The City of SAN DIEGO

Invitation to Bid (ITB) for
PLWTP Digesters C1 and C2 and MBC Tank 17 Cleaning
Addendum B

Solicitation Number:	10089637-20-W
Solicitation Issue Date:	January 21, 2020
Mandatory Pre-Bid Conference:	January 29, 2020 @ 8:30 a.m. Point Loma Wastewater Treatment Plant 1902 Gatchell Road, San Diego, CA 92106
Mandatory Site Inspections:	January 29, 2020 @ 9:15 a.m. Point Loma Wastewater Treatment Plant (PLWTP) 1902 Gatchell Road, San Diego, CA 92106 January 29, 2020 @ 11:00 a.m. Metro Biosolids Center (MBC) 5240 Convoy Street, San Diego, CA 92111
Questions and Comments Due:	February 6, 2020 @ 12:00 p.m.
Bid Due Date and Time ("Closing Date"):	**February 21, 2020** @ 3:00 p.m.
Contract Term:	Beginning from Effective Date until completion of the Scope of Services.
City Contact:	Michael Warner, Senior Procurement Contracting Officer 1200 Third Avenue, Suite 200 San Diego, CA 92101 MWarner@sandiego.gov (619) 236-6154
Submissions:	Respondent is required to provide two (2) originals and one (1) electronic copy (e.g. thumb drive or CD) of their response as described herein. **Completed and signed ITB signature page is required, with most recent addendum listed as acknowledgement of all addenda issued.** **Note: Emailed submissions will not be accepted.**

CONTRACT RESULTING FROM INVITATION TO BID NUMBER 10089637-20-W, PLWTP Digesters C1 and C2 and MBC Holding Tank 17 Cleaning

This Contract (Contract) is entered into by and between the City of San Diego, a municipal corporation (City), and the successful bidder to Invitation to Bid (ITB) # 10089637-20-W, PLWTP Digesters C1 and C2 and MBC Holding Tank 17 Cleaning (Contractor).

RECITALS

On or about 1/21/2020, City issued an ITB to prospective bidders on services to be provided to the City. The ITB and any addenda and exhibits thereto are collectively referred to as the "ITB." The ITB is attached hereto as Exhibit A.

City has determined that Contractor has the expertise, experience, and personnel necessary to provide the services.

City wishes to retain Contractor to to clean PLWTP Digesters C1 and C2 and MBC Holding Tank 17 as further described in the Scope of Work, attached hereto as Exhibit B. (Services).

For good and valuable consideration, the sufficiency of which is acknowledged, City and Contractor agree as follows:

ARTICLE I
CONTRACTOR SERVICES

1.1 Scope of Work. Contractor shall provide the Services to City as described in Exhibit B which is incorporated herein by reference. Contractor will submit all required forms and information described in Exhibit A to the Purchasing Agent before providing Service.

1.2 General Contract Terms and Provisions. This Contract incorporates by reference the General Contract Terms and Provisions, attached hereto as Exhibit C.

ARTICLE II
DURATION OF CONTRACT

2.1 Term. This Contract shall be for a period beginning on the Effective Date until the completion of the Scope of Services. The term of this Contract shall not exceed five years unless approved by the City Council by ordinance.

2.2 Effective Date. This Contract shall be effective on the date it is executed by the last Party to sign the Contract, and approved by the City Attorney in accordance with San Diego Charter Section 40.

ARTICLE III
COMPENSATION

3.1 Amount of Compensation. City shall pay Contractor for performance of all Services rendered in accordance with this Contract in an amount not to exceed the amount authorized by the City Council by ordinance.

ARTICLE IV
WAGE REQUIREMENTS

4.1 By submitting a response to this ITB, Contractor certifies that he or she is aware of, and agrees to comply with, the wage provisions described in Exhibit D, Wage Requirements, which is incorporated herein by reference, before commencing Services.

ARTICLE V
CONTRACT DOCUMENTS

5.1 Contract Documents. The following documents comprise the Contract between the City and Contractor: this Contract and all exhibits thereto; the Notice to Proceed; and the City's written acceptance of exceptions or clarifications to the ITB, if any.

5.2 Contract Interpretation. The Contract Documents completely describe the services to be provided. Contractor will provide any services that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result whether or not specifically called for or identified in the Contract Documents. Words or phrases which have a well-known technical or construction industry or trade meaning and are used to describe services will be interpreted in accordance with that meaning unless a definition has been provided in the Contract Documents.

5.3 Precedence. In resolving conflicts resulting from errors or discrepancies in any of the Contract Documents, the Parties will use the order of precedence as set forth below. The document highest in the order of precedence controls. Inconsistent provisions in the Contract Documents that address the same subject, are consistent, and have different degrees of specificity, are not in conflict and the more specific language will control. The order of precedence from highest to lowest is as follows:

1st The Contract

2nd The ITB and the City's written acceptance of any exceptions or clarifications to the ITB, if any

3rd Contractor's Pricing

5.4 Counterparts. This Contract may be executed in counterparts which, when taken together, shall constitute a single signed original as though all Parties had executed the same page.

5.5 Public Agencies. Other public agencies, as defined by California Government Code section 6500, may choose to use the terms of this Contract, subject to Contractor's acceptance. The City is not liable or responsible for any obligations related to a subsequent Contract between Contractor and another public agency.

IN WITNESS WHEREOF, this Contract is executed by City and Contractor acting by and through their authorized officers.

CONTRACTOR

American Process Group Inc.
Bidder

1201 Pacific Ave., Suite 600
Street Address

Tacoma, WA 98402
City

(780) 963-1484
Telephone No.

jprince@amprocessgroup.com
E-Mail

BY:

Signature of Bidder's Authorized Representative

John Prince
Print Name

President
Title

February 19, 2020
Date

CITY OF SAN DIEGO
A Municipal Corporation

BY:

Print Name: Kristina Peraltz
Director Purchasing & Contracting Department

3 APR 2020
Date Signed

Approved as to form this 17 day of APRIL, 20 20.
MARA W. ELLIOTT, City Attorney

BY:
Deputy City Attorney

EXHIBIT A
INSTRUCTIONS AND BID REQUIREMENTS

A. BID SUBMISSION

1. Timely Bid Submittal. Bids must be submitted as described herein to the Purchasing & Contracting Department (P&C).

1.1 Reserved.

1.2 Paper Bids. The City will accept paper bids in lieu of eBids. Paper bids must be submitted in a sealed envelope to the Purchasing & Contracting Department (P&C) located at 1200 Third Avenue, Suite 200, San Diego, CA 92101. The Solicitation Number and Closing Date must be referenced in the lower left-hand corner of the outside of the envelope. Faxed bids will not be accepted.

1.3 Bid Due Date. Bids must be submitted prior to the Closing Date indicated in the eBidding System. E-mailed and/or faxed bids will not be accepted.

1.4 Pre-Bid Conference. Pre-bid conference information is noted on the eBidding System.

1.4.1 Bidders are required to attend the pre-bid conference. Bidder's failure to attend will result in disqualification.

1.5 Questions and Comments. Written questions and comments must be submitted electronically via the eBidding System no later than the date specified on the eBidding System. Only written communications relative to the procurement shall be considered. The City's eBidding System is the only acceptable method for submission of questions. All questions will be answered in writing. The City will distribute questions and answers without identification of the inquirer(s) to all bidders who are on record as having received this ITB via its eBidding System. No oral communications can be relied upon for this ITB. Addenda will be issued addressing questions or comments that are determined by the City to cause a change to any part of this ITB.

1.6 Contact with City Staff. Unless otherwise authorized herein, bidders who are considering submitting a bid in response to this ITB, or who submit a bid in response to this ITB, are prohibited from communicating with City staff about this ITB from the date this ITB is issued until a contract is awarded.

2. Submission of Information and Forms.

2.1 Completed and signed Contract Signature Page. If any addenda are issued, the latest Addendum Contract Signature Page is required.

2.2 Exceptions requested by bidder, if any. The bidder must present written factual or legal justification for any exception requested to the Scope of Work, Contract, or

the Exhibits. Any exceptions to the Contract that have not been accepted by the City in writing are deemed rejected. The City, in its sole discretion, may accept some or all of bidder's exceptions, reject bidder's exceptions and deem the bid non-responsive, or award the Contract without bidder's proposed exceptions.

2.3 The Contractor Standards Pledge of Compliance Form.

2.4 Equal Opportunity Contracting forms including the Work Force Report and Contractors Certification of Pending Actions.

2.5 Living Wage Ordinance Certification of Compliance.

2.6 Licenses as required in Exhibit B.

2.7 Reserved.

2.8 Additional Information as required in Exhibit B.

2.9 Reserved

2.10 Reserved

2.11 Reserved

3. Bid Review. Bidders are responsible for carefully examining the ITB, the Scope of Work, this Contract, and all documents incorporated into the Contract by reference before submitting a bid. If selected for award of contract, bidder shall be bound by same unless the City has accepted bidder's exceptions, if any, in writing.

4. Addenda. The City may issue addenda to this ITB as necessary. All addenda are incorporated into the Contract. The bidder is responsible for determining whether addenda were issued prior to a bid submission. Failure to respond to or properly address addenda may result in rejection of a bid.

5. Quantities. The estimated quantities provided by the City are not guaranteed. These quantities are listed for informational purposes only. Quantities vary depending on the demands of the City. Any variations from the estimated quantities shall not entitle the bidder to an adjustment in the unit price or any additional compensation.

6. Quality. Unless otherwise required, all goods furnished shall be new and the best of their kind.

6.1 Items Offered. Bidder shall state the applicable trade name, brand, catalog, manufacturer, and/or product number of the required good, if any, in the bid.

6.2 Brand Names. Any reference to a specific brand name in a solicitation is illustrative only and describes a component best meeting the specific operational, design, performance, maintenance, quality, or reliability standards and requirements of the City. Bidder may offer an equivalent or equal in response to a brand name referenced (Proposed Equivalent). The City may consider the Proposed Equivalent after it is subjected to testing and evaluation which must be completed prior to the award of contract. If the bidder offers an item of a manufacturer or vendor other than that specified, the bidder must identify the maker, brand, quality, manufacturer number, product number, catalog number, or other trade designation. The City has complete discretion in determining if a Proposed Equivalent will satisfy its requirements. It is the bidder's responsibility to provide, at their expense, any product information, test data, or other information or documents the City requests to properly evaluate or demonstrate the acceptability of the Proposed Equivalent, including independent testing, evaluation at qualified test facilities, or destructive testing.

7. Modifications, Withdrawals, or Mistakes. Bidder is responsible for verifying all prices and extensions before submitting a bid.

7.1 Modification or Withdrawal of Bid before Bid Opening. Prior to the Closing Date, the bidder or bidder's authorized representative may modify or withdraw the bid by providing written notice of the bid modification or withdrawal to the City Contact via the eBidding System. E-mail or telephonic withdrawals or modifications are not permissible.

7.2 Bid Modification or Withdrawal of Bid After Bid Opening. Any bidder who seeks to modify or withdraw a bid because of the bidder's inadvertent computational error affecting the bid price shall notify the City Contact identified on the eBidding System no later than three working days following the Closing Date. The bidder shall provide worksheets and such other information as may be required by the City to substantiate the claim of inadvertent error. Failure to do so may bar relief and allow the City recourse from the bid surety. The burden is upon the bidder to prove the inadvertent error. If, as a result of a bid modification, the bidder is no longer the apparent successful bidder, the City will award to the newly established apparent successful bidder. The City's decision is final.

8. Incurred Expenses. The City is not responsible for any expenses incurred by bidders in participating in this solicitation process.

9. Public Records. By submitting a bid, the bidder acknowledges that any information submitted in response to this ITB is a public record subject to disclosure unless the City determines that a specific exemption in the California Public Records Act (CPRA) applies. If the bidder submits information clearly marked confidential or proprietary, the City may protect such information and treat it with confidentiality to the extent permitted by law. However, it will be the responsibility of the bidder to provide to the City the specific legal grounds on which the City can rely in withholding information requested under the CPRA should the City choose to withhold such information. General references to sections of the CPRA will not suffice. Rather, the bidder must provide a specific and detailed legal basis, including applicable case law, that clearly establishes the requested information is exempt from the disclosure under the CPRA. If the bidder does not provide a specific and detailed legal basis for requesting the City to withhold bidder's confidential or proprietary

information at the time of bid submittal, City will release the information as required by the CPRA and bidder will hold the City, its elected officials, officers, and employees harmless for release of this information. It will be the bidder's obligation to defend, at bidder's expense, any legal actions or challenges seeking to obtain from the City any information requested under the CPRA withheld by the City at the bidder's request. Furthermore, the bidder shall indemnify and hold harmless the City, its elected officials, officers, and employees from and against any claim or liability, and defend any action brought against the City, resulting from the City's refusal to release information requested under the CPRA which was withheld at bidder's request. Nothing in the Contract resulting from this bid creates any obligation on the part of the City to notify the bidder or obtain the bidder's approval or consent before releasing information subject to disclosure under the CPRA.

10. Right to Audit. The City Auditor may access bidder's records as described in San Diego Charter section 39.2 to confirm contract compliance.

B. PRICING

1. Fixed Price. All prices shall be firm, fixed, fully burdened, FOB destination, and include any applicable delivery or freight charges, and any other costs required to provide the requirements as specified in this ITB.

2. Taxes and Fees. Taxes and applicable local, state, and federal regulatory fees should not be included in the price proposal. Applicable taxes and regulatory fees will be added to the net amount invoiced. The City is liable for state, city, and county sales taxes but is exempt from Federal Excise Tax and will furnish exemption certificates upon request. All or any portion of the City sales tax returned to the City will be considered in the evaluation of bids.

3. Escalation. An escalation factor is not allowed unless called for in this ITB. If escalation is allowed, bidder must notify the City in writing in the event of a decline in market price(s) below the bid price. At that time, the City will make an adjustment in the Contract or may elect to re-solicit.

4. Unit Price. Unless the bidder clearly indicates that the price is based on consideration of being awarded the entire lot and that an adjustment to the price was made based on receiving the entire bid, any difference between the unit price correctly extended and the total price shown for all items shall be offered shall be resolved in favor of the unit price.

C. BID OPENING. All bids will be opened at, or immediately after, the time noticed for the bid opening in a location that is open to the public. No bidder or interested person will be excluded from the bid opening. Where no member of the public is in attendance, at least one City officer or employee, in addition to the City employee opening the bids, will be present. Bid results will be announced in the presence of those attending. The name of the project will be audibly announced to those present followed by the name of the bidder, the name of the surety, the amount of the bond, if required, and the total amounts or unit amounts bid. Any person present shall have the right to ask the announcements be repeated or to ask that

omitted data be supplied. Such requests will be honored to the extent they do not unreasonably delay or interfere with the bid opening procedure, as determined at the sole discretion of the City employee opening the bids.

D. EVALUATION OF BIDS

1. Low Bid Award. A contract will be awarded to the lowest responsible and responsive bidder.

2. Additional Information. The City may require bidder to provide additional written or oral information to clarify responses.

3. Sustainable Materials. Consistent with Council Policy 100-14, the City encourages use of readily recyclable submittal materials that contain post-consumer recycled content.

4. Waiver of Defects and Technicalities. The City may waive defects and technicalities in bids when to do so is in the City's best interests.

5. Rejection of All Bids. The City may reject any and all bids when to do so is in the City's best interests.

E. ANNOUNCEMENT OF AWARD

1. Award of Contract. The City will inform all bidders of its intent to award a Contract in writing.

2. Obtaining Bid Results. Bid results may be obtained by: (1) attending the bid opening; (2) e-mailing a request to the City Contact identified on the eBidding System; or (3) visiting the P&C eBidding System to review the bid results. To ensure an accurate response, requests should reference the Solicitation Number. Bid results will not be released over the phone.

3. Multiple Awards. City may award more than one contract by awarding separate items or groups of items to various bidders. The additional administrative costs associated with awarding more than one Contract will be considered in the determination.

F. PROTESTS. The City's protest procedures are codified in Chapter 2, Article 2, Division 30 of the San Diego Municipal Code (SDMC). These procedures provide unsuccessful bidders with the opportunity to challenge the City's determination on legal and factual grounds. The City will not consider or otherwise act upon an untimely protest.

G. SUBMITTALS REQUIRED UPON NOTICE OF INTENT TO AWARD. The successful bidder is required to submit the following documents to P&C **within ten (10) business days** from the date on the Notice of Intent to Award letter:

1. **Insurance Documents.** Evidence of all required insurance, including all required endorsements, as specified in Article VII of the General Contract Terms and Provisions.

2. **Taxpayer Identification Number.** Internal Revenue Service (IRS) regulations require the City to have the correct name, address, and Taxpayer Identification Number (TIN) or Social Security Number (SSN) on file for businesses or persons who provide goods or services to the City. This information is necessary to complete Form 1099 at the end of each tax year. To comply with IRS regulations, the City requires each Contractor to provide a Form W-9 prior to the award of a Contract.

3. **Business Tax Certificate.** All businesses that contract with the City must have a current business tax certificate unless the City Treasurer determines the business is exempt.

4. **Bond. A bond as described in Exhibit B.**

5. **Reserved.**

The City may find the bidder to be non-responsive and award the Contract to the next responsible and responsive low bidder if the apparent successful bidder fails to timely provide the required information or documents.

EXHIBIT B
SCOPE OF WORK

A. BACKGROUND INFORMATION

The City of San Diego Public Utilities Department (City) desires a Contractor to provide all labor and materials to clean, de-water and haul away residual material from **Point Loma Wastewater Treatment Plant (PLWTP)** digesters C1 & C2 and **Metro Biosolids Center (MBC)** Holding tank # 17 (Tank #17).

The cleanings in each digester are from a municipal wastewater treatment plant. The mixture contains organic and inorganic solids, grit, grease, scum, hair, plastics, rags, silt, sand, scum, industrial solvents and other material normally found in digesters in a municipal wastewater treatment plant. Optimum operating pH is near neutral but may have varied at times from 4 to 11 (Refer to Attachment C for C1 and C2 sludge chemistry (Test Data) for December 2019. Ferric chloride has been added to the influent stream and consequently can be found in the sludge and cleanings. Contractor should anticipate thick hair mats and or hundreds to thousands of 3" to 6" diameter hair balls and a heavy concentration of grit on the digester floor.

B. SERVICE LOCATIONS

1. Point Loma Wastewater Treatment Plant
   1902 Gatchell Road
   San Diego, CA 92106

2. Metro Biosolids Center (MBC)
   5240 Convoy Street
   San Diego, CA 92111

C. GENERAL SCOPE OF SERVICES

1. The Contractor shall be responsible for the loading of the cleanings from digesters and tanks, hauling, storage, processing as needed, testing, and final disposal of all digester and tank cleanings. The material may be processed on site or hauled as liquid.

2. The Contractor shall provide and pay all applicable fees for all disposal or recycle sites, permits, licenses, equipment, labor, material, testing, monitoring, fuel, and all other appurtenances and services required to remove and dispose of digester and tank cleanings including, but not limited to, the following tasks:

   a. Provide administrative and supervisory services over all contractors and subcontractors operations.

   b. Provide a key contact person to coordinate with the Technical Representative, or designee particularly concerning scheduling.

c. Provide onsite de-watering (if selected) and odor control, loading, hauling, removal and disposal services.

d. Weigh vehicles utilizing a certified scale approved by the City at, or as close as possible to, the job site.

e. Transport digester and tank cleanings to disposal site.

f. Pay all disposal fees.

3. Provide any sampling, laboratory testing, monitoring and reporting functions above those provided by the City.

D. DIGESTER AND TANK PARAMETERS

1. Digester Parameters:

a. Digesters C1 and C2 dimensions are 125 feet inside diameter with a sidewall depth of 40'. Digesters C1 and C2 have fixed steel covers with sixteen (16), thirty (30) inch diameter mixing guns each (32 total for C1 and C2). The floors of Digesters C1 and C2 are cones that drop to an additional depth of 14.12'at the center. Refer to the contract drawings (Attachment A) for additional information.

b. The approximate volume for each of digesters C1 and C2 are as follows:

i. Total approximate calculated operating volume: 3,690,433 gallons

ii. Approximate calculated side water volume (35'): 2,212,769 gallons

iii. Approximate calculated cone volume (cone depth 14.12'): 477,663 gallons

c. Each digester may contain approximately 1,133,000 gallons when the Contractor begins cleaning.

2. Tank Parameters:

a. Tank #17 (Attachment B) is 70 feet inside diameter and has a fixed cover with four (4) -24" access hatches in the roof that are 49' (from the underside of the roof) to the top of the cone. The floor of Tank #17 has a cone that drop to an additional depth of 6.5'at the center. Tank #17 also has three (3) removable 30" X 42" access hatches located on the side of the tank. Two are located down in the gallery and one is located above grade on the street side of the tank.

b. The approximate volume for tank #17 is as follows:

i. Total approximate calculated operating volume: 1,357,759 gallons

ii. Approximate calculated side water volume: 1,295,388 gallons

iii. Approximate calculated cone volume (cone depth 6.5'): 62,317 gallons

c. Tank #17 may contain approximately 65,000 gallons when the Contractor begins cleaning.

3. The City will de-water as much as possible prior to turning over the digester or tank to the Contractor for cleaning. The volume of sludge remaining in the digester or tank for removal by the Contractor shall be calculated by the Contractor and the Technical Representative, or designee based on measurement of:

a. The digester or tank sludge surface elevation, with the resultant geometric volume determined from the digester As-built drawings (Attachment A); or

b. The tank sludge surface elevation and the bottom of the 4 access hatches, with the resultant geometric volume determined from the tank geometry listed above.

c. The volume of digester and tank sludge shown on the bid sheet is maximum estimated volume to be removed by the Contractor. The volume of sludge at each digester and tank will be measured by the Construction manager and the Contractor prior to commencement of work. The Contractor will be compensated based on the actual volume of sludge removed from the digesters and tank.

E. DIGESTER AND TANK CLEANING RESIDUALS QUALITY

1. Contractor will provide the City with a representative sample of residuals for testing. The chain of custody forms and sample bottle will be provided by the City. The City will test the samples to certify that the digester or tank cleaning residuals are non-hazardous waste according to Title 22 of the California State Health Code. Contractor shall not dispose of any residuals until directed, in writing, by the City. The turnaround time for completing Title 22 testing residuals is approximately one week.

2. Any additional sampling and analysis shall be done at the Contractor's expense.

3. In the event the Contractor adds any material to the digester or tank cleaning residuals which causes the residuals to be considered hazardous under the Title 22 Health Code, the Contractor will be responsible for all costs incurred to properly treat and dispose of the hazardous waste, as well as any liability arising there from, at no additional cost to the City.

F. DIGESTER CLEANING

1. Contractor shall hydro-blast clean and remove all contents of the digesters including material (both solid and debris) in all pipes penetrating the digester wall or roof, mixing tubes suspended in the digester, and those pipes embedded in the concrete floor. All solids and debris from the cleaning shall be removed and disposed. The pipe cleaning shall include high pressure water blasting of the interior for complete

removal of vivianite. The pipes shall be cleaned and flushed to the nearest flushing port or pipe discharge outside of the digester wall or roof. Contractor shall use no abrasive tools and shall use acceptable water pressure to prevent damage to the glass lining in the pipes. Contractor shall be responsible for ensuring that all pipe connections are properly gasketed and that there is no separation or leaks from pipe connections after cleaning.

2. Contractor shall take special care to mark the top of the mixing guns to ensure that the guns are replaced in the same mixing gun hole that they came from and that they are in the correct alignment in the hole to line up with the existing gas mixing piping (Mixing guns and cupola on digesters C1 and C2).

3. Contractor shall be responsible for removing/cleaning all old/existing gaskets from the gun/cupola flanges during the removal of the guns and cupola(s). Contractor shall also responsible for the proper re-installation of the guns and cupola, ensuring that the flange seating(s) are airtight. Contractor shall replace the old gaskets that were removed earlier with new rubber/neoprene gaskets and use high strength silicon on both sides of the gasket for a 100% seal. Contractor shall also be responsible for acquiring the new rubber/neoprene gaskets and replacing any lost or damaged hardware that may occur from the removal and replacing of the digester mixing guns and cupola(s). Contractor shall also provide washers for the top and bottom of all flanges. All new and replacement bolts and washers shall be 316 Stainless Steel. The City will pressure test the Digesters, and, if leaks are found, the Contractor must make repairs as needed to stop the leaks at no cost to the City.

4. Torque setting specification for tightening nuts and bolts on mixing gun/cupola flanges is 70 ft.-lbs. Nuts shall be tightened in a star pattern. **Due to the presence of gas and atmospheric conditions around the digesters, the Contractor must use non-sparking (Spark-less) tools when working on digester roof**.

5. Plant water (W2 – Industrial Water) may be used by the Contractor without charge. (W2 Water is City water which is separated from the City water supply by an air break tank). Contractor is still expected to have a backflow device (for protecting the Plant water supply) and a water meter to monitor water use.

6. For PLWTP, Contractor's use of Plant water is limited to a total instantaneous flow of 250 gallons per minute, and a total daily usage of 360,000 gallons.

7. Contractor shall provide all compressed air, pumps, piping, hoses and other equipment required for the work.

8. Contractor shall provide construction water meters and a reduced pressure back flow preventer for each connection to the Plant industrial water system. The backflow preventers shall be Febco Model 825, Beeco Model G-C, or equal.

9. Contractor may use Plant electrical power at no cost. The City will provide a 480 V, 1600 Amp breaker at Power Center 5. The City will not modify any connection points for the Contractor. Contractor shall verify at pre-bid visit to the Plant site prior to the bid to determine if the existing power connections will meet their needs. If not, the Contractor shall provide their own portable generators for power requirements.

Contractor shall be responsible for all air quality permits associated with their portable generator engines.

10. Recycling of the cleaning water is not permitted for water used to clean and hydro-mine the digester contents.

11. Plant effluent shall not be used in the work. Although the plant effluent water is an advanced primary treatment water, it is not intended for body contact nor shall it be used for cleaning the digesters.

12. The Contractor shall protect the digester roof by using plywood when working on digesters to protect the coating and insulation of digester roof. At the same time, the Contractor shall caution to avoid any damage to the railings around the digester roof. Damages to the roof and its components caused by the cleaning activities (including removal/replacement of mixing guns) shall be repaired by the Contractor at no cost to the City.

13. Following the removal of the digester contents, the interior (walls, ceiling and floor) of the digester shall be hydro-blasted clean. The blast pressure used shall be sufficient to remove all remaining materials on the digester walls, but not damage the digester concrete surfaces. If at that time any damages or condition issues are found in the digester, the Contractor will be expected to make all required repairs and removal of loose materials/debris from digester walls through the "Change Order" Process. If access is required for repairs and removal of loose materials from digester walls, the Contractor is expected to install tall scaffolding equipment inside the digester to accomplish this task. Any debris from the hydro-blasting shall be removed from the digester as part of the contract work.

14. Following the final cleaning of the appurtenant piping and interior of the digester and before the digester is turned back over to the City, the Contractor shall provide access to the interior of the digester for City inspection, at no cost to the City.

15. Contractor is responsible for the thorough cleaning of the interior and exterior of the digester mixing guns after removing them from the digester(s). The cleaning shall include high pressure water and/or sand blasting of the interior and exterior and top cover of the guns for the complete removal of vivianite and any corrosion. Once they are clean and it has been determined there is no damage to the gun and appurtenant piping, the entire mixing gun(s) shall be recoated per the coating manufacturer's specifications. The coating used on the guns is Amercoat 395 high solids amine cured epoxy, 16 mils minimum thickness. It should be noted that the mixing guns are not only cylinder shape, but there are ring and bracket attachments to them, so the painting of the guns shall include twists and turns for sandblasting and coating as well. The gravel area next to the Plant Guard Shack is provided to Contractor as a laydown area for the mixing guns. It should be noted that the gas mixing guns will include thick layers of vivianite which need to be removed from the guns prior to sandblasting and coating. This operation will require large tarps and wooden pallets on ground to protect the guns and the gravel area. No vivianite shall be dropped on gravel area. The Contractor is responsible to contain all vivianite material and dispose of them accordingly. The Contractor is allowed to take the mixing guns to their shop for blasting and coating, but if onsite blasting and coating is selected, the

Contractor is responsible to contain the operation by building a containment housing to avoid blasting and coating materials into atmosphere per APCD regulations. Contractor shall be responsible for making any repairs to the gas mixing guns, appurtenant equipment, mechanical fittings or gun coating if they are damaged as result of Contractor's work. Any repairs to the mixing guns or appurtenant equipment for damages, not caused by the Contractor, shall be made through the "Change Order" Process.

16. **Remove the existing thirty-two 32 flexible spools and furnish and install thirty-two (32) 2" flexible spool connectors including all appurtenances at digester roof gas lines (16 for Digester C1 and 16 for Digester C2). These flex spool connectors consist of a rubber tube which is covered by braided stainless steel. The work includes the replacement of the entire flex connector piping from the union to the tee (32) as shown in Attachment D. The job is to fit thirty-two (32) new pipe spool sections to the tank and piping connections, trim pipe randoms to proper length and perform tie-in socket welds.**

G. TANK CLEANING

1. Contractor shall hydro-blast clean and remove all contents of the tank including material (both solid and debris) in all pipes penetrating the tank wall or roof, mixing tubes suspended in the tank and those pipes embedded in the concrete floor. All solids and debris from the cleaning shall be removed and disposed. The pipe cleaning shall include high pressure water blasting of the interior for complete removal of any scaled deposits. The pipes shall be cleaned and flushed to the nearest flushing port or pipe discharge outside of the tank wall or roof. Contractor shall use no abrasive tools and shall use acceptable water pressure to prevent damage to the glass lining in the pipes. Contractor shall be responsible for ensuring that all pipe connections are properly gasketed and that there is no separation or leaks from pipe connections after cleaning.

2. Contractor shall take special care when removing or opening any access hatches. It is the contractor's responsibility to replace the old gaskets that were removed earlier with new gaskets. Contractor shall also be responsible for acquiring the new gaskets and replacing any lost or damaged hardware that may occur from the removal and replacing of the Hatches. All new and replacement Hardware shall be 316 Stainless Steel. The City will put the tank back in service, and, if leaks are found, the Contractor must make repairs as needed to stop the leaks at no cost to the City.

3. Plant process water may be used by the Contractor without charge. Process water is City water which is separated from the City water supply by an air break tank.) Contractor is still expected to have a backflow device (for protecting the Plant water supply) and a water meter to monitor water use.

4. Contractor shall furnish and install a 2 ¼"x 8'x 8' steel plate over the concrete slab expansion joint located between Digesters 1 and 3, prior to work in Area 80 (Attachment B). An asphalt transition shall be provided between the steel plate and the existing concrete slab. Contractor shall maintain the asphalt daily or as needed. The steel plate is for heavy traffic loads. Contractor shall remove the asphalt and steel plate and transition material before demobilizing is completed and the

Contractor moves off the site. A submittal for the method and material is required prior to any work or ordering materials.

5. For MBC, Contractor's use of Plant water is limited to a total instantaneous flow of 150 gallons per minute, and a total daily usage of 75,000 gallons.

6. Contractor shall provide all compressed air, pumps, piping, hoses and other equipment required for the work.

7. Contractor shall provide construction water meters and a reduced pressure back flow preventer for each connection to the Plant industrial water system. The backflow preventers shall be Febco Model 825, Beeco Model G-C, or equal.

8. Contractor may use Plant electrical power at no cost. The City will provide a 480 V, 1600 Amp breaker for the contractors use in Area 60 (Attachment B). The City will not modify any connection points for the Contractor. Contractor shall verify at pre-bid visit to the Plant site prior to the bid to determine if the existing power connections will meet their needs. If not, the Contractor shall provide their own portable generators for power requirements. Contractor shall be responsible for all air quality permits associated with their portable generator engines.

9. Recycling of the cleaning water is not permitted for water used to clean and hydro-mine the tank contents.

10. Plant Reclaimed water shall not be used in the work. It is not intended for body contact nor shall it be used for cleaning the tanks.

11. The Contractor shall protect the tank roof by using plywood when working on tanks to protect the coating and insulation of tank roof. At the same time, the Contractor shall caution to avoid any damage to the railings around the tank roof. Damages to the roof and its components caused by the cleaning activities shall be repaired by the Contractor at no cost to the City.

12. Following the removal of the tank contents, the interior (walls, ceiling and floor) of the tank shall be hydro-blasted clean. The blast pressure used shall be sufficient to remove all remaining materials on the tank walls, but not damage the tank concrete surfaces. If at that time any damages or condition issues are found in the tank, the Contractor will be expected to make all required repairs and removal of loose materials/debris from tank walls through the "Change Order" Process. If access is required for repairs and removal of loose materials from tank walls, the Contractor is expected to install tall scaffolding equipment inside the tank to accomplish this task. Any debris from the hydro-blasting shall be removed from the tank as part of the contract work.

13. Following the final cleaning of the appurtenant piping and interior of the tank and before the tank is turned back over to the City, the Contractor shall provide access to the interior of the tank for City inspection, at no cost to the City.

H. DIGESTED ON SITE DE-WATERING (IF SELECTED)

1. The onsite de-watering shall take place on the south end of the Plant site as shown on the contract drawings (Attachment A). Sludge piping to the processing equipment shall be installed on Third Street from the digester being cleaned to the de-watering area. The decant piping from the de-watering area shall also be routed on Third Street to the designated discharge point into the treatment stream immediately downstream from the influent screening equipment. All sludge and decant piping shall be installed and maintained in such a manner as not to interfere with Plant traffic on the Plant streets. All sludge and decant piping shall be routed, installed and maintained to prevent any leakage or spillage from entering the Plant storm drain system. Contractor shall prepare an Emergency Response Plan for dealing with any leakage or spillage of any material as a result of their operation. Contractor shall submit a copy of their plan to the Technical Representative, or designee for review and approval before any digester cleaning can begin.

2. Contractor can return decant from the de-watering process to the Plant. Decant samples will be analyzed by the Point Loma Process Control Laboratory. City will be the sole judge of whether decant complies with the quality constraints specified elsewhere herein. Contractor will be notified and additional sampling will be performed if the samples are deemed out of compliance. Contractor shall modify operations to comply during the entire project.

3. Contractor shall provide instantaneous and total flow metering of decant flow. Plant personnel shall be allowed access to the flow meter for observation/determination of accuracy of meter and precision of calibration unit.

4. Contractor will provide a 24 hour, refrigerated, discrete, programmable sampler with 24-1000 ml bottles, and provide one 1-liter sample for each hour of decant operation. Each 1-liter sample will be a composite of individual 100 ml aliquots taken every 0.1 hours. Samples will be taken within 10' of the decant discharge to the Plant point of connection. Plant personnel will be allowed access to the sampler to verify accurate sampling.

5. Decant returned to the Plant must not exceed the following parameters:

Total suspended solids	851 mg/L
Daily total suspended solids	2.04 dry tons/day
Biochemical Oxygen Demand	172 mg/L
Chemical oxygen demand	380 mg/L
Daily chemical oxygen demand	0.92 tons/day
Particle size, maximum	3 mm
pH	7.0 to 9.0

6. Decant flow shall be de-gritted using tea cup or snail type de-gritters. Contractor shall haul grit from the Plant site.

7. Odor control will be a mutual concern of the Plant and the Contractor. In the event an odor problem occurs, a mutual determination shall be made as to the responsibility. The responsible party will take all necessary actions to abate the odor.

8. Contractor shall enclose cleaning processes, contain potential odor emission sources, and treat foul air discharges to remove odors using granular activated carbon units designed for this application. Ventilation and treatment flow rates shall be as required to prevent odor emissions. The carbon units' bed depths shall be not less than 3'. The carbon loading rate shall result in a superficial force velocity of not greater than 55' per minute. Carbon shall be new virgin material with design criteria as follows:

    a. Mesh size, U.S. sieve, minimum — 4x10

    b. Maximum moisture content as packed, percent by weight — 5.0

    c. CC14 number, % by weight, minimum (per ASTM D-3467) — 60

    d. Hardness number, minimum (per ASTM D-3802) — 92

    e. Retentivity, percent — 35

    Odor treatment of emissions from the digesters is not required.

    Contractor shall comply with San Diego Air Pollution Control District (APCD) Rule 51.

9. If the Contractor decides to perform on-site de-watering, the Contractor shall comply with all conditions of the facility's current Industrial-Activities Storm Water Pollution Prevention Plan. This includes a monthly inspection of the site by the City's Technical Representative, or designee and a report to the Plant's Superintendent on the inspection results.

I. TANK ON SITE DE-WATERING (IF SELECTED)

1. The onsite de-watering shall take place on the concrete pad on the south side of area 80 (Attachment B). Sludge piping to the processing equipment shall be installed between Tank #17 and the dewatering equipment in a way that maintains access through the facility for plant staff. The decant piping from the de-watering area shall also be routed to the nearest plant sanitary sewer system that is capable of handling the dewatering discharge. All sludge and decant piping shall be installed and maintained in such a manner as not to interfere with Plant traffic on the Plant streets. All sludge and decant piping shall be routed, installed, and maintained to prevent any leakage or spillage from entering the Plant storm drain system. Contractor shall prepare an Emergency Response Plan for dealing with any leakage or spillage of any material as a result of their operation. Contractor shall submit a copy of their plan to the Technical Representative, or designee for review and approval before any tank cleaning can begin.

2. Contractor can return decant from the de-watering process to the Plant sanitary sewer system. Decant samples will be analyzed by the City's Process Control Laboratory. City will be the sole judge of whether decant complies with the quality constraints specified elsewhere herein. Contractor will be notified and additional sampling will be performed if the samples are deemed out of compliance. Contractor shall modify operations to comply during the entire project.

3. Contractor shall provide instantaneous and total flow metering of decant flow. Plant personnel shall be allowed access to the flow meter for observation/determination of accuracy of meter and precision of calibration unit.

4. Contractor will provide a 24 hour, refrigerated, discrete, programmable sampler with 24-1000 ml bottles, and provide one 1-liter sample for each hour of decant operation. Each 1-liter sample will be a composite of individual 100 ml aliquots taken every 0.1 hours. Samples will be taken within 10' of the decant discharge to the Plant point of connection. Plant personnel will be allowed access to the sampler to verify accurate sampling.

5. Decant returned to the Plant must not exceed the following parameters:

Total suspended solids	851 mg/L
Daily total suspended solids	2.04 dry tons/day
Biochemical Oxygen Demand	172 mg/L
Chemical oxygen demand	380 mg/L
Daily chemical oxygen demand	0.92 tons/day
Particle size, maximum	3 mm
pH	7.0 to 9.0

6. Decant flow shall be de-gritted using tea cup or snail type de-gritters. Contractor shall haul grit from the Plant site.

7. Odor control will be a mutual concern of the Plant and the Contractor. In the event an odor problem occurs, a mutual determination shall be made as to the responsibility. The responsible party will take all necessary actions to abate the odor.

8. Contractor shall enclose cleaning processes, contain potential odor emission sources, and treat foul air discharges to remove odors using granular activated carbon units designed for this application. Ventilation and treatment flow rates shall be as required to prevent odor emissions. The carbon units' bed depths shall be not less than 3'. The carbon loading rate shall result in a superficial force velocity of not greater than 55' per minute. Carbon shall be new virgin material with design criteria as follows:

    a. Mesh size, U.S. sieve, minimum 4x10

    b. Maximum moisture content as packed, percent by weight 5.0

c. CC14 number, % by weight, minimum (per ASTM D-3467) 60

d. Hardness number, minimum (per ASTM D-3802) 92

e. Retentivity, percent 35

Odor treatment of emissions from the tanks is not required.

Contractor shall comply with San Diego Air Pollution Control District (APCD) Rule 51.

9. If the Contractor decides to perform on-site de-watering, the Contractor shall comply with all conditions of the facility's current Industrial-Activities Storm Water Pollution Prevention Plan. This includes a monthly inspection of the site by the City's Technical Representative, or designee and a report to the Plant's Superintendent on the inspection results.

J. DIGESTER AND TANK CLEANING HAULING VEHICLES

Contractor shall provide and maintain all vehicles required for the hauling described under this contract. Contractor shall provide water tight sealed containers for hauling the de-watered digester and tank cleanings or water tight tanker type trucks for hauling liquid digester and tank cleanings. All open top trucks must be tarped before leaving the PLWTP or MBC facility. All trucks shall be marked, in large lettering, with name, truck number, and phone number for clear identification by the public and City staff. The cost of all equipment and maintenance shall be included in the bid price.

All containers shall be delivered to the site in a clean, well maintained condition. The City has the right to reject a container and be substituted with a clean well-maintained container.

K. LOADING PROCEDURE

De-watering and hauling from PLWTP is allowed 7 days per week, 24 hours per day. De-watering and hauling from MBC is allowed 5 days per week (M-F), 12 hours per day (6am-6pm). However, there may be time limits imposed by the landfill operator.

All staging of Contractor's trucks or de-watered sludge storage containers shall be within the staging areas shown on the contract drawings (Attachments A and B).

L. WEIGHING PROCEDURE

Contractor shall be responsible, at its own expense, to obtain a Certified Weigh Ticket from a City approved scale at or near the processing/disposal site. The ticket will be used for determining billable tonnages hauled, as well as verifying disposal destination. This certified ticket shall meet the criteria as stated in the following paragraph.

The Certified Weigh Ticket must show gross weight, tare weight, net weight, date and time of weighing, tractor and trailer, license/equipment numbers, name of contractor, subcontractor, driver and City manifest number. The type of material hauled and the operators name must appear on the ticket. No predetermined tare weight will be accepted. Once the information is completed and correctly filled out, the driver must sign the ticket.

Tickets in non-compliance shall be rejected and no payment shall be made for rejected tickets.

Should the Contractor use scales which are not Public Certified Scales, the Contractor must provide the Certified Weigh master's name and a copy of their certification, along with a telephone number and a list of the Deputy Weigh master which are authorized to sign weigh tickets under Certified Weigh master.

Prior to receiving payment for any load, the Contractor must provide a hauler's manifest, and Certified Weigh Ticket showing receipt and disposal/unloading at the processing/disposal site. All discrepancies between the City Weigh Ticket and the Certified Weight Ticket shall be investigated by the City prior to payment.

M. EQUIPMENT CLEANING / FUEL STORAGE

Contractor shall wash all trucks off site prior entering to the site. The hauling trucks leaving the site shall be power washed in staging area to get rid of all solids from tires, outside container, and pavement (under trunk), so while leaving the site they do not drop dirt on roads. The Contractor is responsible to clean any dry sludge tracked out of the Cleaning and Staging Area. For **PLWTP**, the Contractor is responsible to clean any dry sludge left on 1st Street by sweeping it immediately. The 1st Street and the 3rd Street shall be cleaned by proper sweeping at every shift. Rocks spread out on street pavement as the result of hauling trucks shall be removed and placed at gravel areas by the end of each shift. Contractor or any subcontractor shall not store any fuel or perform maintenance on the site.

N. HAULING ROUTES

All hauling routes utilized during this contract shall be approved by the City. Further, the City retains the right to withdraw its approval of any hauling route and require the use of alternative routes. In no case will approval be given for any route which passes through the community of Borrego Springs, California. Deviation from approved routes may be grounds for immediate termination of this contract.

Contractor shall be responsible for all costs associated with traffic violations or other claims incurred as result of hauling operations for the duration of the contract. This includes ensuring that all loads are within legal limits.

