees, and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.
4. Other Insurance Provisions. The policies are to contain, or be endorsed to contain, the following provisions:
  - A. General Liability and Automobile Liability Coverages.
    - i. The City, its officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; or automobiles owned, leased, hired or borrowed by the

Contractor. The coverage shall contain no special limitations on the scope of the protection afforded to the City, its officers, officials, employees or volunteers.

- ii. The Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees and volunteers. Any insurance or self -insurance maintained by the City, its officers, officials, employees or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- iii. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officers, officials, employees or volunteers.
- iv. The Contractor's insurance shall apply separately to each insured against whom claim is made or suite is brought, except with respect to the limits of the insurer's liability.

B. Workers' Compensation and Employers Liability Coverage.

The insurer shall agree to waive all rights of subrogation against the City, its officers, officials, employees and volunteers for losses arising from work performed by the Contractor for the City.

C. All Coverages.

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, returned receipt request, has been given to the City.

- 5. Acceptability of Insurers. Insurance is to be placed with insurers with a Best's rating of no less than A: VIII.
- 6. Verification of Coverage. Contractor shall furnish City with certificates of insurance and with original endorsements effecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies, at any time.
- 7. Subcontractors. Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

**ENVIRONMENTALLY PREFERABLE PURCHASING POLICY  
CITY OF SAN LEANDRO**

**1.0 STATEMENT OF POLICY**

It is the policy of the City of San Leandro to:

- institute practices that reduce waste by increasing product efficiency and effectiveness,
- purchase products that minimize environmental impacts, toxics, pollution, and hazards to worker and community safety to the greatest extent practicable, and
- purchase products that include recycled content, are durable and long-lasting, conserve energy and water, use chlorine free manufacturing processes, and are lead-free and mercury-free.

**2.0 PURPOSE**

This Policy is adopted in order to:

- conserve natural resources,
- minimize environmental impacts such as pollution and use of water and energy,
- eliminate or reduce toxics that create hazards to workers and our community,
- support strong recycling markets,
- reduce materials that are landfilled,
- increase the use and availability of environmentally preferable products that protect the environment, and
- identify environmentally preferable products and distribution systems.

**3.0 SPECIFICATIONS**

**3.1 Source Reduction**

- 3.1.1 The City of San Leandro shall institute practices that reduce waste and result in the purchase of fewer products whenever practicable and cost-effective, but without reducing safety or workplace quality.
- 3.1.2 The City of San Leandro shall purchase remanufactured products such as toner cartridges, tires, furniture, equipment and automotive parts whenever practicable, but without reducing safety, quality or effectiveness.
- 3.1.3 All buyers shall consider short-term and long-term costs in comparing product alternatives, when feasible. This includes evaluation of total costs expected during the time a product is owned, including, but not limited to, acquisition, extended warranties, operation, supplies, maintenance, disposal costs and expected lifetime compared to other alternatives.
- 3.1.4 Products that are durable, long lasting, reusable or refillable are preferred whenever feasible.
- 3.1.5 The City of San Leandro requests vendors to eliminate packaging or use the minimum amount necessary for product protection, to the greatest extent practicable.

- 3.1.6 Packaging that is reusable, recyclable or compostable is preferred, when suitable uses and programs exist.
- 3.1.7 Vendors shall be encouraged to take back and reuse pallets and packaging materials.
- 3.1.8 Suppliers of electronic equipment, including but not limited to computers, monitors, printers, and copiers, shall be encouraged to take back equipment for reuse or environmentally safe recycling when the City of San Leandro discards or replaces such equipment, whenever possible.

### **3.2 Recycled Content Products**

- 3.2.1 All products for which the United States Environmental Protection Agency (U.S. EPA) has established minimum recycled content standard guidelines, such as those for printing paper, office paper, janitorial paper, construction, landscaping, parks and recreation, transportation, vehicles, miscellaneous, and non-paper office products, shall contain the highest postconsumer content practicable, but no less than the minimum recycled content standards established by the U.S. EPA Guidelines.
- 3.2.2 Copiers and printers purchased shall be compatible with the use of recycled content products.
- 3.2.3 In accordance with California Public Contract Code, Sec. 10409, the City of San Leandro shall purchase re-refined lubricating and industrial oil for use in its vehicles and other equipment, as long as it is certified by the American Petroleum Institute (API) as appropriate for use in such equipment. This section shall not prohibit the purchase of virgin-oil products for exclusive use in vehicles whose warranties expressly prohibit the use of products containing recycled oil.
- 3.2.4 When specifying asphalt, concrete, aggregate base or portland cement concrete for road construction projects, the City of San Leandro shall use recycled, reusable or reground materials when practicable.
- 3.2.5 The City of San Leandro shall specify and purchase recycled content transportation products, including signs, cones, parking stops, delineators, and barricades.
- 3.2.6 All pre-printed recycled content papers intended for distribution that are purchased or produced shall contain a statement that the paper is recycled content.

