



February 3, 2012

City of Abilene  
Hamby Wastewater Treatment Plant Improvements – Phase I:  
New Influent Splitter Box and Primary Clarifier Repairs

Addendum No. 1

Attention is called to the following modifications to the Plans, Specifications and Contract Documents for the above referenced project. The City of Abilene will receive sealed Bids for the Hamby Wastewater Treatment Plant Improvements – Phase I: New Splitter Box and Primary Clarifier Repairs project until 11:00 a.m. local time on Wednesday, February 8, 2012 in the Purchasing Department at City Hall, 555 Walnut, Suite 201-A, Abilene, Texas. Bids will be publically opened and read aloud. We hereby modify the documents as follows.

**DRAWINGS:**

1. Drawing sheet number M-5 (Sequence 14 of 25). **CHANGE** the Section designation in Grid H-2 to 2/C-4. **ADD** the following Note to Grid H-4:

NOTE: Interior Concrete Surfaces of Splitter Box for Primary Clarifier Nos. 1 and 2 shown in these Sections shall be coated in accordance with Specification Section 09800.

2. Drawing sheet number S-601 (Sequence 23 of 25). Note 1 with Detail 511 shall be **REPLACED** with the following:

“1. Grating to be designed by a qualified engineer based on the requirements in Specification Section 6600. Minimum grating depth shall be 1-1/2 inches.”

3. Drawing sheet number S-601 (Sequence 23 of 25). **ADD** the following as Note 3 with Detail 511.

“3. FRP embedment angle is acceptable as long as it meets the same structural requirements as the aluminum embedment angle including the same bearing leg requirement,  $T + \frac{1}{4}$  inch, and the anchor bars meet the diameter, length, and spacing as indicated in Detail 511. Any cutting of FRP grating, embedment angle or structural members shall be coated with resin as stated in the specifications. Aluminum angle is not available in  $2 \frac{1}{4} \times 2 \frac{1}{4} \times \frac{1}{4}$  inch dimensions. If aluminum embedment angle is used, the grating depth shall be 2-inch. For 2-inch grating,  $2 \frac{1}{2} \times 2 \frac{1}{2} \times \frac{1}{2}$  embedment aluminum angle is required with anchor bars as shown in detail 511.”

4. Drawing sheet number M-6 (Sequence 15 of 25). In Section 2, width of launder will be **CHANGED** from 1'-6" to 2'-0". Depth of launder shall be 2'-0".

**SPECIFICATIONS:**

1. Scope of Project, Page 1, **REPLACE G**, in its entirety, with the following:
  - G. *Sandblasting and painting of all metal surfaces (both below water and above water) at Primary Clarifiers Nos. 1, 2, 3 and 4.*
2. **REPLACE** section 09800 with the attached section.
3. Section 13525. **ADD** to 2.1:

E. NEFCO
4. Section 13525. **DELETE** Article 2.2 (A.12), and **REPLACE** with the following:
  12. A layer of 24 ounce woven roving is to be added throughout the laminate. FRP laminate Properties for Effluent Trough:


<b>Property @ 70°F</b>	<b>Value</b>	<b>Test Method</b>
Tensile Strength Trough	35,000 psi	ASTM D 638
Tensile Strength Weir	12,500 psi	ASTM D 638
Tensile Modulus Trough	2,000,000 psi	ASTM D 638
Tensile Modulus Weir	900,000 psi	ASTM D 638
Compressive Strength Trough	35,000 psi	ASTM D 695
Compressive Strength Weir	26,000 psi	ASTM D 695
Compressive Modulus Trough	2,000,000 psi	ASTM D 695
Flexural Strength Trough	35,000 psi	ASTM D 790
Flexural Strength Weir	32,000 psi	ASTM D 790
Flexural Modulus Trough	1,000,000 psi	ASTM D 790
Shear Strength Trough	6,000 psi	ASTM D 732
Barcol Hardness Trough	50	ASTM D 2583
Glass Content Trough	45%	ASTM D 2584
Water Absorption	.09% Max	ASTM D 570
Coefficient of Linear Thermal Expansion (in/in/°F) - Molded	15 x 10 <sup>-6</sup>	ASTM D 696

5. Section 13525. **DELETE** Article 2.2 (B.8), and **REPLACE** with the following:
  8. The molding process shall be used to produce fiberglass-reinforced plastic molded parts with smooth resin-rich surfaces and edges, dimensional accuracy, and consistency. Weir plate notches shall be molded to ensure resin-rich edges and notches for increased corrosion and weather resistance. All cut edges shall be sanded and sealed with nonair-inhibited resin to ensure edges are completely sealed and to prevent water and chemicals from penetrating the laminate.
6. Section 13525. **DELETE** Article 2.2 (B.9), and **REPLACE** with the following:
  9. FRP Laminate Properties for V-Notch Weirs and Baffles.