Contractor shall prepare a Hauling Route Plan and submit prior to commencement of work.

O. SPILL RESPONSE CONTINGENCY PLAN

Contractor shall prepare a spill response contingency plan defining a course of action in the event a hauling vehicle is involved in accident and/or digester or tank cleaning residuals spill. A copy shall be filed with the City and one shall be retained in each vehicle. The draft plan shall be submitted for the City's review and comment within ten (10) days of award of contract and a final plan within ten (10) days of receipt of City's comments on draft. Contractor shall provide training sessions for drivers and dispatchers on the spill response contingency plan. Contractor shall provide written confirmation that all drivers and dispatchers assigned to this contract have been trained on the spill response contingency

plan. Such training shall be provided by the Contractor at no additional cost to the City. A copy of the contingency plan must be submitted prior to commencement of work.

P. DISPOSAL SITE DOCUMENTATION

Contractor must provide documentation which indicates the ownership and the Contractor's involvement as it relates to any disposal site, i.e., deeds, lease agreements, contractual commitments, etc.

It is the intent of the City to ensure that its own actions and the Contractor's and Subcontractor's actions achieve full regulatory compliance and maintain strict oversight of all aspects of this contract. For this reason, disposal locations are limited to sites within the United States.

All bidders submitting bids for hauling and landfill disposal of the digester and tank cleaning residuals shall submit documentation with the bid identifying the permitted landfill site and the landfill operator's permission to accept bio-solids materials. A copy of the regulatory permits for the proposed site shall be included with the bid.

Q. DIGESTER AND TANK CLEANING RESIDUAL DISPOSAL

It is the intent of these specifications that digester and tank cleaning residuals are disposed of at a permitted landfill. The cost for sampling, testing, chemical analysis processing, or other requirements to meet a specific landfill's permit requirements for digester and tank cleaning residual disposal shall be included in bid price. Contractor shall provide a written description of the disposal method to be used along with all applicable permits and approvals.

Contractor shall not dispose of any digester or tank cleaning residuals in a City sewer system, sewage pumping station, or sewage treatment facility.

In no event shall the Contractor dispose of any digester or tank cleaning residual at a site not approved by the City in writing. Land application of residuals will not be permitted.

R. SAFETY

Contractor will be working in a Class One, Division One area and shall meet all CAL-OSHA standards. All State of California rules and regulations will be strictly enforced. The work shall follow the State of California General Safety Orders and the Construction Safety Orders regarding work in confined spaces. Contractor is advised to contact the local office of CAL-OSHA for information about the local safety regulations.

Two continuous oxygen deficiency and lower explosive limit monitors shall be furnished by the Contractor for digesters and tank during cleaning. The monitors shall be in operation always. If one unit fails, work may continue at the digester or tank while the unit is being repaired. If both units fail, all work shall stop inside the digester or tank.

Contractor shall provide blower induced ventilation to meet the requirements of CAL-OSHA. The blowers shall be in operation always when work is in progress inside the digester or tank. Contractor shall provide emergency air packs for employees and inspectors.

S. POLICY

All contractors, their employees, visitors, subcontractors, vendors, and delivery personnel are required to comply with all safety regulations contained in this document including its appendices, the Public Utilities Environment Safety and Health Manual, applicable portions of the Department Health and Safety Manual, and applicable portions of the California Code of Regulations and Federal OSHA regulations.

Construction and maintenance activities at the sites may present situations or conditions that may adversely impact the safety and health of a contractor and subcontractor employees, City employees, or the general public. Therefore, the highest level of safety performance is required of the Contractor as demonstrated by a Contractor's willingness to adopt a "Safety First" culture, quickly address safety concerns brought up by its employees, subcontractors or City staff, providing quality training, open lines of communication on safety issues and concerns, and enforcement of regulations and policies.

Contractor and subcontractor employees shall be responsible for their actions and the impact their actions have on others. Substandard safety performance of individuals shall be sufficient grounds to dismiss and deny access to Public Utilities project sites.

Employees shall obey safety rules and follow safe work procedures in general, and specifically as outlined in required 'Site Specific Safety Plans and Job Safety Analysis'.

All Contractor and subcontractor employees are required to attend a "Site Specific Safety Training Class" provided by the City before work begins. This class takes about ½ hour maximum, and must be taken before the individual starts working on site.

Environmental Health and Safety Requirements:

1. Each Contractor shall:

    a. Provide a safe and healthy workplace for their employees.

    b. Notify the Public Utilities Technical Representative, or designee of work schedules, locations, and special precautions or concerns prior to the start of a project.

    c. Provide for frequent and regular safety inspections of the work site(s), materials, equipment, and behavior.

    d. Promptly notify the Public Utilities Technical Representative, or designee of OSHA complaint notifications and/or OSHA inspections of the job site.

    e. Bear sole and exclusive responsibility for protecting the safety and health of their employees, visitors, subcontractors, and delivery persons.

    f. Ensure their employees, visitors, and subcontractors are given an appropriate safety orientation prior to site activity. The orientation will include general safety procedures and all required City general and project-specific rules, regulations, and known hazards.

g. Advise employees that failure to comply with spell out rules, or federal, state, and City regulations, will result in corrective action that may include removal from the project site.

h. Act immediately on reported unsafe conditions and activities and implement controls to eliminate the hazard or exposure as soon as possible.

i. Investigate accidents and incidents that result in personal injury or illness to their employees, subcontractors, visitors, or delivery persons and for any damage caused to public or private buildings and/or equipment. In the event of an accident or incident that results in a personal injury or illness to Contractor's employees, subcontractors, visitors, or delivery persons, the Contractor will notify the Technical Representative, or designee and Safety Officer or designee immediately. Contractor will contract all Federal, State, and Local agencies when required by law and complete all required reports. Contractor will cooperate with all investigations by the City, State, or Federal Officials.

j. Ensure that a "Competent Person" is provided at all their job sites including their subcontractors and vendors as required by California Code of Regulations (CCR), Title 8.

k. Comply with all checked matrix requirements as defined in the "Construction Matrix" (Attachment C) section and applicable regulatory requirements.

l. Provide and maintain an appropriate number and type of sanitary facilities for their employees, and subcontractors.

m. Inform and disseminate to their employees, subcontractors, visitors, and delivery persons, all safety information provided by the City.

n. Have a written safety and health plan that includes the following elements:

    i. Management Commitment and Employee Involvement

    ii. Written policy

    iii. Establish and communicate goals and objectives

    iv. Provide for top management visibility

    v. Assign and communication responsibilities:

        (1) Provide authority and resources

        (2) Hold all personnel accountable

        (3) Program review manually for synergy with goals

(4) Complies with Cal-OSHA Title 7, Section 3203

vi. Prioritize Hazard Prevention and Control efforts utilizing the following guide:

(1) Engineering techniques

(2) Procedures for safe work

(3) Provisions for personal protective equipment

(4) Administrative controls
(5) Preventative maintenance

(6) Emergency planning

(7) Medical program

vii. Reinforce safety performance expectations by:

(1) Ensuring that employees understand hazards and how to protect themselves.

(2) Supervisors analyzing the worksite and employee performance for optimum effectiveness.

(3) Maintain physical protection.

(4) Scheduling ongoing, effective quality training.

(5) Ensuring line management understands responsibility and methodology to provide a safe work environment for their employees.

(6) Maintaining records of employees training and safety meetings.

viii. Unless otherwise specified, provide the services of a full-time safety representative and provide verification of the selected individual's qualifications. The safety representative does not have to be on site continuously, but must be available immediately (within reason) when required. Such representatives shall:

(1) Possess an A.S. degree or higher in Occupational Safety or closely related discipline with one year of construction experience in the field. Extensive experience may be considered in lieu of a degree.

(2) Interface directly with the Technical Representative, and/or the City Construction Safety Officer or their designees.

(3) Report directly to the Contractor's Corporate Safety Manager or Company President or Vice President.

(4) Have authority to correct any hazard or unsafe practice by any means necessary including stoppage of work if necessary.

(5) Demonstrate knowledge in construction related to safe practices, Cal-OSHA regulations, and any other regulations or practices pertinent to the work being performed.

ix. Perform employee training to include:

(1) New employee orientations of company safety policies and practices as well as specific safety procedures for the employee's work function.

(2) An educational program to familiarize employees with their company management system.

(3) "Toolbox" or "Tailgate" safety meeting at least weekly to address specific safety issues and awareness of project related topics.

(4) Additional training for new job functions or whenever a new or previously unrecognized hazard is discovered.

(5) Safe operating procedures and related hazards of specific tools and equipment utilized by employees.

x. Each Contractor shall submit the following unless otherwise directed:

(1) A site-specific Safety and Health Plan

1. A comprehensive site-specific safety plan that covers all aspects of on-site construction operations and activities associated with the contract.

2. The plan must comply with applicable safety and health regulations and City safety requirements. It must include an Emergency Action Plan.

3. Contractor will allow ten (10) working days before the scheduled pre-construction meeting for safety plan review.

4. Acceptance of the Contractor's safety plan only signifies that the plan generally conforms to the requirements of

the contract. It does not relieve the Contractor of the responsibility for providing employees with a safe and healthful work environment nor will it sub-plant the requirement for Job Safety Analysis (JSA).

5. A list of hazardous substances brought to the workplace with accompany SDS.

6. Documentation of site safety orientation for employees, subcontractors, and visitors.

7. Job Safety Analysis (JSA).

8. Certifications and Proof of training when required by the City.

xi. Enforcement:

(1) Each Contractor and their subcontractor(s) will establish in writing and enforce effective disciplinary measures in accordance with CCR, Title 8, Section 3203.

(2) The City reserves the authority to require the Contractor to remove any person from the job site who demonstrates an unwillingness to comply with safety rules.

(3) Failure to comply with all applicable Federal, State, and Local safety rules and regulations will be considered as non-compliance with the contract. The City Construction Safety Officer or his designee will advise the City Technical Representative, or designee of any substandard safety performance issues. Such issues will be documented and placed in the Contractor's file. A copy of the document will be presented to the Contractor to correct violations or hazards. Grounds will have been established to withhold progress payments, terminate the contract, and/or seek disbarment should the Contractor fail to promptly make corrections or continue to violate safety rules.

(4) The City has full authority to stop work immediately and without prior notification when either real or perceived conditions or practices present an imminent danger. Work will remain stopped until such conditions or practices are corrected or otherwise dealt with in a manner acceptable to the City. NOTE: Imminent danger may be described as actions and situations that may result in serious injury or death, or considerable property damage.

(5) The Technical Representative, or designee may issue to the responsible Contractor a Notice of Non-Compliance for issues

other than imminent danger. Verbal communication with the Contractor to correct simple issues is acceptable.

(6) Prior to resuming work, the Contractor must agree to abate the hazard(s), provide documents how the hazard will be abated, and agree upon a date with the City to complete the corrective action(s).

(7) If the Contractor fails to take corrective action by the agreed upon date, the City has authority to stop work or retain the necessary craftsman to make the corrections with all labor and materials costs to be charged back to the Contractor. Contractor shall have no recourse against the City for damages that may arise as result of such actions the City takes.

xii. Preconstruction Meetings:

(1) Representatives of the Contractor shall meet with the Technical Representative, or designee and Construction Safety Officer or their designees prior to the start of construction for reviewing Environmental Safety and Health (ESH) requirements and discussing how those requirements will be implemented. A site visit may also occur to ensure appropriate safety equipment, tools, and personnel are ready for work to begin.

(2) Contractor will have submitted his site-specific plan and JSA to be reviewed by the City Construction Safety Officer or designee. Work may not proceed until the aforementioned have been reviewed and approved.

(3) The Contractor Environmental Safety and Health Matrix Requirements will be reviewed with the Contractor.

xiii. Contractor shall provide the following Reports to the Technical Representative, or designee:

(1) Bi-Weekly total of man hours worked at the project(s) site including those of the Contractor, subcontractor, and consultants.

(2) Number of first aide cases, recordable injuries, and lost work day cases incurred on the project for the same period.

(3) Certification of New Employee Orientation

(4) Safety Meeting Minutes

(5) Tailgate Meeting Topic and signed attendance roster.

(6) List of competent persons assigned to the project and competency type.

(7) Safety Inspection reports

(8) Copies of Incident/Accident Reports

(9) Other safety related data as required.

xiv. Definitions:

(1) Cal-OSHA – California Occupational Safety and Health Administration

(2) Competent Person – One who can identify existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

(3) Contractor – The firm or business under contract with the Public Utilities Department to demolish, construct, repair, expand, rehabilitate or upgrade a facility, equipment, or process systems. A contractor may also be considered as a consultant or out-source management group.

(4) Emergency Action Plan – A written plan prepared by the Contractor to describe the various response activities that take place in the event of an emergency.

(5) First Aid Case – Any personal injury that does not require more than first aid, i.e., scratch, minor bruise, etc.

(6) Incident – Any personal injury, property damage, near miss, security breach, environmental or other business interruption, associated with Public Utilities projects.

(7) Job Safety Analysis – A method of analyzing the steps of a task to identify potential hazards, and inserting control measures to prevent an Incident.

(8) Lost Work Day Cases – The number of cases where an employee would have worked but could not because of a work-related illness/injury; or the number of recordable cases on which, because of an injury or illness: (1) the employee was assigned to other duties on a temporary basis; or (2) the employee worked less than full time; or (3) the employee worked at his/her assigned function but could not perform all duties connected with it.

(9) Process Safety Management – An OSHA regulation that specifies safety requirements for operating and maintaining systems that contain highly hazardous chemicals.

(10) Qualified Person(s) – One who, by possession of a recognized degree, certificate or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work or Project.

(11) Recordable Injury – Any work-related illness or injury that requires medical treatment beyond first aid such as, prescribed medication, sutures, therapy, surgery, fracture setting, lost days from work, etc.

(12) Site Specific Safety Plan – A written plan prepared by the Contractor that details specific Project site safety issues and assigns responsibility for control of those issues.

(13) Subcontractor – A party that provides services to another contractor who in turn is contracted to Public Utilities Department or other City of San Diego department or agency.

(14) Man-hours – The sum of hours worked on a Project for a specified period that includes the labor of all Contractor and Subcontractor employees, including Consultants and other on-site labor for which the Contractor has responsibility.

(15) Safety Matrix – A chart included in the Contract which stipulates by function and title, specific safety requirements for a project (detail of each requirement is found as an appendix in the contract).

xv. Definition of Construction Contractors:

(1) Contractors who provide or perform project construction activities for the Public Utilities Department. This work can cover a broad array of activities generally categorized in:

1. Dismantling

2. Renovation

3. New construction

(2) A matrix listing all the requirements showing types of contractors or type of work are covered in this matrix for standard classifications of construction work.

(3) When a contractor has been assigned to one of the six classifications, the corresponding matrix for that classification

will be the guide to assembling an appropriate job specific ESH plan.

(4) The matrix grid will indicate requirements that are specific to each type of contractor or type of work. Those requirements marked with an "X" shall be minimum basic requirements included in the job specific ESH matrix for a contractor in that classification.

For example, when a company is classified as a type of Construction Contractor and an ESH manual is to be prepared; the matrix labeled Construction Contractors will be used. The specific type of work is in the row across the top of the matrix. Moving down the "Type of Work" column, an X in any row will indicate that the requirement number shown in the left-hand column. The requirement, then, can be referenced in the accompanying manual.

T. PLWTP DIGESTER SCHEDULE

Digester C1 shall be cleaned first. It will be prepared by the City for the Contractor to begin work upon completion of mobilization. When the Contractor has completed cleaning each digester and the digester is ready to be placed back into operation, the Contractor shall give the City written notice of such. The City will then start the process of bringing the digester just cleaned back into service and will begin the process of preparing the next digester for cleaning. No work on the next digester C2 will be performed by the Contractor during this preparation period.

Total Contract Time: All work shall be complete **160 calendar days** after Notice to Proceed. This period includes 20 calendar days for mobilization and City preparation of digester C1; 42 calendar days for the cleaning of digester C1; 42 calendar days for the cleaning of digester C2; a total of 42 calendar days for OWNER caused delays; and 14 days for demobilization/clean-up. Should the total City start-up/sludge transfer operations require more time than 42 calendar days, the contract duration will be adjusted accordingly, at no cost to the City.

Contractor may not clean more than one digester at a time. However, the City reserves the right to prepare more than one digester for cleaning at the same time. Should this occur, digesters may remain without mixing or heating for a period until cleaning commences.

U. MBC TANK SCHEDULE

Tank #17 will be prepared by the City for the Contractor to begin work upon completion of mobilization. When the Contractor has completed cleaning the tank and the tank is ready to be placed back into operation, the Contractor shall give the City written notice of such for the City to inspect the tank. After all the City is satisfied with the cleaning, the City will then start the process of bringing the tank back into service.

Total Contract Time: All work shall be complete **54 calendar days** after Notice to Proceed for the MBC portion of the work. This period includes 20 calendar days for mobilization and

City preparation of tank #17; 20 calendar days for the cleaning of tank #17; and 14 days for demobilization/clean-up.

V. CONTRACTOR'S USE OF THE PROJECT SITE / STAGING AREA

1. **For PLWTP, a** large Staging Area (Concrete Paved) will be provided to the Contractor for staging their equipment and dewatering operations on 1st Street. There is a large drain inlet at the staging area which will provide a wash-down for trucks and other related equipment.

2. **For MBC**, a large Staging Area (Concrete Paved) will be provided to the Contractor for staging their equipment and dewatering operations on the South side of Area 80 (Attachment B).

3. Contractor's use of the project site / staging areas shall be limited to its cleaning and hauling. Contractor will be solely responsible for the cleanliness of the concrete slab cleaning site. Contractor and City Technical Representative, or designee shall take either photographs or video of the digester or tank roof, concrete slab, and curbing prior to start of work. Any or all repairs to the digester or tank roof, concrete slab, or surrounding curb, including tears, rips, holes, dents, chipping, cracking, or staining that occurred during the digester or tank cleaning project, will be the responsibility of the Contractor. It is expected that the digester and tank roof(s) and digester and tank slab cleaning areas shall be left in the same condition as it was before the cleaning project was started. The City requires that the concrete pad be pressure washed at a minimum of 3,000 psi at the completion of the project to reduce the staining to a reasonable and acceptable amount by the City. If during the time the digester or tank has been filled for start-up and the Contractor or his subcontractor(s) are working on the roof and drop any item into the digester or tank, i.e., tools, gaskets hardware etc., the Contractor will be responsible for draining the digester or tank and recovering the item to avoid damaging the digester or tank pumps or plugging piping at no cost to the City.

W. WORK BY OTHERS

Interference with Work on Utilities: Contractor shall cooperate fully with all utility forces of the City or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities which interface with the progress of the work, and shall schedule the work to minimize interference with said relocation, altering, or other rearranging of facilities.

Concurrent Work by Other Contractors: Contractor's attention is directed to the fact that work will be conducted at or adjacent to the site by other contractors during the performance of the work of this Contract. Contractor shall conduct its operations causing a minimum of interference with the work of such other contractors.

Routine Operation: Contractor must coordinate his/her work so as not to interfere with or jeopardize the routine operation of the PLWTP, MBC, or the operations of any other Contractor operating at the facility.

Contractor's operation shall be in support of the PLWTP and MBC operational considerations, therefore, the City may suspend hauling of digester cleaning residue at any time deemed necessary by operational constraints. All operational procedures and schedules shall be established by the City.

X. WORK COORDINATION

Contractor shall coordinate the work of this contract with the work of other contractors on the project site. Coordination activities include, but are not limited to, the scheduling of work at interface locations to permit adjacent or connecting work by other contractors, providing necessary shop drawing information to other contractors, working with other contractors to conduct functional testing of systems and start-up of the facility, and hauling operations with Plant traffic and other contractors.

Y. LIQUIDATED DAMAGES

The City and the Contractor recognize that "Time is of the Essence" for this contract, and that the City will suffer financial loss if the work is not completed within the time specified below. They also recognize that it is difficult and impractical to determine the actual loss suffered by the City if the work is not completed on time. Accordingly, instead of requiring any such proof, the City and the Contractor agree that as liquidated damages for delay (but not as a penalty) the Contractor shall pay the following amount to the City: ONE THOUSAND DOLLARS ($1,000) per day for every calendar day that expires more than the time specified for the Milestones in Section AA, parts 1 and 2.

Z. COMPENSATION FOR SERVICES

When directed by the City to commence hauling and disposal of sewage digester and tank cleaning residuals, the Contractor shall bill the City monthly. The total billing will be based on the actual volume in gallons removed from the digester or tank. The initial volume in each digester or tank will be determined by the Technical Representative, or designee and mutually agreed upon with the Contractor prior to the beginning of cleaning. The monthly billing shall be based on the actual loads hauled as supported by weigh tickets from a Certified Weigh Station, truck (hauler) records indicating the truck number, container numbers, driver name, hauler name and address, time leaving PLWTP or MBC, and the time of arrival at final destination of the load. Contractor must also provide proof of disposal. Contractor shall only be compensated for hauling to legally permitted sites.

Contractor will not be allowed additional compensation for hauling to alternate disposal sites.

Retention - A retention of five (5) percent of each approved progress payment will be withheld. At substantial completion, the City at its option may refund any portion of the remaining retention.

Reinstating Retention - The City may reinstate up to ten (10) percent retention of the total of the work done if the City determines, at its discretion, that the Contractor is not performing the work satisfactorily or there is other specific cause for such withholding.

AA. MILESTONE SCHEDULE

1. PLWTP Digester Cleaning:

    a. Contract Milestone 1 - Contractor shall complete all mobilization and temporary piping within 20 calendar days after receiving Notice to Proceed.

    b. Contract Milestone 2 - Contractor shall complete, for Digester C1, all cleaning within 42 calendar days after the date the digester is made available to the Contractor.

    c. Contract Milestone 3 - Contractor shall complete, for Digester C2, all cleaning within 42 calendar days after the date the digester is made available to the Contractor.

    d. Contract Milestone 4 - Contractor shall complete demobilization and cleaning of the concrete slab staging area within 14 calendar days.

2. MBC Tank Cleaning:

    a. Contract Milestone 1 - Contractor shall complete all mobilization and temporary piping within 20 calendar days after receiving Notice to Proceed.

    b. Contract Milestone 2 - Contractor shall complete, for Tank #17, all cleaning within 20 calendar days after the date the tank is made available to the Contractor.

    c. Contract Milestone 3 - Contractor shall complete demobilization and cleaning of the concrete slab staging area within 14 calendar days.

BB. QUALITY ASSURANCE MEETINGS

Contractor will be required to schedule at least one (1) meeting with City's Technical Representative, or designee to discuss Contractor's performance. This meeting should be scheduled no later than eight (8) weeks from date of commencement of work. At this meeting, City's Technical Representative, or designee will provide Contractor with feedback and will note any deficiencies in contract performance and provide Contractor with an opportunity to address and correct these areas. Additional quality assurance meetings may be required, depending upon Contractor's performance.

CC. REGULATORY PERMITTING AND MONITORING / EQUIPMENT DESCRIPTION & CONDITIONS

Contractor shall be required to provide all associated approved Federal, State, and Local regulatory permits for all equipment used and activities identified in the scope of work. Contractor shall be responsible for all air quality permits associated with portable engines.

All necessary permits must be obtained and submitted to the City as part of the bid documents. Permits shall accommodate handling the quantity of digester and tank cleanings specified herein, throughout the entire term of the contract. All costs associated with

obtaining the required permits, fees, and related testing, monitoring, and record keeping, shall be the responsibility of the Contractor and shall be included in the lump sum price bid for "Regulatory Permitting".

During the digester and tank cleaning project, the Contractor shall be aware of and in compliance with existing, revised, proposed, and new Federal, State and Local rules and regulations covering its activities in regarding this work. Changes in regulations or practices necessitated by any revision in rules and regulations shall be brought to the attention of the City sufficiently in advance of their implementation. Changes in regulations will not constitute justification for contract amendments or relaxation of the responsibility of the Contractor to provide the required services.

Contractor shall be responsible, at its expense, for meeting all monitoring and reporting requirements imposed by all regulatory agencies having jurisdiction over Contractor's operations. Contractor shall provide improvements, and shall pay all operating expenses required by the responsible regulatory agencies.

County of San Diego Air Pollution Control District (APCD) established guidelines through a Permit to Operate (PTO) for Point Loma Wastewater Treatment Plant (PLWTP) usage of Portable Equipment Registration Program (PERP) registered portable engines/pumps during digester cleaning activities.

Contractors or persons who owns or operates portable equipment is required to comply with the conditions listed in permit APCD2015-PTO-002381 also called Flex Permit and all applicable requirements and district rules. Some of the flex permit conditions/requirements for diesel pumps are outlined in the following:

1. Equipment Description

    a. Up to Five Prime Diesel Engines (ATCM portable)

    b. Each engine rated up to 100 bhp

    c. Tier 4 certified

    d. Non-diesel engines are not allowed. Different fuels have different emission profiles.

2. Conditions

    a. A Permit to Operate (Flex Permit) must be posted on or within 25 feet of the equipment, or readily available on the operating promises.

    b. A documentation identifying CARB diesel fuel used in the engine shall be kept on site.

    c. Engine must have a valid registration issued by the California Air Resources Board (CARB) under the Portable Equipment Registration Program (PERP).

d. Engines shall be operated as a portable unit as defined by the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and greater.

e. Engine shall be certified to meet Federal or California tiered emission standard.

f. Engine shall have an original manufacturer label containing make, model, family number and serial number.

g. Each engine shall not operate at site for more than 960 hours (40 days) per calendar year, as evidence by an operational log record with the engine identifications, date and hours of operation, hour meter readings.

h. If a meter is replaced when the unit is operating on site, the APCD Compliance division shall be notified in writing within 10 calendar years.

i. A Preventive Maintenance record of the engine shall be kept on site or readily available upon request.

j. If the engines operate non-stop then yes, the equivalent is 40 days per engine. If the contractor continues to use the same engine beyond the 960 hours then the City of San Diego would be in violation. If any engine is reaching its limit then it would need to be switched.

During the digester and tank cleaning project, copies of all laboratory testing, analysis and reports, prepared by the Contractor in support of this contract will be provided to the City at no additional cost.

City personnel shall inspect the Contractor's disposal site(s) at any time without prior notification to the Contractor.

DD. SUBCONTRACTORS NAMES

The bidder shall provide to City a list of all subcontractors and sub-haulers including their company name, address, telephone number, contact person, a list of all truck and trailer numbers, and a list of all driver's names. Contractor shall advise the City immediately, in advance, of any changes to Subcontractor agreements.

EE. SHOP DRAWINGS/SAMPLES & SUBMITTALS REQUIRED PRIOR TO COMMENCEMENT OF WORK

The following shall be submitted at the pre-construction meeting:

1. Data sheets and other information on the construction water meters, back flow preventers, and odor scrubbers.

2. Methods of screen and de-watering, if used.

3. Methods of odor control for onsite de-watering, if used.

4. Prior to commencing work, the following must be submitted to the Contract Administrator:

    a. Emergency Response Plan.

    b. Shop drawings and samples.

    c. Methods of Screening and De-watering and odor control, if used.

    d. Hauling Routes.

    e. Spill Response Contingency Plan.

    f. Disposal Site Documentation.

    g. Digester and Tank Cleaning Residuals Disposal or Recycling.

    h. Safety and Health Plan.

    i. Site specific Safety and Health Plan.

    j. Qualifications of full time safety representative

FF. DIGESTER C1, C2 MIXING TUBE DATA

1. MIXING TUBE – 3/8" Wall Pipe

2. BUBBLE GENERATOR – 1/8" Thick, 316 Stainless Steel

Digester C1:	Length	No. of Guns	Approximate Shipping Weight
	50' – 5"	10	6,600 lbs.
	55' – 10"	5	7,700 lbs.
	68' – 10 ¾"	1	8,800 lbs.
Digester C2:	50' – 5"	10	6,600 lbs.
	55' – 10"	5	7,700 lbs.
	68' – 10 ¾"	1	8,800 lbs.

GG. DIGESTER MIXING TUBE GASKET INFORMATION:

1. Digester Mixing Tube Gasket: ¼" thick neoprene rubber, 60 ½" outside diameter, 54" inside diameter, with thirty-six @ ¾" holes equally spaced on a 4'-10" diameter bolt circle.

II. DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER. Per Section II.A.9:

	Registration No.	Expiration Date	Name
DIR Registration No.	1000027676	June 30, 2022	PWCR

JJ. LICENSES. To perform the work described in this solicitation, bidders must hold a current Class A License.

	License Number	Expiration Date	Name
State of California Contractor's License	Class: A No.: 875175	March 31, 2020	General Engineering Contractor

Any bidder holding a different license who feels qualified to bid on this work must notify the City Contact in writing at least seven (7) days prior to the bid closing. After a thorough review of the proposed license substitution, the City will inform the bidder, in writing, of its decision prior to the bid closing. The City's decision is final.

KK. PERMITS. To perform the work described in this solicitation, bidders must hold a current permit (s) required per Section E. Regulatory Permitting and Monitoring.

LL. PERFORMANCE BOND

Prior to the execution of this Contract, City requires Contractor to post a payment and performance bond (Bond). The Bond shall guarantee Contractor's faithful performance of this Contract and assure payment to contractors, subcontractors, and to persons furnishing goods and/or services under this Contract. The following paragraphs supersede Article VIII, Bonds of the General Contract Terms and Provisions document.

1. Performance and Payment Bond

Bond Amount and Term. The successful bidder shall furnish Performance and Payment Bonds, each in the amount of one hundred percent (100%) of the total amount of bid as security for the faithful performance and payment of all the successful bidder's obligations under the Contract Documents. These bonds shall remain in effect for a minimum of one (1) year after the completion of work, except as otherwise provided by Law or Regulation. The Bid item for bonds may include full compensation for actual costs of payment and performance bonds. The Contractor may submit a request for payment of actual invoiced costs up to the bid amount, but not to exceed 2.5% of the Contract Price, not less than ten (10) working days after award of the contract. If the bid item for bonds exceeds actual invoiced costs, any such differential amount up to the bid amount, shall be paid as a part of the Final Payment.

Bond Surety. The Bond must be furnished by a company authorized by the State of California Department of Insurance to transact surety business in the State of California and which has a current A.M. Best rating of at least "A-, VIII."

exclusively by the subcontractor providing the insurance. The deductible shall not exceed $25,000 per claim. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. Occurrence based policies shall be procured before the Scope of Work commences and shall be maintained for the duration of the Contract. Claims Made policies shall be procured before the Scope of Services commences, shall be maintained for the duration of the Contract, and shall include a 12 month extended Claims Discovery Period applicable to the Contract or the existing policy or policies must continue to be maintained for 12 months after the completion of the Scope of Work under the Contract without advancing the retroactive date. Except as provided for under California law, the policy or policies must provide that the City is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or nonrenewal of the policy or policies.

2. Contractors Hazardous Transporters Pollution Liability Insurance

Including contractual liability coverage to cover liability arising out of transportation of hazardous wastes, petroleum products and wastes, or toxic, materials, substances, or any other pollutants by the Contractor or any subcontractor in an amount not less than two million ($2,000,000) limit per occurrence/aggregate for bodily injury and property damage. All costs of defense shall be outside the limits of the policy. The deductible shall not exceed $25,000 per claim. Any such insurance provided by a subcontractor must be approved separately in writing by the City. Approval of the substitution of a subcontractor's insurance shall require a certification by the Contractor that all activities for which Contractors Hazardous Transporters Pollution Liability Insurance will provide coverage will be performed exclusively by the subcontractor providing the insurance.

Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. Occurrence based policies shall be procured before the Scope of Services commences and shall be maintained for the duration of the Contract. Claims Made policies shall be procured before the Scope of Services commences, shall be maintained for the duration of the Contract, and shall include a twelve (12) month extended Claims Discovery Period applicable to the Contract or the existing policy or policies must continue to be maintained for twelve (12) months after the completion of the Scope of Services under the Contract without advancing the retroactive date. Except as provided for under California law, the policy or policies must provide that the City is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

Required Endorsements. The following endorsements to the policies of insurance are required to be provided to the City before any work is initiated under this contract.

Commercial Pollution Liability Insurance.

Additional Insured. To the fullest extent allowed by law including but not limited to California Insurance Code Section 11580.04, the policy or policies must be endorsed to include as an Insured the City of San Diego and its respected elected officials, officers, employees, agents and representatives with the respect to liability arising out of (a) ongoing operations performed by Contractor or on Contractor's behalf, (b) Contractor's products, (c) Contractor's work, including but not limited to Contractor's completed operations performed by Contractor or on Contractor's behalf, or (d) premises owned, leased, controlled or used by Contractor.

Primary and Non-Contributory Coverage. The policy or policies must be endorsed to provide that the insurance afforded by the Commercial General Liability policy or policies is primary to any insurance or self-insurance of the City of San Diego and its elected officials, officers, employees, agents and representatives as respects operations of the Named Insured. Any insurance maintained by the City of San Diego and its elected officials, officers, employees, agents and representatives shall be in excess of Contractor's insurance and shall not contribute to it.

Contractors Hazardous Transporters Pollution Liability Insurance.

Additional Insured. To the fullest extent allowed by law including but not limited to California Insurance Code Section 11580.04, the policy or policies must be endorsed to include as an Insured the City of San Diego and its respective elected officials, officers, employees, agents, and representatives with respect to liability arising out of (a) ongoing operations performed by Contractor or on Contractor's behalf, (b) Contractor's products, (c) Contractor's work, including but not limited to Contractor's completed operations performed by Contractor or on Contractor's behalf, or (d) premises owned, leased, controlled or used by Contractor.

NN. PRICING SCHEDULE

The estimated annual quantities provided by the City are not guaranteed. The quantities may vary depending on the demands of the City. Any variations from these estimated quantities shall not entitle the Contractor to an adjustment in the unit price or to any additional compensation and in no case shall exceed $3 million without City Council approval.

Bidders shall complete the pricing schedule in its entirety to be considered responsive. Prices shall include all labor, vehicles, equipment, fuel and fuel surcharges; fees, and any other costs related to transportation; sampling, testing and reporting fees; and landfill tip fees, and processing costs (as needed); and any other costs related to disposal and recycling of wet sewage scum.

Unit prices shall be based on the Unit of Measure (U/M) as specified on the Pricing Schedule. Any changes to the U/M made by the Bidder may be cause for the bid to be rejected as non-responsive. Applicable taxes should not be included in pricing.

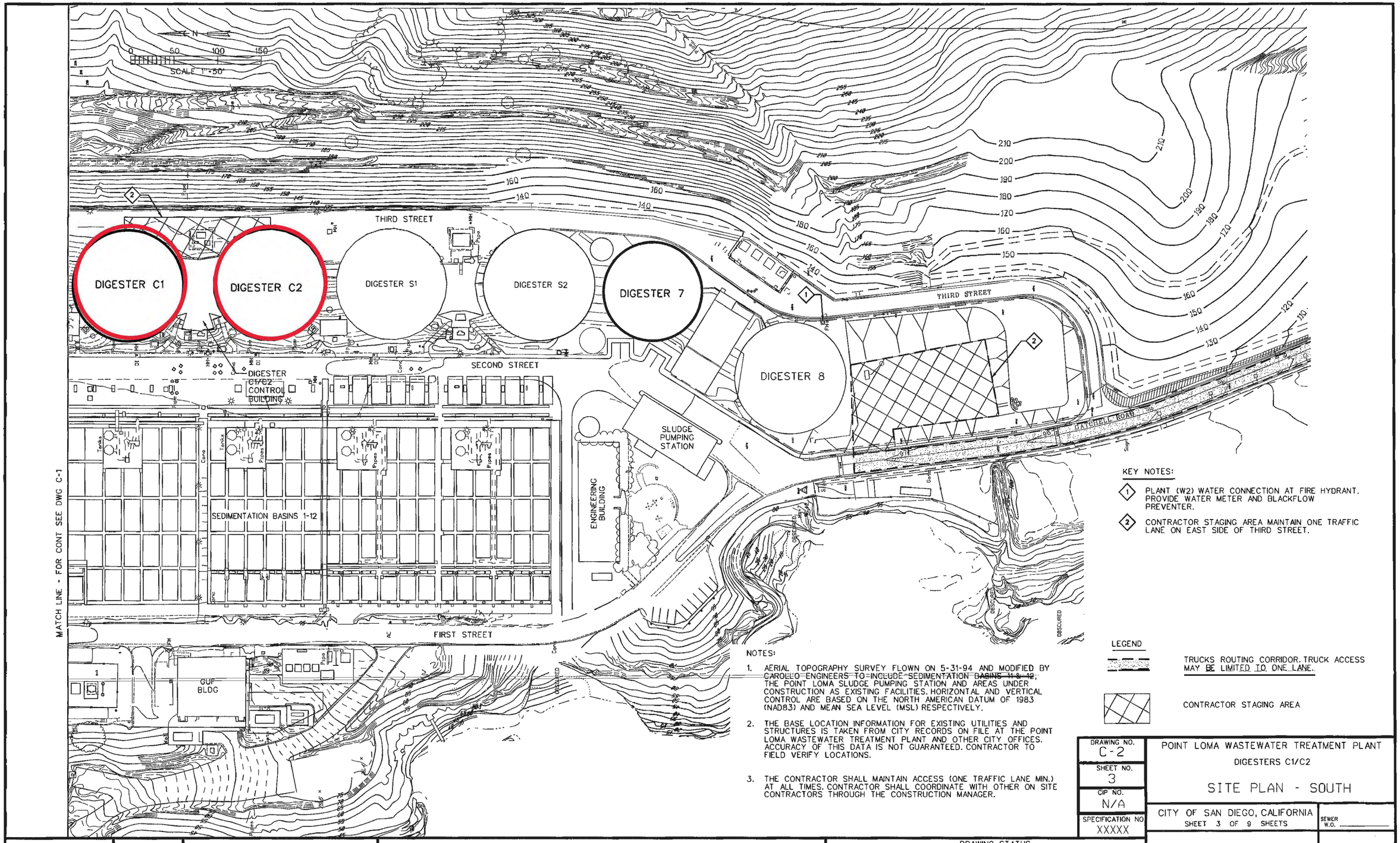
Category Descriptions:

NAICS – North American Industry Classification System
LS= Lump Sum
GL= Gallon
AL= Allowance

Section B shall be included with the bid submittal, but will not be part of the City's evaluation for award.

Section A: MBC Holding Tank #17 & Point Loma Wastewater Treatment Plant Digesters C1 & C2 Cleaning							
Item	**Est. Qty.**	**Unit**	**NAICS**	**Payment Reference**	**Description**	**Unit Price**	**Extension**
1	1	LS	524126	2-4.1	Bonds (Payment and Performance)	$ 28,710.00	$ 28,710.00
2	1	LS	541330	7-8.6.3.7	Storm Water Pollution Prevention Development	$ 6,756.00	$ 6,756.00
3	1	LS	237990	7-8.6.3.7	Storm Water Pollution Prevention Implementation	$ 7,400.00	$ 7,400.00
4	1	LS	237110	9-3.1	Removal, Cleaning, Storage and Placement of 16 (32 total), 30" Diameter Mixing Guns from Digesters C1 & C2	$ 206,534.00	$ 206,534.00
5	1	LS	237110	9-3.1	Paint/Coat All Mixing Guns Including Covers Front & Back, and Cylinders (32 total) at Digesters C1 & C2	$ 460,893.00	$ 460,893.00
6	2,266,000	GL	237110	9-3.1	PLWTP Digester Cleaning/Dewatering & Hauling Solids to Landfill (Estimated +/- 1,133,000 Gallons per Digester after Lowering Digesters to Lowest Level by City Operations	$ 0.577	$ 1,307,482.00
7	65,000	GL	237110	9-3.1	MBC Holding Tank #17 Cleaning, Dewatering & Hauling Solids to Landfill (Estimated +/- 65,000 Gallons after Lowering Holding Tank to Lowest Level by City Operations	$ 1.932	$ 125,580.00
8	1	LS	237110	7-5.3	Regulatory Permitting & Monitoring Effort	$ 3,223.00	$ 3,223.00
9	1	LS	237110	9-3.4.1	Mobilization & Demobilization	$ 235,380.00	$ 235,380.00
					Estimated Bid Total for Line Items 1-9		**$** 2,381,958.00

Section B: Miscellaneous							
Item	**Est. Qty.**	**Unit**	**NAICS**	**Payment Reference**	**Description**	**Unit Price**	**Extension**
1	1	AL		9-3.5	Field Order Allowance	$190,000.00	$190,000.00



KEY NOTES:

1. PLANT (W2) WATER CONNECTION AT FIRE HYDRANT. PROVIDE WATER METER AND BLACKFLOW PREVENTER.
2. CONTRACTOR STAGING AREA MAINTAIN ONE TRAFFIC LANE ON EAST SIDE OF THIRD STREET.

LEGEND

TRUCKS ROUTING CORRIDOR. TRUCK ACCESS MAY BE LIMITED TO ONE LANE.

CONTRACTOR STAGING AREA

NOTES:

1. AERIAL TOPOGRAPHY SURVEY FLOWN ON 5-31-94 AND MODIFIED BY CAROLLO ENGINEERS TO INCLUDE SEDIMENTATION ~~BASINS 11 & 12~~, THE POINT LOMA SLUDGE PUMPING STATION AND AREAS UNDER CONSTRUCTION AS EXISTING FACILITIES. HORIZONTAL AND VERTICAL CONTROL ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND MEAN SEA LEVEL (MSL) RESPECTIVELY.
2. THE BASE LOCATION INFORMATION FOR EXISTING UTILITIES AND STRUCTURES IS TAKEN FROM CITY RECORDS ON FILE AT THE POINT LOMA WASTEWATER TREATMENT PLANT AND OTHER CITY OFFICES. ACCURACY OF THIS DATA IS NOT GUARANTEED. CONTRACTOR TO FIELD VERIFY LOCATIONS.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS (ONE TRAFFIC LANE MIN.) AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH OTHER ON SITE CONTRACTORS THROUGH THE CONSTRUCTION MANAGER.

DRAWING NO.	C-2
SHEET NO.	3
CIP NO.	N/A
SPECIFICATION NO	XXXXX

POINT LOMA WASTEWATER TREATMENT PLANT
DIGESTERS C1/C2
SITE PLAN - SOUTH

CITY OF SAN DIEGO, CALIFORNIA
SHEET 3 OF 9 SHEETS

SEWER W.O.