### **3.3 Energy and Water Savings**

- 3.3.1 Where applicable, energy-efficient equipment shall be purchased with the most up-to-date energy efficiency functions. This includes, but is not limited to, high efficiency space heating systems and high efficiency space cooling equipment.
- 3.3.2 When practicable, the City of San Leandro shall replace inefficient lighting with energy-efficient equipment.
- 3.3.3 All products purchased by the City of San Leandro and for which the U. S. EPA Energy Star certification is available shall meet Energy Star certification, when practicable. When Energy Star labels are not available, choose energy-efficient products that are in the upper 25% of energy efficiency as designated by the Federal Energy Management Program.
- 3.3.4 The City of San Leandro shall purchase water-saving products whenever practicable.

### **3.4 Green Building – Construction and Renovations**

- 3.4.1 All building and renovations undertaken by the City of San Leandro shall consider Green Building practices for design, construction, and operation, where appropriate, as described in the LEED™ Rating System.

### **3.5 Landscaping**

- 3.5.1 All landscape renovations, construction and maintenance performed by the City of San Leandro, including workers and contractors providing landscaping services for the City of San Leandro, shall employ Bay Friendly Landscaping or sustainable landscape management techniques for design, construction and maintenance practices whenever possible, including, but not limited to, integrated pest management, grasscycling, drip irrigation, composting, and procurement and use of mulch and compost that give preference to those produced from regionally generated plant debris and/or food waste programs.
- 3.5.2 Plants should be selected to minimize waste by choosing species for purchase that are appropriate to the microclimate, species that can grow to their natural size in the space allotted them, and perennials rather than annuals for color. Native and drought-tolerant plants that require no or minimal watering once established are preferred.
- 3.5.3 Hardscapes and landscape structures constructed of recycled content materials are encouraged. The City of San Leandro shall limit the amount of impervious surfaces in the landscape, wherever practicable. Permeable substitutes, such as permeable asphalt or pavers, are encouraged for walkways, patios and driveways.

### **3.6 Toxics and Pollution**

- 3.6.1 When maintaining buildings and landscapes, the City of San Leandro and its contractors shall manage pest problems through prevention and physical, mechanical and biological controls. The City of San Leandro may either adopt and implement an organic pest management policy and practices or adopt and implement an Integrated Pest Management (IPM) policy and practices using the least toxic pest control as a last resort.
- 3.6.2 When maintaining buildings, the City of San Leandro shall use products with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no formaldehyde when purchasing materials such as paint, carpeting, adhesives, furniture and casework.
- 3.6.3 To the extent practicable, the City of San Leandro shall purchase, or require janitorial contractors to supply, industrial and institutional cleaning products that meet Green Seal certification standards for environmental requirements.
- 3.6.4 To the extent practicable, the City of San Leandro shall purchase paper, paper products, and janitorial paper products that are unbleached or that are processed without chlorine or chlorine derivatives.
- 3.6.5 The City of San Leandro will prohibit the purchase of products that use polyvinyl chloride (PVC) such as, but not limited to, furniture and flooring, whenever practicable.
- 3.6.6 The City of San Leandro shall purchase products and equipment with no lead or mercury whenever possible. For products that contain lead or mercury, the City of San Leandro

shall give preference to those products with lower quantities of these metals and to vendors with established lead and mercury recovery programs.

- 3.6.7 When replacing vehicles, the City of San Leandro shall consider less-polluting alternatives to diesel such as compressed natural gas, biobased fuels, hybrids, electric batteries, and fuel cells, as available.

#### **4.0 PRIORITIES**

- 4.1 The City of San Leandro has made significant investments in developing a successful recycling system and recognizes that recycled content products are essential to the continuing viability of that recycling system and for the foundation of an environmentally sound production system. Therefore, to the greatest extent practicable, recycled content shall be included in products that also meet other specifications, such as chlorine free.
- 4.2 Nothing contained in this policy shall be construed as requiring a department, purchaser or contractor to procure products that do not perform adequately for their intended use, exclude adequate competition, risk the health or safety of workers and citizens, or are not available at a reasonable price in a reasonable period of time.
- 4.3 Nothing contained in this policy shall be construed as requiring the City of San Leandro, department, purchaser or contractor to take any action that conflicts with local, state or federal requirements.

#### **5.0 IMPLEMENTATION**

- 5.1 The Finance Director and the Public Works Director, or their designees, shall coordinate implementation of this policy.
- 5.2 Successful bidders shall certify in writing that the environmental attributes claimed in competitive bids are accurate. In compliance with State law, vendors shall be required to specify the minimum or actual percentage of recovered and postconsumer material in their products, even when such percentages are zero.
- 5.3 Purchasers shall attempt to include businesses certified by the Bay Area Green Business Program in requests for products and services.
- 5.4 Vendors, contractors and grantees shall be encouraged to comply with applicable sections of this policy for products and services provided to the City of San Leandro, where practicable.