7. Section 13525. Article 2.4 (G), **DELETE** "1500 psi" and **REPLACE** with "4000 psi".
8. Section 15060, 2.1, A.4.b.i. **ADD** the following sentence at the end of the paragraph:  
"The minimum pressure class of the pipe shall be 50 psi"
9. Section 15257. **ADD** to 2.1:  
E. Wateman
10. Section 15257. **ADD** to 2.1:
11. Section 15257, 2.2, C.1.a. **ADD** the followings at the end of the paragraph:

"Gates may also be provided with Neoprene J-bulb seals to restrict leakage"

This addendum consists of 13 pages. This addendum becomes a part of the referenced plans and specifications and shall be acknowledged by the bidder on the Bid Form submitted.

  
By: Iqbal Hossain, P.E. #83490 2-3-2012  
Project Manager



SECTION 09800

PAINTING

PART 1 GENERAL

1.1 SECTION INCLUDES:

- A. The work of this section includes the coating of all steel clarifier surfaces below and above water in Primary Clarifiers 1, 2, 3 and 4.
- B. Section also includes coating and interior concrete surfaces of the new influent splitter box and of the influent box between Primary Clarifiers 1 and 2.

1.2 REFERENCES:

- A. ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.
- B. ASTM D3359 - Method for Measuring Adhesion by Tape Test.
- C. NACE (National Association of Corrosion Engineers) - Industrial Maintenance Painting.
- D. NPCA (National Paint and Coating Association) - Guide to U.S. Government Paint Specifications.
- E. SSPC (Steel Structures Painting Council) - Steel Structures Painting Manual.
- F. TACB (Texas Air Control Board) - 31 TAC Chapter 11.
- G. TNRCC (Texas National Resources Conservation Commission) - TAC Chapter 290 - Water Hygiene.
- H. Paint manufacturer's printed instructions.
- I. TAC - Texas Administrative Code.

1.3 DEFINITIONS:

- A. Dft - Dry film thickness.
- B. Mil(s) - a unit of measure equal to a thousandth of an inch (0.0254) mm.
- C. VOC(s) - volatile organic compound(s).

1.4 INTERPRETATION:

- A. The Engineer's decision shall be final in the interpretation and/or conflict between any of the referenced Specifications and Standards contained herein.

## 1.5 SUBMITTALS:

- A. Information to be provided: Provide a list of materials to be used under this Section. Submit the list before the materials are delivered to the job site. Cross reference the list to the coating systems identified. Furnish with the list, the coating manufacturer's standard product data and color chart for each material to be used.
- B. Manufacturer's color charts shall be submitted to the Engineer at least 30 days or prior to paint application. Coordinate work so as to allow sufficient time for paint to be delivered to the job site.

## 1.6 QUALITY ASSURANCE:

- A. General: Use quality assurance procedures and practices to monitor all phases of surface preparation, application and inspection throughout the duration of the project. Procedures or practices not specifically defined herein may be utilized provided they meet recognized and accepted professional standards.
- B. Surface Preparation: Surface preparation will be based upon comparison with: "Pictorial Surface Preparation Standards for Painting Steel Surfaces" SSPC-VIS 1-89 and ASTM Designation D2200, "Standard Methods of Evaluating Degree of Rusting on Painted Steel Surfaces" SSPC-VIS 2 and ASTM Designation D610, "Visual Standard for Surfaces of New Steel Air blast Cleaned with Sand Abrasive".
- C. Application: No coating shall be applied: When the surrounding air temperature or the temperature of the surface to be coated or painted is below the minimum surface temperature for the products specified herein; or in rain; snow, fog, or mist; when the temperature is less than 5 degrees F above the dew point; when the air temperature is expected to drop below 35 degrees F within six hours after application of coating. Dew point shall be measured by use of an instrument such as a Sling Psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables. If the above conditions are forecast, coating or painting shall be completed in time to permit the film sufficient drying time prior to damage by atmospheric conditions.
- D. Thickness and Holiday Checking (Steel Surfaces): Thickness of coatings shall be checked with a non-destructive, magnetic-type thickness gauge. Use as instrument such as a Tooke Gauge if a destructive tester is deemed necessary. The integrity of coated surfaces shall be checked with an approved inspection device. Non-destructive holidays shall not exceed the voltage recommended by the manufacturer of the coating system. For thickness between 10 and 20 mils, use a non-sudsing type wetting agent, such as Kodak Photo-Flow. Failures shall be marked, repaired in accordance with the manufacturer's printed recommendations and retested. No pinholes or other irregularities will be permitted in the final coating.
- E. Inspection Devices: The Contractor shall furnish, until final acceptance of coating and painting, inspection devices in good working condition for detection of holidays and measurement of dry film thickness (dft) of coating. The Contractor shall also furnish U.S. Department of Commerce; National Bureau of Standards certified thickness calibration plates to test accuracy of