PROJECT MANAGER DATE

DESCRIPTION	BY	APPROVED	DATE	FILMED

ROYAL MANAKA
DESIGN ENGINEER

CONTROL CERTIFICATION
186-1693
LAMBERT COORDINATES
-D

CONTRACT NO. DATE STARTED
INSPECTOR DATE COMPLETED

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

SCALE HORIZONTAL 1" = 50'
VERTICAL

PUBLIC UTILITIES DEPARTMENT
City of San Diego

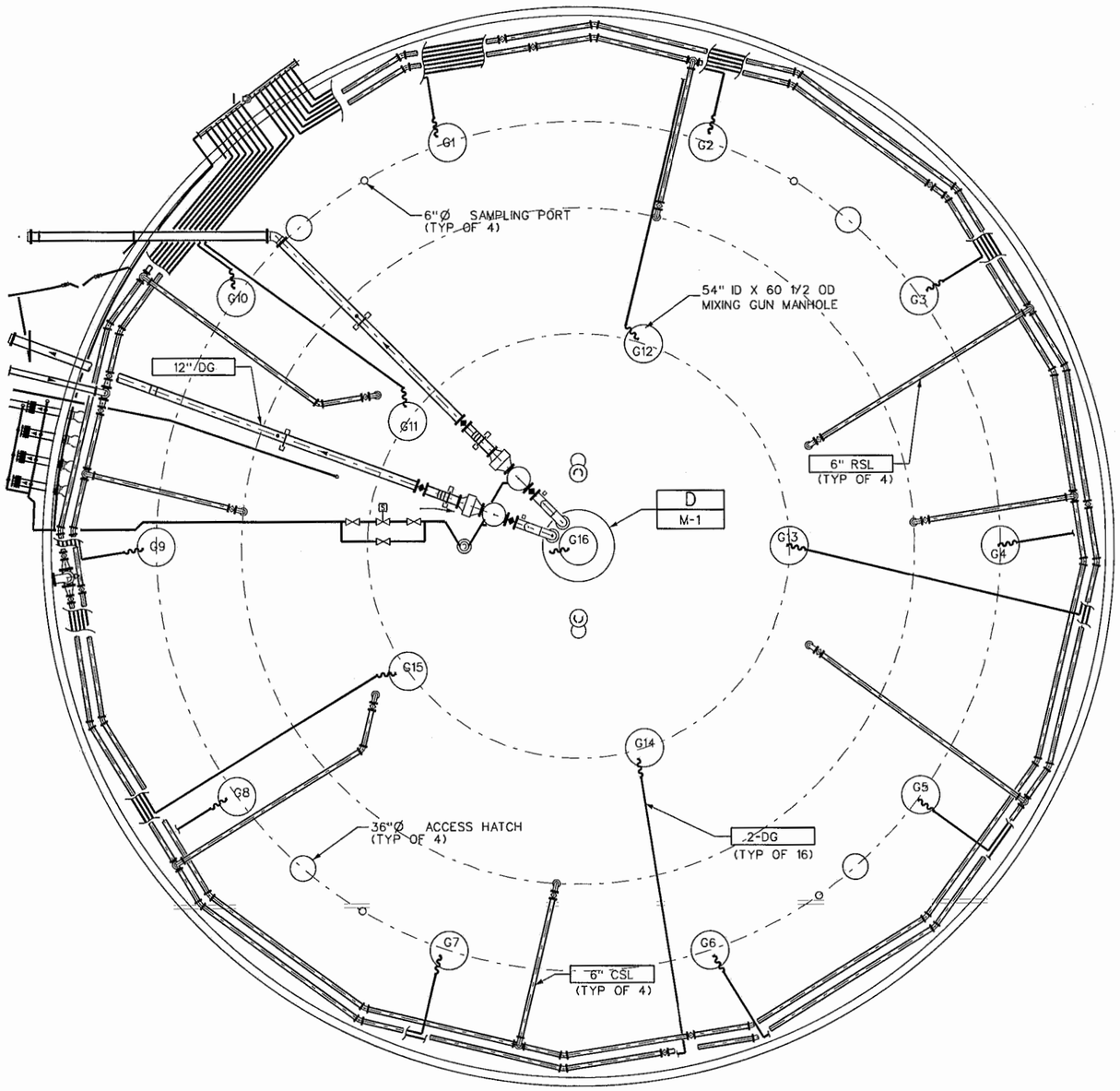
DRAWING STATUS

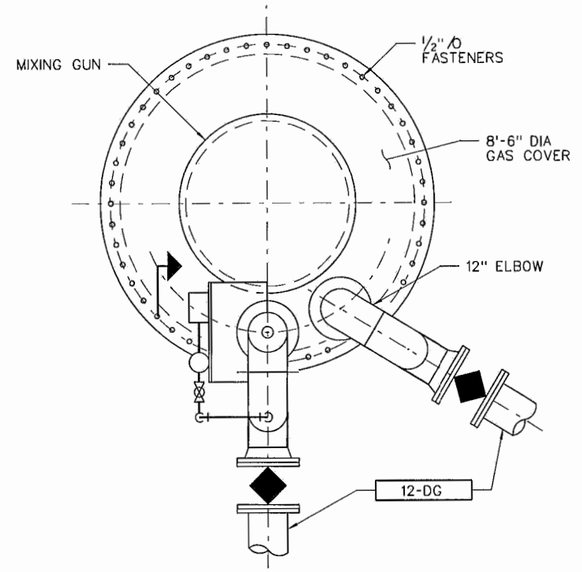
NO.	DATE	REQ.	REVISION DESCRIPTION	DRAWN	CKD	APD	PE	EM	QA/QC

N

0 8 16 24

SCALE: 1/8"= 1'-0"





8'-6" DIA CUPULA AND MIXING GUN DETAIL

SCALE: NONE

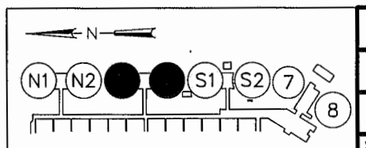
D
M-1
M-2

LEGEND

RSL	RAW SLUDGE
CSL	CIRCULATED SLUDGE
DG	DIGESTER GAS
(G1)	GAS MIXING GUN

NOTE:

1. ENTIRE INTERIOR OF DIGESTER AND CONTROL BUILDING HAVE NEC-AREA ELECTRICAL CLASSIFICATION OF CLASS 1, GROUP D, DIVISION 1.
2. NOT ALL PIPING SHOWN ON DRAWING FOR CLARITY. CONTRACTOR TO REVIEW REFERENCE DOCUMENTS TO DETERMINE ALL EXISTING PIPING.
3. DIGESTER ROOF WALKWAY IN NOT SHOWN FOR CLARITY.



KEY MAP

DRAWING NO.	M-1
SHEET NO.	4
CIP NO.	N/A
SPECIFICATION NO	XXXXX

POINT LOMA WASTEWATER TREATMENT PLANT
DIGESTERS C1/C2

DIGESTER C1/C2 PLAN (TYPICAL)

CITY OF SAN DIEGO, CALIFORNIA
SHEET 4 OF 9 SHEETS

SEWER W.O. _____

PROJECT MANAGER _____ DATE _____

ROYAL MANAKA
DESIGN ENGINEER

CONTROL CERTIFICATION
186-1693
LAMBERT COORDINATES
-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

DRAWING STATUS

NO.	DATE	REQ.	REVISION DESCRIPTION	DRAWN	CKD	APD	PE	EM

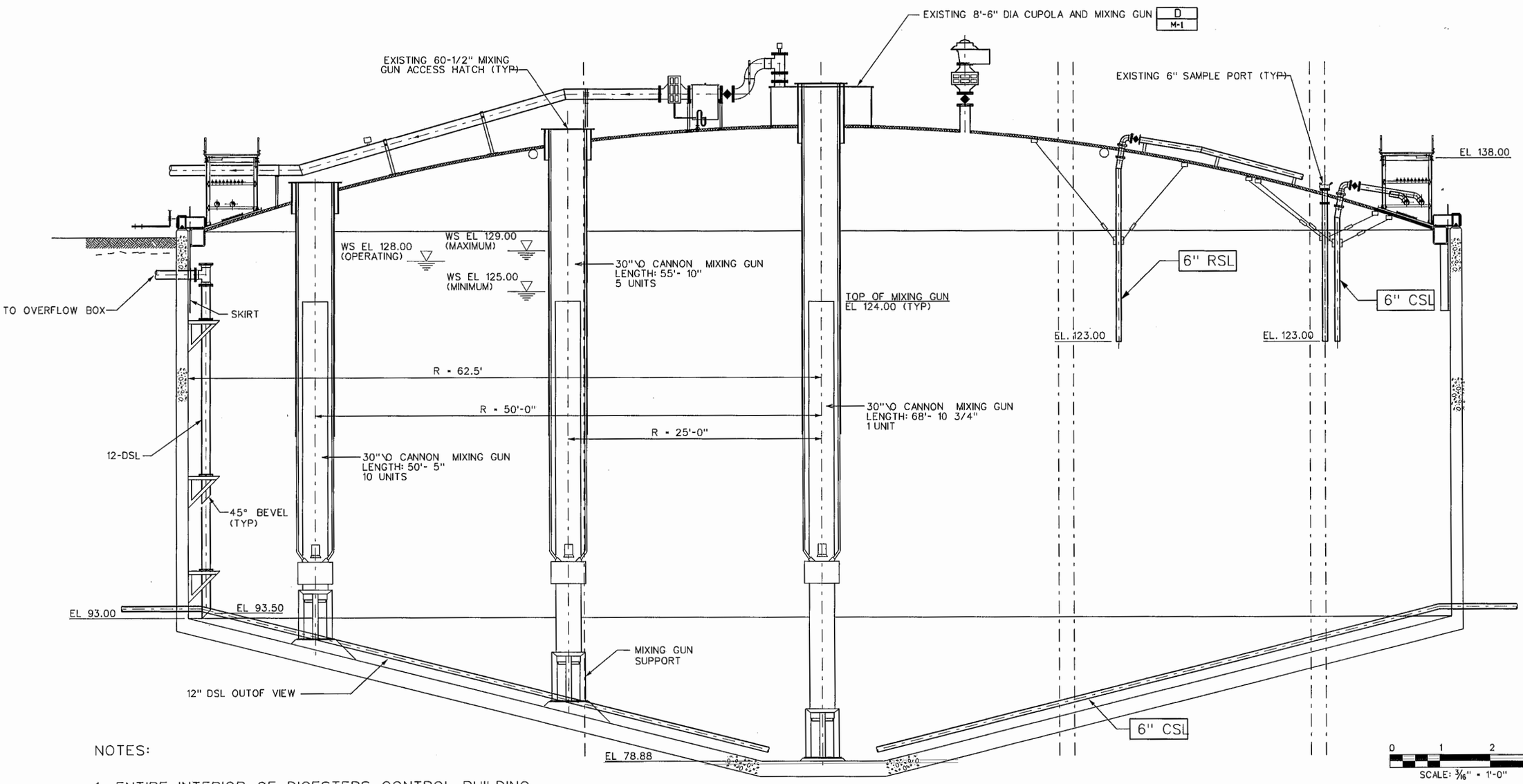
DESCRIPTION	BY	APPROVED	DATE	FILMED

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

SCALE: HORIZONTAL 1/8" = 1'-0" VERTICAL

PUBLIC UTILITIES DEPARTMENT
City of San Diego



NOTES:

1. ENTIRE INTERIOR OF DIGESTERS CONTROL BUILDING, HAVE NEC-AREA ELECTRICAL CLASSIFICATION OF CLASS I, GROUP D, DIVISION 1.
2. NOT ALL PIPING SHOWN FOR CLARITY. CONTRACTOR TO REVIEW REFERENCE DOCUMENTS TO DETERMINE ALL EXISTING PIPING.

SECTION 1 / M-1

LEGEND

RSL	RAW SLUDGE
CSL	CIRCULATED SLUDGE
DSL	DIGESTED SLUDGE

DRAWING NO. M-2
SHEET NO. 5
CIP NO. N/A
SPECIFICATION NO XXXXX

POINT LOMA WASTEWATER TREATMENT PLANT
DIGESTERS C1/C2
DIGESTER C1/C2 SECTION (TYPICAL)

CITY OF SAN DIEGO, CALIFORNIA
SHEET 5 OF 9 SHEETS

SEWER W.O.

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

SCALE: HORIZONTAL 3/16" = 1'-0" VERTICAL

PUBLIC UTILITIES DEPARTMENT
City of San Diego

DRAWING STATUS

NO.	DATE	REQ.	REVISION DESCRIPTION	DRAWN	CKD	APD	PE	EM	QA/QC

PROJECT MANAGER ____ DATE ____

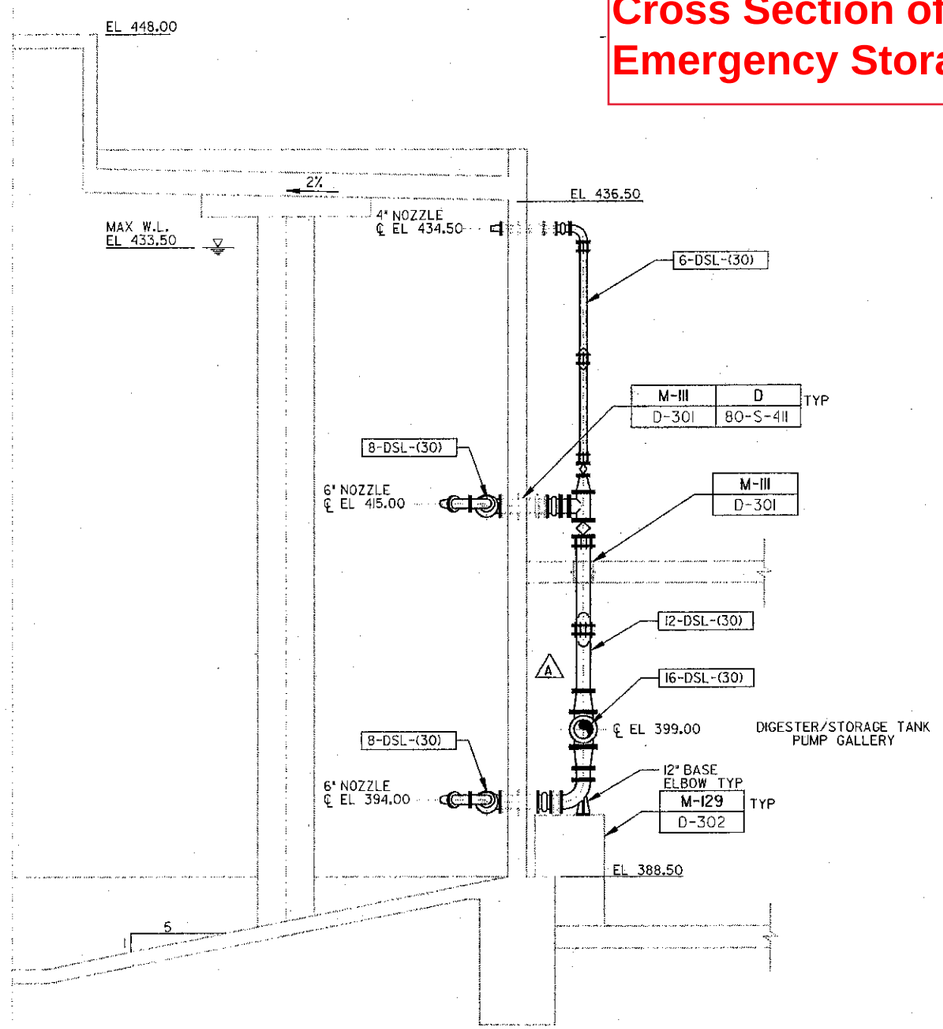
DESCRIPTION	BY	APPROVED	DATE	FILMED

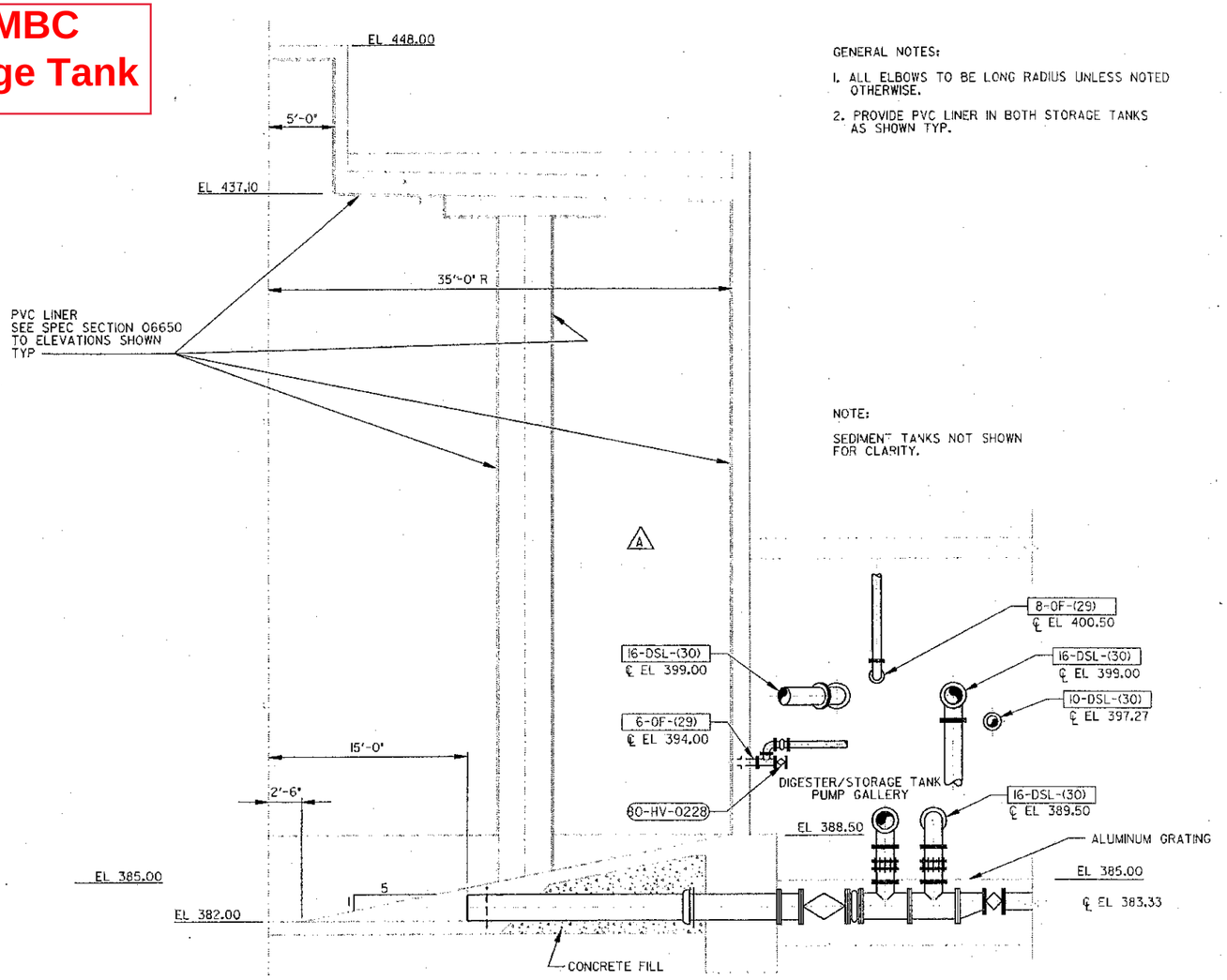
CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

ROYAL MANAKA
DESIGN ENGINEER

CONTROL CERTIFICATION 186-1693
LAMBERT COORDINATES -D

Cross Section of MBC Emergency Storage Tank





GENERAL NOTES:

1. ALL ELBOWS TO BE LONG RADIUS UNLESS NOTED OTHERWISE.
2. PROVIDE PVC LINER IN BOTH STORAGE TANKS AS SHOWN TYP.

NOTE:

SEDIMENT TANKS NOT SHOWN FOR CLARITY.

SECTION 6
80-M-101
80-M-102
80-M-105
80-M-107
80-M-109
80-M-121
80-M-122
80-M-125
80-M-127
80-M-129

SECTION 7
80-M-101
80-M-103
80-M-105
80-M-121
80-M-123
80-M-125

RECORD DRAWING

Revisions drawn by: SCOTT DAVIS Date: 9/99

This record drawing has been prepared based on information furnished by others. While this information furnished is assumed to be reliable, the DESIGN CONSULTANT cannot assure its accuracy. The DESIGN CONSULTANT will not be responsible for any errors or omissions which may have been incorporated into this record drawing as a result. The DESIGN CONSULTANT is responsible for accurately incorporating the information furnished by others into this record drawing. Those relying on this record drawing must obtain independent verification of its accuracy before applying it for any purpose.

DESIGN CONSULTANT: _____ Date: _____

DRAWING STATUS

NO.	DATE	REQ.	REVISION DESCRIPTION	DRAWN	CKD	APD	PE	EM	QA/QC
A	9/96	DCB	PIPING EL CHANGE/REMOVE PIPING	GPB	GJA	DPL			
B	2/99		RECORD DRAWING	GPB	JFK	AAB			

DRAWING NO. 80-M-203
SHEET NO.
CIP NO. 42-911.4
SPECIFICATION NO. 94017

FIRP/NSPF
DIGESTER COMPLEX
MECHANICAL SECTIONS -3

CITY OF SAN DIEGO, CALIFORNIA
SHEET 166 OF 585 SHEETS

WATER W.O. 198855
SEWER W.O.

SIGNATURE NOT REQUIRED
MWWD DIRECTOR DATE

SIGNATURE NOT REQUIRED
DEPUTY DIRECTOR

DESCRIPTION	BY	APPROVED	DATE	FILMED
AS-BUILT	AB	LTJ	01/15/02	

CONTRACTOR APCT. & E. DATE STARTED 10/23/95
INSPECTOR SVERDRUP KAISER ENGINEERS DATE COMPLETED 8/23/98

LOR PIERCE
DESIGN ENGINEER

CONTROL CERTIFICATION
246-1719
LAMBERT COORDINATES
27333-0165-D

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

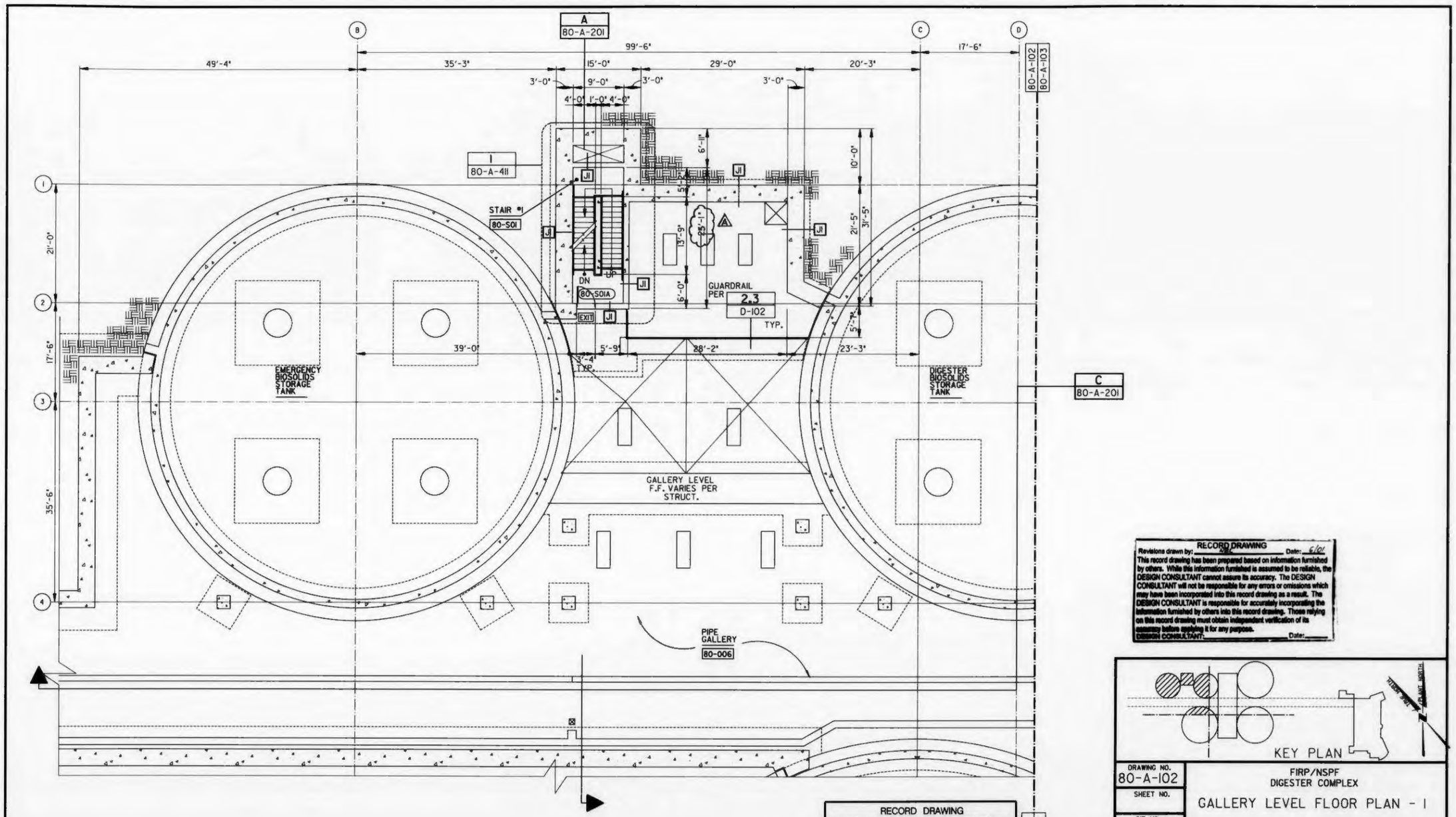
Metcalf&Eddy

SCALE
HORIZONTAL 3/16" = 1'-0"
VERTICAL 3/16" = 1'-0"

METROPOLITAN WASTEWATER DEPARTMENT
City of San Diego

AS-BUILT

nspf\mech1\m80m_203.dgn (2/19/01 : 13:14:56)
METCALF & EDDY CAD PLOT BY SHAUNA



RECORD DRAWING

Revisions drawn by: SAC Date: 6/01

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DESIGN CONSULTANT: _____ Date: _____

KEY PLAN

RECORD DRAWING

THE RECORD DRAWING SHOWS THE FACILITIES AND THEIR CONDITION BASED UPON DATA SUPPLIED BY THE CONTRACTOR AND INSPECTED BY THE CITY AND THE CITY'S RESIDENT ENGINEER. FOR PURPOSES OF FUTURE CONSTRUCTION, LOCATION AND CONDITION OF FACILITIES MUST BE VERIFIED IN THE FIELD.

80-A-103

DRAWING STATUS

NO.	DATE	REQ.	REVISION DESCRIPTION	DRAWN	CKD	APD	PE	EM	DA/OC
A	2/99		RECORD DRAWING	HML	NVS	DPL			

DRAWING NO. 80-A-102

SHEET NO.

CIP NO. 42-911.4

SPECIFICATION NO. 94017

FIRP/NSPF
DIGESTER COMPLEX

GALLERY LEVEL FLOOR PLAN - 1

CITY OF SAN DIEGO, CALIFORNIA
SHEET 33 OF 565 SHEETS

WATER W.O. 198855
SEWER W.O.

SIGNATURE NOT REQUIRED
MWWD DIRECTOR DATE

SIGNATURE NOT REQUIRED
DEPUTY DIRECTOR

DESIGN ENGINEER

CONTROL CERTIFICATION

246-1719
LAMBERT COORDINATES

27333-0032-D

DESCRIPTION	BY	APPROVED	DATE	FILMED
AS-BUILT	AS	L73		

CONTRACTOR LINDSAY DATE STARTED 10/19/98

INSPECTOR [illegible] DATE COMPLETED 8/24/99

REGISTERED PROFESSIONAL ENGINEER DUANE P. LINDSAY No. C048048 Exp. 12-31-99 CIVIL STATE OF CALIFORNIA

LICENSED ARCHITECT ARTURO MOISES QUIJANO C12,036 REN. 3-31-99

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

Metcalf&Eddy

SCALE HORIZONTAL 1/8" = 1'-0"
VERTICAL

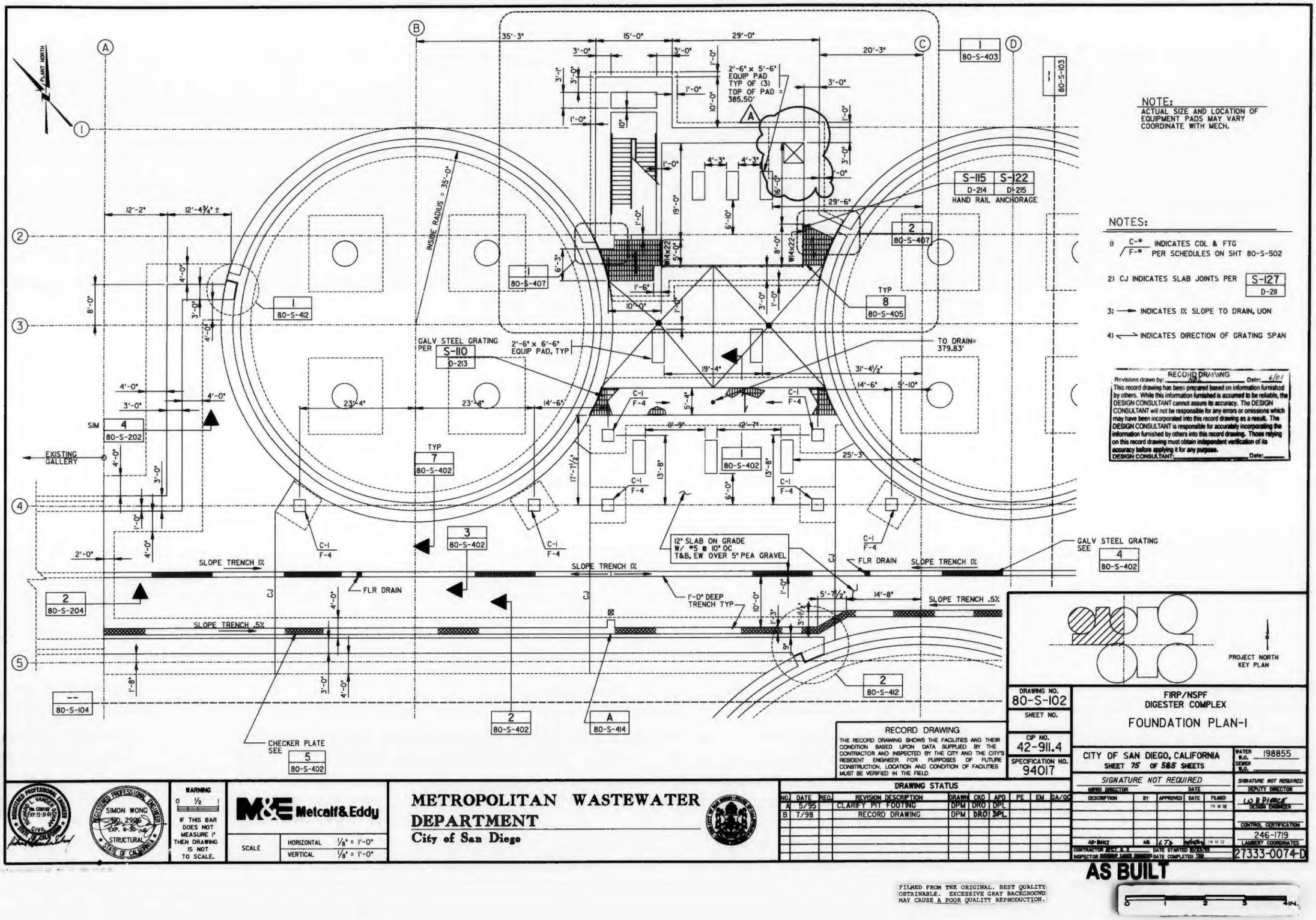
METROPOLITAN WASTEWATER DEPARTMENT
City of San Diego

AS BUILT

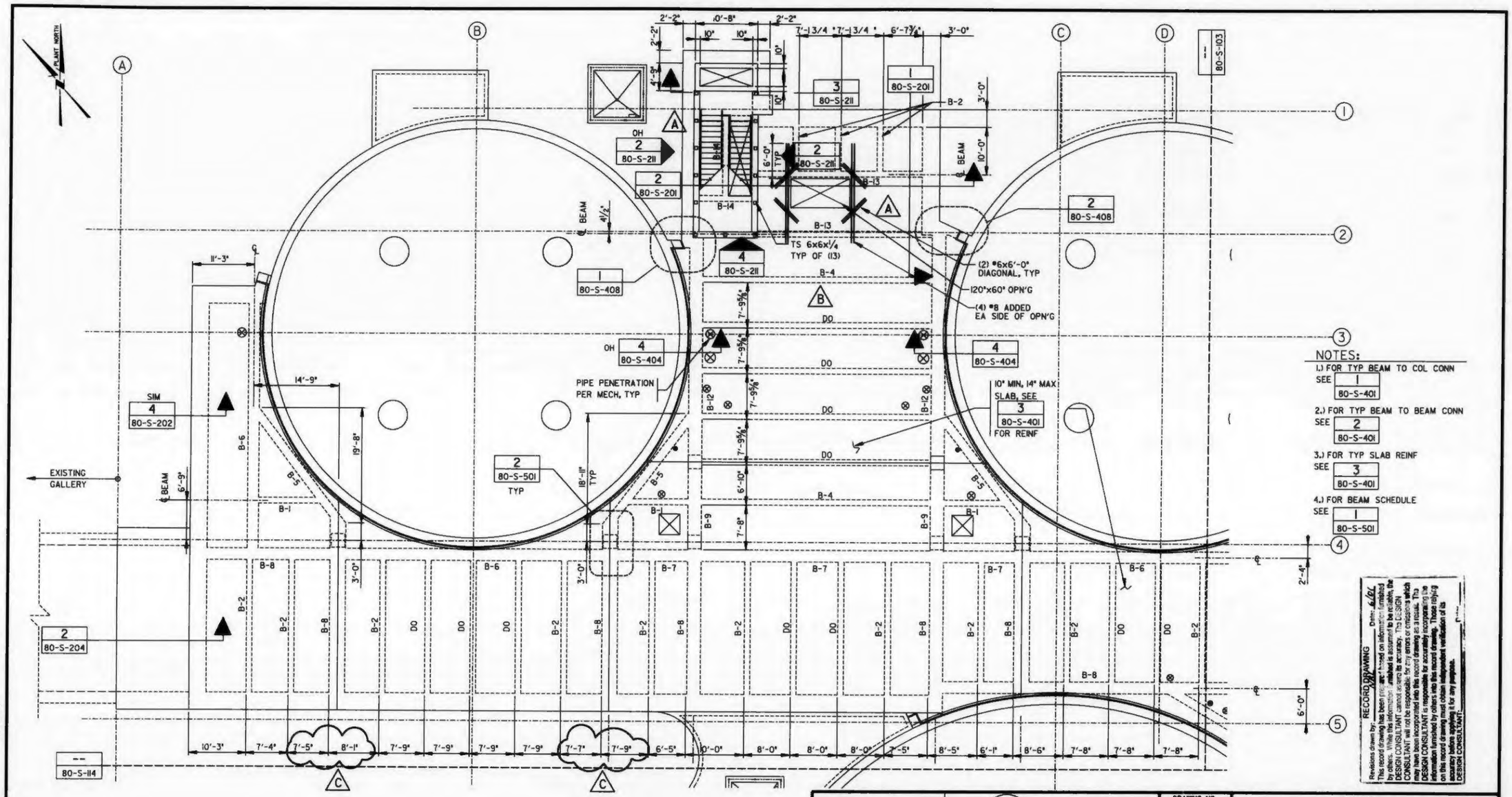
a80a102.dgn

FILMED FROM THE ORIGINAL. BEST QUALITY OBTAINABLE. EXCESSIVE GRAY BACKGROUND MAY CAUSE A POOR QUALITY REPRODUCTION.

0 1 2 3 4 IN.



Attachment B



RECORD DRAWING

Revisions drawn by: ____ Dated: 6/98

This record drawing has been prepared based on information furnished by others. While this information is believed to be accurate, the DESIGN CONSULTANT cannot assess its accuracy. This document may have been incorporated into this record drawing as received. The DESIGN CONSULTANT is responsible for accurately incorporating the information furnished by others into this record drawing. Those relying on this record drawing must obtain independent verification of its accuracy before applying it for any purpose.

DESIGN CONSULTANT: ____

RECORD DRAWING

THE RECORD DRAWING SHOWS THE FACILITIES AND THEIR CONDITION BASED UPON DATA SUPPLIED BY THE CONTRACTOR AND INSPECTED BY THE CITY AND THE CITY'S RESIDENT ENGINEER, FOR PURPOSES OF FUTURE CONSTRUCTION, LOCATION AND CONDITION OF FACILITIES MUST BE VERIFIED IN THE FIELD.

PROJECT NORTH KEY PLAN

DRAWING NO. 80-S-112
SHEET NO.
CIP NO. 42-911.4
SPECIFICATION NO. 94017

FIRP/NSPF
DIGESTER COMPLEX
GROUND FLOOR
FRAMING PLAN-1

CITY OF SAN DIEGO, CALIFORNIA
SHEET 80 OF 585 SHEETS

WATER W.O. 198855
SEWER W.O.

SIGNATURE NOT REQUIRED
MEED DIRECTOR

SIGNATURE NOT REQUIRED
DEPUTY DIRECTOR

W. P. DIEGEL
DESIGN ENGINEER

CONTROL CERTIFICATION 246-1719
LAMBERT COORDINATES 27333-0079-D

REGISTERED PROFESSIONAL ENGINEER — CIVIL — SIMON WONG — NO. 29061 — EXP. 6-30-98 — STRUCTURAL — STATE OF CALIFORNIA

WARNING
0 1/2
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

Metcalf&Eddy

SCALE
HORIZONTAL 1/8" = 1'-0"
VERTICAL 1/8" = 1'-0"

METROPOLITAN WASTEWATER DEPARTMENT
City of San Diego

DRAWING STATUS

NO.	DATE	REQ.	REVISION DESCRIPTION	DRAWN	CKD	APD	PE	EM	DA/QC
A	5/95		NEW BEAMS	DPM	DRO	DPL			
B	3/96	3C20	HVAC OPN'G	DPM	DRO	DPL			
C	6/96	3C43	DIMENSIONS	DPM	DRO	DPL			
D	7/98		RECORD DRAWING	DPM	DRO	DPL			

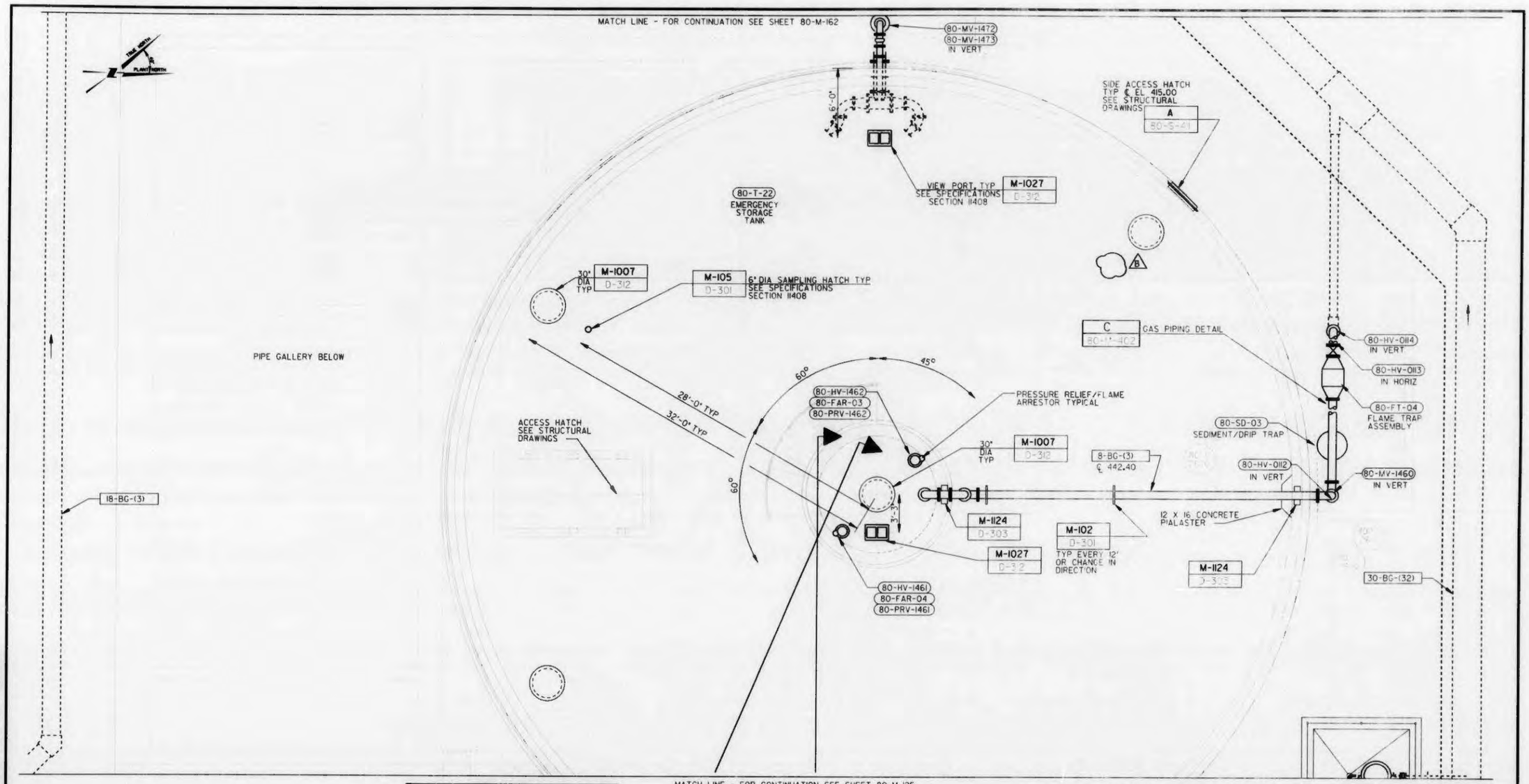
DESCRIPTION	BY	APPROVED	DATE	FILMED
AS-BUILT	AB			

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

AS BUILT

0 1 2 3 4 IN.

$1234567890123456789012345678901234567890$
$plot$date$time$$
$user$



S:\nsp\mech\m80m_123.dgn (2/19/01 : 10:49:23)
METCALF & EDDY CAD PLOT BY SHAUNA

RECORD DRAWING
Revisions drawn by: SCOTT DAVIS Date: 9/99
This record drawing has been prepared based on information furnished by others. While this information furnished is assumed to be reliable, the DESIGN CONSULTANT cannot assure its accuracy. The DESIGN CONSULTANT will not be responsible for any errors or omissions which may have been incorporated into this record drawing as a result. The DESIGN CONSULTANT is responsible for accurately incorporating the information furnished by others into this record drawing. Those relying on this record drawing must obtain independent verification of its accuracy before applying it for any purpose.
DESIGN CONSULTANT: _____ Date: _____

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

Metcalf & Eddy
SCALE HORIZONTAL 1/4" = 1'-0"
VERTICAL 1/4" = 1'-0"

METROPOLITAN WASTEWATER DEPARTMENT
City of San Diego

DRAWING STATUS

NO.	DATE	REQ.	REVISION DESCRIPTION	DRAWN	CKD	APD	PE	EM	QA/QC
A	5/96	CL23	MODIFIED PIPING	NLM	MAK	DPL			
B	2/99		RECORD DRAWING	GPB	JFK	AAB			

DRAWING NO. 80-M-123
SHEET NO.
CIP NO. 42-911.4
SPECIFICATION NO. 94017

FIRP/NSPF
DIGESTER COMPLEX
GROUND AND ROOF PLAN -1

CITY OF SAN DIEGO, CALIFORNIA
SHEET 142 OF 585 SHEETS

WATER W.O. 198855
SEWER W.O.