#### **6.0 PROGRAM EVALUATION**

- 6.1 The Directors of Finance and Public Works shall periodically evaluate the success of this policy's implementation.

#### **7.0 DEFINITIONS**

- 7.1 "Agricultural Bio-Based Products" means commercial or industrial products (other than food or feed) that utilize agricultural crops or residues but does not include products made from forestry materials.

- 7.2 “Bay Area Green Business Program” is a partnership of governments and businesses that certifies the environmental performance of government agencies and businesses.
- 7.3 “Bay-Friendly Landscaping” means working with the natural ecosystems of the San Francisco Bay Area to foster soil health, to reduce runoff and pollution, prevent and reuse plant waste, and conserve water and other natural resources. Bay-Friendly Landscaping practices are described in the forthcoming *Bay-Friendly Landscape Guidelines*, by the Alameda County Waste Management Authority & Recycling Board.
- 7.4 “Buyer” means anyone authorized to purchase or contract for purchases on behalf of this jurisdiction or its subdivisions.
- 7.5 “Chlorine free” means products processed without chlorine or chlorine derivatives.
- 7.6 “Contractor” means any person, group of persons, business, consultant, designing architect, association, partnership, corporation, supplier, vendor or other entity that has a contract with the City of San Leandro or serves in a subcontracting capacity with an entity having a contract with the City of San Leandro for the provision of goods or services.
- 7.7 “Energy Star” means the U.S. EPA’s energy efficiency product labeling program.
- 7.8 “Energy-Efficient Product” means a product that is in the upper 25% of energy efficiency for all similar products, or that is at least 10% more efficient than the minimum level that meets Federal standards.
- 7.9 “Federal Energy Management Program” is a program of the Department of Energy that issues a series of *Product Energy Efficiency Recommendations* that identify recommended efficiency levels for energy-using products.
- 7.10 “Green Seal” is an independent, non-profit environmental labeling organization. Green Seal standards for products and services meet the U.S. EPA’s criteria for third-party certifiers. The Green Seal is a registered certification mark that may appear only on certified products.
- 7.11 “Integrated Pest Management” is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.
- 7.12 “LEED™ Rating System” means the self-assessing system developed by the U.S. Green Building Council designed for rating new and existing commercial, institutional, and high-rise residential buildings.
- 7.13 “Organic Pest Management” prohibits the use and application of toxic chemical pesticides and strives to prevent pest problems through the application of natural, organic horticultural and maintenance practices. All pest control products shall be in keeping with, but not limited to, those products on the approved list of California Certified Organic Foods (CCOF).

- 7.14 "Postconsumer Material" means a finished material which would normally be disposed of as a solid waste, having reached its intended end-use and completed its life cycle as a consumer item, and does not include manufacturing or converting wastes.
- 7.15 "Practical" and "Practicable" mean whenever possible and compatible with local, state and federal law, without reducing safety, quality, or effectiveness and where the product or service is available at a reasonable cost in a reasonable period of time.
- 7.16 "Preconsumer Material" means material or by-products generated after manufacture of a product is completed but before the product reaches the end-use consumer. Preconsumer material does not include mill and manufacturing trim, scrap, or broke which is generated at a manufacturing site and commonly reused on-site in the same or another manufacturing process.
- 7.17 "Recovered Material" means fragments of products or finished products of a manufacturing process, which has converted a resource into a commodity of real economic value, and includes preconsumer and postconsumer material but does not include excess resources of the manufacturing process.
- 7.18 "Recycled Content" means the percentage of recovered material, including preconsumer and postconsumer materials, in a product.
- 7.19 "Recycled Content Standard" means the minimum level of recovered material and/or postconsumer material necessary for products to qualify as "recycled products."
- 7.20 "Recycled Product" means a product that meets the City of San Leandro's recycled content policy objectives for postconsumer and recovered material.
- 7.21 "Remanufactured Product" means any product diverted from the supply of discarded materials by refurbishing and marketing said product without substantial change to its original form.
- 7.22 "Reused Product" means any product designed to be used many times for the same or other purposes without additional processing except for specific requirements such as cleaning, painting or minor repairs.
- 7.23 "Source Reduction" refers to products that result in a net reduction in the generation of waste compared to their previous or alternate version and includes durable, reusable and remanufactured products; products with no, or reduced, toxic constituents; and products marketed with no, or reduced, packaging.
- 7.24 "U.S. EPA Guidelines" means the Comprehensive Procurement Guidelines established by the U.S. Environmental Protection Agency for federal agency purchases as of May 2002 and any subsequent versions adopted.
- 7.25 "Water-Saving Products" are those that are in the upper 25% of water conservation for all similar products, or at least 10% more water-conserving than the minimum level that meets the Federal standards.

## **8.0 EFFECTIVE DATES**

- 8.1 This policy shall take effect on 10/4/04.