dft gauges and certified instrumentation to test accuracy of holiday detector. Dry film thickness gauges and holiday detectors shall be made available for the Engineer's use at all times until final acceptance of application. Holiday detection devices shall be operated in the presence of the Engineer.

- F. Warranty Inspection: Warranty inspection shall be conducted during the eleventh month following completion of all coating and painting work. All defective work shall be repaired in accordance with this specification and to the satisfaction of the Engineer/Owner.

#### 1.7 QUALIFICATIONS:

- A. The Contractor shall have three years practical experience and successful history in the application of specified products to surfaces in water treatment, wastewater treatment, or industrial facilities. The Contractor shall be a knowledgeable and experienced professional, fully aware of the methods and regulatory requirements of coating removal and application. Upon request, he shall substantiate this requirement by furnishing a list of references and job completions.

#### 1.8 SAFETY AND HEALTH REQUIREMENTS:

- A. General: The Contractor shall perform all work in accordance with applicable local, state, and federal laws and regulations, and material manufacturer's instructions and recommendations pertaining to the methods, materials, or activities in the work. Some of these regulations are included in the following groups:

Occupational Safety and Health Act and derived regulations.

Clean Air Act and derived regulations, both federal and state.

The items listed below in the rest of this Paragraph are intended to call the Contractor's attention to some of the frequently necessary compliance activities. The Contractor is solely responsible for compliance with applicable regulations including, but not limited to, the areas identified in this Specification. The Contractor shall provide and require the use of personal protective equipment for persons working on or about the project.

- B. Head and Face Protection and Respiratory Devices: Equipment shall include protective helmets which shall be worn by all persons while in the vicinity of the work. In addition, workers engaged in or near the work during sandblasting shall wear appropriate eye and face protection devices and air purifying, half mask or mouthpiece respirators with appropriate filters.
- C. Ventilation: Where ventilation is used to control hazardous exposure, all equipment shall be explosion-proof. Ventilation shall reduce the concentration of air contaminants to the degree a hazard does not exist. Air circulation and exhausting of solvent vapors shall be continued until coatings have fully cured.
- D. Sound Levels: Whenever the occupational noise exposure exceeds maximum allowable sound levels, the Contractor shall provide and require the use of approved ear protective devices.

- E. Illumination: Adequate illumination shall be provided while work is in progress, including explosion-proof lights and electrical equipment. Whenever requires by the Engineer, the Contractor shall provide additional illumination and necessary supports to cover all areas to be inspected. The level of illumination for inspection purposes shall be determined by the Engineer.
- F. Temporary Ladders and Scaffolding: All temporary ladders and scaffolding shall conform to applicable safety requirements. They shall be erected where requested by the Engineer to facilitate inspection and be moved by the Contractor to locations requested by the Engineer.

**PART 2 PRODUCTS**

**2.1 ACCEPTABLE MANUFACTURERS:**

- A. Materials specified are those that have been evaluated for the specific service. Products are listed to establish a standard of quality. Equivalent materials of other manufacturers may be substituted on written approval of the Engineer in accordance with Section 01600.

Requests for substitution shall include manufacturer's literature for each product giving name, product number, and generic type, descriptive information, solids by volume, recommended dft and certified laboratory test reports showing results to equal the performance criteria of the products specified herein. In addition, a list of five projects shall be submitted in which each product has been used and rendered satisfactory service. The listed projects shall be in the State of Texas, Oklahoma, Louisiana, or Arkansas.