SIGNATURE NOT REQUIRED
MWWD DIRECTOR DATE

SIGNATURE NOT REQUIRED
DEPUTY DIRECTOR

DESCRIPTION	BY	APPROVED	DATE	FILMED
AS-BUILT	AB	LTS white		

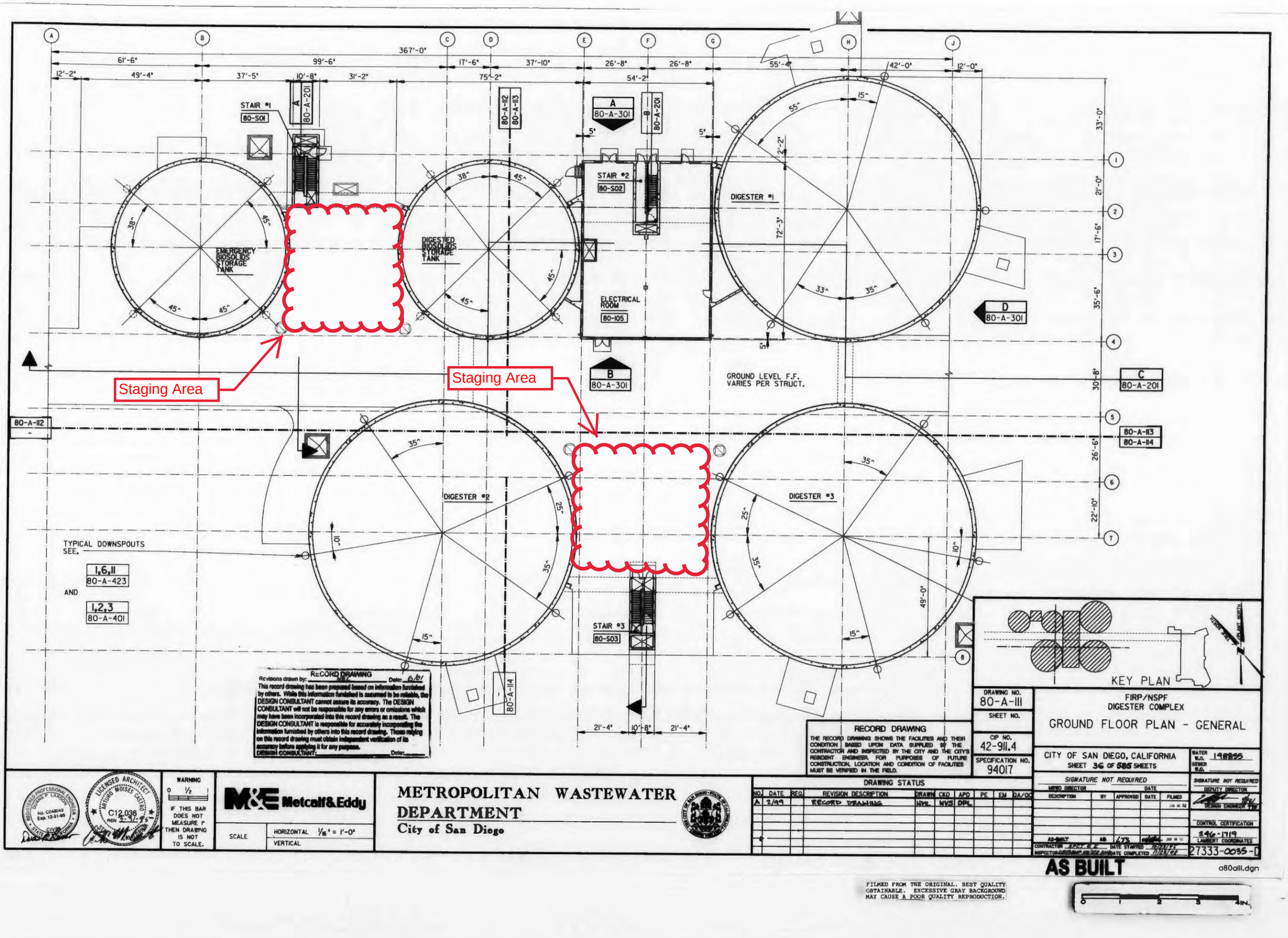
W.D. PIERCE
DESIGN ENGINEER

CONTROL CERTIFICATION
246-1719
LAMBERT COORDINATES
27333-0141-D

CONTRACTOR APCT & K DATE STARTED 10-23-95
INSPECTOR ENGROUP WATER ENGINEERS DATE COMPLETED 1/23/98

AS-BUILT

0 1 2 3 4IN.


Staging Area
Staging Area
EMERGENCY BIOSOLIDS STORAGE TANK
DIGESTED BIOSOLIDS STORAGE TANK
STAIR #1
80-S01
STAIR #2
80-S02
STAIR #3
80-S03
ELECTRICAL ROOM
80-105
DIGESTER #1
DIGESTER #2
DIGESTER #3
GROUND LEVEL F.F. VARIES PER STRUCT.
TYPICAL DOWNSPOUTS SEE, 1,6,11 80-A-423 AND 1,2,3 80-A-401
RECORD DRAWING
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RECORD DRAWING
THE RECORD DRAWING SHOWS THE FACILITIES AND THEIR CONDITION BASED UPON DATA SUPPLIED BY THE CONTRACTOR AND INSPECTED BY THE CITY AND THE CITY'S RESIDENT ENGINEER FOR PURPOSES OF FUTURE CONSTRUCTION. LOCATION AND CONDITION OF FACILITIES MUST BE VERIFIED IN THE FIELD.
KEY PLAN
DRAWING NO. 80-A-111
SHEET NO.
CIP NO. 42-911.4
SPECIFICATION NO. 94017
FIRP/NSPF DIGESTER COMPLEX
GROUND FLOOR PLAN - GENERAL
CITY OF SAN DIEGO, CALIFORNIA
SHEET 36 OF 585 SHEETS
WATER W.O. 198855
SEWER W.O.
SIGNATURE NOT REQUIRED
CONTROL CERTIFICATION
27333-0035-D
WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.
Metcalf&Eddy
SCALE
HORIZONTAL 1/8" = 1'-0"
VERTICAL
METROPOLITAN WASTEWATER DEPARTMENT
City of San Diego
DRAWING STATUS
NO. A DATE 2/99 REQ. REVISION DESCRIPTION RECORD DRAWING DRAWN NVL CKD NVS APD DPL
AS BUILT
a80a111.dgn
FILMED FROM THE ORIGINAL. BEST QUALITY OBTAINABLE. EXCESSIVE GRAY BACKGROUND MAY CAUSE A POOR QUALITY REPRODUCTION.

CONSTRUCTION MATRIX		
Contractor: _____		
Job Number: _____		
MWWD Representative: _____		
REQUIREMENTS		
5.1	Environmental Safety and Health Rules	X
5.2	Emergency Response	X
5.3	Management of Change	X
5.4	Training	X
5.5	Communication Proficiency	X
5.6	Working in an Operating Unit	X
5.7	Office Safety	
5.8	Housekeeping	X
5.9	Personal Protective Equipment	X
5.10	Accident/Incident Investigation	X
5.11	Pre-Start Up ES&H Review	X
5.12	Injury & Illness Recordkeeping & Reporting	X
5.13	Portable Power Tools	X
5.14	Hand Tools	X
5.15	Scaffolding	X
5.16	Abrasive Blasting	
5.17	Stairways and Ladders	X
5.18	High Pressure Water Blasting	X
5.19	Welding, Cutting & Brazing	
5.20	Slings, Chainfalls & Come-Alongs	X
5.21	Compressed Gas Cylinders	
5.22	Fire Protection & Prevention	X
5.23	Temporary Field Facilities	X
5.24	Steel Erection	
5.25	Concrete, Concrete Forms & Shoring	
5.26	Security	X
5.27	Hazardous Work Permits	X
5.28	Confined Space Entry	X
5.29	Breaking Into Pipelines	x
5.30	Lockout & Tagging	X

CONSTRUCTION MATRIX

Contractor: _____

Job Number: _____

MWWD Representative: _____

REQUIREMENTS		
5.31	Electrical Safety	X
5.32	Hot-Work Permit (Fire Permit)	X
5.33	Hot-Tapping	
5.34	Trenching & Excavation	
5.35	Fall Protection	X
5.36	Floor & Wall Openings/Barricades	X
5.37	Demolition and Dismantling	X
5.38	Occupational Health/Exposure Monitoring	X
5.39	Hearing Conservation	X
5.40	Respiratory Protection	X
5.41	Hazard Communication	X
5.42	Asbestos Abatement	
5.43	Laboratory Safety	
5.44	Lead Exposure	
5.45	Vehicle Safety	X
5.46	Cranes & Hoisting Equipment	X
5.47	Pile Driving	
5.48	Mobile/Powered Construction Equipment	X
5.49	Waste Management	X
5.50	Ground & Surface Water Protection	X
5.51	Occupational Medicine	X
5.52	Substance Detection	X
5.53	Tunneling	
5.54	Sewers	X
5.55	Blank	

THE CITY OF SAN DIEGO

GENERAL CONTRACT TERMS AND PROVISIONS

APPLICABLE TO GOODS, SERVICES, AND CONSULTANT CONTRACTS

ARTICLE I
SCOPE AND TERM OF CONTRACT

1.1 Scope of Contract. The scope of contract between the City and a provider of goods and/or services (Contractor) is described in the Contract Documents. The Contract Documents are comprised of the Request for Proposal, Invitation to Bid, or other solicitation document (Solicitation); the successful bid or proposal; the letter awarding the contract to Contractor; the City's written acceptance of exceptions or clarifications to the Solicitation, if any; and these General Contract Terms and Provisions.

1.2 Effective Date. A contract between the City and Contractor (Contract) is effective on the last date that the contract is signed by the parties and approved by the City Attorney in accordance with Charter section 40. Unless otherwise terminated, this Contract is effective until it is completed or as otherwise agreed upon in writing by the parties, whichever is the earliest. A Contract term cannot exceed five (5) years unless approved by the City Council by ordinance.

1.3 Contract Extension. The City may, in its sole discretion, unilaterally exercise an option to extend the Contract as described in the Contract Documents. In addition, the City may, in its sole discretion, unilaterally extend the Contract on a month-to-month basis following contract expiration if authorized under Charter section 99 and the Contract Documents. Contractor shall not increase its pricing in excess of the percentage increase described in the Contract.

ARTICLE II
CONTRACT ADMINISTRATOR

2.1 Contract Administrator. The Purchasing Agent or designee is the Contract Administrator for purposes of this Contract, and has the responsibilities described in this Contract, in the San Diego Charter, and in Chapter 2, Article 2, Divisions 5, 30, and 32.

2.1.1 Contractor Performance Evaluations. The Contract Administrator will evaluate Contractor's performance as often as the Contract Administrator deems necessary throughout the term of the contract. This evaluation will be based on criteria including the quality of goods or services, the timeliness of performance, and adherence to applicable laws, including prevailing wage and living wage. City will provide Contractors who receive an unsatisfactory rating with a copy of the evaluation and an opportunity to respond. City may consider final evaluations, including Contractor's response, in evaluating future proposals and bids for contract award.

2.2 Notices. Unless otherwise specified, in all cases where written notice is required under this Contract, service shall be deemed sufficient if the notice is personally delivered or deposited in the United States mail, with first class postage paid, attention to the Purchasing Agent. Proper notice is effective on the date of personal delivery or five (5) days after deposit in a United States postal mailbox unless provided otherwise in the Contract. Notices to the City shall be sent to:

Purchasing Agent
City of San Diego, Purchasing and Contracting Division
1200 3rd Avenue, Suite 200
San Diego, CA 92101-4195

ARTICLE III
COMPENSATION

3.1 Manner of Payment. Contractor will be paid monthly, in arrears, for goods and/or services provided in accordance with the terms and provisions specified in the Contract.

3.2 Invoices.

3.2.1 Invoice Detail. Contractor's invoice must be on Contractor's stationary with Contractor's name, address, and remittance address if different. Contractor's invoice must have a date, an invoice number, a purchase order number, a description of the goods or services provided, and an amount due.

3.2.2 Service Contracts. Contractor must submit invoices for services to City by the 10th of the month following the month in which Contractor provided services. Invoices must include the address of the location where services were performed and the dates in which services were provided.

3.2.3 Goods Contracts. Contractor must submit invoices for goods to City within seven days of the shipment. Invoices must describe the goods provided.

3.2.4 Parts Contracts. Contractor must submit invoices for parts to City within seven calendar (7) days of the date the parts are shipped. Invoices must include the manufacturer of the part, manufacturer's published list price, percentage discount applied in accordance with Pricing Page(s), the net price to City, and an item description, quantity, and extension.

3.2.5 Extraordinary Work. City will not pay Contractor for extraordinary work unless Contractor receives prior written authorization from the Contract Administrator. Failure to do so will result in payment being withheld for services. If approved, Contractor will include an invoice that describes the work performed and the location where the work was performed, and a copy of the Contract Administrator's written authorization.

3.2.6 Reporting Requirements. Contractor must submit the following reports using the City's web-based contract compliance portal. Incomplete and/or delinquent reports may cause payment delays, non-payment of invoice, or both. For questions, please view the City's online tutorials on how to utilize the City's web-based contract compliance portal.

3.2.6.1 Monthly Employment Utilization Reports. Contractor and Contractor's subcontractors and suppliers must submit Monthly Employment Utilization Reports by the fifth (5th) day of the subsequent month.

3.2.6.2 Monthly Invoicing and Payments. Contractor and Contractor's subcontractors and suppliers must submit Monthly Invoicing and Payment Reports by the fifth (5^{th}) day of the subsequent month.

3.3 Annual Appropriation of Funds. Contractor acknowledges that the Contract term may extend over multiple City fiscal years, and that work and compensation under this Contract is contingent on the City Council appropriating funding for and authorizing such work and compensation for those fiscal years. This Contract may be terminated at the end of the fiscal year for which sufficient funding is not appropriated and authorized. City is not obligated to pay Contractor for any amounts not duly appropriated and authorized by City Council.

3.4 Price Adjustments. Based on Contractor's written request and justification, the City may approve an increase in unit prices on Contractor's pricing pages consistent with the amount requested in the justification in an amount not to exceed the increase in the Consumer Price Index, San Diego Area, for All Urban Customers (CPI-U) as published by the Bureau of Labor Statistics, or 5.0%, whichever is less, during the preceding one year term. If the CPI-U is a negative number, then the unit prices shall not be adjusted for that option year (the unit prices will not be decreased). A negative CPI-U shall be counted against any subsequent increases in the CPI-U when calculating the unit prices for later option years. Contractor must provide such written request and justification no less than sixty days before the date in which City may exercise the option to renew the contract, or sixty days before the anniversary date of the Contract. Justification in support of the written request must include a description of the basis for the adjustment, the proposed effective date and reasons for said date, and the amount of the adjustment requested with documentation to support the requested change (e.g. CPI-U or 5.0%, whichever is less). City's approval of this request must be in writing.

ARTICLE IV
SUSPENSION AND TERMINATION

4.1 City's Right to Suspend for Convenience. City may suspend all or any portion of Contractor's performance under this Contract at its sole option and for its convenience for a reasonable period of time not to exceed six (6) months. City must first give ten (10) days' written notice to Contractor of such suspension. City will pay to Contractor a sum equivalent to the reasonable value of the goods and/or services satisfactorily provided up to the date of suspension. City may rescind the suspension prior to or at six (6) months by providing Contractor with written notice of the rescission, at which time Contractor would be required to resume performance in compliance with the terms and provisions of this Contract. Contractor will be entitled to an extension of time to complete performance under the Contract equal to the length of the suspension unless otherwise agreed to in writing by the Parties.

4.2 City's Right to Terminate for Convenience. City may, at its sole option and for its convenience, terminate all or any portion of this Contract by giving thirty (30) days' written notice of such termination to Contractor. The termination of the Contract shall be effective upon receipt of the notice by Contractor. After termination of all or any portion of the Contract, Contractor shall: (1) immediately discontinue all affected performance (unless the notice directs

otherwise); and (2) complete any and all additional work necessary for the orderly filing of documents and closing of Contractor's affected performance under the Contract. After filing of documents and completion of performance, Contractor shall deliver to City all data, drawings, specifications, reports, estimates, summaries, and such other information and materials created or received by Contractor in performing this Contract, whether completed or in process. By accepting payment for completion, filing, and delivering documents as called for in this section, Contractor discharges City of all of City's payment obligations and liabilities under this Contract with regard to the affected performance.

4.3 City's Right to Terminate for Default. Contractor's failure to satisfactorily perform any obligation required by this Contract constitutes a default. Examples of default include a determination by City that Contractor has: (1) failed to deliver goods and/or perform the services of the required quality or within the time specified; (2) failed to perform any of the obligations of this Contract; and (3) failed to make sufficient progress in performance which may jeopardize full performance.

4.3.1 If Contractor fails to satisfactorily cure a default within ten (10) calendar days of receiving written notice from City specifying the nature of the default, City may immediately cancel and/or terminate this Contract, and terminate each and every right of Contractor, and any person claiming any rights by or through Contractor under this Contract.

4.3.2 If City terminates this Contract, in whole or in part, City may procure, upon such terms and in such manner as the Purchasing Agent may deem appropriate, equivalent goods or services and Contractor shall be liable to City for any excess costs. Contractor shall also continue performance to the extent not terminated.

4.4 Termination for Bankruptcy or Assignment for the Benefit of Creditors. If Contractor files a voluntary petition in bankruptcy, is adjudicated bankrupt, or makes a general assignment for the benefit of creditors, the City may at its option and without further notice to, or demand upon Contractor, terminate this Contract, and terminate each and every right of Contractor, and any person claiming rights by and through Contractor under this Contract.

4.5 Contractor's Right to Payment Following Contract Termination.

4.5.1 Termination for Convenience. If the termination is for the convenience of City an equitable adjustment in the Contract price shall be made. No amount shall be allowed for anticipated profit on unperformed services, and no amount shall be paid for an as needed contract beyond the Contract termination date.

4.5.2 Termination for Default. If, after City gives notice of termination for failure to fulfill Contract obligations to Contractor, it is determined that Contractor had not so failed, the termination shall be deemed to have been effected for the convenience of City. In such event, adjustment in the Contract price shall be made as provided in Section 4.3.2. City's rights and remedies are in addition to any other rights and remedies provided by law or under this Contract.

4.6 Remedies Cumulative. City's remedies are cumulative and are not intended to be exclusive of any other remedies or means of redress to which City may be lawfully entitled in case of any breach or threatened breach of any provision of this Contract.

ARTICLE V
ADDITIONAL CONTRACTOR OBLIGATIONS

5.1 Inspection and Acceptance. The City will inspect and accept goods provided under this Contract at the shipment destination unless specified otherwise. Inspection will be made and acceptance will be determined by the City department shown in the shipping address of the Purchase Order or other duly authorized representative of City.

5.2 Responsibility for Lost or Damaged Shipments. Contractor bears the risk of loss or damage to goods prior to the time of their receipt and acceptance by City. City has no obligation to accept damaged shipments and reserves the right to return damaged goods, at Contractor's sole expense, even if the damage was not apparent or discovered until after receipt.

5.3 Responsibility for Damages. Contractor is responsible for all damage that occurs as a result of Contractor's fault or negligence or that of its' employees, agents, or representatives in connection with the performance of this Contract. Contractor shall immediately report any such damage to people and/or property to the Contract Administrator.

5.4 Delivery. Delivery shall be made on the delivery day specified in the Contract Documents. The City, in its sole discretion, may extend the time for delivery. The City may order, in writing, the suspension, delay or interruption of delivery of goods and/or services.

5.5 Delay. Unless otherwise specified herein, time is of the essence for each and every provision of the Contract. Contractor must immediately notify City in writing if there is, or it is anticipated that there will be, a delay in performance. The written notice must explain the cause for the delay and provide a reasonable estimate of the length of the delay. City may terminate this Contract as provided herein if City, in its sole discretion, determines the delay is material.

5.5.1 If a delay in performance is caused by any unforeseen event(s) beyond the control of the parties, City may allow Contractor to a reasonable extension of time to complete performance, but Contractor will not be entitled to damages or additional compensation. Any such extension of time must be approved in writing by City. The following conditions may constitute such a delay: war; changes in law or government regulation; labor disputes; strikes; fires, floods, adverse weather or other similar condition of the elements necessitating cessation of the performance; inability to obtain materials, equipment or labor; or other specific reasons agreed to between City and Contractor. This provision does not apply to a delay caused by Contractor's acts or omissions. Contractor is not entitled to an extension of time to perform if a delay is caused by Contractor's inability to obtain materials, equipment, or labor unless City has received, in a timely manner, documentary proof satisfactory to City of Contractor's inability to obtain materials, equipment, or labor, in which case City's approval must be in writing.

5.6 Restrictions and Regulations Requiring Contract Modification. Contractor shall immediately notify City in writing of any regulations or restrictions that may or will require Contractor to alter the material, quality, workmanship, or performance of the goods and/or services to be provided. City reserves the right to accept any such alteration, including any resulting reasonable price adjustments, or to cancel the Contract at no expense to the City.

5.7 Warranties. All goods and/or services provided under the Contract must be warranted by Contractor or manufacturer for at least twelve (12) months after acceptance by City, except automotive equipment. Automotive equipment must be warranted for a minimum of 12,000 miles or 12 months, whichever occurs first, unless otherwise stated in the Contract. Contractor is responsible to City for all warranty service, parts, and labor. Contractor is required to ensure that warranty work is performed at a facility acceptable to City and that services, parts, and labor are available and provided to meet City's schedules and deadlines. Contractor may establish a warranty service contract with an agency satisfactory to City instead of performing the warranty service itself. If Contractor is not an authorized service center and causes any damage to equipment being serviced, which results in the existing warranty being voided, Contractor will be liable for all costs of repairs to the equipment, or the costs of replacing the equipment with new equipment that meets City's operational needs.

5.8 Industry Standards. Contractor shall provide goods and/or services acceptable to City in strict conformance with the Contract. Contractor shall also provide goods and/or services in accordance with the standards customarily adhered to by an experienced and competent provider of the goods and/or services called for under this Contract using the degree of care and skill ordinarily exercised by reputable providers of such goods and/or services. Where approval by City, the Mayor, or other representative of City is required, it is understood to be general approval only and does not relieve Contractor of responsibility for complying with all applicable laws, codes, policies, regulations, and good business practices.

5.9 Records Retention and Examination. Contractor shall retain, protect, and maintain in an accessible location all records and documents, including paper, electronic, and computer records, relating to this Contract for five (5) years after receipt of final payment by City under this Contract. Contractor shall make all such records and documents available for inspection, copying, or other reproduction, and auditing by authorized representatives of City, including the Purchasing Agent or designee. Contractor shall make available all requested data and records at reasonable locations within City or County of San Diego at any time during normal business hours, and as often as City deems necessary. If records are not made available within the City or County of San Diego, Contractor shall pay City's travel costs to the location where the records are maintained and shall pay for all related travel expenses. Failure to make requested records available for inspection, copying, or other reproduction, or auditing by the date requested may result in termination of the Contract. Contractor must include this provision in all subcontracts made in connection with this Contract.

5.9.1 Contractor shall maintain records of all subcontracts entered into with all firms, all project invoices received from Subcontractors and Suppliers, all purchases of materials and services from Suppliers, and all joint venture participation. Records shall show name, telephone number including area code, and business address of each Subcontractor and Supplier, and joint venture partner, and the total amount actually paid to each firm. Project relevant records, regardless of tier, may be periodically reviewed by the City.

5.10 Quality Assurance Meetings. Upon City's request, Contractor shall schedule one or more quality assurance meetings with City's Contract Administrator to discuss Contractor's performance. If requested, Contractor shall schedule the first quality assurance meeting no later than eight (8) weeks from the date of commencement of work under the Contract. At the quality assurance meeting(s), City's Contract Administrator will provide Contractor with feedback, will note any deficiencies in Contract performance, and provide Contractor with an opportunity to address and correct such deficiencies. The total number of quality assurance meetings that may be required by City will depend upon Contractor's performance.

5.11 Duty to Cooperate with Auditor. The City Auditor may, in his sole discretion, at no cost to the City, and for purposes of performing his responsibilities under Charter section 39.2, review Contractor's records to confirm contract compliance. Contractor shall make reasonable efforts to cooperate with Auditor's requests.

5.12 Safety Data Sheets. If specified by City in the solicitation or otherwise required by this Contract, Contractor must send with each shipment one (1) copy of the Safety Data Sheet (SDS) for each item shipped. Failure to comply with this procedure will be cause for immediate termination of the Contract for violation of safety procedures.

5.13 Project Personnel. Except as formally approved by the City, the key personnel identified in Contractor's bid or proposal shall be the individuals who will actually complete the work. Changes in staffing must be reported in writing and approved by the City.

5.13.1 Criminal Background Certification. Contractor certifies that all employees working on this Contract have had a criminal background check and that said employees are clear of any sexual and drug related convictions. Contractor further certifies that all employees hired by Contractor or a subcontractor shall be free from any felony convictions.

5.13.2 Photo Identification Badge. Contractor shall provide a company photo identification badge to any individual assigned by Contractor or subcontractor to perform services or deliver goods on City premises. Such badge must be worn at all times while on City premises. City reserves the right to require Contractor to pay fingerprinting fees for personnel assigned to work in sensitive areas. All employees shall turn in their photo identification badges to Contractor upon completion of services and prior to final payment of invoice.

5.14 Standards of Conduct. Contractor is responsible for maintaining standards of employee competence, conduct, courtesy, appearance, honesty, and integrity satisfactory to the City.

5.14.1 Supervision. Contractor shall provide adequate and competent supervision at all times during the Contract term. Contractor shall be readily available to meet with the City. Contractor shall provide the telephone numbers where its representative(s) can be reached.

5.14.2 City Premises. Contractor's employees and agents shall comply with all City rules and regulations while on City premises.

5.14.3 Removal of Employees. City may request Contractor immediately remove from assignment to the City any employee found unfit to perform duties at the City. Contractor shall comply with all such requests.

5.15 Licenses and Permits. Contractor shall, without additional expense to the City, be responsible for obtaining any necessary licenses, permits, certifications, accreditations, fees and approvals for complying with any federal, state, county, municipal, and other laws, codes, and regulations applicable to Contract performance. This includes, but is not limited to, any laws or regulations requiring the use of licensed contractors to perform parts of the work.

5.16 Contractor and Subcontractor Registration Requirements. Prior to the award of the Contract or Task Order, Contractor and Contractor's subcontractors and suppliers must register with the City's web-based vendor registration and bid management system. The City may not award the Contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified by the City, the City reserves the right to rescind the Contract award and to make the award to the next responsive and responsible proposer of bidder.

ARTICLE VI
INTELLECTUAL PROPERTY RIGHTS

6.1 Rights in Data. If, in connection with the services performed under this Contract, Contractor or its employees, agents, or subcontractors, create artwork, audio recordings, blueprints, designs, diagrams, documentation, photographs, plans, reports, software, source code, specifications, surveys, system designs, video recordings, or any other original works of authorship, whether written or readable by machine (Deliverable Materials), all rights of Contractor or its subcontractors in the Deliverable Materials, including, but not limited to publication, and registration of copyrights, and trademarks in the Deliverable Materials, are the sole property of City. Contractor, including its employees, agents, and subcontractors, may not use any Deliverable Material for purposes unrelated to Contractor's work on behalf of the City without prior written consent of City. Contractor may not publish or reproduce any Deliverable Materials, for purposes unrelated to Contractor's work on behalf of the City, without the prior written consent of the City.

6. 2 Intellectual Property Rights Assignment. For no additional compensation, Contractor hereby assigns to City all of Contractor's rights, title, and interest in and to the content of the Deliverable Materials created by Contractor or its employees, agents, or subcontractors, including copyrights, in connection with the services performed under this Contract. Contractor

shall promptly execute and deliver, and shall cause its employees, agents, and subcontractors to promptly execute and deliver, upon request by the City or any of its successors or assigns at any time and without further compensation of any kind, any power of attorney, assignment, application for copyright, patent, trademark or other intellectual property right protection, or other papers or instruments which may be necessary or desirable to fully secure, perfect or otherwise protect to or for the City, its successors and assigns, all right, title and interest in and to the content of the Deliverable Materials. Contractor also shall cooperate and assist in the prosecution of any action or opposition proceeding involving such intellectual property rights and any adjudication of those rights.

6. 3 Contractor Works. Contractor Works means tangible and intangible information and material that: (a) had already been conceived, invented, created, developed or acquired by Contractor prior to the effective date of this Contract; or (b) were conceived, invented, created, or developed by Contractor after the effective date of this Contract, but only to the extent such information and material do not constitute part or all of the Deliverable Materials called for in this Contract. All Contractor Works, and all modifications or derivatives of such Contractor Works, including all intellectual property rights in or pertaining to the same, shall be owned solely and exclusively by Contractor.

6. 4 Subcontracting. In the event that Contractor utilizes a subcontractor(s) for any portion of the work that comprises the whole or part of the specified Deliverable Materials to the City, the agreement between Contractor and the subcontractor shall include a statement that identifies the Deliverable Materials as a "works for hire" as described in the United States Copyright Act of 1976, as amended, and that all intellectual property rights in the Deliverable Materials, whether arising in copyright, trademark, service mark or other forms of intellectual property rights, belong to and shall vest solely with the City. Further, the agreement between Contractor and its subcontractor shall require that the subcontractor, if necessary, shall grant, transfer, sell and assign, free of charge, exclusively to City, all titles, rights and interests in and to the Deliverable Materials, including all copyrights, trademarks and other intellectual property rights. City shall have the right to review any such agreement for compliance with this provision.

6. 5 Intellectual Property Warranty and Indemnification. Contractor represents and warrants that any materials or deliverables, including all Deliverable Materials, provided under this Contract are either original, or not encumbered, and do not infringe upon the copyright, trademark, patent or other intellectual property rights of any third party, or are in the public domain. If Deliverable Materials provided hereunder become the subject of a claim, suit or allegation of copyright, trademark or patent infringement, City shall have the right, in its sole discretion, to require Contractor to produce, at Contractor's own expense, new non-infringing materials, deliverables or works as a means of remedying any claim of infringement in addition to any other remedy available to the City under law or equity. Contractor further agrees to indemnify, defend, and hold harmless the City, its officers, employees and agents from and against any and all claims, actions, costs, judgments or damages, of any type, alleging or threatening that any Deliverable Materials, supplies, equipment, services or works provided under this contract infringe the copyright, trademark, patent or other intellectual property or

proprietary rights of any third party (Third Party Claim of Infringement). If a Third Party Claim of Infringement is threatened or made before Contractor receives payment under this Contract, City shall be entitled, upon written notice to Contractor, to withhold some or all of such payment.

6.6 Software Licensing. Contractor represents and warrants that the software, if any, as delivered to City, does not contain any program code, virus, worm, trap door, back door, time or clock that would erase data or programming or otherwise cause the software to become inoperable, inaccessible, or incapable of being used in accordance with its user manuals, either automatically, upon the occurrence of licensor-selected conditions or manually on command. Contractor further represents and warrants that all third party software, delivered to City or used by Contractor in the performance of the Contract, is fully licensed by the appropriate licensor.

6.7 Publication. Contractor may not publish or reproduce any Deliverable Materials, for purposes unrelated to Contractor's work on behalf of the City without prior written consent from the City.

6.8 Royalties, Licenses, and Patents. Unless otherwise specified, Contractor shall pay all royalties, license, and patent fees associated with the goods that are the subject of this solicitation. Contractor warrants that the goods, materials, supplies, and equipment to be supplied do not infringe upon any patent, trademark, or copyright, and further agrees to defend any and all suits, actions and claims for infringement that are brought against the City, and to defend, indemnify and hold harmless the City, its elected officials, officers, and employees from all liability, loss and damages, whether general, exemplary or punitive, suffered as a result of any actual or claimed infringement asserted against the City, Contractor, or those furnishing goods, materials, supplies, or equipment to Contractor under the Contract.

ARTICLE VII
INDEMNIFICATION AND INSURANCE

7.1 Indemnification. To the fullest extent permitted by law, Contractor shall defend (with legal counsel reasonably acceptable to City), indemnify, protect, and hold harmless City and its elected officials, officers, employees, agents, and representatives (Indemnified Parties) from and against any and all claims, losses, costs, damages, injuries (including, without limitation, injury to or death of an employee of Contractor or its subcontractors), expense, and liability of every kind, nature and description (including, without limitation, incidental and consequential damages, court costs, and litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigation) that arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, any goods provided or performance of services under this Contract by Contractor, any subcontractor, anyone directly or indirectly employed by either of them, or anyone that either of them control. Contractor's duty to defend, indemnify, protect and hold harmless shall not include any claims or liabilities arising from the sole negligence or willful misconduct of the Indemnified Parties.

7.2 Insurance. 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 and the results of that work by Contractor, his agents, representatives, employees or subcontractors.

Contractor shall provide, at a minimum, the following:

7.2.1 Commercial General Liability. Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury, and personal and advertising injury with limits no less than $1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

7.2.2 Commercial Automobile Liability. Insurance Services Office Form Number CA 0001 covering Code 1 (any auto) or, if Contractor has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than $1,000,000 per accident for bodily injury and property damage.

7.2.3 Workers' Compensation. Insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than $1,000,000 per accident for bodily injury or disease.

7.2.4 Professional Liability (Errors and Omissions). For consultant contracts, insurance appropriate to Consultant's profession, with limit no less than $1,000,000 per occurrence or claim, $2,000,000 aggregate.

If Contractor maintains broader coverage and/or higher limits than the minimums shown above, City requires and shall be entitled to the broader coverage and/or the higher limits maintained by Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to City.

7.2.5 Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

7.2.5.1 Additional Insured Status. The City, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 if a later edition is used).

7.2.5.2 Primary Coverage. For any claims related to this contract, Contractor's insurance coverage shall be primary coverage at least as broad as ISO CG 20 01 04 13 as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by City, its officers, officials, employees, or volunteers shall be excess of Contractor's insurance and shall not contribute with it.

7.2.5.3 Notice of Cancellation. Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to City.

7.2.5.4 Waiver of Subrogation. Contractor hereby grants to City a waiver of any right to subrogation which the Workers' Compensation insurer of said Contractor may acquire against City by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

7.2.5.5 Claims Made Policies (applicable only to professional liability). The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, Contractor must purchase "extended reporting" coverage for a minimum of five (5) years after completion of work.

7.3 Self Insured Retentions. Self-insured retentions must be declared to and approved by City. City may require Contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

7.4 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-VI, unless otherwise acceptable to City.

City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State of California and is included on the List of Approved Surplus Lines Insurers (LASLI list). All policies of insurance carried by non-admitted carriers are subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

7.5 Verification of Coverage. Contractor shall furnish City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive Contractor's obligation to provide them. City reserves the right

to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

7.6 Special Risks or Circumstances. City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

7.7 Additional Insurance. Contractor may obtain additional insurance not required by this Contract.

7.8 Excess Insurance. All policies providing excess coverage to City shall follow the form of the primary policy or policies including but not limited to all endorsements.

7.9 Subcontractors. Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City is an additional insured on insurance required from subcontractors. For CGL coverage, subcontractors shall provide coverage with a format at least as broad as the CG 20 38 04 13 endorsement.

ARTICLE VIII
BONDS

8.1 Payment and Performance Bond. Prior to the execution of this Contract, City may require Contractor to post a payment and performance bond (Bond). The Bond shall guarantee Contractor's faithful performance of this Contract and assure payment to contractors, subcontractors, and to persons furnishing goods and/or services under this Contract.

8.1.1 Bond Amount. The Bond shall be in a sum equal to twenty-five percent (25%) of the Contract amount, unless otherwise stated in the Specifications. City may file a claim against the Bond if Contractor fails or refuses to fulfill the terms and provisions of the Contract.

8.1.2 Bond Term. The Bond shall remain in full force and effect at least until complete performance of this Contract and payment of all claims for materials and labor, at which time it will convert to a ten percent (10%) warranty bond, which shall remain in place until the end of the warranty periods set forth in this Contract. The Bond shall be renewed annually, at least sixty (60) days in advance of its expiration, and Contractor shall provide timely proof of annual renewal to City.

8.1.3 Bond Surety. The Bond must be furnished by a company authorized by the State of California Department of Insurance to transact surety business in the State of California and which has a current A.M. Best rating of at least "A-, VIII."

8.1.4 Non-Renewal or Cancellation. The Bond must provide that City and Contractor shall be provided with sixty (60) days' advance written notice in the event of non-renewal, cancellation, or material change to its terms. In the event of non-renewal, cancellation, or

material change to the Bond terms, Contractor shall provide City with evidence of the new source of surety within twenty-one (21) calendar days after the date of the notice of non-renewal, cancellation, or material change. Failure to maintain the Bond, as required herein, in full force and effect as required under this Contact, will be a material breach of the Contract subject to termination of the Contract.

8.2 Alternate Security. City may, at its sole discretion, accept alternate security in the form of an endorsed certificate of deposit, a money order, a certified check drawn on a solvent bank, or other security acceptable to the Purchasing Agent in an amount equal to the required Bond.

ARTICLE IX
CITY-MANDATED CLAUSES AND REQUIREMENTS

9.1 Contractor Certification of Compliance. By signing this Contract, Contractor certifies that Contractor is aware of, and will comply with, these City-mandated clauses throughout the duration of the Contract.

9.1.1 Drug-Free Workplace Certification. Contractor shall comply with City's Drug-Free Workplace requirements set forth in Council Policy 100-17, which is incorporated into the Contract by this reference.

9.1.2 Contractor Certification for Americans with Disabilities Act (ADA) and State Access Laws and Regulations: Contractor shall comply with all accessibility requirements under the ADA and under Title 24 of the California Code of Regulations (Title 24). When a conflict exists between the ADA and Title 24, Contractor shall comply with the most restrictive requirement (i.e., that which provides the most access). Contractor also shall comply with the City's ADA Compliance/City Contractors requirements as set forth in Council Policy 100-04, which is incorporated into this Contract by reference. Contractor warrants and certifies compliance with all federal and state access laws and regulations and further certifies that any subcontract agreement for this contract contains language which indicates the subcontractor's agreement to abide by the provisions of the City's Council Policy and any applicable access laws and regulations.

9.1.3 Non-Discrimination Requirements.

9.1.3.1 Compliance with City's Equal Opportunity Contracting Program (EOCP). Contractor shall comply with City's EOCP Requirements. Contractor shall not discriminate against any employee or applicant for employment on any basis prohibited by law. Contractor shall provide equal opportunity in all employment practices. Prime Contractors shall ensure that their subcontractors comply with this program. Nothing in this Section shall be interpreted to hold a Prime Contractor liable for any discriminatory practice of its subcontractors.

9.1.3.2 Non-Discrimination Ordinance. Contractor shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring or treatment of

subcontractors, vendors or suppliers. Contractor shall provide equal opportunity for subcontractors to participate in subcontracting opportunities. Contractor understands and agrees that violation of this clause shall be considered a material breach of the Contract and may result in Contract termination, debarment, or other sanctions. Contractor shall ensure that this language is included in contracts between Contractor and any subcontractors, vendors and suppliers.

9.1.3.3 Compliance Investigations. Upon City's request, Contractor agrees to provide to City, within sixty calendar days, a truthful and complete list of the names of all subcontractors, vendors, and suppliers that Contractor has used in the past five years on any of its contracts that were undertaken within San Diego County, including the total dollar amount paid by Contractor for each subcontract or supply contract. Contractor further agrees to fully cooperate in any investigation conducted by City pursuant to City's Nondiscrimination in Contracting Ordinance. Contractor understands and agrees that violation of this clause shall be considered a material breach of the Contract and may result in Contract termination, debarment, and other sanctions.

9.1.4 Equal Benefits Ordinance Certification. Unless an exception applies, Contractor shall comply with the Equal Benefits Ordinance (EBO) codified in the San Diego Municipal Code (SDMC). Failure to maintain equal benefits is a material breach of the Contract.

9.1.5 Contractor Standards. Contractor shall comply with Contractor Standards provisions codified in the SDMC. Contractor understands and agrees that violation of Contractor Standards may be considered a material breach of the Contract and may result in Contract termination, debarment, and other sanctions.

9.1.6 Noise Abatement. Contractor shall operate, conduct, or construct without violating the City's Noise Abatement Ordinance codified in the SDMC.

9.1.7 Storm Water Pollution Prevention Program. Contractor shall comply with the City's Storm Water Management and Discharge Control provisions codified in Division 3 of Chapter 4 of the SDMC, as may be amended, and any and all applicable Best Management Practice guidelines and pollution elimination requirements in performing or delivering services at City owned, leased, or managed property, or in performance of services and activities on behalf of City regardless of location.

Contractor shall comply with the City's Jurisdictional Urban Runoff Management Plan encompassing Citywide programs and activities designed to prevent and reduce storm water pollution within City boundaries as adopted by the City Council on January 22, 2008, via Resolution No. 303351, as may be amended.

Contractor shall comply with each City facility or work site's Storm Water Pollution Prevention Plan, as applicable, and institute all controls needed while completing the services to minimize any negative impact to the storm water collection system and environment.

9.1.8 Service Worker Retention Ordinance. If applicable, Contractor shall comply with the Service Worker Retention Ordinance (SWRO) codified in the SDMC.

9.1.9 Product Endorsement. Contractor shall comply with Council Policy 000-41 concerning product endorsement which requires that any advertisement referring to City as a user of a good or service will require the prior written approval of the Mayor.

9.1.10 Business Tax Certificate. Unless the City Treasurer determines in writing that a contractor is exempt from the payment of business tax, any contractor doing business with the City of San Diego is required to obtain a Business Tax Certificate (BTC) and to provide a copy of its BTC to the City before a Contract is executed.

9.1.11 Equal Pay Ordinance. Unless an exception applies, Contractor shall comply with the Equal Pay Ordinance codified in San Diego Municipal Code sections 22.4801 through 22.4809. Contractor shall certify in writing that it will comply with the requirements of the Equal Pay Ordinance throughout the duration of the Contract.

9.1.11.1 Contractor and Subcontract Requirement. The Equal Pay Ordinance applies to any subcontractor who performs work on behalf of a Contractor to the same extent as it would apply to that Contractor. Contractor shall require subcontractors performing work for contractor under their contract with the City to certify compliance with the Equal Pay Ordinance in their written subcontracts.

9.1.11.2 Notice Requirement. Contractor must post a notice informing its employees of their rights under the Equal Pay Ordinance in their workplace or job site.

ARTICLE X
CONFLICT OF INTEREST AND VIOLATIONS OF LAW

10.1 Conflict of Interest Laws. Contractor is subject to all federal, state and local conflict of interest laws, regulations, and policies applicable to public contracts and procurement practices including, but not limited to, California Government Code sections 1090, *et. seq.* and 81000, *et. seq.*, and the Ethics Ordinance, codified in the SDMC. City may determine that Contractor must complete one or more statements of economic interest disclosing relevant financial interests. Upon City's request, Contractor shall submit the necessary documents to City.

10.2 Contractor's Responsibility for Employees and Agents. Contractor is required to establish and make known to its employees and agents appropriate safeguards to prohibit employees from using their positions for a purpose that is, or that gives the appearance of being, motivated by the desire for private gain for themselves or others, particularly those with whom they have family, business or other relationships.

10.3 Contractor's Financial or Organizational Interests. In connection with any task, Contractor shall not recommend or specify any product, supplier, or contractor with whom

Contractor has a direct or indirect financial or organizational interest or relationship that would violate conflict of interest laws, regulations, or policies.

10.4 Certification of Non-Collusion. Contractor certifies that: (1) Contractor's bid or proposal was not made in the interest of or on behalf of any person, firm, or corporation not identified; (2) Contractor did not directly or indirectly induce or solicit any other bidder or proposer to put in a sham bid or proposal; (3) Contractor did not directly or indirectly induce or solicit any other person, firm or corporation to refrain from bidding; and (4) Contractor did not seek by collusion to secure any advantage over the other bidders or proposers.

10.5 Hiring City Employees. This Contract shall be unilaterally and immediately terminated by City if Contractor employs an individual who within the twelve (12) months immediately preceding such employment did in his/her capacity as a City officer or employee participate in negotiations with or otherwise have an influence on the selection of Contractor.

ARTICLE XI
DISPUTE RESOLUTION

11.1 Mediation. If a dispute arises out of or relates to this Contract and cannot be settled through normal contract negotiations, Contractor and City shall use mandatory non-binding mediation before having recourse in a court of law.

11.2 Selection of Mediator. A single mediator that is acceptable to both parties shall be used to mediate the dispute. The mediator will be knowledgeable in the subject matter of this Contract, if possible.

11.3 Expenses. The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator, and the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the parties, unless they agree otherwise.

11.4 Conduct of Mediation Sessions. Mediation hearings will be conducted in an informal manner and discovery will not be allowed. The discussions, statements, writings and admissions will be confidential to the proceedings (pursuant to California Evidence Code sections 1115 through 1128) and will not be used for any other purpose unless otherwise agreed by the parties in writing. The parties may agree to exchange any information they deem necessary. Both parties shall have a representative attend the mediation who is authorized to settle the dispute, though City's recommendation of settlement may be subject to the approval of the Mayor and City Council. Either party may have attorneys, witnesses or experts present.

11.5 Mediation Results. Any agreements resulting from mediation shall be memorialized in writing. The results of the mediation shall not be final or binding unless otherwise agreed to in writing by the parties. Mediators shall not be subject to any subpoena or liability, and their actions shall not be subject to discovery.

ARTICLE XII
MANDATORY ASSISTANCE

12.1 Mandatory Assistance. If a third party dispute or litigation, or both, arises out of, or relates in any way to the services provided to the City under a Contract, Contractor , its agents, officers, and employees agree to assist in resolving the dispute or litigation upon City's request. Contractor's assistance includes, but is not limited to, providing professional consultations, attending mediations, arbitrations, depositions, trials or any event related to the dispute resolution and/or litigation.

12.2 Compensation for Mandatory Assistance. City will compensate Contractor for fees incurred for providing Mandatory Assistance. If, however, the fees incurred for the Mandatory Assistance are determined, through resolution of the third party dispute or litigation, or both, to be attributable in whole, or in part, to the acts or omissions of Contractor, its agents, officers, and employees, Contractor shall reimburse City for all fees paid to Contractor, its agents, officers, and employees for Mandatory Assistance.

12.3 Attorneys' Fees Related to Mandatory Assistance. In providing City with dispute or litigation assistance, Contractor or its agents, officers, and employees may incur expenses and/or costs. Contractor agrees that any attorney fees it may incur as a result of assistance provided under Section 12.2 are not reimbursable.

ARTICLE XIII
MISCELLANEOUS

13.1 Headings. All headings are for convenience only and shall not affect the interpretation of this Contract.

13.2 Non-Assignment. Contractor may not assign the obligations under this Contract, whether by express assignment or by sale of the company, nor any monies due or to become due under this Contract, without City's prior written approval. Any assignment in violation of this paragraph shall constitute a default and is grounds for termination of this Contract at the City's sole discretion. In no event shall any putative assignment create a contractual relationship between City and any putative assignee.

13.3 Independent Contractors. Contractor and any subcontractors employed by Contractor are independent contractors and not agents of City. Any provisions of this Contract that may appear to give City any right to direct Contractor concerning the details of performing or providing the goods and/or services, or to exercise any control over performance of the Contract, shall mean only that Contractor shall follow the direction of City concerning the end results of the performance.

13.4 Subcontractors. All persons assigned to perform any work related to this Contract, including any subcontractors, are deemed to be employees of Contractor, and Contractor shall be directly responsible for their work.

13.5 Covenants and Conditions. All provisions of this Contract expressed as either covenants or conditions on the part of City or Contractor shall be deemed to be both covenants and conditions.

13.6 Compliance with Controlling Law. Contractor shall comply with all applicable local, state, and federal laws, regulations, and policies. Contractor's act or omission in violation of applicable local, state, and federal laws, regulations, and policies is grounds for contract termination. In addition to all other remedies or damages allowed by law, Contractor is liable to City for all damages, including costs for substitute performance, sustained as a result of the violation. In addition, Contractor may be subject to suspension, debarment, or both.

13.7 Governing Law. The Contract shall be deemed to be made under, construed in accordance with, and governed by the laws of the State of California without regard to the conflicts or choice of law provisions thereof.

13.8 Venue. The venue for any suit concerning solicitations or the Contract, the interpretation of application of any of its terms and conditions, or any related disputes shall be in the County of San Diego, State of California.

13.9 Successors in Interest. This Contract and all rights and obligations created by this Contract shall be in force and effect whether or not any parties to the Contract have been succeeded by another entity, and all rights and obligations created by this Contract shall be vested and binding on any party's successor in interest.

13.10 No Waiver. No failure of either City or Contractor to insist upon the strict performance by the other of any covenant, term or condition of this Contract, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this Contract, shall constitute a waiver of any such breach of such covenant, term or condition. No waiver of any breach shall affect or alter this Contract, and each and every covenant, condition, and term hereof shall continue in full force and effect without respect to any existing or subsequent breach.

13.11 Severability. The unenforceability, invalidity, or illegality of any provision of this Contract shall not render any other provision of this Contract unenforceable, invalid, or illegal.

13.12 Drafting Ambiguities. The parties acknowledge that they have the right to be advised by legal counsel with respect to the negotiations, terms and conditions of this Contract, and the decision of whether to seek advice of legal counsel with respect to this Contract is the sole responsibility of each party. This Contract shall not be construed in favor of or against either party by reason of the extent to which each party participated in the drafting of the Contract.

13.13 Amendments. Neither this Contract nor any provision hereof may be changed, modified, amended or waived except by a written agreement executed by duly authorized representatives of City and Contractor. Any alleged oral amendments have no force or effect. The Purchasing Agent must sign all Contract amendments.

13.14 Conflicts Between Terms. If this Contract conflicts with an applicable local, state, or federal law, regulation, or court order, applicable local, state, or federal law, regulation, or court order shall control. Varying degrees of stringency among the main body of this Contract, the exhibits or attachments, and laws, regulations, or orders are not deemed conflicts, and the most stringent requirement shall control. Each party shall notify the other immediately upon the identification of any apparent conflict or inconsistency concerning this Contract.

13.15 Survival of Obligations. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with this Contract, as well as all continuing obligations indicated in this Contract, shall survive, completion and acceptance of performance and termination, expiration or completion of the Contract.

13.16 Confidentiality of Services. All services performed by Contractor, and any sub-contractor(s) if applicable, including but not limited to all drafts, data, information, correspondence, proposals, reports of any nature, estimates compiled or composed by Contractor, are for the sole use of City, its agents, and employees. Neither the documents nor their contents shall be released by Contractor or any subcontractor to any third party without the prior written consent of City. This provision does not apply to information that: (1) was publicly known, or otherwise known to Contractor, at the time it was disclosed to Contractor by City; (2) subsequently becomes publicly known through no act or omission of Contractor; or (3) otherwise becomes known to Contractor other than through disclosure by City.

13.17 Insolvency. If Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the Contract, written notification of the bankruptcy to the Purchasing Agent and the Contract Administrator responsible for administering the Contract. This notification shall be furnished within five (5) days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of City contract numbers and contracting offices for all City contracts against which final payment has not been made. This obligation remains in effect until final payment is made under this Contract.

13.18 No Third Party Beneficiaries. Except as may be specifically set forth in this Contract, none of the provisions of this Contract are intended to benefit any third party not specifically referenced herein. No party other than City and Contractor shall have the right to enforce any of the provisions of this Contract.

13.19 Actions of City in its Governmental Capacity. Nothing in this Contract shall be interpreted as limiting the rights and obligations of City in its governmental or regulatory capacity.

EXHIBIT D

WAGE REQUIREMENTS: SERVICE AND MAINTENANCE CONTRACTS EXECUTED ON OR AFTER JANUARY 1, 2015

By signing this Contract, Bidder certifies that he or she is aware of the wage provisions described herein and shall comply with such provisions before commencing services.

A. PREVAILING WAGES. Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding $25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding $15,000, Bidder and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below. This requirement is in addition to the requirement to pay Living Wage pursuant to San Diego Municipal Code Chapter 2, Article 2, Division 42. Bidder must determine which per diem rate is highest for each classification of work (i.e. Prevailing Wage Rate or Living Wage Rate), and pay the highest of the two rates to their employees. Living Wage applies to workers who are not subject to Prevailing Wage Rates.

1. Compliance with Prevailing Wage Requirements. Pursuant to sections 1720 through 1861 of the California Labor Code, Bidder and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.

1.1. Copies of such prevailing rate of per diem wages are on file at the City of San Diego's Equal Opportunity Contracting Department and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm. Bidder and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.

1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date

of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.

2. Penalties for Violations. Bidder and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed. This shall be in addition to any other applicable penalties allowed under Labor Code sections 1720 – 1861.

3. Payroll Records. Bidder and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Bidder shall require its subcontractors to also comply with section 1776. Bidder and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Bidder is responsible for ensuring its subcontractors submit certified payroll records to the City. Bidder and its subcontractors shall also furnish the records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required in Labor Code section 1771.4.

4. Apprentices. Bidder and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Bidder shall be held responsible for their compliance as well as the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.

5. Working Hours. Bidder and its subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of $25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections1810 through 1815.

6. Required Provisions for Subcontracts. Bidder shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.

7. Labor Code Section 1861 Certification. Bidder in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Bidder certifies that "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract."

8. Labor Compliance Program. The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when

payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Equal Opportunity Contracting Department at 619-236-6000.

9. Contractor and Subcontractor Registration Requirements. This project is subject to compliance monitoring and enforcement by the DIR. A Bidder or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or enter into any contract for public work, as defined in this chapter of the Labor Code unless currently registered and qualified to perform the work pursuant to Section 1725.5. In accordance with Labor Code section 1771.1(a), "[i]t is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded."

9.1. A Bidder's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in a response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered contractor pursuant to Public Contract Code section 4107.

9.2. A Contract entered into with any Bidder or subcontractor in violation of Labor Code section 1771.1(a) shall be subject to cancellation, provided that a Contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, Bidder, or any subcontractor to comply with the requirements of section 1725.5 of this section.

9.3. By submitting a bid or proposal to the City, Bidder is certifying that he or she has verified that all subcontractors used on this public works project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Bidder shall provide proof of registration for themselves and all listed subcontractors to the City at the time of bid or proposal due date or upon request.

10. Stop Order. For Bidder or its subcontractor(s) engaging in the performance of any public work contract without having been registered in violation of Labor Code sections 1725.5 or 1771.1, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered Bidder or unregistered subcontractor(s) on ALL public works until the unregistered Bidder or unregistered subcontractor(s) is registered. Failure to observe a stop order is a misdemeanor.

11. List of all Subcontractors. The City may ask Bidder for the most current list of subcontractors (regardless of tier), along with their DIR registration numbers,

utilized on this contract at any time during performance of this contract, and Bidder shall provide the list within ten (10) working days of the City's request. Additionally, Bidder shall provide the City with a complete list of all subcontractors utilized on this contract (regardless of tier), within ten working days of the completion of the contract, along with their DIR registration numbers. The City shall withhold final payment to Bidder until at least 30 days after this information is provided to the City.

12. Exemptions for Small Projects. There are limited exemptions for installation, alteration, demolition, or repair work done on projects of $25,000 or less. The Bidder shall still comply with Labor Code sections 1720 et. seq. The only recognized exemptions are listed below:

12.1. Registration. The Bidder will not be required to register with the DIR for small projects. (Labor Code section 1771.1).

12.2. Certified Payroll Records. The records required in Labor Code section 1776 shall be required to be kept and submitted to the City of San Diego, but will not be required to be submitted online with the DIR directly. The Bidder will need to keep those records for at least three years following the completion of the contract. (Labor Code section 1771.4).

12.3. List of all Subcontractors. The Bidder shall not be required to hire only registered subcontractors and is exempt from submitting the list of all subcontractors that is required in section 11 above. (Labor Code section 1773.3).

B. Living Wages. This Contract is subject to the City's Living Wage Ordinance (LWO), codified in San Diego Municipal Code Chapter 2, Article 2, Division 42. Bidder agrees to require all of its subcontractors, sublessees, and concessionaires subject to the LWO to comply with the LWO and all applicable regulations and rules.

1. Payment of Living Wages. Pursuant to San Diego Municipal Code section 22.4220(a), Bidder and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the required minimum hourly wage rates and health benefits rate unless an exemption applies.

1.1 Copies of such living wage rates are available on the City website at https://www.sandiego.gov/purchasing/programs/livingwage/. Bidder and its subcontractors shall post a notice informing workers of their rights at each job site or a site frequently accessed by covered employees in a prominent and accessible place in accordance with San Diego Municipal Code section 22.4225(e).

1.2 LWO wage and health benefit rates are adjusted annually in accordance with San Diego Municipal Code section 22.4220(b) to reflect the Consumer Price Index. Service contracts, financial assistance agreements, and City facilities agreements must include this upward adjustment of wage rates to covered employees on July 1 of each year.

2. Compensated Leave. Pursuant to San Diego Municipal Code section 22.4220(c), Bidder and its subcontractors shall provide a minimum of eighty (80)

hours per year of compensated leave. Part-time employees must accrue compensated leave at a rate proportional to full-time employees.

3. **Uncompensated Leave.** Bidder and its subcontractors must also permit workers to take a minimum of eighty (80) hours of uncompensated leave per year to be used for the illness of the worker or a member of his or her immediate family when the worker has exhausted all accrued compensated leave.

4. **Enforcement and Remedies**. City will take any one or more of the actions listed in San Diego Municipal Code section 22.4230 should Bidder or its subcontractors are found to be in violation of any of the provisions of the LWO.

5. **Payroll Records.** Bidder and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Bidder is responsible for ensuring its subcontractors submit certified payroll records to the City.

5.1 For contracts subject to both living wage and prevailing wage requirements, only one submittal will be required. Submittals by a Bidder and all subcontractors must comply with both ordinance requirements.

6. **Certification of Compliance**. San Diego Municipal Code section 22.4225 requires each Bidder to fill out and file a living wage certification with the Living Wage Program Manager within thirty (30) days of Award of the Contract.

7. **Annual Compliance Report**. Bidder and its subcontractors must file an annual report documenting compliance with the LWO pursuant to San Diego Municipal Code section 22.4225(d). Records documenting compliance must be maintained for a minimum of three (3) years after the City's final payment on the service contract or agreement.

8. **Exemption from Living Wage Ordinance.** Pursuant to San Diego Municipal Code section 22.4215, this Contract may be exempt from the LWO. For a determination on this exemption, Bidder must complete the Living Wage Ordinance Application for Exemption.

C. **Highest Wage Rate Applies.** Bidder is required to pay the highest applicable wage rate where more than one wage rate applies.

CITY OF SAN DIEGO

PURCHASING & CONTRACTING DEPARTMENT
1200 Third Avenue, Suite 200
San Diego, CA 92101-4195
Fax: (619) 236-5904

ADDENDUM A

Invitation to Bid (ITB) 10089637-20-W

Closing Date: February 13, 2020 @ 3:00 p.m.

Bid for furnishing the City of San Diego with **PLWTP Digesters C1 and C2 and MBC Tank 17 Cleaning.**

The following changes to the specifications are hereby made effective as though they were originally shown and/or written:

1. *Remove* the original cover sheet and *replace* with the attached Addendum A cover sheet.

2. *Remove* the original ITB, Signature Page (pg 3 of 9) and *replace* with the attached Addendum A, Signature Page.

3. *Remove* the original ITB, Exhibit B, Scope of Work and *replace* with the attached Exhibit B, Scope of Work. (NOTE: Paragaraph added to Section A (page 1), Section F, Part 16 (page 6) added, and Section LL, Performance Bond has been removed)

4. *Add* two (2) pages "Attachment C - C1/C2 Digester Sludge chemistry (TEST DATA) for December 2019". (**NOTE:** The attachment is provided for informational purposes.)

5. *Add one* (1) page "Attachment D – Flexible Spools".

6. *Add* four (4) pages "Questions and Answers". (**NOTE:** The questions and answers are being provided for informational purposes only, and are not part of any resulting contract from this ITB.)

CITY OF SAN DIEGO PURCHASING & CONTRACTING DEPARTMENT

Mchael Warner

Michael Warner
Senior Procurement Contracting Officer
(619) 236-6154

Januray 31, 2020

C1P

Date	pH	Total Solids (%)	Volatile Solids (%)	Alkal-inity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
01	*	*	*	*	*	*	*	*
02	*	*	*	*	*	*	*	*
03	*	*	*	*	*	*	*	*
04	*	*	*	*	*	*	*	*
05	*	*	*	*	*	*	*	*
06	*	*	*	*	*	*	*	*
07	*	*	*	*	*	*	*	*
08	*	*	*	*	*	*	*	*
09	7.19	2.2	63.5	2500	113	*	*	*
10	7.09	2.2	62.2	*	*	60.8	39.0	*
11	7.17	2.3	62.5	2500	119	*	*	*
12	7.13	2.2	61.2	*	*	62.7	36.7	*
13	7.12	2.3	60.2	2520	97	*	*	*
14	*	*	*	*	*	*	*	*
15	*	*	*	*	*	*	*	*
16	7.52	2.1	60.3	2390	96	*	*	*
17	7.13	2.0	62.0	*	*	62.4	37.1	*
18	7.28	2.1	62.5	2440	96	*	*	*
19	7.06	2.2	63.0	*	*	61.7	38.1	32
20	7.08	2.7	55.1	2380	96	*	*	*
21	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*
23	7.32	2.4	58.9	2270	77	*	*	28
24	6.94	3.0	57.1	*	*	61.6	38.2	26
25	*	*	*	*	*	*	*	*
26	7.01	3.5	52.7	*	*	62.7	36.8	24
27	7.15	2.2	59.8	2290	67	*	*	*
28	*	*	*	*	*	*	*	*
29	*	*	*	*	*	*	*	*
30	7.07	2.3	60.7	2350	87	*	*	22
31	7.00	2.2	61.0	*	*	61.7	38.1	24
Average:	7.14	2.4	60.2	2404	94	61.9	37.7	26

C2P

Date	pH	Total Solids (%)	Volatile Solids (%)	Alkal-inity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
01	*	*	*	*	*	*	*	*
02	7.02	2.8	45.2	2130	84	*	*	16
03	6.96	1.3	45.1	*	*	62.1	37.7	20
04	7.34	2.4	59.0	2240	77	*	*	*
05	7.38	1.9	55.8	*	*	61.8	37.4	20
06	7.20	2.4	62.9	2300	76	*	*	*
07	*	*	*	*	*	*	*	*
08	*	*	*	*	*	*	*	*
09	7.22	2.4	59.2	2290	72	*	*	24
10	6.94	2.3	61.9	*	*	61.5	38.3	24
11	7.05	2.3	58.7	2390	82	*	*	*
12	7.39	2.3	58.8	*	*	62.6	36.9	28
13	7.08	2.3	60.2	2360	91	*	*	*
14	*	*	*	*	*	*	*	*
15	*	*	*	*	*	*	*	*
16	7.12	2.2	58.8	2510	94	*	*	30
17	7.49	2.2	60.6	*	*	62.1	37.4	30
18	6.99	2.2	60.7	2420	86	*	*	*
19	7.02	2.2	62.3	*	*	61.5	38.4	*
20	7.07	2.3	60.8	2310	93	*	*	*
21	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*
23	7.11	2.7	51.5	2370	79	*	*	*
24	6.99	2.3	60.0	*	*	61.9	37.9	*
25	*	*	*	*	*	*	*	*
26	7.05	1.1	39.9	*	*	62.5	37.1	*
27	7.05	2.3	59.1	2340	77	*	*	*
28	*	*	*	*	*	*	*	*
29	*	*	*	*	*	*	*	*
30	7.32	2.4	59.1	2460	77	*	*	*
31	6.86	2.3	59.8	*	*	61.9	37.9	*
Average:	7.13	2.2	57.1	2343	82	62.0	37.7	


Replacement Part

ITB 10089637-20-W, PLWTP Digesters C1 and C2 and MBC Tank 17 Cleaning Questions and Answers

Question 1: What is the engineered estimate?

Response: The City doesn't have an estimated Contract value.

Question 2: What is the anticipated start date for the project?

Response: Based on our estimate, the anticipated start date would be in June 2020.

Question 3: What was the starting volume of cleaning of Digester S1 in 2016?

Response: Digester S1 is not part of this project. The Scope of Work provides estimates for this project.

Question 4: What was the starting volume of cleaning of Digester S2 in 2016?

Response: Digester S2 is not part of this project. The Scope of Work provides estimates for this project.

Question 5: What was the starting volume of cleaning of Digester #7 in 2016?

Response: Digester #7 is not part of this project. The Scope of Work provides estimates for this project.

Question 6: What was the number of truck loads removed from S1?

Response: Data is not available. Digester S1 is not part of this project.

Question 7: What was the number of truck loads removed from Digester S2?

Response: Data is not available. Digester S2 is not part of this project.

Question 8: What was the number of truck loads removed from Digester 7?

Response: Data is not available. Digester 7 is not part of this project.

Question 9: How many days did it take to remove and dewater solids from Digester S1?

Response: Data is not available. Digester S1 is not part of this project.

Question 10: How many days did it take to remove and dewater solids from Digester S2?

Response: Data is not available. Digester S2 is not part of this project.

Question 11: How many days did it take to remove and dewater solids from Digester 7?

Response: Data is not available. Digester 7 is not part of this project.

Addendum A
January 31, 2020

Question 12: Was any scaffolding required in any of the 3 digesters from 2016? If so, which one(s)?

Response: Scaffolding was not required for the cleaning portion of the project.

Question 13: Was any hydro blasting, beyond W2 water pressure, required for any of the digester cleanings in 2016?

Response: The City does not dictate the method of digester cleaning so long as the digesters/tanks are free from solids and stains at the end of the project.

Question 14: If hydro blasting is needed, please specify what PSI is required to meet the hydro-blast requirements?

Response: The City does not dictate the method of digester cleaning so long as the digesters/tanks are free from solids and stains at the end of the project.

Question 15: Were there any issues with complete" vivianite removal from the all three digester cleanings in 2016? If so, what were they?"

Response: The City is not aware of any issues.

Question 16: What is the pressure of the W2 Industrial water?

Response: Flow rates are covered in the Scope of Work.

Question 17: What company did the painting and coating of the guns?

Response: MP Environmental Services Inc

Question 18: Were there any odor issues that required management in the 2016 digester cleanings?

Response: The City is not aware of any issues.

Question 19: Will digesters C1 and C2 be available back to back?

Response: The schedule is covered in the Scope of Work.

Question 20: How long was the delay between digesters S1, S2 and #7 in the 2016 project?

Response: Data is not available. Digesters S1, S2 and #7 are not part of this project.

Question 21: Were there any issues with hairballs in cleaning digesters S1, S2, & 7 in 2016?

Response: Digesters S1, S2, and 7 are not part of this project.

Question 22: Do the digester cupolas need to be painted and coated?

Response: Yes.

Question 23: Amercoat 395 is no longer manufactured and was discontinued before the 2016 project. What product did the contractor use in 2016 for painting and coating that was acceptable?

Response: Contractor should use an equal/equivalent product.

Question 24: How were the guns transported off site in 2016?

Response: By truck.

Question 25: In Exhibit B, Scope of Work, Item Z Compensation of Services it states, Total billing will be based on the actual volume in gallons removed from the digester or tank." Later in the same item it states, "The monthly billing shall be based on the actual loads hauled as supported by weigh tickets.....of the load." Can you please clarify how monthly billing will be determined by truck loads when the bid amount is strictly by the volume of gallons in the digesters?"

Response: The Contractor will be compensated based on the volume of solids to be removed (Per gallon). The monthly progress billing will be processed based on number of truck loads and/or weigh tickets to back-up the disposal. The City wants to make sure that solids are properly disposed of.

Question 26: In Exhibit B, Scope of Work, Item LL Performance Bond, 2. Guarantee of Good Faith, it states the bidder shall include a 100% Bid Bond with their Bid. Typically Bid Bonds are ten percent (10%) of the bid amount. Would the City consider revising this to make the Bid Bond 10%?

Response: Section LL (Performance Bond) has been deleted from Exhibit B, Scope of Work. Bond requirements can be found under the City's General Contract Terms and Provisions (Exhibit C), Article VIII, Bonds.

Question 27: Has Holding Tank 17 ever been cleaned? If so, when?

Response: No record is available.

Question 28: In Exhibit D it states Bidder must determine which per diem rate is highest for each classification of work (i.e. Prevailing Wage Rate or Living Wage Rate), and pay the highest of the two rates to their employees. Living Wage applies to workers who are not subject to Prevailing Wage Rates.". On the last contract for the digester cleaning did the contractor use Prevailing Wage Rates or did they use Living Wage Rates? If Prevailing Wage Rates were used, what classification of work was used for each employee on site?"

Response: The City does not provide specific labor categories for prevailing wage requirements. Contractors are responsible for ensuring the correct category is selected per DIR requirements, or seek guidance directly from the DIR.

Question 29: Were there any issues with guns being stuck in any of the digesters during the 2016 cleaning project?

Response: No record is available. The City is not aware of any issues.

Question 30: Should any cleaning work of guns be completed off of the Point Loma Treatment Plant site, are prevailing wages required to be paid?

Response: The project is subject to Prevailing Wage regardless of where the guns are cleaned.

Question 31: Where were the solids disposed of the for the Point Loma digesters in 2016 and the last cleaning at MBC 2017?

Response: Otay Landfill.

Question 32: In Exhibit B - Scope of Work, F: Digester Cleaning, Item 15 it states the entire mixing gun(s) shall be recoated. Does this included the inside of the mixing gun or jut all of the exterior of mixing gun(s)?

Response: Only the exterior of the guns need to be coated. The lids need to be coated front and back.

Question 33: Per FOIA who was the incumbent (company name) that provided this service last and when was the last time (date) digesters were dewatered and cleaned?

Response: The most recent Contract for this type of service was awarded to MP Environmental Services Inc. C1 was last cleaned in 2010, and C2 was last cleaned in 2014.

Question 34: Per FOIA please provide latest (incumbent) contract pricing for this service.

Response: There is no current contract, therefore no incumbent. The last two bids were for other digester tanks, not the specific tanks that are included in the bid.

Question 35: What was the volume of material (liquid and solids) removed from the digesters the last time they were cleaned?

Response: Approximately one (1) million gallons.

CITY OF SAN DIEGO

PURCHASING & CONTRACTING DEPARTMENT
1200 Third Avenue, Suite 200
San Diego, CA 92101-4195
Fax: (619) 236-5904

ADDENDUM B

Invitation to Bid (ITB) 10089637-20-W

Closing Date: February 21, 2020 @ 3:00 p.m.

Bid for furnishing the City of San Diego with **PLWTP Digesters C1 and C2 and MBC Tank 17 Cleaning.**

The following changes to the specifications are hereby made effective as though they were originally shown and/or written:

1. *Remove* the Addendum A cover sheet and *replace* with the attached Addendum B cover sheet. (**NOTE:** Bid due date has changed from February 13, 2020 to February 21, 2020.)

2. *Remove* the Addendum A, Signature Page (pg 3 of 9) and *replace* with the attached Addendum B, Signature Page.

3. *Remove* the original Exhibit A, Instructions and Bid Requirements, page 5 of 9 and *replace* with the attached Addendum B, Exhibit A, Instructions and Bid Requirements, page 5 of 9. (NOTE: Section 2.10 (Guarantee of Good Faith) has been removed)

4. *Add* one (1) page "Attachment A - San Diego Air Pollution Control Rule 51" (**NOTE:** The attachment is provided for informational purposes.)

5. *Add* seventy-three (73) pages "Attachment B - Storm Water Pollution Prevention Plan (SWPPP) for the E. W. Blom Pt. Loma Wastewater Treatment Plant" (**NOTE:** The attachment is provided for informational purposes.)

6. *Add* thirty-one (31) pages "Attachment C - Storm Water Pollution Prevention Plan (SWPPP) for the the Metro Biosolids Center" (**NOTE:** The attachment is provided for informational purposes.)

7. *Add* two (2) pages "Attachment D - APCD2015-PTO-002381" (**NOTE:** The attachment is provided for informational purposes.)

8. *Add* one (1) page "Attachment E – Pipe Spool" (**NOTE:** The attachment is provided for informational purposes.)

9. *Add* two (2) pages "Attachment F – Piping Components Spec" (**NOTE:** The attachment is provided for informational purposes.)

10. *Add* five (5) pages "Attachment G – SS Pipe Spec" (**NOTE:** The attachment is provided for informational purposes.)

11. *Add* six (6) pages "Questions and Answers". (**NOTE:** The questions and answers are being provided for informational purposes only, and are not part of any resulting contract from this ITB.)

CITY OF SAN DIEGO PURCHASING & CONTRACTING DEPARTMENT

Mchael Warner

Michael Warner
Senior Procurement Contracting Officer
(619) 236-6154

February 7, 2020

RULE 50.1. NSPS AND NESHAPS VISIBLE EMISSIONS REQUIREMENTS (Effective 11/8/76)

A person owning or operating any source subject to the provisions of any federal New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAPS) which has been delegated to the Air Pollution Control District of San Diego County must, in addition to complying with Rule 50, comply with Regulation X or Regulation XI, respectively.

RULE 51. NUISANCE

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations in the growing of crops or raising of fowls or animals.

The City of SAN DIEGO

PUBLIC UTILITIES DEPARTMENT

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

for the

E.W. BLOM
Pt. Loma Wastewater Treatment Plant

July 2015
Amended December 21, 2016
Amended July 6, 2017
Amended December 19, 2017
Amended December 20, 2018

Facility Operating Hours
Monday – Friday
05:30 – 15:30
(excluding City holidays)

WDID 9 37I009026

Statement of Certification

I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Electronic signature via SMARTS certification

Thomas Rosales
Assistant Deputy Public Utilities Director

Date

Table of Contents

Tables

Chapter 1 - Introduction

1.1 Purpose of Plan

- This Storm Water Pollution Prevention Plan (SWPPP or Plan) complies with California State Water Resources Control Board Order No. 2014-0057-DWQ, and subsequent amendments, (Industrial General Permit or IGP) which is a general National Pollutant Discharge Elimination System (NPDES) permit regulating storm water associated with industrial activity.
- The IGP requires the facility to implement this plan to preserve and protect the quality of "waters of the United States" and "waters of the State" by reducing or eliminating pollutants in storm water runoff associated with an industrial activity.
- For more information visit the SWRCB website at: http://www.swrcb.ca.gov/water_issues/programs/stormwaterstormwater/industrial.shtml
- Contact the SWRCB/Storm Water Section at 1-866-563-3107.
- For general questions, e-mail the SWRCB/Storm Water Section at: stormwaterstormwater@waterboards.ca.gov.
- Additional requirements and parameters in this plan added pursuant to a 2018 Consent Decree with San Diego Coastkeeper and Coastal Environmental Rights Foundation (CERF).

1.2 Pollution Prevention Team (PPT)

The storm water is outlined in the Table 1 below designating the responsibilities of each assigned staff.

Table 1. Pollution Prevention Team

Position	Responsibility	Assigned Staff
Site Compliance Personnel	Responsible for directing SWPPP	Treatment and Disposal • Facility Superintendent • Senior Wastewater Operations Supervisor • Qualified Industrial Storm Water Practitioner (QISP)
Site Compliance Coordinator	Responsible for site operations; directing performance of site inspections; directing implementation of best management practices	Treatment and Disposal • Process Control Supervisor • Wastewater Operations Supervisor

Position	Responsibility	Assigned Staff
Inspections	Perform monthly dry weather inspections	Treatment and Disposal • Process Control Operators
Monitoring	Responsible for wet weather observations and sample collection	Treatment and Disposal • Process Control Operators
Laboratory Analysis	Responsible for laboratory analyses	Environmental Monitoring and Technical Services (EMTS) Division • Environmental Chemistry Services– Senior Chemist; Alternates- QADM Associate Chemist, Wet Chemistry/Inorganic Group Associate Chemist • Marine Microbiology Laboratories- Marine Micro Biologist III; Alternate- QA Lead
Data Analysis and Reporting	Responsible for data interpretation and reporting to SMARTS	EMTS Division • Data Management and Quality Assurance – Associate Chemist • Permits and Compliance – Assistant Chemist
Compliance Assessment	Assist with roles and responsibilities of implementation of the SWPPP; oversee submittal of annual report	EMTS Division • Permits and Compliance – Senior Chemist, Associate Chemist or Biologist III
Qualified Industrial Storm Water Practitioner (QISP)	Assist in completing the Level 1 status and Level 2 status ERA requirements specified in the IGP. Assist with general IGP compliance, data collection and review.	Treatment & Disposal • Division Engineering-Registered Civil Engineer

*Supervisory staff is responsible for selecting alternate team members should they be required.

1.3 Plan Implementation

Chapter 3 of this SWPPP identifies potential pollutant sources to storm water and authorized non-storm water runoff at the site. It also identifies the best management practices for minimizing the potential for pollution in storm runoff. Additional best management practices must be implemented at the facility, as needed.

1.4 Plan Updates and Revisions

This SWPPP presents up-to-date storm water management strategies for minimizing storm runoff pollution and may be modified at any time by the departmental staff in response to:

- Changes in state or federal storm water regulations or permits
- Requests by EPA, the San Diego Regional Water Quality Control Board (RWQCB) or the SWRCB for modification of the SWPPP
- Implementation of more effective, economical or practical best management practices than those currently identified in the SWPPP
- Significant changes in the facility operations, as well as any changes to discharge points or sample locations.

The SWPPP is a working document and can be updated and revised when necessary. Any revisions to the SWPPP will be reviewed and implemented by the site's pollution prevention team. All changes must include a date and initials. Refer to Appendix L to document changes.

SWPPP revisions must be submitted to the SWRCB via the State's internet based tracking system called SMARTS (Storm Water Multiple Application & Report Tracking System) per the following schedule:

- Significant revisions must be submitted via SMARTS within 30 days.
- Non-significant revisions must be submitted via SMARTS every three (3) months.

It's up to the site to distinguish between significant and non-significant revisions.

Chapter 2 - Site Description

2.1 Facility Overview

The E.W. Blom Point Loma Wastewater Treatment Plant (PLWTP) is located along the Pacific Ocean coastline on the southwestern portion of Point Loma. The plant has a rated average daily flow treatment capacity of 240 million gallons per day (mgd) and provides chemically enhanced primary treatment for approximately 175 mgd of wastewater generated within the 450-square-mile area. The San Diego Metropolitan Sewerage System service area includes the City of San Diego and 15 additional cities and sewer agencies.

Wastewater treatment at the Point Loma plant consists of initial screening, bar screens, grit removal, ferric chloride and polymer addition, sedimentation and clarification. Treated wastewater is discharged to the Pacific Ocean at a depth of over 310 feet via the 4.5-mile-long Point Loma ocean outfall.

Solids removed through the screening and grit removal processes are hauled offsite and disposed in a landfill. Waste solids removed through the sedimentation and clarification processes are directed to on-site anaerobic digesters for stabilization. The solids are then pumped approximately 20 miles to the City of San Diego's Metro Biosolids Center via the facility's sludge pump station for dewatering and disposal to a landfill.

2.2 Process Description

The Point Loma treatment plant site consists of approximately 15 densely developed acres situated at an approximate elevation of 100 feet. The relatively flat developed portion of the site is confined between steep cliffs to the west, which extend downward to the Pacific Ocean and steep slopes of the Point Loma peninsula to the east. The site consists of a central traffic loop bounded by First Street to the west, Third Street to the east, "A" Street to the north, and "C" Street to the south. Treatment and support facilities are located within and surrounding the traffic loop. Key site facilities are described as follows.

Headworks: The plant headworks area consists of rag removal bar screens located north of "A" Street. The bar screens are installed above-grade. Waste solids removed from the bar screens are conveyed via a shaftless screw conveyor into an adjacent closed building where the screenings are dumped into bins. To the south of "A" Street but north of the sedimentation basins are six Parshall flumes that calculate the plant flow rates, six grit removal tanks and a grit processing facility. The grit tanks are covered and below grade and the grit processing facility is above grade in an enclosed building. Runoff or spills from the screening building, bar screens, and other headworks areas are collected in drains which discharge back into the PLWTP system.

Sedimentation Facilities: Twelve sedimentation basins, each topped with removable metal covers, are almost entirely below grade and located within the central traffic loop. The tops of the covered basins are approximately level with Second Street, while the concrete walls of the sedimentation basins extend approximately three feet above grade along First Street. Electric motors, which drive the submerged traveling flights within the basins, are located above grade on the eastern end of the basins along with polymer feed facilities. Electric motors, which extract the raw sludge from the

sedimentation basins collection hoppers, are located below grade, in the main gallery that runs underground on the east side of the basins.

Outfall Structures: Once through the sedimentation basins, wastewater is directed to either the underground north or south effluent outfall channels. The north effluent outfall channel is located at the northwest corner of the PLWTP site. The south effluent outfall channel is constructed entirely below grade. Facilities along the channel include a screening and flow diversion structure located west of sedimentation basin no. 9, and a large below-grade dry well, which houses outfall pipes and throttling valves. The south effluent outfall screening structure drains to a parking area located adjacent to the Central Boiler Facility, which, in turn, drains to an access road.

Solids Handling Facilities: Once extracted from the sedimentation basin hoppers, the raw sludge is pumped through the main pipe gallery to the raw sludge screens located in the top floor of the Fiesta Island Replacement Project (FIRP) pump station located at the south end of Second Street. Once screened, the material is sent to a sludge blending tank where it is mixed with sludge from the other sedimentation tanks. From the blending tank, the sludge is transferred to seven covered 125-foot diameter anaerobic digesters that are located immediately east of Second Street. After digestion, the sludge is sent to the covered 110-foot diameter digester #7 which is also located immediately east of Second Street. All of these processes, are either below grade, covered, or are in a facility.

The digested sludge is then sent from the digester # 7, through the sludge grinders and to the main sludge pumps where the sludge is pumped into the high pressure digested sludge line. This line runs north in the main pipe gallery and then it diverts up on to Third Street, where it runs along the retaining wall on Third Street, past the headworks and continues underground approximately 20 miles to the Metro Biosolids Center. This section of piping on Third Street where the pipe is exposed, drains either to the catch basins along Third Street or into the inlets on Second Street.

Gas Collection System: The digester gas collection system collects the methane gas that is produced by the digestion process. The gas collection header runs buried beneath Third Street. This gas is used primarily by the Gas Utilization/Boiler Facility, secondary usage by the Beneficial Use of Digester Gas Facility, with any remaining gas being burned off by three enclosed waste gas burners.

Gas Utilization Facility (GUF) and Hydroelectric Power: Two power generation facilities are located on-site. The first facility, called the GUF, is located within a building immediately west of sedimentation basin No. 7. It utilizes digester gas to fire two engines for generating power and to provide heat to the digesters along with four boilers which provide additional heat as required. A second on-site hydroelectric power generating facility (hydro) is located west (and below) the north effluent outfall channel; it generates hydroelectric power from the outfall. Power from the GUF and hydro is used on-site with any excess power sold to the local public utility, San Diego Gas & Electric. All buildings referred to in this section are covered facilities.

Beneficial Use of Digester Gas (BUDG) facility: Located at the corner of First Street and Third Street, the privately owned and operated BUDG facility takes the excess gas that is not used by the GUF engines, cleans the gas to natural gas standards, and redirects the gas into the San Diego Gas & Electric gas line. A portion of the digester gas from the above operation vents to a digester/natural

gas fired, enclosed flare. Drainage from this facility is directed down to First Street where it is collected at the inlet to the west of digester 8. The BUDG operator, SCS Energy, is responsible for containing any BUDG spills and for reporting to the plant superintendent and to the Regional Board immediately.

Odor Control Facilities: Eight odor control systems are located on-site. ORS 1, consisting of two identical trains, is located at the headworks of the plant and treats foul air from the headworks, screening building, six aerated grit tanks, Parshall flume, effluent weir structure and grit processing equipment by chemical wet scrubbing combining caustic soda and sodium hypochlorite. ORS 2-5, 7 & 8 are located atop sedimentation basins and treat foul air from the basins by chemical wet scrubbing followed by activated carbon adsorption. ORS 9 is located in the sludge pump station building and treats foul air from screenings area by activated carbon adsorption.

Chemical Storage Facilities: Several chemical storage areas exist on the Point Loma plant. Sodium hypochlorite and caustic soda for the odor control facilities are stored in above-ground tanks, located within a containment site, west of the headworks. One 10,000 gallon above-ground sodium hydroxide (caustic) storage tanks, one caustic mixing tank, and three 15,500 gallon above-ground sodium hypochlorite tanks are located in a paved area enclosed within a 3 to 5-foot-tall retaining wall. Chemicals are delivered to the containment site via delivery trucks. The chemical transfer area is tributary to drains which discharge back into the plant wastewater stream.

A second chemical containment area consists of two 23,000-gallon ferric and one 10,000-gallon ferrous above-ground tanks for ferric/ferrous chloride storage and is located at the intersection of Second Street and "A" Street. Liquid polymer, in mixing tanks within the facility's polymer distribution building located at the intersection of Third, Second and A Streets, is conveyed via pipe to feed facilities which meter the polymer into the sedimentation tanks. Two 10,000-gallon polymer storage tanks are enclosed within a retaining wall on the north side of the polymer building. One 8,400-gallon double wall containment storage tank containing Hydrogen Peroxide is located at the intersection of A and Second street.

Maintenance Facilities: The PLWTP maintenance building is located immediately west of sedimentation basin No. 2. The building houses a machine shop, tools, and welding equipment. Paints, tools, mechanical equipment, and spare parts for the treatment plant are stored in the storeroom building.

Paint Shop: A paint shop is located southwest of the headworks. The enclosed paint spraying booth is located north of the warehouse.

Engineering Facilities: A building that houses the plant's engineering staff is located south of the sedimentation basins and "C" Street.

Operations Building and Visitors' Center: This building houses Operations, Administration and Laboratory personnel; it is located in the northwest corner of the plant site.

2.3 Drainage Systems

The PLWTP site map in Appendix A identifies the location of existing storm drains at this primarily impervious facility. Storm water runoff is collected by various catch basins and inlets throughout the facility and conveyed through four separate storm drain systems and discharged to the Pacific Ocean. Storm water runoff to Storm Drain No. 4 is diverted back to the treatment plant inlet channel. In addition to these storm drains, runoff flows along a lower access road as surface flow both into the ocean and into a catch basin. Storm water from the catch basin is diverted back to the treatment plant inlet channel.