**2.2 DELIVERY AND STORAGE:**

- A. All materials shall be brought to jobsite in original sealed containers. They shall not be used until the Engineer has inspected contents and obtained data from information on containers or label. Materials exceeding storage life recommended by the manufacturer shall be rejected.
- B. All coatings and paints shall be stored in enclosed structures to protect them from weather and excessive heat or cold. Flammable coatings or paint must be stored to conform with City, County, State, and Federal safety codes for flammable coating or paint materials. At all times coatings and paints shall be protected from freezing.

**2.3 MATERIALS:**

The number of coats called for in this schedule shall be considered minimum. If additional coats are required for complete coverage and uniform appearance, they shall be applied. Colors will be selected by the Owner. The system numbering may not be sequential or inclusive of all numbers from the first to last system or schedule numbers.

**SYSTEM NO. 1**

TYPE OF LIQUID HANDLED: Raw Sewage

TYPE OF SURFACE: Concrete

STRUCTURE: Interior surfaces of new splitter box and influent box of Primary Clarifier No. 1 and No. 2.

EXPOSURE CONDITION: Submerged and intermittently submerged.

SURFACE PREPARATION: Concrete should be completely cured and brushed free of all form release compounds, laitance, loose particles and be completely dry. Lightly blast concrete in existing splitter box between PC 1 and 2.

PAINTING SYSTEM:

TNEMEC COMPANY:

First Coating:

Series 218 Mortarclad® (1/16-inch nominal dry film thickness)

Second Coat:

Series 436 Permashield® FR (125 mils dry film thickness)

**SYSTEM NO. 3**

TYPE OF SURFACE: Metal

TYPE OF STRUCTURE: Piping, fittings, exposed structural steel and metal trim.

EXPOSURE CONDITION: Non-Submerged

SURFACE PREPARATION: Surface must be free of moisture, oil and grease. Remove as much rust as possible by wire brushing, scraping or chipping.

PAINTING SYSTEM:

First Coat:

Tnemec Series 1 – Purple Prime 3.0 dft mils

Second Coat:

Tnemec Series N69-HB epoxyline II 4.0 dft mils

Third Coat:

Tnemec Series 1075 Endura-Shield II (Semi-Gloss) 3.0 dft mils  
Total Thickness Tnemec = 10.0 dft mils min.

**SYSTEM NO.4**

TYPE OF LIQUID HANDLED: Non-potable water

TYPE OF SURFACE: Metal

TYPE OF STRUCTURE: Primary Clarifiers 1, 2, 3 and 4 feed wells, clarifier mechanism, center columns, baffles, and skimming arms.

EXPOSURE CONDITIONS: Submerged or Intermittently Submerged.

SURFACE PREPARATION: SSPC-SP10 Near white metal blast clean.

**PAINTING SYSTEM:**First Coat:

Tnemec Series 104-1255 Beige H.S. Epoxy 4.0 dft mils

Second Coat:

Tnemec Series 104-AA90 White H.S. Epoxy 5.0 dft mils

Total Thickness Tnemec = 9.0 dft mils

Alternate First Coat:

Sherwin-Williams Tank Clad HS B62 series/B600V80 6.0-9.0 dft mils

Alternate:

Sherwin-Williams Tank Clad HS B62 series/B60V80 6.0-9.0 dft mils

Total Thickness Sherwin-Williams = 14.0 mils dft min.

**SYSTEM NO. 16**

TYPE OF SURFACE: PVC Pipe

TYPE OF STRUCTURE: PVC Conduits and Pipes

EXPOSURE CONDITION: Normal Atmosphere

SURFACE PREPARATION: Hand sand to roughen pipe surface.

**PAINTING SYSTEM:**First Coat:

Tnemec Series 66 H.B. Epoxoline 4.0 dft mils

Second Coat (Interior):

Tnemec Series 66 H.B. Epoxoline 4.0 dft mils

Total Thickness-Interior = 8.0 dft mils min.

Second Coat (Exterior):

Tnemec Series 1075 Color Endura Shield II (S-G) 3.0 dft mils

Total Thickness-Exterior = 7.0 dft mils min.