Storm water runoff from the following specific areas at the facility is conveyed back to the plant for treatment and therefore prevented from discharging offsite:

- The Digester Tanks 1 thru 8 and Methane Gas Capture Facilities, including the Northern portion of the Polymer Building/Storage Tanks;
- The Primary Sedimentation Tanks and Odor Control;
- A portion of both Headworks areas;
- The Sludge Pumping Station;
- The Recycling Bin Storage and Wash Area;
- The SCS Plant - Methane Gas Storage and Transfer; and
- The Chemical Unloading and Tank Storage

Descriptions of the storm runoff conveyance systems at this site are presented below.

PLSD1

Storm Drain No. 1 is a 24-inch diameter drain which discharges to the Pacific Ocean, west of the North Operations Building. The discharge from PLSD1 includes run-on transported via culvert from an undeveloped area on the eastern side of the property, some of which is owned by the City of San Diego and some of which is owned by the U.S. Navy.

PLSD2

PLSD2 discharges runoff to the Pacific Ocean through an 18-inch diameter pipe. The discharge is located west of the Warehouse Building. Storm Drain No. 2 collects runoff from paved areas adjacent to the maintenance building and storage building.

PLSD3a

An access road extends downward from First Street to the outfall structures and the hydroelectric facility. Storm runoff flows along the road as surface flow both into the ocean and into a catch basin. Also draining to the access road is a small parking area located adjacent to the Central Boiler Facility and South Effluent Screening Facility. Industrial activity in this area is generally conducted indoors with minimal to no exposure to storm water. An outlet valve can be opened to release the contents of the basin. The facility diverts captured storm water from the catch basin back to the treatment plant inlet channel. A Stormwater Capture Feasibility Study completed in June 2018 found that the "bird bath" catch basin capacity meets and exceeds the 85th percentile 24-hour storm volume. However, upon review by a second consultant the catch basin does not meet the capacity necessary for an 85th percentile 24-hour storm. Overflow or bypass that occurs during sampling events will be sampled.

PLSD3

PLSD3 runoff flows through an 18-inch- diameter pipe and discharges at a 30-inch-diameter outfall pipe southwest of the Gas Utilization Facility cantilevered over the Pacific Ocean. Runoff discharged from PLSD3 is collected in a series of storm drains along the southern portion of First Street and the uppermost portion of the access road leading to the hydroelectric facility.

PLSD4

PLSD4 runoff flows through a 33-inch-diameter drain, which could discharge to the Pacific Ocean from a 36-inch-diameter outfall pipe near where Gatchell Road intersects with First and Second Streets. However, the facility is currently diverting captured storm water from PLSD4 back to the treatment plant inlet channel by using a sump pump during storm events. Runoff that flows into PLSD4 is collected from a series of storm drains along the length of Second Street. Paved areas along Second Street drain to PLSD4, along with the digester area, portions of the Engineering Building area, and BUDG facility. Some non-industrial run-on is collected in the brow ditch on the eastern portion of the property also discharges to PLSD4.

Diversion Structures

Five low flow diversion structures in the facility prevent the flow of storm water or any unanticipated spill with various contaminants or chemicals into the ocean. These structures consist of a valve at each of the four storm drain outlets with five 1,000-gallon basins installed below ground ahead of each valve to contain runoff or future spills which would flow to the basin, be pumped out, and treated at the plant. Storm Drain No. 1. has two separate basins, both of which could flow to PLSD1 if the basins reach capacity. During a storm, if the basins reach capacity, the operations staff will open the valves for storm runoff to flow directly to the ocean and will document such activity. When a spill occurs from BUDG facility that reaches the Diversion Structure, SCS Energy will be responsible for cleanup and report to plant superintendent immediately.

The run-on collected in the brow ditch also discharges to Gatchell Road in front of the guard shack and likely flows offsite or into Storm Drain No. 4.

Chapter 3 – Pollutant Source Assessment

This section presents a list of all industrial activities, materials, and potential pollutant sources at the facility. It also identifies specific pollutants associated with these sources, activities and/or areas that have the potential for spills and leaks, and the pollutant sources that may be exposed to storm water and authorized non-storm water discharges (NSWDs) as required by the IGP.

3.1 List of Industrial Materials

The following industrial materials are present at the site.

- Wastewater
- Sodium Hydroxide (Caustic)
- Sodium Hypochlorite (Bleach)
- Ferrous Chloride
- Ferric Chloride
- Activated Carbon
- Polymer
- Hydrogen Peroxide
- Lubricants
- Sludge (Bio-Solids)
- Grit (85% Inorganics)
- Rags (5% Organics)
- Sludge Screenings
- Diesel Fuel
- Aluminum
- Copper
- Iron-Steel
- Trash: PVC-materials, plastics and metals

The quantity, location, and handling frequency of each material is detailed in Appendix E.

3.2 Description of Potential Pollutant Sources

The table in Appendix F lists industrial areas and activities and their associated industrial materials including material characteristics, associated pollutants, potential exposure pathway, and corresponding drainage area. As noted, some of these activities and associated materials could potentially contribute pollutants to storm water runoff; however, a significant portion of the facility is either covered or the storm water is contained and drains to the sanitary sewer. Areas that were determined to be non-industrial are not included in this table (e.g. parking lot, office building). See map in Appendix A for further details.

3.3 Spills and Leaks

Appendix G details industrial areas and materials where spills or leaks have the potential to occur, while Appendix H outlines significant spills or leaks that have occurred in the past 5 years.

3.4 Identification of Authorized Non-Storm Water Discharges (NSWDs)

Authorized non-storm water discharges (NSWDs) consist of discharges that do not originate from precipitation events. The IGP provides allowances for specified NSWDs provided they:

- Do not cause erosion;
- Do not carry other pollutants;
- Are not prohibited by the local MS4; and
- Do not require a separate NPDES Permit from the Regional Water Board.

NSWDs into storm drainage systems or waterways, which are not authorized under the IGP and listed in the SWPPP, or authorized under a separate NPDES permit, are prohibited. Authorized NSWDs at this facility are described in Appendix D.

3.5 Receiving Water Body Impairment Assessment

The IGP requires facilities to evaluate whether the receiving waters within the HUC 10 watershed, of which the site is located, are listed for any 303(d) impairments or approved TMDLs. If so, the facility must assess whether industrial pollutants at the site could cause or contribute to exceedances of those parameters.

Runoff leaving this facility discharges directly into the Pacific Ocean. This facility lies in the Mission Beach-Frontal Pacific Ocean HUC 10 Watershed (ID 1807030413). The 303(d) listed impairments for this watershed include: Eutrophic (nutrients), Indicator Bacteria, Lead, Low Dissolved Oxygen, Mercury, Nickel, PAHs (Polycyclic Aromatic Hydrocarbons), PCBs (Polychlorinated biphenyls), Pesticides, Thallium, Toxicity, Trash, and Turbidity.

The facility handles materials that may be exposed to precipitation, which may include the following 303(d) listed pollutants: Nitrate and Nitrite, Ammonia, and Indicator Bacteria. As a result, these pollutants have been added to the list of sampled parameters.

Chapter 4 – Best Management Practices

4.1 Minimum BMPs

The requirements for each minimum BMP as outlined in the IGP are included here. Minimum BMPs will be implemented for additional targeted industrial activities, equipment, and materials as necessary. If any of the required minimum BMPs are applicable but cannot be implemented, an explanation and alternative approach will be provided in the following sections. The minimum BMP section below includes the IGP requirements (italicized bullets) followed by an explanation of how the BMP is addressed within the facility.

As required by the IGP, a summary of all implemented BMPs is included in Appendix I. The schedule for BMP implementation and the requirements for inspection and maintenance are presented in Appendix I.

Good Housekeeping

The following good housekeeping measures are required to be implemented, as feasible, in accordance with the IGP (Section X.H.1.a):

1. *Observe all outdoor areas associated with industrial activity including storm water discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials will be cleaned and disposed of properly;*
2. *Minimize or prevent material tracking;*
3. *Minimize dust generated from industrial materials or activities;*
4. *Ensure that all facility areas impacted by rinse/wash waters are cleaned as soon as possible;*
5. *Cover all stored industrial materials that can be readily mobilized by contact with storm water;*
6. *Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed via by the wind or contact with storm water;*
7. *Prevent disposal of any rinse/wash waters or industrial materials into the storm water conveyance system;*
8. *Minimize storm water discharges from non-industrial areas (e.g., storm water flows from employee parking area) that contact industrial areas of the facility; and*
9. *Minimize authorized NSWDs from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the facility.*

The facility fulfills the above IGP requirements by conducting the following site specific BMPs described below.

- Inspections of the industrial areas, BMPs, and storm water collection system are conducted as needed during the wet season (monthly at a minimum) and monthly during the dry season to identify required maintenance, tracked or leaked materials, debris, or spills. Inspections are logged and kept on-site or electronically; Inspections are logged and kept in Appendix K. (1);
- Storm drain inlets are kept free of sediment, trash and debris (1);
- All facility storm drains are cleared annually of debris (e.g., catch basins, storm drain inlets,

open channels, etc.) (1);
- Any maintenance performed outside is followed by sweeping and cleaning of the area (2, 3);
- A wet-vacuum is used during sawing, cutting, etc. (2, 3);
- During inspections, objects reducing the performance of the storm water system are removed, BMP maintenance needs are documented, and presence of spills or leaks are recorded (10);
- Process and wash water is captured, contained and properly disposed of to the treatment system, an appropriate waste hauler or to landscaped or other pervious surfaces (4, 7);
- Sweeping is performed throughout the year, as needed, using a mechanical sweeper; sweeping activity is included with the general security log (2,3);
- Tracked or leaked materials, debris, and spills found during inspections are cleaned up and properly disposed of (2, 4);
- Materials stored outside are covered, contained and/or elevated (3, 5, 6, 21);
- Tarps and coverings are repaired or replaced when needed (5); and
- Authorized discharges from non-industrial areas are comingled per initial facility design and generally can't be separated from the industrial areas at this time. When possible, all NSWDs are minimized (8, 9).

Preventative Maintenance

The following preventative maintenance measures are required to be implemented, as feasible, in accordance with the IGP (Section X.H.1.b):

10. *Identify all equipment and systems used outdoors that may spill or leak pollutants;*
11. *Observe the identified equipment and systems to detect leaks, or identify conditions that may result in the development of leaks;*
12. *Establish an appropriate schedule for maintenance of identified equipment and systems; and*
13. *Establish procedures for prompt maintenance and repair of equipment, and maintenance of systems when conditions exist that may result in the development of spills or leaks.*

The facility fulfills the above IGP requirements by conducting the following site specific BMPs described below.

- Inspections of equipment and systems that can leak are conducted and recorded frequently, and any required repairs are made as soon as possible (11);
- BMPs are replaced and maintained according to the manufacturer's schedule or as needed (12,13);
- All equipment and systems that can spill or leak pollutants are included in Appendix F (10);
- The facility has established a schedule for equipment and system maintenance (12); and
- The facility has established procedures for maintenance and repair of equipment (13).

Spill and Leak Prevention and Response

The following spill and leak prevention and response measures are required to be implemented, as feasible, in accordance with the IGP (Section X.H.1.c):

14. *Establish procedures and/or controls to minimize spills and leaks;*
15. *Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the storm water conveyance system. Spilled or leaked industrial materials will be cleaned promptly and disposed of properly;*

16. *Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and*
17. *Identify and train appropriate spill and leak response personnel.*

The facility fulfills the above IGP requirements by conducting the following site specific BMPs described below.

- The facility has a Spill Prevention Control & Countermeasure Plan and spill response procedures to establish procedures and/or controls to minimize spills and leaks, and staff receive annual training. The plan is located on-site (14, 17);
- Spills are cleaned up in accordance with the facility Spill Prevention Control & Countermeasure Plan and spill response procedures (15);
- Spill kits are located throughout the facility. Locations are detailed in Appendix F (16);
- Spill kits are inspected weekly (16);
- All equipment maintenance is performed indoors, when possible (14);
- Truck transfers of chemicals to storage facilities are performed at the designated transfer sites (14);
- Bulk chemicals are stored in designated containment areas (14);
- Secondary containment is used for storage of hazardous substances with a potential storm water exposure pathway (specific secondary containment systems are detailed in Appendix F) (14);
- Procedures exist and are implemented to respond to leaks and spills, and to prevent pollutants from discharging through the storm water conveyance system (15); and
- Spilled and leaked industrial materials are cleaned promptly and are properly disposed of (15).

Material Handling and Waste Management

The following material handling and waste management measures are required to be implemented, as feasible, in accordance with the IGP (Section X.H.1.d):

18. *Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with storm water during a storm event;*
19. *Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water during handling;*
20. *Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;*
21. *Divert run-on and storm water generated from within the facility away from all stockpiled materials;*
22. *Clean all spills of industrial materials or wastes that occur during handling in accordance with the spill response procedures (Section X.H.1.c); and*
23. *Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.*

The facility fulfills the above IGP requirements by conducting the following site specific BMPs described below.

- Disposal areas are kept free of exposed trash, sediment and debris (18);

- Trash cans and bins are kept covered when not in use or in an area where the leachate drains back into the treatment system (19, 20);
- Hazardous substances are properly stored, labeled and disposed of (18, 19);
- Equipment and systems used for loading and unloading materials are designed to minimize contact between industrial materials and storm water (18);
- Spills that occur during handling activities are cleaned in accordance with the Spill Prevention Control & Countermeasure Plan and spill response procedures (22);
- Material handling equipment are inspected for residual materials, as appropriate (23); and
- When feasible, larger materials and equipment are stored on palettes to reduce contact with storm water (21).

Erosion and Sediment Controls

The following erosion and sediment control measures are required to be implemented, as feasible, in accordance with the IGP (Section X.H.1.e):

24. *Implement effective wind erosion controls;*
25. *Provide effective stabilization for all disturbed soils and other erodible areas prior to a forecasted storm event;*
26. *Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site;*
27. *Divert run-on and storm water generated from within the facility away from all erodible materials.*

The facility fulfills the above IGP requirements by conducting the following site specific BMPs described below.

- When possible, erodible materials are stored to prevent contact with storm water, including run-on (27);
- Vehicles are operated at low speeds at the facility to minimize dust generation (2, 3);
- Facility is paved to avoid sediment tracking (26);
- Landscaped areas are not overwatered and are maintained, as necessary, to prevent soil erosion (9, 27); and
- Sprinkler/irrigation systems are maintained to prevent overspray, leaks and other malfunctions (9,26); and
- Areas with exposed soils are stabilized with vegetation, gravel bags, fiber rolls etc. whenever possible (9, 24, 25, 27).

Employee Training Program

The following employee training program measures are required to be implemented, as feasible, in accordance with the IGP (Section X.H.1.f):

28. *Ensure that all team members implementing the various compliance activities of this SWPPP are properly trained in topics including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities;*
29. *Prepare or acquire appropriate training manuals or training materials;*
30. *Identify which personnel need to be trained, their responsibilities, and the type of training they will receive;*
31. *Provide a training schedule; and*
32. *Maintain documentation of all completed training classes and the personnel that received training in the SWPPP.*

The facility fulfills the above IGP requirements by conducting the following site specific BMPs described below.

- Table 1 of this SWPPP identifies the PPT and their roles and duties within the facility (30);
- All employees implementing the SWPPP are properly trained, as required (28);
- Task-specific training for all employees engaged in activities that have the potential to cause storm water pollution is conducted when new employees are hired (28, 31);
- Site specific training materials have been prepared (29);
- All personnel listed on the PPT, at a minimum, will receive annual compliance training (30); and
- Documentation of training activities is retained on-site or electronically (32).

Quality Assurance and Record Keeping

The following quality assurance and record keeping measures are required to be implemented, as feasible, in accordance with the IGP (Section X.H.1.g):

33. *Develop and implement management procedures to ensure that appropriate staff implements all elements of the SWPPP, including the Monitoring Implementation Plan;*
34. *Develop a method of tracking and recording the implementation of BMPs identified in the SWPPP; and*
35. *Maintain the BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five years (Section XXI.J.4).*

The facility fulfills the above IGP requirements by conducting the following site specific BMPs described below.

- An employee training program is used to ensure that the appropriate staff implements all elements of the SWPPP and the Monitoring Implementation Plan (33);
- Wet and dry season inspections, BMPs, and training are logged and kept on-site (34, 35);
- Management procedures have been developed and performed to ensure that all parts of the SWPPP are implemented through annual IGP training (33); and
- Required records are kept for a minimum of five years either on-site or electronically, including but not limited to: SWPPP and BMP changes, training documentation, and significant spills and clean-ups (35).

See Section 5 of this SWPPP for additional details outlining the reporting and record keeping requirements at this facility.

4.2 Advanced BMPs

Where the minimum BMPs described above will not adequately reduce or prevent pollutants in storm water discharges, the IGP (Section X.H.2) requires dischargers, to the extent feasible, implement and maintain advanced BMPs necessary to reduce or prevent discharges of pollutants in its storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability. The following advanced BMPs have been implemented at the site.

Exposure Minimization BMPs

Storm resistant shelters are installed on-site to prevent the contact of storm water with industrial activities and material. In addition, some industrial pollutants are stored within covered and sealed containers and tanks. The locations of these BMPs are shown on the "Point Loma WTP Pollutant Sources and BMPs" map in Appendix A. Exposure minimization BMPs are found in the following area at the site:

- Digester Tanks 1 thru 8 and Methane Gas Capture Facilities, including Northern Portion of the Polymer Building/Storage Tanks – all material is stored and conveyed through sealed and covered pipes and tanks
- A portion of Head Works – some materials and equipment stored under covered structures
- North Effluent Screening Facility – The effluent screening facility consists of a covered building
- Warehouse and Paint Booth – material is stored within the covered warehouse and paint booth
- Maintenance Building – Maintenance is performed within the covered maintenance building
- Gas Utilization Facility – A portion of this facility is located within a covered building
- Central Boiler Facility – A portion of this facility is located within a covered building
- South Effluent Screening Facility – A portion of this facility is located within a covered structure
- Sludge Pumping Station – all material and equipment stored within a covered building
- Enclosed Cargo Container Storage Area – all containers are covered

Storm Water Containment and Discharge Reduction BMPs

These BMPs include structures that divert, infiltrate, reuse, contain, retain, or reduce the volume of storm water runoff. Storm water runoff from certain areas within this facility are conveyed back into the facility for treatment, thereby reducing the volume of industrial storm water runoff conveyed to the storm drain system and discharge offsite. These areas include:

- The Digester Tanks 1 thru 8 and Methane Gas Capture Facilities, including the Northern portion of the Polymer Building/Storage Tanks;
- The Primary Sedimentation Tanks and Odor Control;
- A portion of both Headworks areas;
- The Sludge Pumping Station;
- The Recycling Bin Storage and Wash Area;
- The SCS Plant - Methane Gas Storage and Transfer; and
- The Chemical Unloading and Tank Storage

The catch basin near PLSD3a is sized to be able to capture the volume of runoff produced by an 85th percentile 24-hr storm event. In addition, low flow diversion structures at each storm drain outfall capture storm water runoff. Runoff captured in the catch basins and the diversion structures is pumped out by a vactor truck and discharged back to the plant for treatment, with the exception of PLSD4, which contains a pump and is pumped back to the plant.

Calculations or modeling have not been performed to determine what sized storms will overtop all of the existing containment structures, resulting in discharge from these areas. However, runoff from these areas has historically not been observed by site staff and will continue to be monitored during storm events. If discharge occurs, this SWPPP will be revised accordingly.

Treatment Control BMPs

Treatment control BMPs are intended to capture and filter or treat pollutants from industrial storm water. There are no treatment control BMPs in place at the facility at this time. PUD is currently evaluating additional structural controls at the facility. If the evaluation proves feasible and cost effective, the additional BMPs may be implemented and the SWPPP will be updated at that time.

4.3 BMP Summary Table

Appendix I summarizes the industrial activities, locations, pollutants, the minimum and advanced BMPs implemented to prevent discharge of pollutants in storm water runoff, and the frequency of BMP implementation.

4.4 BMP Implementation and Maintenance Schedule

BMPs will be maintained regularly to ensure proper and effective functionality. If necessary, corrective actions will be implemented as soon as practicable when deficiencies are identified and associated amendments to the SWPPP will be prepared and documented. All BMPs are inspected as part of the wet and dry weather observations and recorded on the applicable form in Appendix K. BMPs are also inspected as part of the annual comprehensive facility site evaluation with Form 3 in Appendix K. BMPs are maintained, as needed, and according to the maintenance schedule available in Appendix I.

Chapter 5 – Monitoring Implementation Plan and Reporting

This chapter describes the Site Monitoring Implementation Plan (MIP) and reporting requirements mandated by the IGP. The following topics are included:

- Storm water monitoring team;
- Discharge locations;
- Monthly visual observations during dry weather;
- Wet weather observations of the discharge locations;
- Sampling and analyses procedures;
- Example chain of custody (COC);
- Quality assurance and quality control;
- Annual site wide evaluation; and
- Recordkeeping and reporting.

5.1 Storm Water Monitoring Team

The storm water monitoring team is comprised of the staff identified in the PPT outlined in Table 1.

5.2 Compliance with the California Ocean Plan Receiving Water Monitoring Requirements

PLWTP storm water discharges are subject to the 2015 California Ocean Plan (Ocean Plan) requirements. The facility complies by performing additional monitoring outlined in Order No. R9-2017-0007 NPDES No. CA0107409 which consists of the Waste Discharge Requirements (WDR) and NPDES (National Pollutant Discharge Elimination System) permit requirements for the plant's wastewater discharge to the Pacific Ocean through the Point Loma Ocean Outfall. The NPDES outfall permit is issued by the CA Regional Water Quality Control Board San Diego Region in conjunction with the US Environmental Protection Agency. The City of San Diego also participates in the Southern California Bight Regional Monitoring Program, coordinated by SCCWRP every 5 years (e.g. 2013, 2018, etc.). The CA Regional Water Quality Control Board San Diego Region has determined that PLWTP monitoring performed by the City of San Diego fulfills the IGP Ocean Plan monitoring requirements.

5.3 Discharge Locations

The site contains four drainage areas which drain to four discharge locations (compliance monitoring locations) identified in Table 2.

Table 2. Storm Water Discharge Locations (Compliance Monitoring Locations)

Discharge Location (Sampling Point ID)	Description	Latitude and Longitude (decimal degrees)
PLSD1	Sampling location PLSD1 is a grab sample collected from the catch basin inlet located northwest of the North Operations Building.	(32.681209, -117.247983)
PLSD2	Sampling location PLSD2 is a grab sample collected from the catch basin inlet located west of the Warehouse Building.	(32.680490, -117.247867)
PLSD3	Sampling location PLSD3 is a grab sample collected from the catch basin inlet west of the Primary Sedimentation Tanks.	(32.678513, -117.247283)
PLSD3a	Sampling location PLSD3a is a grab sample collected from the catch basin located near the outfall structure.	(32.680054, -117.248400)
PLSD4	Sampling location PLSD4 is located west of Digester 8. Facility is currently diverting captured storm water back to the treatment plant inlet channel. No discharge is occurring at this location. Samples are not collected unless a discharge occurs.	(32.677392, -117.246503)

California Ocean Plan Receiving Water Monitoring Locations

Receiving water sampling locations are monitored through the Shore Station Monitoring Program, along with other Ocean Monitoring conducted under Order No. Order No. R9-2017-0007 NPDES No. CA0107409, including the Bight Regional Monitoring Program. The following table lists the shore station monitoring locations.

Table 3. Shore Station Monitoring Program Locations

Sampling Point ID	Location	Location Description	Coordinates
D4	Point Loma **(Lighthouse)**	Located on the southernmost tip of Point Loma, just North of the Lighthouse. Go through the fence gate, park in the parking lot and follow the trail north past the radio tower to a slope where the tide-pools can be accessed. Sample point is near the tide-pools.	32.66567°N 117.24367°W

Sampling Point ID	Location	Location Description	Coordinates
D5	Point Loma **(Treatment Plant)**	Point Loma Wastewater Treatment Plant. Use the road that goes behind the Gas Utilization Facility-Cogeneration Plant to the discharge pipes. Sample near the rip-rap close to the pipes. Directly in front of the wastewater treatment plant north of the Hydro Facility.	32.68083°N 117.2490°W
D7	Sunset Cliffs **(Ladera Street)**	Sunset Cliffs at the foot of the stairs seaward of Ladera Street. Park at the farthest south point, where Sunset Cliffs Blvd. and Novara Street intersect. Sample point is at the foot of the stairs on the rocks.	32.71933°N 117.25733°W
D8	Ocean Beach/ **duplicate samples/ Splits (Bermuda Avenue)**	Ocean Beach at the foot of the stairs to the small beach at the end of **Bermuda Avenue**.	32.73700°N 117.25533°W
D9	Ocean Beach **(Pier)**	Just south of the Ocean Beach Pier. Walk down to the foot of the stairs at the end of **Narragansett Street**. Better access is at the Ocean Beach Pier parking lot & walk south to the sample point.	32.74667°N 117.25400°W
D10	Ocean Beach	Ocean Beach, just north of west end of Newport Avenue, directly west of main Lifeguard Station	32.74917°N 117.25300°W
D11	Dog Beach **(Voltaire)**	North Ocean Beach (dog beach), directly west of south end of dog beach. Next to the Big rocks jetty. Park at the Voltaire Street parking lot south side of stub Jetty.	32.75400°N 117.25267W
D12	Mission Beach **(Belmont Park)**	Mission Beach (Belmont Park), directly west of main lifeguard station in Belmont Park, located at the west end of Mission Bay Drive.	32.77133°N 117.25350°W

5.4 Monthly Visual Observations (during Dry Weather)

Visual observations are conducted at least once each calendar month and will include observations of drainage areas, BMPs, and discharge locations. Visual observations are conducted during daylight hours of scheduled facility operating hours and on days without precipitation.

- Observe each drainage area for the presence or indications of prior, present, or potential **authorized** discharges and their sources as well as **unauthorized** discharges, their sources,

and associated BMPs [see Appendix D for authorized discharges]
- Document observations and note the presence of any discolorations, stains, odors, floatables, etc.;
- Take pictures of the affected drainage areas as additional documentation, if necessary;
- Complete Form 2 in Appendix K to make sure it is fully and adequately completed with the date, time, and signature of person conducting the observation;
- Maintain all visual observation records of drainage areas, including outdoor industrial equipment storage areas and outdoor industrial activity areas in SWPPP binder; and
- Revise BMPs as necessary if observations indicate pollutant sources have not been adequately addressed

5.5 Visual Observations (during Wet Weather)

Whenever storm water samples are collected or there is a rain event that produces a discharge during business hours, visual observations will also be conducted as time allows. These observations allow the PPT to quickly assess the quality of the discharged storm water and respond to potential BMP deficiencies in a timely manner. The Form 1 found in the Appendix K will be used to record sampling event observations. If staff time allows, events that do not produce a discharge may be recorded.

When pollutants (i.e., odor, oily sheen, sediment, trash, etc.) are observed in the discharged storm water, follow-up observations of the drainage area will be conducted to identify the probable source of the pollutants and adequacy of BMPs. BMP deficiency corrections, including repairs or maintenance of BMPs, will be initiated as soon as possible. If the deficiencies require substantive design or procedural changes, including additional BMPs, the SWPPP will be amended to reflect the changes.

If observations are not made, an explanation for not conducting the required observations will be provided on Form 1. The following guidance should be followed during these observations:
- Conduct visual observations at the same time as storm water sampling from each discharge location in the facility (see Sampling section below for details)
- Visually observe the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris and sources of any discharged pollutants
- Document observations on Form 1 (in the SWPPP binder)
- Ensure Form 1 is fully and adequately completed with the date, time, and signature of person conducting the observation/sampling
- Revise BMPs as necessary if observations indicate pollutant sources have not been adequately addressed

5.6 Sampling During Qualified Storm Event (QSE)

A qualifying storm event (QSE) is precipitation that:

- Produces a discharge for at least one drainage area; and
- Is preceded by 48 hours with no discharge from any drainage area

Sampling Events:

- Collect storm water samples from two (2) QSEs between July 1 to December 31;
- Collect storm water samples from two (2) QSEs between January 1 to June 30;
- Collect samples according to sample points on the site map in Appendix A;
- Collect samples only when sampling conditions are safe;
- Collect samples within four (4) hours of:
  - The start of the discharge
  - The start of the facility operating hours if the QSE occurs within the previous 12-hour period.
- Document sampling information on a Chain-of-Custody form;
- If sampling of a QSE cannot be conducted it will also be documented as time allows; and
- If prior to March 1, two (2) or fewer QSEs have been collected for the reporting year (July 1 – June 30 each year), additional QSE samples will be collected during the second half of the reporting year until a total of four (4) QSEs have been collected for the reporting year, provided that QSEs continue to occur in the second half of the reporting year. *

*Added pursuant to a 2018 Consent Decree with Coastkeeper/CERF

Sampling Details:

To maintain sample integrity and prevent cross-contamination, sample collection personnel will follow the protocols below:

- Samples will only be collected (for laboratory analysis) in laboratory-provided sample containers;
- Clean, powder-free, nitrile gloves will be worn when collecting samples;
- Gloves will be changed whenever something not known to be clean has been touched;
- Gloves will be changed between sampling locations; and
- All equipment (e.g. bucket, tubing) will be decontaminated prior to sample collection using an appropriate disinfectant

The most important aspect of grab sampling is to collect a sample that represents the entire runoff stream. Typically, samples are collected by dipping the collection container in the runoff flow paths and streams, as discussed below.

- For small streams and flow paths, the bottle will be dipped facing upstream until full;
- For larger stream that can be safely accessed a sample will be collected in the middle of the flow stream by directly dipping the mouth of the bottle. The opening of the bottle will face upstream as to avoid any contamination by the sampler;
- For larger streams that cannot be safely waded, pole samplers will be used to safely access the representative flow;
- Samples will not be collected from ponded, sluggish, or stagnant water; and

- The sampler will not stand upstream of the sampling point within the flow path.

Depending upon the specific analytical test, some containers may contain preservatives. When feasible, these containers will not be dipped into the stream, but filled indirectly from the pole sampler.

Immediately following sample collection, the following will be completed:

- Sample containers will be capped;
- Complete the sample bottles labels and complete two COC forms – one for the Microbiology Lab and one for the on-site process control lab;
- Keep samples refrigerated or on ice until officially transferred to laboratories; all samples collected from the facility shall be delivered to the laboratory and analyzed within the holding times required in 40 C.F.R. Part 136, except for pH, addressed below;
- Perform pH testing as soon as practicable but **no later than 15 minutes** of sample collection;
    - Inform lab staff prior to sampling for pH (if pH will be determined in the lab).
    - Testing for pH must be performed either in the field using a calibrated portable pH meter OR by laboratory personnel using a calibrated benchtop pH meter using methods in accordance with 40 Code of Federal Regulations.
- Deliver the samples for chemistry analysis to the process control lab at the site;
- For Microbiology samples:
    - Immediately notify the Microbiology Lab that storm water samples have been collected;
    - Deliver samples within 6 hours of sample collection and no later than 4pm;
    - The facility staff is responsible for delivering the samples to the Microbiology Lab at the following address:

        Marine Microbiology Lab or "NTC Lab"
        2392 Kincaid Rd, San Diego, CA 92101
        Main lab line: 619-758-2361

5.7 Laboratory and Field Analyses

The EMTS process control laboratory at the facility and the EMTS microbiology laboratory analyze the storm water samples for the following parameters using prescribed test methods. These laboratories are accredited by the State of California. Laboratory reports containing analytical results are considered final on the date the laboratory report is signed by authorized laboratory personnel. Once finalized, reports will be uploaded to SMARTS within 30 calendar days.

Table 4. Storm Water Sample Parameters and Test Methods

Parameter	Test Method[1]	Units	Reason for Inclusion
pH	pH field or SM 4500-HB	pH units	Basic required constituent
Total Suspended Solids (TSS)	SM 2540-D	mg/L	Basic required constituent
Oil & Grease (O&G)	EPA1664B	mg/L	Basic required constituent
E. Coli[2]	SM 9223 B	MPN/100mL	Pollutant Source Assessment constituent
Fecal coliform[2]	SM 9221 C-E	MPN/100mL	Pollutant Source Assessment constituent
Total coliform[2]	SM 9221 B, SM 9222 B	MPN/100mL	Pollutant Source Assessment constituent
Nitrate + nitrite nitrogen[4]	EPA 300.0	mg/L as N	Pollutant Source Assessment constituent
Ammonia (as N)[4]	SM 4500-NH3 B+C	mg/L	Pollutant Source Assessment constituent
Total aluminum[4] (H)	EPA 200.7 or 200.8	mg/L	Pollutant Source Assessment constituent
Total copper[3,4] (H)	EPA 200.7 or 200.8	mg/L	Consent Decree Required Parameter
Total iron[4]	EPA 200.7 or 200.8	mg/L	Pollutant Source Assessment constituent
Total lead[3,4] (H)	EPA 200.7 or 200.8	mg/L	Consent Decree Required Parameter
Total zinc[3,4] (H)	EPA 200.7 or 200.8	mg/L	Pollutant Source Assessment constituent

1. The specified analytical method is adequate to detect the individual constituents at or below the numeric levels specified in the IGP and the Consent Decree.
2. May be removed if human genetic marker (HF183) testing for 4 consecutive QSEs produces results below lab quantification levels.
3. This constituent was added to the previous list of sampled constituents pursuant to a 2018 Consent Decree with Coastkeeper/CERF.
4. Constituents may be removed if not detected for 2 consecutive sampled QSEs, or if new information becomes available supporting an amended pollutant source assessment (e.g., natural background or non-industrial sources, no further exposure at the facility).
(H) – hardness dependent

The facility must ensure that the collection, preservation, and handling of all storm water samples are in accordance with good laboratory practices and standards. All analyses must be conducted according to established test protocols and prescribed analytical procedures. Samples from different discharge locations shall not be combined or composited.

An example COC is included in the site monitoring forms packet in Form 4 in Appendix K. The COC will be carefully and accurately prepared in ink. Changes will be noted with strikethrough text, sampler's initials, and date.

5.8 Quality Assurance and Quality Control

Quality Assurance and Quality Control (QA/QC) will be implemented as part of this MIP to ensure that reliable data (field observations and analytical data) is developed. QA/QC procedures will include the following:

- Field forms will be carefully and legibly prepared and signed by the PPT member that conducts the observations and sampling;
- Clean sampling techniques will be implemented by trained PPT members;
- Field instruments are carefully calibrated and records are maintained on-site or electronically;
- Chains of custody forms will be carefully prepared and reviewed prior to sample shipment; and
- Data will be reviewed to ensure that the laboratory performed the requested analyses and that laboratory performance parameters (hold time, reporting limits, method detection limits, and laboratory QC samples) are satisfactory.

5.9 Annual Site-wide Evaluation

The IGP (Section XV) requires the Discharger to conduct one Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation) for each reporting year (July 1 to June 30). Annual Evaluations will be conducted at least eight months and not more than 16 months after the previous Annual Evaluation. The site-wide evaluation must at a minimum consist of the following:

- Review of all sampling, visual observation and inspection records conducted during the reporting year;
- Visual inspection of all areas of industrial activity and associated potential pollutant sources for evidence of (or the potential for) pollutants entering the storm water conveyance system;
- A visual inspection of all drainage areas previously identified as having no exposure to industrial activities and materials in accordance with the definitions in IGP Section XVII;
- Visual inspection of any BMPs and a review of their effectiveness;
- Review of the SWPPP and update in accordance with X(B) of IGP, if necessary; and
- An assessment of any other factors needed to comply with the Annual Reporting requirements in IGP XVI.B.

5.10 Reporting Requirements

Sampling & Analytical Results: The Permits and Compliance section staff submits all sampling and analytical results to the State Water Resources Control Board via the on-line reporting tool (SMARTS) **within 30 days** of obtaining all results for each sampling event.

Annual report: The reporting year is from July 1 thru June 30; the annual report is due no later than July 15. Permits & Compliance staff completes and submits annual report in SMARTS. All forms used to complete report and signed by plant staff are archived at Y:\EMTS\41.Sections\P&C\STORM WATER\INDUSTRIAL-IGP\ANNUAL REPORTS.

5.11 Records Retention

Paper or electronic records of storm water monitoring information and copies of reports (including Annual Reports) must be retained for a period of at least five years from date of submittal or longer if required by the Regional Water Board.

Records to be retained on-site or electronically include:

- Employee Training Records;
- SWPPP and BMPs changes;
- Significant spills and cleanup related records;
- Sampling logs and analytical laboratory reports;
- Visual Observation Records, including corrective action responses; and
- Annual Reports from SMARTS (checklist and any explanations).

Copies of these records will be available for review by the Water Board's staff at the facility during scheduled facility operating hours. Upon written request by U.S. EPA or the local MS4, Dischargers will provide paper or electronic copies of requested records to the Water Boards, U.S. EPA, or local MS4 within 10 working days from receipt of the request.

5.12 Additional Studies

Additional studies may be conducted to assess potential pollutant sources at internal monitoring locations, areas with run-on, non-controllable sources, and/or areas to identify background concentrations of pollutants. If additional studies are conducted, information will be provided upon study completion.

Chapter 6 – Exceedance Response Actions (ERAs)

6.1 Numeric Action Levels (NALs)

Exceedance Response Actions (ERAs) are triggered when the results of a storm water sample exceed a numeric limit for any parameter.

Every facility starts at a baseline compliance level and must demonstrate continuous compliance by performing storm water sampling, analysis, and reporting via the web-based reporting system (SMARTS). For compliance purposes, the reporting year is defined as July 1 through June 30.

Table 5. Numeric Action Levels

Parameter	Units	Annual NAL	Instantaneous Maximum NAL	Additional Assessment Values*
pH	pH units	N/A	6.0 – 9.0	
TSS	mg/L	100	400	100 (Instantaneous)
Oil & Grease	mg/L	15	25	15 (Instantaneous)
Fecal coliform	MPN/100mL			400
Total coliform	MPN/100mL			
E. Coli	MPN/100mL			
Total copper(H)	mg/L	0.0332		0.0058
Total lead (H)	mg/L	0.262		0.220
Total zinc(H)	mg/L	0.26		0.095
Total aluminum	mg/L	0.75		
Total iron	mg/L	1.0		
Nitrate + nitrite	mg/L as N	0.68		
Ammonia (as N)	mg/L	2.14		

(H) – hardness dependent

*Added pursuant to a 2018 Consent Decree with Coastkeeper/CERF

6.2 NAL Exceedances

There are two types of potential monitoring data exceedances:

- Annual NAL exceedance
  - Annual NAL exceedances occurs when the average of all the analytical results for one parameter from samples within a reporting year exceed the limit listed above. In other words, the site average per parameter. There is no annual NAL for pH.
- Instantaneous exceedance
  - Instantaneous maximum NAL exceedances occur when two or more analytical results for one parameter from samples taken within a reporting year exceed the instantaneous

maximum NAL value (or is outside the NAL pH range) listed above.

- Instantaneous maximum for Additional Assessment occurs when (a) a single exceedance of double or more the constituents' value occurs at any sampling location or (b) more than two exceedances of the value for a constituent occurs over all the discharge sampling locations (and with no averaging of each discharge sampling location's results).*

*Added pursuant to a 2018 Consent Decree with Coastkeeper/CERF.

6.3 Baseline Status

At the beginning of the facility's coverage under the IGP, it has a Baseline status for all parameters. A facility will remain at Baseline status so long as there are no annual or instantaneous NAL Exceedances in the previous reporting year or for four consecutive QSEs.

PLWTP is currently at baseline status for all parameters.

6.4 Level 1 Status

Baseline status changes to Level 1 if sampling results indicate an annual or instantaneous NAL exceedance for a parameter. Level 1 status starts on July 1 following the reporting year during which the exceedance(s) occurred.

By October 1 following the commencement of Level 1 status, the facility shall:

- Designate a Qualified Industrial Storm Water Practitioner (QISP) to assess all drainage areas of the industrial pollutant sources at the site that may be related to the NAL exceedance;
- Identify in the evaluation the corresponding BMPs in the SWPPP required to prevent future NAL exceedances;
- Revise the SWPPP as necessary and implement any additional BMPs identified in the evaluation as soon as practicable but no later than January 1 following the start of Level 1 status; and
- Certify and submit via SMARTS a Level 1 ERA Report prepared by the QISP that includes the following:
    1. A summary of the Level 1 ERA Evaluation;
    2. A detailed description of the SWPPP revisions and any additional BMPs for each parameter that exceeded an NAL; and
    3. The QISP's identification number, name, and contact information (telephone number, email address).

The facility will return to Baseline status once the Level 1 ERA report has been completed, all identified additional BMPs have been implemented, and results from four (4) consecutive QSEs sampled after BMP implementation indicate no additional NAL exceedance for that parameter.

6.5 Level 2 Status

The facility reaches Level 2 status if sampling results indicate an NAL exceedance for that same parameter while the site is in Level 1. Level 2 status starts on July 1 following the reporting year during which the NAL exceedance(s) occurred.

By October 1 following the commencement of Level 2 status, the facility shall:

- Certify and submit via SMARTS a Level 2 ERA Action Plan that identifies which of the following demonstration the facility has selected to perform:

    1. Industrial Activity BMPs Demonstration – shall include a description and evaluation of the industrial pollutant sources related to the NAL exceedance(s); evaluation and costs of additional BMPs to reduce or prevent the NAL exceedance(s); analysis describing the basis for the selection of BMPs implemented; and/or alternative design storm standard for treatment control BMPs to achieve compliance of the IGP.

    2. Non-Industrial Pollutant Source Demonstration – shall include a facility statement that the NAL exceedance is attributable solely to the presence of non-industrial pollutant sources that are identified as either run-on from adjacent properties, aerial deposition from man-made sources, or as generated by on-site non-industrial sources, and that the facility has evaluated all potential pollutant sources that may have commingled with storm water or contributed to the NAL exceedance.

    3. Natural Background Pollutant Source Demonstration – shall include a facility statement that the site has determined the NAL exceedance is attributable solely to the presence of the pollutant in the natural background which has not been disturbed by industrial activities; a summary of data describing the levels of natural background pollutants in the storm water discharge; a summary of research or published literature as part of Natural Background Source Demonstration; map and photographs showing the reference site location, vegetation, and indicating test site elevation; and site reconnaissance survey data regarding presence of roads, outfalls, or other human-made structures.

The Action Plan, prepared by a QISP and includes a schedule with description of tasks to complete the selected demonstration, shall at a minimum address the drainage areas with the corresponding exceedance(s), shall be implemented as soon as practicable, and shall be completed no later than one year after submitting the Action Plan.

- Certify and submit via SMARTS a Level 2 ERA Technical Report on January 1 of the reporting year following the submittal of the ERA Level 2 Action Plan. The Technical Report, also prepared by a QISP, shall include information supporting one or more of the aforementioned demonstrations.

Unless the demonstration is not accepted by the State or Regional Water Board, the facility is not required to perform additional ERA requirements for the parameter(s) involved if: (a) additional BMPs required to eliminate NAL exceedances are not technologically available or economically practicable; or (b) NAL exceedances are solely caused by non-industrial pollutant sources or pollutants from natural background sources. If the Technical Report is rejected, the Board may direct the facility to take further action(s) to comply with the IGP.

- The facility may be required to update the Level 2 ERA Technical Report, based upon

additional NAL exceedances of the same parameter and same drainage area, to be submitted with the annual report.

The facility is eligible to return to Baseline status after submittal of an Industrial Activity BMPs demonstration, implementing BMPs to prevent future NAL exceedances for the Level 2 parameter(s), and if results from four (4) subsequent consecutive QSEs sampled indicate no additional NAL exceedance for that parameter(s).

The facility is ineligible to return to Baseline status if it elected to submit a non-industrial pollutant source demonstration or natural background pollutant source demonstration, or industrial activity BMP demonstration where additional BMPs implemented caused the site to achieve IGP compliance but is not expected to eliminate future NAL exceedances.

The facility can request a single time extension on the Level 2 ERA Technical Report for up to six (6) months by submitting via SMARTS the reasons for the extension, a revised ERA Action Plan including a schedule and description of necessary tasks still to be performed to complete the Level 2 ERA Technical Report, and a description of temporary BMPs that will be implemented while constructing the permanent BMPs.

Chapter 7 – Training Program

7.1 Purpose of Training

The purpose of the annual training program is to refresh staff on proper operational practices and to disseminate new information relevant to storm water and industrial activity at the facility, including the facility's status under the IGP. Storm water BMP and IGP training is provided annually, at minimum, to applicable employees.

7.2 Training Program Implementation

The Training Program includes use of written and visual training materials, as needed for effective storm water program implementation. PUD ensures there are sufficient number of resources assigned to implement BMPs and conduct other required compliance activities. The training program serves as a forum for storm water discussions while providing resources and the information needed to properly perform required activities.

The Training Program includes, but is not limited to:

- Non-storm water discharge training
- BMP training
- Sampling Training
- Visual Observations Training

Training is provided by a facility representative, generally the QISP, who is familiar with industrial storm water requirements. All facilities in IGP Level 1 status or higher are trained by a QISP, per IGP requirements. Training is repeated, as necessary, for individual employees. New employees responsible for SWPPP implementation shall receive training within thirty (30) calendar days of being hired or put in charge of industrial storm water compliance.

Training records are maintained through an on-line database, with a relevant copy at each facility.

Appendices

Appendix A – Figures

Legend

- Stream
- Impaired Stream*
- Waterbody
- Impaired Waterbody*
- Parcel Boundary
- Facility Boundary
- Industrial Operations Boundary

* Identified as impaired in the 2014/2016 California Integrated Report 303(d) list

0 750 1,500 3,000 Feet

Point Loma WTP
Facility Location

San Diego, CA

December 2018

Date: 9/21/2018, Path: \\westla-01\Data\GIS\Projects\LA0460 - Confidential\Draft Work Products\SWPPP\Draft_SWPPP_PL_Facility_Location.mxd, User: MColyar

Figure 1: Point Loma WTP - Facility Location

Geosyntec consultants

N

San Diego Bay Shoreline, near sub base

San Diego Bay

Approximate Points of Discharge

Pacific Ocean

Note:
This facility lies in the Mission Beach-Frontal Pacific Ocean HUC 10 Watershed (ID 1807030413). The 303(d) listed impairments for this watershed include: Eutrophic, Indicator Bacteria, Lead, Low Dissolved Oxygen, Mercury, Nickel, PAHs (Polycyclic Aromatic Hydrocarbons), PCBs (Polychlorinated biphenyls), Pesticides, Thallium, Toxicity, Trash, and Turbidity.

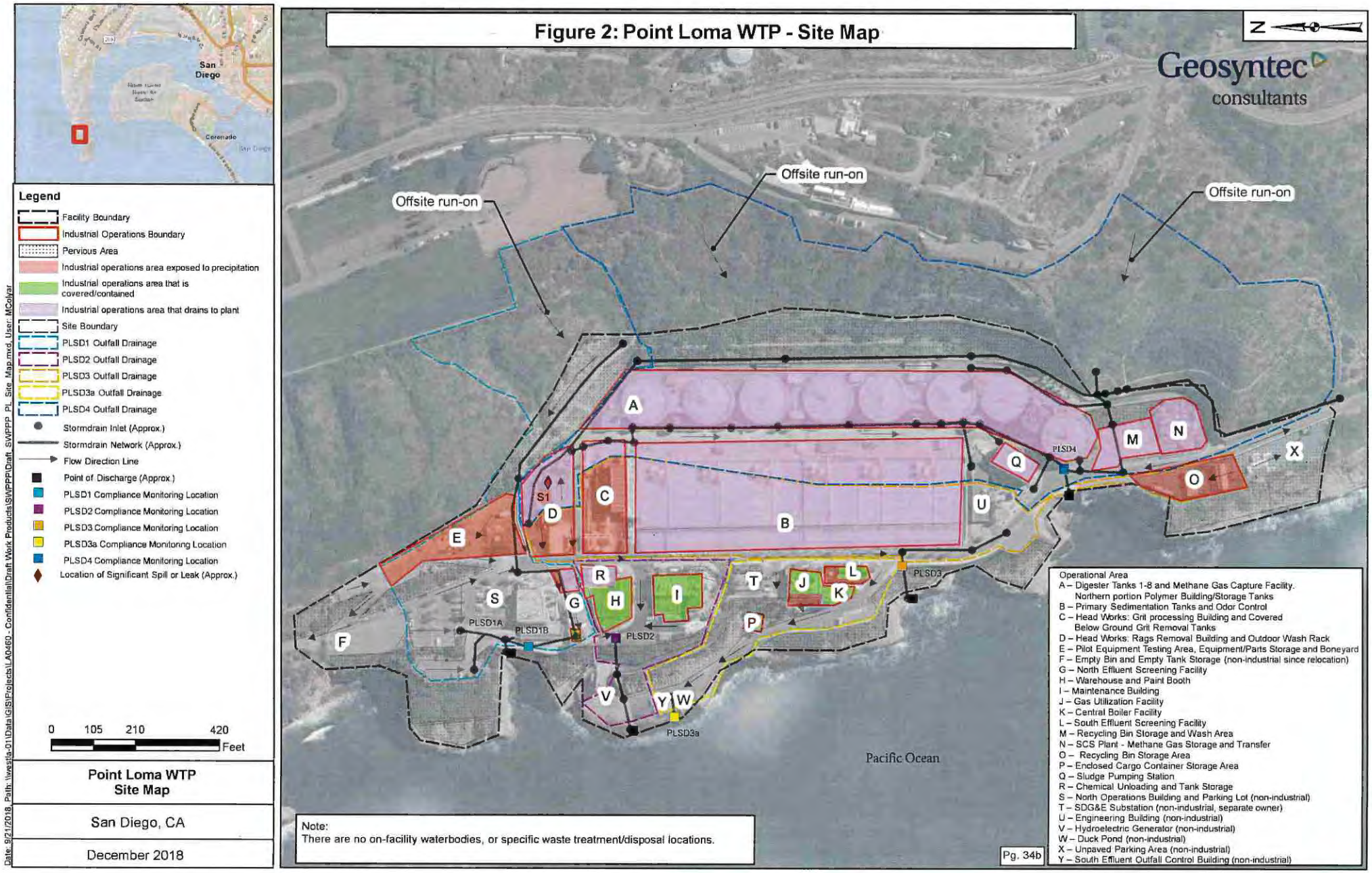
Figure 2: Point Loma WTP - Site Map
Geosyntec consultants
N
San Diego
Coronado
Legend
Facility Boundary
Industrial Operations Boundary
Pervious Area
Industrial operations area exposed to precipitation
Industrial operations area that is covered/contained
Industrial operations area that drains to plant
Site Boundary
PLSD1 Outfall Drainage
PLSD2 Outfall Drainage
PLSD3 Outfall Drainage
PLSD3a Outfall Drainage
PLSD4 Outfall Drainage
Stormdrain Inlet (Approx.)
Stormdrain Network (Approx.)
Flow Direction Line
Point of Discharge (Approx.)
PLSD1 Compliance Monitoring Location
PLSD2 Compliance Monitoring Location
PLSD3 Compliance Monitoring Location
PLSD3a Compliance Monitoring Location
PLSD4 Compliance Monitoring Location
Location of Significant Spill or Leak (Approx.)
0 105 210 420 Feet
Offsite run-on
Offsite run-on
Offsite run-on
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
S1
PLSD1A
PLSD1B
PLSD2
PLSD3
PLSD3a
PLSD4
Pacific Ocean
Operational Area
A – Digester Tanks 1-8 and Methane Gas Capture Facility. Northern portion Polymer Building/Storage Tanks
B – Primary Sedimentation Tanks and Odor Control
C – Head Works: Grit processing Building and Covered Below Ground Grit Removal Tanks
D – Head Works: Rags Removal Building and Outdoor Wash Rack
E – Pilot Equipment Testing Area, Equipment/Parts Storage and Boneyard
F – Empty Bin and Empty Tank Storage (non-industrial since relocation)
G – North Effluent Screening Facility
H – Warehouse and Paint Booth
I – Maintenance Building
J – Gas Utilization Facility
K – Central Boiler Facility
L – South Effluent Screening Facility
M – Recycling Bin Storage and Wash Area
N – SCS Plant - Methane Gas Storage and Transfer
O – Recycling Bin Storage Area
P – Enclosed Cargo Container Storage Area
Q – Sludge Pumping Station
R – Chemical Unloading and Tank Storage
S – North Operations Building and Parking Lot (non-industrial)
T – SDG&E Substation (non-industrial, separate owner)
U – Engineering Building (non-industrial)
V – Hydroelectric Generator (non-industrial)
W – Duck Pond (non-industrial)
X – Unpaved Parking Area (non-industrial)
Y – South Effluent Outfall Control Building (non-industrial)
Note:
There are no on-facility waterbodies, or specific waste treatment/disposal locations.
Pg. 34b
Point Loma WTP
Site Map
San Diego, CA
December 2018
Date: 9/21/2018 Path: \\westla-01\Data\GIS\Projects\LA0460 - Confidential\Draft Work Products\SWPPP\Draft_SWPPP_PL_Site_Map.mxd User: MColyar

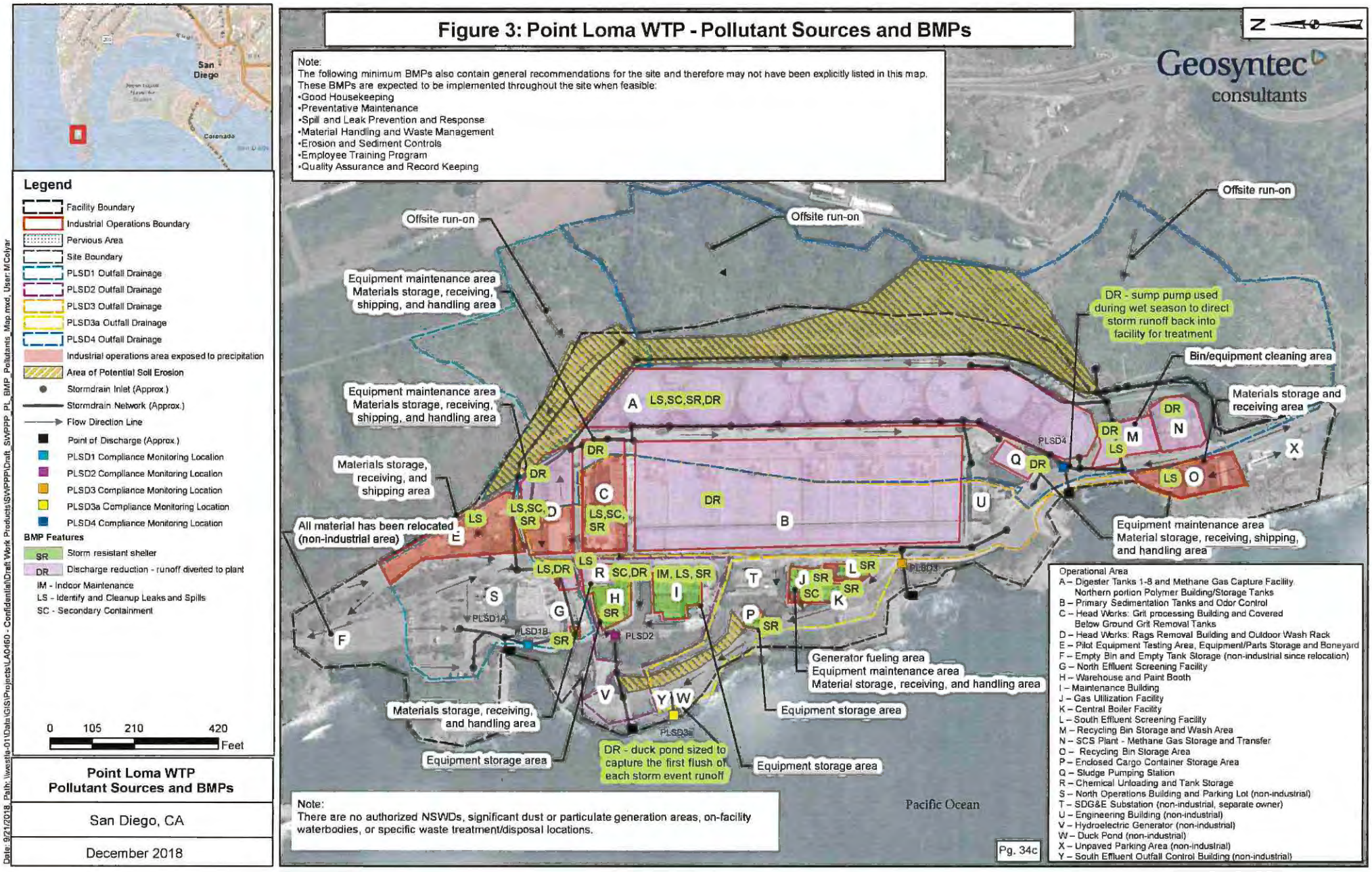
Figure 3: Point Loma WTP - Pollutant Sources and BMPs
Note:
The following minimum BMPs also contain general recommendations for the site and therefore may not have been explicitly listed in this map.
These BMPs are expected to be implemented throughout the site when feasible:
•Good Housekeeping
•Preventative Maintenance
•Spill and Leak Prevention and Response
•Material Handling and Waste Management
•Erosion and Sediment Controls
•Employee Training Program
•Quality Assurance and Record Keeping
Geosyntec consultants
N
San Diego
Coronado
Legend
Facility Boundary
Industrial Operations Boundary
Pervious Area
Site Boundary
PLSD1 Outfall Drainage
PLSD2 Outfall Drainage
PLSD3 Outfall Drainage
PLSD3a Outfall Drainage
PLSD4 Outfall Drainage
Industrial operations area exposed to precipitation
Area of Potential Soil Erosion
Stormdrain Inlet (Approx.)
Stormdrain Network (Approx.)
Flow Direction Line
Point of Discharge (Approx.)
PLSD1 Compliance Monitoring Location
PLSD2 Compliance Monitoring Location
PLSD3 Compliance Monitoring Location
PLSD3a Compliance Monitoring Location
PLSD4 Compliance Monitoring Location
BMP Features
SR Storm resistant shelter
DR Discharge reduction - runoff diverted to plant
IM - Indoor Maintenance
LS - Identify and Cleanup Leaks and Spills
SC - Secondary Containment
0 105 210 420 Feet
Offsite run-on
Offsite run-on
Offsite run-on
Equipment maintenance area
Materials storage, receiving, shipping, and handling area
Equipment maintenance area
Materials storage, receiving, shipping, and handling area
Materials storage, receiving, and shipping area
All material has been relocated (non-industrial area)
DR - sump pump used during wet season to direct storm runoff back into facility for treatment
Bin/equipment cleaning area
Materials storage and receiving area
Equipment maintenance area
Material storage, receiving, shipping, and handling area
Generator fueling area
Equipment maintenance area
Material storage, receiving, and handling area
Equipment storage area
Materials storage, receiving, and handling area
Equipment storage area
DR - duck pond sized to capture the first flush of each storm event runoff
Equipment storage area
Pacific Ocean
PLSD1A
PLSD1B
PLSD2
PLSD3a
PLSD4
A LS,SC,SR,DR
B DR
C LS,SC, SR
D LS,SC, SR
E LS
F
G
H SR
I IM, LS, SR
J SR
K SR
L SR
M DR
N DR
O LS
P SR
Q DR
R SC,DR
S
T
U
V
W
X
Y
Operational Area
A – Digester Tanks 1-8 and Methane Gas Capture Facility Northern portion Polymer Building/Storage Tanks
B – Primary Sedimentation Tanks and Odor Control
C – Head Works: Grit processing Building and Covered Below Ground Grit Removal Tanks
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G – North Effluent Screening Facility
H – Warehouse and Paint Booth
I – Maintenance Building
J – Gas Utilization Facility
K – Central Boiler Facility
L – South Effluent Screening Facility
M – Recycling Bin Storage and Wash Area
N – SCS Plant - Methane Gas Storage and Transfer
O – Recycling Bin Storage Area
P – Enclosed Cargo Container Storage Area
Q – Sludge Pumping Station
R – Chemical Unloading and Tank Storage
S – North Operations Building and Parking Lot (non-industrial)
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U – Engineering Building (non-industrial)
V – Hydroelectric Generator (non-industrial)
W – Duck Pond (non-industrial)
X – Unpaved Parking Area (non-industrial)
Y – South Effluent Outfall Control Building (non-industrial)
Note:
There are no authorized NSWDs, significant dust or particulate generation areas, on-facility waterbodies, or specific waste treatment/disposal locations.
Pg. 34c
Point Loma WTP
Pollutant Sources and BMPs
San Diego, CA
December 2018
Date: 9/21/2018, Path: \\westla-01\Data\GIS\Projects\LA0460 - Confidential\Draft Work Products\SWPPP\Draft_SWPPP_PL_BMP_Pollutants_Map.mxd, User: MColyar

Appendix B –Acronym List

Al	Aluminum
BMP	Best Management Practices
Cu	Copper
ERA	Exceedance Response Action
Fe	Iron
Hg	Mercury
IGP	Industrial General Permit
MS4	Municipal Separate Storm Sewer System
NAL	Numeric Action Level
NEC	No Exposure Certification
NEL	Numeric Effluent Limitation
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NSWD	Non-Storm Water Discharges
O&G	Oil and Grease
Pb	Lead
PRDs	Permit Registration Documents
QA/QC	Quality Assurance/Quality Control
QISP	Qualified Industrial Storm Water Practitioner
QSE	Qualifying Storm Event
SMARTS	Storm Water Multiple Application & Report Tracking System
SWPPP	Storm Water Pollution Prevention Plan
TBEL	Technology Based Effluent Limitation
TDS	Total Dissolved Solids
TOC	Total Organic Carbon
TSS	Total Suspended Solids
EPA	United States Environmental Protection Agency
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirement
Zn	Zinc

Appendix C –Glossary

Beneficial Uses
As defined in the California Water Code, beneficial uses of the waters of the state that may be protected against quality degradation, include but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Best Management Practices (BMPs)
Scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Chain of Custody
Form used to track sample handling as samples progress from sample collection to the laboratory. The chain of custody is also used to track the resulting analytical data from the laboratory to the client. Chain of custody forms can be obtained from an analytical laboratory upon request.

Consent Decree
An agreement the City has entered into with a third party regarding alleged storm water violations at industrial facilities.

Debris
Litter, rubble, discarded refuse, and remains of destroyed inorganic anthropogenic waste.

Detected Not Quantifiable
A sample result that is between the Method Detection Limit (MDL) and the Minimum Level (ML).

Drainage Area
The area of land that drains water, sediment, pollutants, and dissolved materials to a common discharge location.

Effective Date
The date, set by the State Water Resources Control Board (State Water Board), when at least one or more of the IGP requirements (such as SMARTs submittals, minimum BMPs, sampling and analysis requirements) to take effect on July 15, 2015.

Effluent
Any discharge of water, either to the receiving water or beyond the property boundary, controlled by the Discharger.

Effluent Limitation
Any numeric or narrative restriction imposed on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, waters of the contiguous zone, or the ocean.

Erosion
The process by which soil particles are detached and transported by the actions of wind, water or gravity.

Erosion Control BMPs
Vegetation, such as grasses and wildflowers, and other materials, such as straw, fiber, stabilizing emulsion, protective blankets, etc., placed to stabilize areas of disturbed soils, reduce loss of soil due to the action of water or wind, and prevent water pollution.

Facility
A collection of industrial processes discharging storm water associated with industrial activity within the property boundary of operational unit.

Field Measurements
Testing procedures performed in the field with portable field-testing kits or meters.

Good Housekeeping BMPs
BMPs designed to reduce or eliminate the addition of pollutants through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

Industrial General Permit
Order 2014-0057-DWQ which is a general National Pollution Discharge Elimination System (NPDES) permit associated with industrial activity issued by the CA State Water Resources Control Board (SWRCB).

Industrial Materials
Includes, but is not limited to: raw materials, recyclable materials, intermediate products, final products, by product, waste products, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERLCA); any chemical the facility is required to report pursuant to Section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge and that are used, handled, stored, or disposed in relation to a facility's industrial activity.

Method Detection Limit
The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte measured concentration is distinguishable from method blank results.

Minimum Level
The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.

Monitoring Implementation Plan
Planning document included in the Storm Water Pollution Prevention Plan (SWPPP). Dischargers are required to record information on the implementation of the monitoring requirements in this IGP. The MIP should include relevant information on: The Monthly Visual Observation schedule, Sampling Parameters, Representative Sampling Reduction, Sample Frequency Reduction, and Qualified Combined Samples.

Monitoring Requirements
Includes sampling and analysis activities as well as visual observations.

Natural Background
Pollutants including substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from previous activity at a facility, or pollutants in run-on from neighboring sources which are not naturally occurring.

Numeric Action Level (NAL) Exceedance
Annual NAL Exceedance – the Discharger shall determine the average concentration for each parameter using the results of all the sampling and analytical results for the entire facility for the reporting year (i.e., all "effluent" data) and compare this to the corresponding Annual NAL values in Table 26. For Dischargers using composite sampling or flow measurement in accordance with standard practices, the average concentrations shall be calculated in accordance with the U.S. EPA Guidance Manual for the Monitoring and Reporting Requirements of the NPDES Multi-Sector Storm Water General Permit. An annual NAL exceedance occurs when the average of all the analytical results for a parameter from samples taken within a reporting year exceeds an annual NAL value for that parameter listed in Table 6 (or is outside the NAL pH range);

Instantaneous maximum NAL exceedance
The Discharger shall compare all sampling and analytical results from each distinct sample (individual or composite) to the corresponding instantaneous maximum NAL values in Table 26. An instantaneous maximum NAL exceedance occurs when two or more analytical results from samples taken for any parameter within a reporting year exceed the instantaneous maximum NAL value (for TSS and O&G), or are outside of the instantaneous maximum NAL range (for pH).

Non Detect
Per IGP, sample result is less than Method Detection Limit; analyte being tested cannot be detected by the equipment or method.

Non-Storm Water Discharges (NSWDs)
Discharges that do not originate from precipitation events. Including but not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

Numeric Action Level (NAL)
Pollutant concentration levels used to evaluate if best management practices are effective and if additional measures are necessary to control pollutants. NALs are not effluent limits. The exceedance of an NAL is not a permit violation.

Operator
In the context of storm water associated with industrial activity, any party associated with an industrial facility that meets either of the following two criteria:
The party has operational control over the industrial SWPPP and SWPPP specifications, including the ability to make modifications to those plans and specifications.
The party has day-to-day operational control of activities at the facility which are necessary to ensure compliance with a SWPPP for the facility or other permit conditions (e.g., authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

pH
Unit universally used to express the intensity of the acid or alkaline condition of a water sample. The pH of natural waters tends to range between 6.0 and 9.0 with neutral being 7.0.

Plastic Materials
Plastic Materials are virgin and recycled plastic resin pellets, powders, flakes, powdered additives, regrind, dust, and other similar types of preproduction plastics with the potential to discharge or migrate off-site.

Qualified Industrial Storm Water Practitioner (QISP)
Required when a Discharger reaches Level 1 status or higher, a QISP is the individual assigned to ensure compliance with this IGP or to assist New Dischargers with determining coverage eligibility for discharges to an impaired water body. A QISP's responsibilities include implementing the SWPPP, performing the Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation), assisting in the preparation of Annual Reports, performing ERAs, and training appropriate Pollution Prevention Team members. The individual must take the appropriate state approved or sponsored training to be qualified. Dischargers shall ensure that the designated QISP is geographically located in an area where they will be able to adequately perform the permit requirements at all of the facilities they represent.

Qualifying Storm Event (QSE)
A precipitation event that:
Produces a discharge for at least one drainage area; and
Is preceded by 48 hours with no discharge from any drainage area.

Receiving Water
For the purpose of this document, a water of the U.S.

Regional Water Board
Includes the Executive Officer and delegated Regional Water Board staff. San Diego is in Region 9. The local Regional Water Quality Control Board is located at 2375 Northside Drive, Suite 100, San Diego, CA 92108.

Runoff Control BMPs
Measures used to divert run-on from offsite and runoff within the site.

Run-on

Discharges that originate offsite and flow onto the property of a separate facility or property or, discharges that originate on-site from areas not related to industrial activities and flow onto areas on the property with industrial activity.

Scheduled Facility Operating Hours
The time periods when the facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed.

Sediment
Solid particulate matter, both mineral and organic, that is in suspension, is being transported, or has been moved from its origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

Sedimentation
Process of deposition of suspended matter carried by water, wastewater, or other liquids that flow by gravity. Control of sedimentation is accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material.

Sediment Control BMPs
Practices that trap soil particles after they have been eroded by rain, flowing water, or wind. Includes those practices that intercept and slow or detain the flow of storm water to allow sediment to settle and be trapped (e.g., silt fence, sediment basin, fiber rolls, etc.).

Sheet Flow
Flow of water that occurs overland in areas where there are no defined channels and where the water spreads out over a large area at a uniform depth.

Source
Any facility or building, property, road or area that causes or contributes to pollutants in storm water.

Storm Water
Storm water runoff, snowmelt runoff, and storm water surface runoff and drainage.

Storm Water Discharge Associated with Industrial Activity
The discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. The term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used for traveled by carriers of raw materials; manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application of or disposal of process wastewaters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

Material handling activities
Include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas.

Structural Controls
Any structural facility designed and constructed to mitigate the adverse impact of storm water and urban runoff pollution.

Total Suspended Solids (TSS)
The measure of the suspended solids in a water sample including inorganic substances such as soil particles, organic substances such as algae, aquatic plant/animal waste, and particles related to industrial/sewage waste, etc. The TSS test measures the concentration of suspended solids in water by measuring the dry weight of a solid material contained in a known volume of a sub-sample of a collected water sample. Results are reported in mg/L.

Toxicity
The adverse response(s) of organisms to chemicals or physical agents ranging from mortality to physiological responses, such as impaired reproduction or growth anomalies.

Turbidity
The cloudiness of water quantified by the degree to which light traveling through a water column is scattered by the suspended organic and inorganic particles it contains. The turbidity test is reported in Nephelometric Turbidity Units (NTU) or Jackson Turbidity Units (JTU).

Waters of the United States
Generally, refers to surface waters, as defined for the purposes of the federal Clean Water Act.

Waters of the State
Generally, refers to surface and ground waters, as defined for the purposes of the California Porter-Cologne Water Quality Control Act.

Appendix D – Authorized Non-Stormwater Discharges

Authorized non- storm water discharges (NSWDs), which can include specified types of dry weather discharges, are not authorized unless specified in:

- NPDES Order 2014-0057-DWQ (IGP) – Chapter IV, Sections A.-C.
- NPDES Order No. R9-2015-0100 (MS4) - Chapter II, Section E.2.a.
- Or other applicable, NPDES Permits, WDR or regulatory requirements

The annual report lists and describes all the authorized discharges.

In addition to any other reporting requirements, any unauthorized non-storm discharges that enter a storm drain should be reported to the Storm Water Hotline at 619-235-1000 or send an email to SWPPP@sandiego.gov.

Appendix E – List of Industrial Materials

Material	Storage Location(s); Typical Quantity Stored; and Typical Frequency of Storage	Receiving Location(s); Typical Quantity Received; and Typical Frequency of Receiving	Shipping Location(s); Typical Quantity Shipped; and Typical Frequency of Shipping	Handling Location(s); Typical Quantity Handled; and Typical Frequency of Handling
Wastewater	Storage Location: Map: Areas A, B, C, and D.	Receiving Location: Areas A, B, C, and D.		Handling Location: Areas A, B, C, and D.
	Typical Quantity Stored: 150 mgd	Typical Quantity Received: 150 mgd	Not Applicable	Typical Quantity Handled: 150 mgd
	Frequency of Storage: Daily	Typical Frequency of Receiving: Daily		Typical Frequency of Handling: Daily
Sodium Hydroxide (Caustic)	Storage Location: Near R	Receiving Location: Near R	Not Applicable	Handling Location: Near R
	Typical Quantity Stored: Two 10,000-gallon ASTs	Typical Quantity Received: 3600 gallons		Typical Quantity Handled: 3600 gallons
	Frequency of Storage: Annually	Typical Frequency of Receiving: Monthly		Typical Frequency of Handling: Monthly
Sodium Hypochlorite (Bleach)	Storage Location: Near R	Receiving Location: Near R	Not Applicable	Handling Location: Near R
	Typical Quantity Stored: Three 15,500-gallon ASTs	Typical Quantity Received: 4800 gallons		Typical Quantity Handled: 4800 gallons
	Frequency of Storage: Annually	Typical Frequency of Receiving: Daily		Typical Frequency of Handling: Daily
Ferrous Chloride	Storage Location: Near C & D	Receiving Location: Near C & D	Not Applicable	Handling Location: Near C&D
	Typical Quantity Stored: One 10,000-gallon AST	Typical Quantity Received: 4200 gallons		Typical Quantity Handled: 4200 gallons
	Frequency of Storage: Annually	Typical Frequency of Receiving: Daily		Typical Frequency of Handling: Daily
Ferric Chloride	Storage Location: Near C & D	Receiving Location: Near C & D	Not Applicable	Handling Location: Near C&D
	Typical Quantity Stored: Two 23,000-gallon AST	Typical Quantity Received: 4200 gallons		Typical Quantity Handled: 4200 gallons
	Frequency of Storage: Annually	Typical Frequency of Receiving: Daily		Typical Frequency of Handling: Daily
Activated Carbon	Storage Location: Near B&Q	Receiving Location: Near B&Q	Shipping Location: Near B&Q	Handling Location: Near B&Q
	Typical Quantity Stored: 280,000 pounds	Typical Quantity Received: 20,000-40,000 pounds	Typical Quantity Shipped: 20,000-40,000 pounds	Typical Quantity Handled: 20,000-40,000 pounds
	Frequency of Storage: Annually	Typical Frequency of Receiving: Annually	Typical Frequency of Shipping: Annually	Typical Frequency of Handling: Annually
Polymer	Storage Location: Near A	Receiving Location: Near A	Not Applicable	Handling Location: Near A

Material	Storage Location(s); Typical Quantity Stored; and Typical Frequency of Storage	Receiving Location(s); Typical Quantity Received; and Typical Frequency of Receiving	Shipping Location(s); Typical Quantity Shipped; and Typical Frequency of Shipping	Handling Location(s); Typical Quantity Handled; and Typical Frequency of Handling
	Typical Quantity Stored:	Typical Quantity Received:		Typical Quantity Handled:
	Two 8,500 gallons ASTs	5,000 gallons		5,000 gallons
	Frequency of Storage:	Typical Frequency of Receiving:		Typical Frequency of Handling:
	Annually	Daily		Daily
Hydrogen Peroxide	Storage Location:	Receiving Location:	Not Applicable	Handling Location:
	Near D	Near D		Near D
	Typical Quantity Stored:	Typical Quantity Received:		Typical Quantity Handled:
	One 8,400 gallons AST	4,400 gallons		4,400 gallons
	Frequency of Storage:	Typical Frequency of Receiving:		Typical Frequency of Handling:
	Annually	Weekly		Weekly
Lubricants	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	J-Q	J		J-Q
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	4,000 gallons	2,000 gallons		2,000 gallons
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Annually		Monthly
Sludge (Bio-Solids) Liquid-Solids	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	Near A&Q	Near A&Q	Near Q	Pumped off-site to MBC
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	21 MG	1.12 mgd	1.12 mgd	1.12 mgd
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Daily	Daily	Daily
Grit/85% Inorganics	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	C	C	C	Trucked to landfill
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	17,000 pounds	17,000 pounds	17,000 pounds	17,000 pounds
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Weekly	Weekly	Weekly
Rags/5% Organics	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	D	Daily	D	Trucked to landfill
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	8,000 pounds	8,000 pounds	8,000 pounds	8,000 pounds
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Weekly	Weekly	Weekly
Sludge Screenings	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	Q	Q	Q	Trucked to landfill

Material	Storage Location(s); Typical Quantity Stored; and Typical Frequency of Storage	Receiving Location(s); Typical Quantity Received; and Typical Frequency of Receiving	Shipping Location(s); Typical Quantity Shipped; and Typical Frequency of Shipping	Handling Location(s); Typical Quantity Handled; and Typical Frequency of Handling
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	21,000 pounds	21,000 pounds	21,000 pounds	21,000 pounds
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Daily	Daily	Daily
Diesel Fuel	Storage Location:	Receiving Location:	Not Applicable	Handling Location:
	J	J		J
	Typical Quantity Stored:	Typical Quantity Received:		Typical Quantity Handled:
	4200 gallons	4000 gallons		
	Frequency of Storage:	Typical Frequency of Receiving:		Typical Frequency of Handling:
	Annually	Annually		Daily
Aluminum	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	O	O	Q	Trucked to recycle
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	654 pounds			654 pounds
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Weekly	Weekly	Weekly
Copper	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	Q	Q	Q	Trucked to recycle
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	647 pounds			647 pounds
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Weekly	Weekly	Weekly
Iron-Steel	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	E	E	E	Trucked to scrap yard
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Quarterly	Quarterly	Quarterly
Trash: PVC-materials, plastics and metals	Storage Location:	Receiving Location:	Shipping Location:	Handling Location:
	M	M	M	Trucked to landfill
	Typical Quantity Stored:	Typical Quantity Received:	Typical Quantity Shipped:	Typical Quantity Handled:
	5,000 pounds	1,000 pounds	5,000 pounds	5,000 pounds
	Frequency of Storage:	Typical Frequency of Receiving:	Typical Frequency of Shipping:	Typical Frequency of Handling:
	Annually	Quarterly	Quarterly	Quarterly

Appendix F – Industrial Activities and Associated Materials

Map Location	Location Description	Industrial Activity	Associated Industrial Materials	Material Physical Characteristics	Associated Drainage Management Area	Associated Pollutants	Potential Storm Water Exposure Pathway
A	Digester Tanks 1-8 and Methane Gas Capture Facility. Northern Portion Polymer Building/Storage Tanks	Wastewater Treatment	Wastewater; Equipment	Liquids/Solids	PLSD4	TSS; Oil & Grease; Fecal coliform; Total coliform; E. Coli; Ammonia; Nitrate + Nitrite; pH; Fe; Al	No - Area runoff directed back to the plant by a sump pump.
B	Primary Sedimentation Tanks and Odor Control	Wastewater Treatment	Wastewater; Equipment	Liquids/Solids	PLSD4	TSS; Oil & Grease; Fecal coliform; Total coliform; E. Coli; pH; Ammonia; Nitrate + Nitrite; Fe; Al	No - Area runoff directed back to sedimentation tanks and the plant.
C	Head Works - Grit Processing Building and Covered Below Ground Grit Removal Tanks	Grit Removal from Wastewater Treatment; Chemical Loading Area	Wastewater; Grit (Biosolids)	Liquids/Solids	PLSD3/ PLSD4	TSS; Fecal coliform; Total coliform; E. Coli; pH ; Ammonia; Nitrate + Nitrite	Yes – Most is exposed except a small area where runoff is directed back to the plant by a sump pump.
D	Head Works - Rags Removal Building and Outdoor Wash Rack (Southern Portion)	Rags Removal; Loading Solids into Bins and Transporting	Grit (Biosolids)	Liquids/Solids	PLSD3/ PLSD4	TSS; Solids; Fecal coliform; Total coliform; E. Coli; pH; Ammonia; Nitrate + Nitrite	Yes – Half of this area is exposed and will produce runoff that is conveyed to the storm drain. Runoff from the other half is directed back to the plant by a sump pump.
E	Pilot Equipment, Testing Area, Equipment/Parts Storage and Boneyard	Pilot Equipment Testing Area; Equipment/ Parts Storage Area	Iron; Galvanized Metals; Plastic; Equipment	Solids	PLSD1	TSS; Oil & Grease; Al; Fe; Zn; pH	Yes – Runoff from this area is exposed and enters the storm drain.
G	North Effluent Screening Facility	Removing Solids	Wastewater; Equipment	Solids	PLSD1	TSS; Oil & Grease; pH; Fe; Al	Yes, low potential – Building is covered, but a portion of the upstream area runoff is directed back into the plant and the remainder enters the storm drain.
H	Warehouse	Miscellaneous equipment storage indoors and Outdoors	Metals; Paint; Solvents	Solids/ Liquids	PLSD2	TSS, Oil & Grease; Al; Fe; Pb	No – All materials are stored indoors and under cover.
I	Maintenance Building	Metal fabrication; metal storage; equipment storage	Metals	Solids	PLSD2	TSS; Oil & Grease; pH; Fe	No - All operations contained within a building.

Map Location	Location Description	Industrial Activity	Associated Industrial Materials	Material Physical Characteristics	Associated Drainage Management Area	Associated Pollutants	Potential Storm Water Exposure Pathway
J	Gas Utilization Faculty	Gas Storage; Generator Fueling	Diesel Fuel; Lubricant Oil	Liquid	PLSD3a	Oil & Grease; pH	Yes, low potential - Diesel fuel and lube stored in secondary containment. Small area to west is exposed and enters the storm drain.
K	Central Boiler Facility	Boiler Maintenance; Equipment Loading/Unloading	Metals; Oil and Grease; Equipment	Solids/ Liquids	PLSD3a	TSS; Oil & Grease; pH	No - All operations contained within a building.
L	South Effluent Screening Facility	Removing Solids	Biosolids	Solids	PLSD3a	TSS, Fecal coliform; Total coliform; E. Coli; Ammonia; Nitrate + Nitrite; pH	Yes, low potential – Majority of this area is covered.
M	Recycling Bin Storage Area and Wash Area	Storing facility generated wastes and bin/equipment cleaning	Scrap metal; paper; plastic	Solids/Liquids	PLSD4	TSS; Oil & Grease; Fe; Al; Zn; pH	No - Runoff directed back to the plant.
N	SCS Plant - Methane Gas Storage and Transfer	Storing methane gas generated by wastewater treatment process	Methane; Processing Equipment	Gas	PLSD4	TSS; Oil & Grease; Fe; Al	No - Runoff directed back to the plant.
O	Recycling Bin Storage Area	Storing scrap metal	Scrap metal	Solids	PLSD3	TSS; Fe; Al	Yes - Potential for runoff and tracking from unpaved gravel covered area to paved road.
P	Covered Cargo Container Storage Area	Miscellaneous equipment storage	Scrap metal	Solids	PLSD3a	TSS; Fe; Al	No - All materials are covered.

Map Location	Location Description	Industrial Activity	Associated Industrial Materials	Material Physical Characteristics	Associated Drainage Management Area	Associated Pollutants	Potential Storm Water Exposure Pathway
Q	Sludge Pumping Station	Loading biosolids into rolloff container inside building and transporting offsite	Biosolids	Solids	PLSD4	TSS; Fecal coliform; Total coliform; E. Coli; Ammonia; Nitrate + Nitrite; Oil & Grease pH	No - Runoff directed back to the plant.
R	Chemical Unloading and Tank Storage	Transfer chemicals to holding tanks	Polymer; Ferrous Chloride; Sodium Hydroxide; Sodium Hypochlorite	Liquid	PLSD2	pH	No - Tanks are stored within a secondary containment and therefore material exposed to precipitation is not conveyed into the storm drain system.

Appendix G – Potential for Significant Spills and Leaks

Location Where Spills and Leaks Can Likely Occur	General Description of Potential for Spills and Leaks
A - Digester Tanks 1-8 and Methane Gas Capture Facility. Northern Portion Polymer Building/Storage Tanks	Spills/Leaks may occur during equipment maintenance. Lubricant leaks may occur from gas pumps to outside the Methane Capture Facilities.
B - Primary Sedimentation Tanks and Odor Control	Spills/Leaks may occur during equipment maintenance.
C - Headworks - Grit Processing Building	Liquids/Solids have the potential to be spilled outside of the building as trucks leave the covered loading area.
D - Headworks - Rags Removal	Liquids/Solids have the potential to be spilled outside of the building as trucks leave the covered loading area
E - Pilot Equipment Testing Area, Equipment/Parts Storage and Boneyard	Spills/Leaks may occur during equipment storage.
G - North Effluent Screening Facility	Liquids and solids have the potential to spill on to First St. when transferring solids/liquids.
H - Warehouse	Forklifts have the potential to leak fluids if a hydraulic hose breaks.
I - Maintenance Building	Spills/Leaks may occur while working on or moving equipment.
J - Gas Utilization Facility	Spills/Leaks may occur while offloading diesel fuel and lubricants and during equipment maintenance.
L - South Effluent Screening Facility	Spills/Leaks of biosolids may occur when trucks leave the covered loading area.
Q – Sludge Pumping Station	Spills/Leaks of biosolids may occur when trucks leave the covered loading area and during equipment maintenance.

Appendix H – Significant Spills and Leaks

Date of spill	Describe Material leaked or spilled	Location of spill or leak and corresponding drainage area	Describe whether the spill or leak discharged or had the potential to discharge from Facility	Describe spill (Include characteristics, quantity spilled/leaked, and quantity discharged as appropriate)	Describe cleanup or remedial actions	Describe preventative measures taken to avoid reoccurrence
July 27, 2015	Ferrous Chloride	Release occurred by Ferrous pump area in the Headworks of Facility. Area spills back to the plant.	No discharge or potential to discharge from Facility.	All chemical contained within the area and put back to Headworks.	All 1200 gallons were contained within area and metered back to Plant process.	Repaired Pump and ordering new pumps.

Significant spills are considered those that were reported to the Regional Water Quality Control Board.