Alternate First Coat:

Sherwin Williams Tile Clad HS B62Z Series B60VZ70 4.0 dft mils

Alternate Second Coat (Interior):

Sherwin Williams Tile Clad HS B62Z Series B60VZ70 4.0 dft mils

Alternate Second Coat (Exterior):

Sherwin Williams Corothane II Satin B65 Series B60V2 4.0 dft mils

**PART 3 EXECUTION****3.1 GENERAL:**

- A. All surface preparation, coating and painting shall conform to applicable standards of the Steel Structures Painting Council and the manufacturer's printed instructions. Material applied to the surface prior to the approval of

the Engineer shall be removed and re-applied to the satisfaction of the Engineer at the expense of the Contractor.

- B. All work shall be performed by skilled craftsmen qualified to perform the required work in a manner comparable with the best standards of practice. Continuity of personnel shall be coordinated with the Engineer.
- C. The Contractor shall provide a supervisor at the work site during cleaning and application operations. The supervisor shall have the authority to sign change orders, coordinate work and make decisions pertaining to the fulfillment of the contract.
- D. Dust, dirt, oil, grease or any foreign matter that will affect the adhesion or durability of the finish must be removed by washing with clean rags dipped in an approved cleaning solvent and wiped dry with clean rags.
- E. Coating and painting system include surface preparation, prime coating and finish coatings. Unless otherwise approved by the Engineer, prime coating shall be field applied. Where prime coatings are shop applied, the Contractor shall instruct suppliers to provide the prime coat compatible with the finish coat specified. Any off-site work which does not conform to this specification that is damaged during transportation, construction or installation shall be thoroughly cleaned and touched-up in the field as directed by the Engineer. The Contractor shall use repair procedures which insure the complete protection of all adjacent primer. The specified repair method and equipment may include wire brushing, hand or power tool cleaning, or dry-air blast cleaning. In order to prevent injury to surrounding painted areas, blast cleaning may require use of lower air pressure, smaller nozzle and abrasive particle sizes, or shorter blast nozzle distance from surface shielding and masking. If damage is too extensive or uneconomical to touch-up, then the item shall be re-cleaned and coated as directed by the Engineer.
- F. The Contractor's coating and painting equipment shall be designed for application of materials specified and shall be maintained in first class working condition. Compressors shall have suitable traps and filters to remove water and oils from the air.
- G. Application of the first coat shall follow immediately after surface preparation and cleaning and before rust bloom occurs. Any cleaned areas not receiving first coat within this period shall be re-cleaned prior to application of first coat.
- H. Prior to assembly, all surfaces made inaccessible after assembly shall be prepared as specified herein and shall receive the coating or paint system specified.

### 3.2 SURFACE PREPARATION:

- A. The latest revision of the following surface preparation specifications of the Steel Structures Painting Council shall form a part of this Specification:

1. Solvent Cleaning (SSPC-SP1): Removal of oil, grease, soil and other contaminants by use of solvents, emulsions, cleaning compounds, steam cleaning or similar materials and methods which involve a solvent or cleaning action.
  2. Hand Tool Cleaning (SSPC-SP2): Removal of loose rust, loose mil scale and other detrimental foreign matter to degree specified by hand chipping, scraping, sanding and wire brushing.
  3. Power Tool Cleaning (SSPC-SP3): Removal of loose rust, loose mil scale and other detrimental foreign matter to degree specified by power wire brushing, power impact tools or power sanders.
  4. White Metal Blast Cleaning (SSPC-SP5): Blast cleaning to a gray-white uniform metallic color until each element of surface area is free of all visible residues.
  5. Commercial Blast Cleaning (SSPC-SP6): Blast cleaning until at least two-thirds of each element or surface area is free of all visible residues.
  6. Brush-Off Blast Cleaning (SSPC-SP7): Blast cleaning to remove loose rust, loose mil scale and other detrimental foreign matter to degree specified.
  7. Near White Blast Cleaning (SSPC-SP10): The removal of all visible oil, grease, dirt, rust, mil scale, rust, paint, oxides, corrosion products and other foreign matter by compressed air nozzle blasting, centrifugal wheels or other specific method. Discoloration caused by certain stains shall be limited to no more than 5% of each square inch of surface area.
  8. Power Tool Cleaning to Bare Metal (SSPC-SP11): The removal of all visible oil, grease, dirt, mil scale, rust, paint, oxide, corrosion products, and other foreign matter. Slight residues of rust and paint may be left in the lower portion of pits if the original surface is pitted. Differs from SSPC-SP3 in that it requires more thorough cleaning and a surface profile not less than 1 mil (25 microns). For areas where abrasive blasting is prohibited or not feasible.
  9. Surface Preparation of Concrete (SSPC-SP13): Removal of contaminants, laitance, loosely adhering concrete, and dust by mechanical, chemical or thermal methods prior to the application of bonded protective coating or lining systems.
- B. Slag and weld metal accumulation and spatters not removed by the Fabricator, Erector, or Installer shall be removed by chipping and grinding. All sharp edges shall be panned, ground or otherwise blunted as required by the Engineer.
- C. Field blast cleaning for all surfaces shall be by dry method unless otherwise directed.

- D. Particle size of abrasive used in blast cleaning shall be that which will produce a 1.5-2.0 mils (37.5 microns-50.0 microns) surface profile or in accordance with recommendations of the manufacturer of the specified coating or paint system to be applied.
- E. Abrasive used in blast cleaning operations shall be new, washed, graded and free of contaminants that would interfere with adhesion of coating or paint and shall not be reused unless specifically approved by the Engineer.
- F. During blast cleaning operations, caution shall be exercised to insure that existing coatings or paint are not exposed to abrasion from blast cleaning.
- G. The Contractor shall keep the area of his work and the surrounding environment in a clean condition. He shall not permit blasting materials to accumulate as to constitute a nuisance or hazard to the accomplishment of the work, the operation of the existing facilities, or nuisance to the surrounding environment.
- H. Blast cleaned surfaces shall be cleaned prior to application of specified coatings or paint. No coatings or paint shall be applied over damp or moist surfaces.
- I. All welds shall be neutralized with suitable chemical compatible with the specified coating materials.
- J. Specific Surface Preparation: Surface preparation for the specific system shall be as noted in Section 2.1.

### 3.3 APPLICATION:

- A. Coating and paint application shall conform to the requirements of the Steel Structures Painting Council Paint Application Specification SSPC-PA1, latest revision, for "Shop, Field and Maintenance Painting", the American Water Works Association and the manufacturer of the coating and paint materials.
- B. Thinning shall be permitted only as recommended by the manufacturer approved by the Engineer, and utilizing the thinners stated in Section 2.2 Paragraphs D and E.
- C. Each application of coating or paint shall be applied evenly, free of brush marks, sags, runs, with no evidence of poor workmanship. Care shall be exercised to avoid lapping on glass or hardware. Coatings and paints shall be sharply cut to lines. Finished surfaces shall be free from defects or blemishes.
- D. Protective coverings or drop cloths shall be used to protect floors, textures, and equipment. Care shall be exercised to prevent coatings or paints from being spattered onto surfaces which are not to be coated or painted. Report surfaces from which materials cannot be satisfactorily removed to the Engineer.
- E. When two coats of coating or paint are specified, where possible, the first coat shall contain sufficient approved color additive to act as an indicator of coverage or the two coats must be of contrasting color.

- F. Film thickness per coat specified in Section 2.2 are minimum required. If roller application is deemed necessary, the Contractor shall apply additional coats to achieve the specified thickness.
- G. All material shall be applied as specified.
- H. All welds and irregular surfaces shall receive a brush coat of the specific product prior to application of the first complete coat.

3.4 COATING SYSTEM APPLICATION:

- A. After completion of surface preparation as specified for the specific system, materials shall be applied as noted in Section 2.2.

3.5 COLOR SCHEME:

- A. The Engineer shall select colors for the project. The Contractor shall submit a current chart of the manufacturer's available colors to the Engineer thirty days prior to the start of coating and painting.

3.6 DISINFECTION:

- A. Disinfection may be required for interior surfaces of tanks or systems containing potable water. Coordinate painting with disinfection requirements.

3.7 VAPOR REMOVAL:

- A. All solvent vapors shall be completely removed by suction-type exhaust fans and blowers before placing tank or system in operating service.

3.8 CLEAN UP:

- A. Upon completion of the work, all staging, scaffolding and containers, waste blast abrasive, or other painting debris shall be removed from the site. Coating or paint spots or oil stains upon adjacent surfaces shall be removed and the jobsite cleaned. All damage to surfaces resulting from the work of this section shall be cleaned, repaired, or refinished to the satisfaction of the Engineer at no cost to the Owner.

END OF SECTION