Appendix I – BMP Summary Table

Location Description (Map ID)	Pollutant Source Type(s)	Associated Pollutants	BMPs Implemented	BMP Type (minimum/ advanced)	BMP Site Map ID	Frequency of BMP Implementation
Digester Tanks 1-8 and Methane Gas Capture Facility. Northern Portion Polymer Building/Storage Tanks (A)	Material handling and storage, Spills and Leaks	TSS; Oil & Grease; Fecal coliform; Total coliform; E. Coli; Ammonia; Nitrate + Nitrite; pH; Fe; Al	Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	Monthly during the dry season, monthly or more as needed during wet season
			Spill and Leak Prevention - Secondary containment	Minimum	SC	Continuous
			Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
			Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	Continuous
Primary Sedimentation Tanks and Odor Control (B)	Material handling and storage, Spills and Leaks	TSS; Oil & Grease; Fecal coliform; Total coliform; E. Coli; pH; Ammonia; Nitrate + Nitrite; Fe; Al	Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	Continuous
Head Works - Grit Processing Building and Covered Below Ground Grit Removal Tanks (C)	Material handling and storage, Spills and Leaks	TSS; Fecal coliform; Total coliform; E. Coli; pH; Ammonia; Nitrate + Nitrite	Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	Monthly during the dry season, monthly or more as needed during wet season
			Spill and Leak Prevention - Secondary containment	Minimum	SC	Continuous
			Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
			Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	Continuous
Head Works - Rags Removal Building and Outdoor Wash Rack (Southern Portion) (D)	Material handling and storage, Spills and Leaks	TSS; Solids; Fecal coliform; Total coliform; E. Coli; pH; Ammonia; Nitrate + Nitrite	Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	Monthly during the dry season, monthly or more as needed during wet season
			Spill and Leak Prevention - Secondary containment	Minimum	SC	Continuous
			Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
			Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	Continuous
Pilot Equipment, Testing Area, Equipment/Parts Storage and Boneyard (E)	Material handling and storage, Spills and Leaks	TSS; Oil & Grease; Al; Fe; Zn; pH	Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	Monthly during the dry season, monthly or more as needed during wet season
North Effluent Screening Facility	Material handling and storage, Spills and Leaks	TSS; Oil & Grease; pH; Fe; Al	Spill and Leak Prevention - Secondary containment	Minimum	SC	Continuous

Location Description (Map ID)	Pollutant Source Type(s)	Associated Pollutants	BMPs Implemented	BMP Type (minimum/ advanced)	BMP Site - Map ID	Frequency of BMP Implementation
(G)			Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	Monthly during the dry season, monthly or more as needed during wet season
			Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	Continuous
			Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
Warehouse (H)	Material handling and storage	TSS, Oil & Grease; Al; Fe; Pb	Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
Maintenance Building (I)	Material handling and storage, Spills and Leaks	TSS; Oil & Grease; pH; Fe	Good Housekeeping/Preventative Maintenance - Indoor maintenance	Minimum	IM	Continuous
			Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	Monthly during the dry season, monthly or more as needed during wet season
			Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
Gas Utilization Faculty (J)	Material handling and storage, Spills and Leaks	Oil & Grease; pH	Spill and Leak Prevention - Secondary containment	Minimum	SC	Continuous
			Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
Central Boiler Facility (K)	Spills and Leaks	TSS; Oil & Grease; pH	Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
South Eluent Screening Facility (L)	Material handling and storage, Spills and Leaks	TSS, Fecal coliform; Total coliform; E. Coli; Ammonia; Nitrate + Nitrite; pH	Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	Continuous
Recycling Bin Storage Area and Wash Area (M)	Material handling and storage, Spills and Leaks	TSS; Oil & Grease; Fe; Al; Zn; pH	Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	Monthly during the dry season, monthly or more as needed during wet season
			Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	During rain events
SCS Plant - Methane Gas Storage and Transfer (N)	Material handling and storage, Spills and Leaks	TSS; Oil & Grease; Fe; Al	Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	During rain events
Recycling Bin Storage Area (O)	Material handling and storage	TSS; Fe; Al	Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	During rain events
Enclosed Cargo Container Storage Area (P)	Material handling and storage	TSS; Fe; Al	Exposure Minimization BMPs - Storm resistant shelter	Advanced	SR	During rain events

Location Description (Map ID)	Pollutant Source Type(s)	Associated Pollutants	BMPs Implemented	BMP Type (minimum/ advanced)	BMP Site Map ID	Frequency of BMP Implementation
Sludge Pumping Station (Q)	Material handling and storage	TSS; Fecal coliform; Total coliform; E. Coli; Ammonia; Nitrate + Nitrite; Oil & Grease pH;	Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	Continuous
Chemical Unloading and Tank Storage (R)	Material handling and storage, Spills and Leaks	pH	Spill and Leak Prevention - Secondary containment	Minimum	SC	Continuous
			Good Housekeeping/Preventative Maintenance - Identify and clean leaks and spills	Minimum	LS	Monthly during the dry season, monthly or more as needed during wet season
			Storm Water Containment and Discharge Reduction - Discharge reduction	Advanced	DR	Continuous

Note:

The following minimum BMPs also contain general recommendations for the site and therefore may not have been explicitly listed in the table above. These BMPs are expected to be implemented throughout the site when feasible:

- Good Housekeeping
- Preventative Maintenance
- Spill and Leak Prevention and Response
- Material Handling and Waste Management
- Erosion and Sediment Controls
- Employee Training Program
- Quality Assurance and Record Keeping

Appendix J – Site Contact Information

Site Address
1902 Gatchell Rd.
San Diego, CA 92106

Mailing Address
4077 N. Harbor Dr.
San Diego, CA 92101

Facility Contact
David Marlow
DMarlow@sandiego.gov
Phone (619) 221-8728

Appendix K – Forms and Checklists

Form 1 – Sampling Visual Observations
Form 2 – Monthly Dry Weather Visual Observations
Form 3 – Annual Comprehensive Site Compliance Evaluation
Form 4 – Example Chain of Custody (COC)

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SIDE A

FORM 1- SAMPLING VISUAL OBSERVATIONS

Conduct visual observations at the same time as storm water sampling (w/in 4 hours of start of discharge or w/in 12 hours if the discharge began outside facility hours).

Facility: _____

Date: _____

Name & Title: _____

Signature: _____

Did a discharge occur at the facility?

☐ No (see #1 below) ☐ Yes (see #2 below)

1. This is not a QSE. ***Stop here***.
2. Did the discharge at 1 or more drainage areas begin outside of facility hours, but within the past 12 hours?
   - ☐ Yes (continue to form below)
   - ☐ No (list date and estimated time discharge began and ***stop here***).

Date: _____ Time: _____

Sampling Event # (Check one):

☐ **1** (July to December) ☐ **2** (July to December)

☐ **3** (January to June) ☐ **4** (January to June) ☐ Other (Specify) _____

Drainage Location Description *Write in SD code listed on Bottle/COC.*	#1	#2	#3	#4
Observation/Sample Time:	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.
Did a discharge occur at this location? *If no, stop here for those locations. If yes, continue below for those locations.*	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Approximate Time Discharge Began:	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.
pH Result (units) *If pH is >9 or <6, complete reverse side.*				
Did Any Containment Overflow? *If yes, complete reverse side.*	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Were any of the following Pollutants Observed: Floating or suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris? *If yes, complete reverse side.*	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐

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SIDE B

FORM 1 - SAMPLING VISUAL OBSERVATIONS

DRAINAGE LOCATION DESCRIPTION *(from Side A)*	**SOURCE AND LOCATION OF POLLUTANT** *EXAMPLE: Discharge from material storage Area #2*	**DESCRIBE STORM WATER DISCHARGE CHARACTERISTICS** *Indicate whether discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.*	**IDENTIFY AND DESCRIBE PROBABLE SOURCE(S) OF POLLUTANTS** *EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.*	**DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION**

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FORM 2 – MONTHLY DRY WEATHER VISUAL OBSERVATIONS

Perform a visual observation once per month throughout the reporting year during dry weather at all drainage areas. Observe each drainage area for indications of authorized and unauthorized non-storm water discharges (NSWDs) and their sources.

Facility: _____

Date & Time: _____

Name & Title: _____

Signature: _____

Check the Month:

☐ July ☐ August ☐ September

☐ October ☐ November ☐ December

☐ January ☐ February ☐ March

☐ April ☐ May ☐ June

WERE ANY NSWDS OR POLLUTANTS OBSERVED DURING THIS VISUAL OBSERVATION?

- Pollutants include floating or suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris.
- NSWDs include any discharge to a storm drain that is not entirely composed of precipitation.

☐ No. ***Stop here.*** ☐ Yes. Continue below.

SOURCE AND LOCATION *E.g. Drinking fountain water @ Building C*	**TYPE OF NSWD OR POLLUTANT** *E.g. Drinking fountain water*	**DESCRIBE NSWD CHARACTERISTICS AND PROBABLE SOURCE OF POLLUTANTS** Indicate whether NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc. **At the NSWD Source** *Where is it coming from?*	 **At the NSWD Drainage Area and Discharge Location** *Where is it going to?*	**DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION**

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SOURCE AND LOCATION *E.g. Drinking fountain water @ Building C*	**TYPE OF NSWD OR POLLUTANT** *E.g. Drinking fountain water*	**DESCRIBE NSWD CHARACTERISTICS AND PROBABLE SOURCE OF POLLUTANTS** Indicate whether NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc. **At the NSWD Source** *Where is it coming from?*	 **At the NSWD Drainage Area and Discharge Location** *Where is it going to?*	**DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION**

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FORM 3-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: ____/____/_____

INSPECTOR NAME: _____ **TITLE:** _____ **SIGNATURE:** _____

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS TO CONTACT STORM WATER? ☐ YES ☐ NO *If yes, to ANY question, complete the next two columns of this form*	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
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Make sure to staple this together for each evaluation, because only the front page has the date and signature.

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FORM 3-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS (CONTINUED)

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS TO CONTACT STORM WATER? ☐ YES ☐ NO *If yes, to ANY question, complete the next two columns of this form*	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
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FORM 3-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS (CONTINUED)

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS TO CONTACT STORM WATER? ☐ YES ☐ NO *If yes, to ANY question, complete the next two columns of this form*	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
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FORM 3-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS (CONTINUED)

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FORM 4 – Chain of Custody Example

The City of SAN DIEGO

PUBLIC UTILITIES DEPARTMENT
ENVIRONMENTAL MONITORING & TECHNICAL SERVICES DIVISION
ENVIRONMENTAL CHEMISTRY SERVICES SECTION
3530 Kiowa Drive
La Mesa, CA 91942
(619) 668-3213

SAMPLING REPORT & CHAIN OF CUSTODY RECORD

Project/Client: IGP Storm Water Monitoring	Contact Name: Superin Tendent		Type of Sampling Equipment/How sample obtained/other sampling notes:	
Contact Name: Ima Incharge	Sampler's Name: Sam Pier		No discharge at SBSD #3; stainless steel bucket used for collection	
Phone: (619)555-1234	Phone: 619-555-4321			

Sample Information: (All information is required) Number of attachments:

Date/Time Sample Taken	Source / Location	Sample Type/Description	Grab / Composite	Vol / wt (mL / L / g)	Number of containers	Container Type	Preservation	Analyses requested	Sample Log Number (Lab use only)	Sample Temperature (Lab use only)
10/1/18 1300	SB SD #2	STORM WATER	GRAB	2L	1	P	≤6.0°C	METALS, NO2, NO3, AMMONIA,TSS,PH		
10/1/18 1300	SB SD #2	STORM WATER	GRAB	1L	1	G	HCl	O&G		
	~~SB SD #3~~ NO DISCHARGE	~~STORM WATER~~	~~GRAB~~	~~2L~~	~~1~~	~~P~~	~~≤6.0°C~~	~~METALS, NO2, NO3, AMMONIA,TSS,PH~~		
	~~SB SD #3~~	~~STORM WATER~~	~~GRAB~~	~~1L~~	~~1~~	~~G~~	~~HCl~~	~~O&G~~		

Chain-of-Custody

Relinquished by:	Date & Time	Received by:	Date & Time
Name: Sam Pier Sign: [signature]	10/1/18 1315 Location: ALV	Name: Ann Alyst Sign: [signature]	10/1/18 1315 Location: ALV
Relinquished by: Name: Sign:	Date & Time Location:	Received by: Name: Sign:	Date & Time Location:
Relinquished by: Name: Sign:	Date & Time Location:	Received by: Name: Sign:	Date & Time Location:

Sample Condition Received in Lab

Temperature In Compliance:	Y / N		
Container Intact:	Y / N	Preserved:	Y / N / NA
Received On Ice:	Y / N	Preserved at Lab:	Y / N

Comments

Reviewed by: Date:

See instructions, on reverse, for completing this form.
FIGURE 2a

Original retained by lab
1st copy – Transporter
Last copy - for sample originator

V:\ADATS\41.Section\WCDGROUPS\South_Bay_Lab\SB COC\IGP_storm_water_SB.docx

Document Control Number: WCL-F-002.8 August 1, 2018

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Appendix L – Revisions (Page 1 of 1)

The facility SWPPP is a working document. Any approved changes or modifications, whether administrative (A) or operational (O), and results of annual site compliance evaluations must be noted/recorded in the following table to maintain an updated document.

Date	Type of Revision	Description of Change(s)	Signature
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

for the

Metro Biosolids Center

CITY OF SAN DIEGO
PUBLIC UTILITIES DEPARTMENT

July 2015
Amended December 21, 2016

Facility Operating Hours
Monday – Friday
06:00 – 15:00

WDID 9 37I014927

Statement of Certification

I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

Peter Vroom
Deputy Public Utilities Director

_____

Date

TABLE OF CONTENTS –

Chapter 1 - Introduction

1.1 Purpose of Plan

- This plan complies with Order 2014-0057-DWQ which is a general National Pollution Discharge Elimination System (NPDES) permit associated with industrial activity issued by the CA State Water Resources Control Board (SWRCB).
- This order requires the facility to implement this plan to preserve and protect the quality of "waters of the United States" by reducing or eliminating pollutants in storm water runoff.
- This plan supersedes Order 97-03-DWQ; its effective date is July 1, 2015.
- For more information visit the SWRCB website at: http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml
- Contact the SWRCB/Storm Water Section at 1-866-563-3107
- For general questions, e-mail the SWRCB/Storm Water Section at: stormwater@waterboards.ca.gov

1.2 Pollution Prevention Team

- The storm water team is outlined in the table below designating the responsibilities of each assigned staff.

Position	Responsibility	Assigned Staff
Site Compliance Supervisor	Responsible for directing SWPPP	Facility Superintendent
Site Compliance Coordinator	Responsible for site operations; directing performance of site inspections; directing implementation of best management practices	Process Control Supervisor Alternate: Wastewater Operations Supervisor
Inspections	Perform monthly inspections; collect runoff samples	Treatment & Disposal (T&D) Operations staff at site
Monitoring	Analyze for appropriate constituents	Environmental Monitoring & Technical Services (EMTS) Division - Environmental Chemistry Services and Marine Microbiology Laboratories
Compliance Assessment	Assist with roles & responsibilities of implementation of the SWPPP; oversee submittal of annual report	EMTS Division – Permits & Compliance Section

1.3 Plan Implementation

Chapter 3 of this SWPPP identifies potential pollution sources to storm water and non-storm water runoff at the site. It also identifies the best management practices for minimizing the potential for pollution in storm runoff. Additional best management practices must be implemented at the facility, as needed.

1.4 Plan Updates & Revisions

This SWPPP presents up-to-date storm water management strategies for minimizing storm runoff pollution and may be modified at any time by the departmental staff in response to:

- changes in state or federal storm water regulations or permits
- requests by EPA, San Diego Regional Water Quality Control Board (RWQCB) or State Water Resources Control Board (SWRCB) for modification of the SWPPP
- implementation of more effective, economical or practical best management practices than those currently identified in the SWPPP

The SWPPP is a working document and can be updated and revised when necessary. Any revisions to the SWPPP will be reviewed and implemented by the site's pollution prevention team. All changes must include a date and initials. Refer to Appendix E to document changes.

SWPPP revisions must be submitted to the SWRCB via the State's internet based tracking system called "SMARTS" [Stormwater Multiple Application & Report Tracking System] per the following schedule:

- Significant revisions must be submitted via SMARTS within 30 days.
- Non-significant revisions must be submitted via SMARTS every three (3) months.

It's up to the site to distinguish between significant and non-significant revisions.

Chapter Two - Site Description

2.1 MBC FACILITY OVERVIEW

The Metro Biosolids Center (MBC) processes solids generated from the 450-square-mile service area that includes the City of San Diego and 15 additional cities and participating agencies. It is located north of Highway 52 and northwest of the Convoy Street exit. The approximately 39 acre site is accessed through a road north of and parallel to Highway 52.

Blended secondary and primary sludge from the North City Water Reclamation Plant (NCWRP) are sent to the Metro Biosolids Center for degritting, thickening and digesting. The digested biosolids are then combined with already digested biosolids from the Pt. Loma Wastewater Treatment Plant which are pumped via force main to MBC. The combined digested biosolids are then sent for dewatering and subsequent reuse/disposal.

Key site facilities are described below.

2.2 PROCESS DESCRIPTION

Raw Solids Receiving Facilities. Approximately 1.0 million gallons per day (mgd) of undigested solids from NCWRP are received into two 0.5 million gallon liquid storage tanks approximately 45 feet in diameter and 45 feet tall. The onsite tanks equalize biosolids flows from NCWRP to the thickening centrifuges.

Grit Removal and Thickening. From the blending sludge receiving facilities, biosolids are directed to a grit removal facility located in the Centrifuge Building. Three grit separators, each with a 1,042 gallon per minute processing capacity, remove grit which is transferred to roll-off dumpsters for storage prior to offsite disposal at a landfill.

The degritted sludge stream is then directed to five 750 gallon per minute (gpm) thickening centrifuges located within the Centrifuge Building. With the addition of polymers, the centrifugal thickeners increase solids concentration in the sludge stream from approximately 0.5 percent to approximately 5 percent prior to pumping to the anaerobic digesters.

Anaerobic Digestion. The thickened NCWRP sludge is directed to one of three anaerobic digesters. Each digester is approximately 105 feet in diameter and 45 feet deep with a 2.9 million gallon capacity. The digesters, which are not open to the atmosphere, heat the sludge to 98^{o}F for a period of at least 15 days in order to stabilize the sludge by reducing its pathogen levels. This digestion process also reduces the volatile solids content of the biosolids and produces digester

(methane) gas. Gas produced during the digestion process is collected and sent to a biogas storage tank.

Digested Solids Storage. From the digesters, stabilized NCWRP sludge is directed to digested solids storage tanks. Digested biosolids from the Point Loma plant are also discharged to these tanks. Two storage tanks, each with 1.3 million gallons of storage capacity, equalize flows prior to solids dewatering. This total combined storage capacity of 2.6 million gallons is sufficient to accommodate approximately two-days of biosolids production from the MBC and Point Loma digesters. The combined digested biosolids are then sent to the dewatering process. Gas generated during storage of the digested biosolids is collected and sent to a biogas storage tank.

Solids Dewatering and Storage. Centrifuges dewater the digested biosolids to a solids concentration of approximately 28 to 30 percent. A total of eight centrifuges have been installed, each with a production capacity of 225 gallons per minute. The dewatered biosolids or “cake” produced by the centrifuges is directed to onsite storage silos.

Eight silos, each with a storage capacity of 6,950 cubic feet, are currently operational. Two additional silos are being constructed and should be operational in CY 2015. The combined capacity of the storage silos is adequate to handle up to three days of solids production from the dewatering centrifuges.

Loading Bins. Cake from the storage silos is conveyed to one of two truck loading stations. Each of the truck loading stations includes a 1,080 cubic foot capacity weighing bin, a 1,085 cubic foot capacity truck loading bin and a floor mounted truck scale. The truck loading stations weighs and prepares the cake into batches that are suitably sized for loading into trucks, transfers the batch of biosolids into the trucks and then determines the total weight of each loaded truck.

Odor Control Facilities.
Area 60: Foul air streams from the biosolids processes described above are collected and sent for treatment by three odor control trains (two in operation; one in stand-by). To treat the foul air, each train consists of one 26,000 scfm packed bed caustic scrubber (using sodium hydroxide and sodium hypochlorite) followed by two 13,000 scfm dual bed carbon adsorption vessels.
Area 94: Foul air from the onsite pump station is sent for treatment by two odor control trains (one in operation; one in stand-by). To treat the foul air, each train consists of one 9,000 scfm packed bed water or caustic scrubber and one 9,000 scfm dual bed carbon adsorption vessel.

Biogas Storage Tank and Flares. Gas produced in the MBC digesters and gas collected from the Digested Biosolids Storage tanks is stored in a 25,000 cubic foot capacity biogas storage tank before being compressed and sent to an on-site co-generation facility. Any gas that is not sent to the co-generation facility is burned off by two gas flares, each with a 2,800 scfm capacity.

Cogeneration (power and heating water) Facilities. Landfill gas from the adjacent Miramar Landfill is blended with the digester gas from MBC. The combined gas is then used as fuel to drive four engine generator sets that provide both power and heat for the processes at MBC. The cogeneration facility produces more electricity than MBC uses and exports the excess power to the SDG&E utility grid.

Under most operating conditions, the cogeneration facility also produces enough heat for the MBC HVAC and digestion systems. Should cogeneration fail to produce enough heat, the MBC hot water boiler system, utilizing natural gas, is used to meet the heating demands. The cogeneration facility is owned and operated by a private company.

Chemical Storage Facilities. MBC uses several process chemicals that are delivered in tanker trucks and stored in bulk chemical storage tanks that are located within secondary containments cells in the Chemical Building. Chemicals are transferred as needed to day tanks located in processing area where they are used. The day tank are also located within secondary containment cells. Piping between the bulk tanks and the day tanks are contained within chemical pipe trenches which have leak detection systems that shut down chemical transfers if a leak is detected. The chemicals currently in use in MBC's processes are sodium hypochlorite, caustic soda, ferrous chloride and mannich polymer.

Pumping Station. The pumping station actually consists of two separate pump stations: the centrate pump station and the wastewater pump station. The wastewater pump station conveys sewage generated from onsite kitchens, restrooms and showers to the municipal sewer system south of Highway 52.

Flows from the dewatering centrifuges, thickening centrifuges and floor drains in processing areas of MBC are directed to a centrate pump station with three 2,500 gallon per minute capacity pumps. The centrate is sampled for quality monitoring before being returned to a large trunk sewer north of MBC and west of the NCWRP. The centrate flows to the Point Loma Wastewater Treatment Plant where it goes through the sewer treatment processes before being discharged through the ocean outfall.

Vactor Truck Unloading. The vactor truck unloading facility was constructed and is operated by the Wastewater Collections Division. The facility allows vactor trucks to unload the sediments, grit, rocks and other debris generated from cleaning sewer pipelines. The vactor trucks discharge their contents into special roll off bins that contain filtered drains. The filters allow the liquid to drain out of the bins into the onsite sewer system and to the wastewater pump station while retaining the solids in the roll

off bins for final disposal at a landfill. To prevent generating odors, the roll off bins have covers that are closed at all times except during vactor unloading operations.

Departmental Storage Area. MBC has designated an area adjacent to Area 87 for other Divisions within Public Utilities Department to utilize for storage of materials and equipment. Storage area “A” is used by the Wastewater Collections Division for the storage of non-hazardous materials and equipment. Storage Area “B” is used by the Central Support Facilities for the storage of non-hazardous materials. Storage Area “C” is used by private contractors to store building materials and equipment while staging construction activities. All applicable Federal, State and local regulations are followed in the storage, usage and disposal of hazardous and non-hazardous materials.

2.3 DESCRIPTION OF STORM DRAIN SYSTEM –

The site map in Appendix A presents the location of existing storm drains at the facility. Storm runoff is collected and discharged from five separate storm drain systems. In addition to these storm drains, runoff from a lower access road flows into a local canyon as surface flow. Storm drains outfall structures or energy dissipaters are designated as Storm Drain “E” (for East) and “S” (for southwest).

The sampling points allow staff to pinpoint the source of any elevated coliform at the facility’s storm drain outfalls. A description of the five storm runoff conveyance systems in this predominantly impervious site are presented below.

Please note the inlet Area 51 drains back into the sewer system.

On-Site Drainage:

South (S) Outfall: This system is a 48" storm drain that empties into the outfall at the west edge of the site boundary.

East (E) Outfall: This system is a 48" storm drain that empties into the outfall outside the east site boundary at the temporary access road.

Drainage Ditch: This system empties into the outfall at the southwest corner of the site boundary.

Access Road Drainage: This system is an 18" storm drain that empties into the north culvert and into a 156" storm drain.

Spillway empties into the canyon at the west end of the access road.

Chapter 3 – Pollutants and Best Management Practices

3.1 Potential Pollution Source Summary Table

The table below summarizes the potential pollutant sources in specific areas or during specific activities at the site. It also lists the pollutants and Best Management Practices or BMPs to prevent and/or eliminate pollutants from entering the waters of the United States.

BMPs can be added or removed at anytime, when necessary. Updates and changes to the table must be documented in Appendix E – Revisions.

Area & Activity	Pollutant	Pollutant Source	BMPs
Facility-wide: Good housekeeping	Suspended solids, nutrients, coliform, dissolved minerals, lubricating oils, degreasers, automotive fluids	Litter, landscape debris, soil erosion, dust; residue from washed off screens, pumps and mechanical equipment; spilled/leaked sewage, sludge, and chemicals	• Identify storm drain inlets and catch basins via stencil, tile or other method • Identify drain inlets that flow back into the treatment system • Where feasible, cover storm drain inlets with mesh to prevent debris from entering the storm drain system • Keep storm drain inlets free of sediment, trash and debris • Annually clear all storm dray system inlets (catch basins, storm drain inlets, open channels, etc.) of debris • Clean up spills in accordance with the Spill Prevention Control & Countermeasure Plan • Maintain a readily accessible spill clean-up kits on site • Sweep/clean-up after on-site maintenance of pumps, valves and mechanical equipment • Pick up litter and trash • Keep disposal areas free of exposed trash, sediment and debris • Keep trash cans and bins covered or placed on dirt and/or in an area where the leachate drains back into the treatment system • Properly store and dispose of hazardous substances • Cover, contain and/or elevate materials stored outside; store on pervious ground if feasible • Label containers to prevent mishandling of hazardous materials • Use wet-vac during sawing, cutting, etc. to prevent materials from getting to storm drains

Facility-wide: roads and onsite vehicle use	Oil, automotive fluids, dust, soil, sludge, grit, dirt, mud	Leaks from vehicles, car and tire wear, grit, sludge, dirt and mud tracking from tires	• Sweep on-site streets and parking areas weekly • Use soil erosion controls • Install rumble steel plates at Areas 27 and 3
Maintenance Shop: maintenance activities	Lubricants, hydrocarbons, nutrients, coliform suspended solids, sand, metals	Leaks from vehicles, pumps, valves and mechanical equipment; residue from grinding, sanding, etc.	• Sweep/clean Area 86 • Perform preventative maintenance on a routine basis • Dispose of waste oils and lubricants into recycling containers • Perform painting activities in paint booth when feasible
Facility-wide: Wash down activities	Suspended solids, nutrients, coliform, sodium hypochlorite, sodium hydroxide, sludge, oil, lubricants, ferrous chloride	Erosion from soil/dust; residue from washed off screens, pumps or mechanical areas, spills of chemicals, sludge, wastewater	• Minimize runoff when performing hose down activities when the runoff doesn't drain back into the treatment system • Capture, contain and properly dispose of process and wash water to the treatment system, an appropriate waste hauler or to landscaping or other pervious surfaces
Facility-wide: Bulk chemical transfer and storage areas	Polymer, Ferrous Chloride, Sodium Hydroxide, Sodium Hypochlorite	Leaks from industrial activities when transferring/storing/maintaining bulk chemical areas	• Perform truck transfers of chemicals to storage facilities to the designated transfer sites • Use secondary containment • Store bulk chemicals in designated containment areas • Immediately clean up spills according to SPCC plan
Facility-wide: onsite irrigation	Suspended solids, fertilizers, dissolved minerals, nutrients	Overspray of landscape irrigation; soil erosion, leachate from soils or areas of irrigated vegetation, on site fertilizer use	• Limit onsite irrigation to prevent runoff into the storm drain system • Maintain sprinkler/irrigation systems to prevent overspray, leaks and other malfunctions • Leave as much vegetation on site as possible • Minimize soil exposure • Stabilize exposed soils with vegetation, gravel bags, erosion control blankets, fiber rolls and silt fences
Facility wide: Training	***	***	• Attend annual training (Fall Classic) • Review and update the Spill Control & Countermeasure Plan every five years • Perform periodic storm water pollution prevent tailgates • Perform BMP specific tailgates, when necessary

Facility-wide: Minor Construction and Contractor's Responsibility	Suspended solids, nutrients, dissolved minerals, automotive fluids,	Cutting and sawing of concrete, FRP, metal, etc during construction activities; uncovered construction materials, landscape debris; construction debris	• Protect storm drains from potential discharges • Sweep/clean-up after all construction activities • Pick up litter • Keep trash bins covered or placed on dirt and/or in a area where the leachate drains back into the treatment system • clean-up spills and leaks immediately with a minimum of water • Use soil erosion controls • Use wet-vac during sawing, cutting, etc...to prevent materials from getting to storm drains • Leave as much vegetation on-site as possible, minimize soil exposure time, stabilize exposed soils, and prevent storm water run-on and runoff
Area & Activity	**Pollutant**	**Pollutant Source**	**BMPs**

Chapter 4 –Monitoring & Reporting Requirements

4.1 Monitoring and Reporting Requirements

This chapter describes the monitoring and reporting requirements mandated by the industrial storm water permit. They include:

- monthly visual observations during dry weather
- observations of the discharge locations during wet weather
- sampling and analyses procedures
- annual site wide evaluation
- recordkeeping and reporting

4.2 MONTHLY Visual Observations (during DRY weather)

- Perform a visual observation once/month for **every month of the year**
- Perform during daylight of scheduled facility operating hours
- Perform on days **without** precipitation, i.e., dry weather
- Observe each drainage area for the presence or indications of prior, present, or potential **authorized** discharges and their sources as well as **unauthorized** discharges, their sources, and associated BMPs [see Appendix D for authorized discharges]
- Document observations and note the presence of any discolorations, stains, odors, floatables, etc. on Form 3 discharges; forms are located in the SWPPP binder
- Take pictures of the affected drainage areas as additional documentation, if necessary
- Ensure Form 3 is fully and adequately completed with the date, time, and signature of person conducting the observation
- Maintain all visual observation records of drainage areas, including outdoor industrial equipment storage areas and outdoor industrial activity areas in SWPPP binder
- Revise BMPs as necessary if observations indicate pollutant sources have not been adequately addressed

4.3 Sampling Visual Observations (during WET weather)

- Conduct visual observations at the same time as storm water sampling from each discharge location in the facility (see Sampling section below for details)
- Perform on days with precipitation
- Visually observe the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris and sources of any discharged pollutants
- Document observations on Form 2 (in the SWPPP binder)
- Ensure Form 2 is fully and adequately completed with the date, time, and signature of person conducting the observation/sampling
- Revise BMPs as necessary if observations indicate pollutant sources have not been adequately addressed

4.4 Sampling: Qualified Storm Event (QSE)

A qualifying storm event (QSE) is precipitation that:

- produces a discharge for at least one drainage area
- preceded by 48 hours with no discharge from any drainage area

Sampling Events:

- collect storm water samples from two (2) QSEs between July 1 to December 31
- collect storm water samples from two (2) QSEs between January 1 to June 30
- collect samples according to sample points on site map in Appendix A
- collect samples only when sampling conditions are safe
- collect samples within **four (4) hours** of:
    - the start of the discharge
    - the start of the facility operating hours if the QSE occurs within the previous 12-hour period
- document sampling information on a Chain-of-Custody form

Sampling Details:

- label the sample bottles and complete two Chain of Custody forms – one for the Microbiology Lab and one for the on-site process control lab
- collect grab samples for both microbiology and chemical analyses
- keep samples refrigerated until officially transferred to laboratories
- perform pH testing within 15 minutes of sample collection or in the field; inform lab staff prior to sampling for pH (if pH will be determined in the lab)
- deliver the samples for chemistry analysis to the process control lab at the site
- For Microbiology samples:
    - immediately notify the Microbiology Lab that storm water samples have been collected

- deliver samples within 6 hours of sample collection and no later than 4pm
- the facility staff is responsible for delivering the samples to the microbiology lab at the following address:

  Marine Microbiology Lab or "NTC Lab"
  2392 Kincaid Rd, San Diego, CA 92101
  Main lab line: 619-758-2361

4.5 Laboratory and Field Analyses

The EMTS process control laboratory at the facility and the EMTS microbiology laboratory analyze the storm water samples for the following parameters using prescribed test methods:

- pH
  Under most circumstances, the site is eligible to screen for pH using wide range litmus pH paper or other equivalent pH test kits. The pH must be performed as soon as practicable but **no later than 15 minutes** after the sample is collected.

  If the site has entered Level 1 status for pH, the laboratory must use a calibrated portable pH meter in accordance with the manufacturer's instructions during the subsequent reporting years.

- total suspended solids (TSS)
- oil and grease (O&G)
- fecal coliform & total coliform

PARAMETER	TEST METHOD	REPORTING UNITS
pH	varies	pH units
TSS	SM 2540-D	mg/L
O&G	EPA 1664A	mg/L
Fecal and total coliform	SM 9221A,E SM9221A,B	MPN

The facility must ensure that the collection, preservation, and handling of all storm water samples are in accordance with good laboratory practices and standards. All analyses must be conducted according to established test protocols and prescribed analytical procedures. Samples from different discharge locations shall not be combined or composited.

4.6 Annual Site-wide Evaluation

Prior to the end of the reporting year (July 1 to June 30), a comprehensive site-wide evaluation must be conducted and consist of the following:

- review of all sampling, visual observation and inspection records conducted during the reporting year
- inspection of all areas of industrial activity and associated potential pollutant sources for evidence of (or the potential for) pollutants entering the storm water conveyance system
- inspection of any BMPs and review of their effectiveness
- review of the SWPPP and update, if necessary

4.7 Reporting:

Sampling & Analytical results: The chemistry and microbiology lab staff submits all sampling and analytical results to the State Water Resources Control Board via the on-line reporting tool [SMARTS] **within 30 days** of obtaining all results for each sampling event.

Annual report: The reporting year is from July 1 thru June 30; the annual report is due no later than July 15. Permits & Compliance staff prepares and submits the annual report which includes all forms that are completed and signed by plant staff. The annual report is submitted to the State Water Resources Control Board via SMARTS and archived at Y:\EMTS\41.0 Sections\P&C\Stormwater\industrial.

CHAPTER 5 - EXCEEDANCE RESPONSE ACTIONS (ERAs)

5.1 Exceedances

Exceedance Response Actions or ERAs are triggered when the results of a stormwater sample exceed a numeric limit for any parameter.

Every facility starts at a baseline compliance level and must demonstrate continuous compliance by performing storm water sampling, analysis, and reporting via the web-based reporting system (SMARTS).

If any qualified storm water sample exceeds a numeric action level (NAL) based on laboratory results for pH, Total Suspended Solids, or oil and grease with Table 1 below, the facility must implement corrective actions called Exceedance Response Actions (ERAs).

Table 1

Parameter	Units	Annual NAL	Instantaneous NAL
pH	pH units	N/A	6.0 – 9.0
TSS	mg/L	100	400
Oil & Grease	mg/L	15	25

For compliance purposes, the reporting year is defined as July 1 through June 30.

5.2 NALs and NAL Exceedances

There are two types of potential monitoring data exceedances:

- annual NAL exceedance
- instantaneous maximum NAL exceedance

A. Annual NAL exceedance occurs when the average of all the analytical results for one parameter from samples within a reporting year exceeds the limit listed in Table 1. In other words, the site average per parameter; there is no annual NAL for pH.

B. Instantaneous maximum NAL exceedance occurs when two or more analytical results for TSS, O&G, or pH from samples taken within a reporting year exceed the instantaneous maximum NAL value (or is outside the NAL pH range) listed in Table 1.

5.3 Baseline Status

At the beginning of the facility's coverage under the Industrial General Permit, it has a Baseline status for all parameters.

5.4.1 Level 1 Status

Baseline status changes to Level 1 if sampling results indicate an annual or instantaneous NAL exceedance for a parameter. Level 1 status starts on July 1 following the reporting year during which the exceedance(s) occurred.

By October 1 following the commencement of Level 1 status, the facility shall:

- Designate a Qualified Industrial Stormwater Practitioner (QISP) to assess all drainage areas of the industrial pollutant sources at the site that may be related to the NAL exceedance.
- Identify in the evaluation the corresponding BMPs in the SWPPP required to prevent future NAL exceedances.
- Revise the SWPPP as necessary and implement any additional BMPs identified in the evaluation as soon as practicable but no later than January 1 following the start of Level 1 status.
- Certify and submit via SMARTS a Level 1 ERA Report prepared by the QISP that includes the following:

    1) A summary of the Level 1 ERA Evaluation
    2) A detailed description of the SWPPP revisions and any additional BMPs for each parameter that exceeded an NAL
    3) The QISP's identification number, name, and contact information (telephone number, email address)

The facility will return to Baseline status once the Level 1 ERA report has been completed, all identified additional BMPs have been implemented, and results from four (4) consecutive QSEs sampled subsequent to BMP implementation indicate no additional NAL exceedance for that parameter.

5.5 Level 2 Status

The facility reaches Level 2 status if sampling results indicate an NAL exceedance for that same parameter while the site is in Level 1. Level 2 status starts on July 1 following the reporting year during which the NAL exceedance(s) occurred.

By October 1 following the commencement of Level 2 status, the facility shall:

- Certify and submit via SMARTS a Level 2 ERA Action Plan that identifies which of the following demonstration the facility has selected to perform:

1. Industrial Activity BMPs Demonstration – shall include a description and evaluation of the industrial pollutant sources related to the NAL exceedance(s); evaluation and costs of additional BMPs to reduce or prevent the NAL exceedance(s); analysis describing the basis for the selection of BMPs implemented; and/or alternative design storm standard for treatment control BMPs to achieve compliance of the IGP.

2. Non-Industrial Pollutant Source Demonstration – shall include a facility statement that the NAL exceedance is attributable solely to the presence of non-industrial pollutant sources that are identified as either run-on from adjacent properties, aerial deposition from man-made sources, or as generated by on-site non-industrial sources, and that the facility has evaluated all potential pollutant sources that may have commingled with storm water or contributed to the NAL exceedance.

3. Natural Background Pollutant Source Demonstration – shall include a facility statement that the site has determined the NAL exceedance is attributable solely to the presence of the pollutant in the natural background which has not been disturbed by industrial activities; a summary of data describing the levels of natural background pollutants in the storm water discharge; a summary of research or published literature as part of Natural Background Source Demonstration; map and photographs showing the reference site location, vegetation, and indicating test site elevation; and site reconnaissance survey data regarding presence of roads, outfalls, or other human-made structures.

The Action Plan, prepared by a QISP and includes a schedule with description of tasks to complete the selected demonstration, shall at a minimum address the drainage areas with the corresponding exceedance(s), shall be implemented as soon as practicable, and shall be completed no later than 1 year after submitting the Action Plan.

- Certify and submit via SMARTS a Level 2 ERA Technical Report on January 1 of the reporting year following the submittal of the ERA Level 2 Action Plan. The Technical Report, also prepared by a QISP, shall include information supporting one or more of the aforementioned demonstrations.

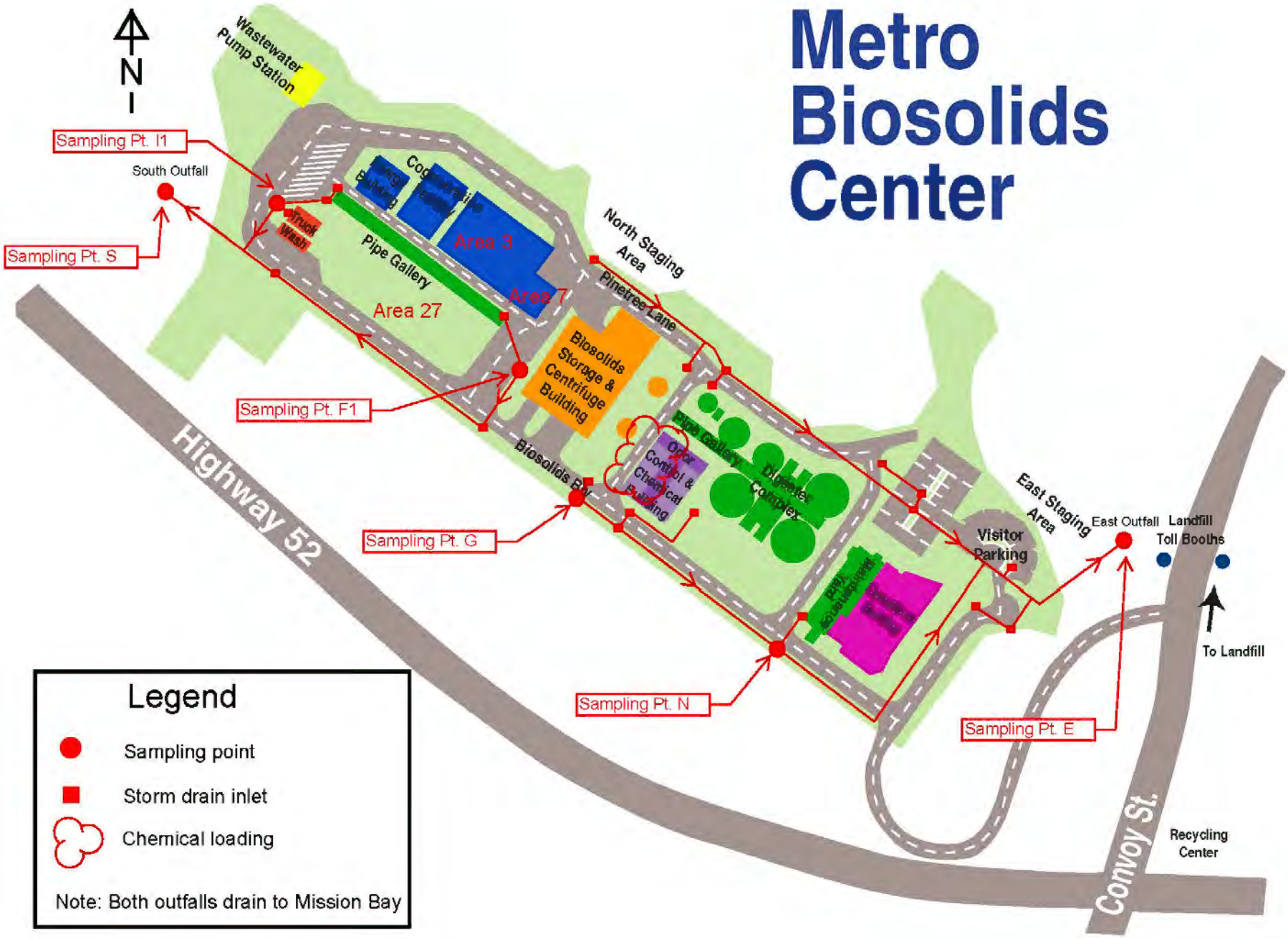
  Unless the demonstration is not accepted by the State or Regional Water Board, the facility is not required to perform additional ERA requirements for the parameter(s) involved if: (a) additional BMPs required to eliminate NAL exceedances are not technologically available or economically practicable; or (b) NAL exceedances are solely caused by non-industrial pollutant sources or pollutants from natural background sources. If the Technical Report is rejected, the Board may direct the facility to take further action(s) to comply with the IGP.

- The facility may be required to update the Level 2 ERA Technical Report, based upon additional NAL exceedances of the same parameter and same drainage area, to be submitted with the annual report.

The facility is eligible to return to Baseline status after submittal of an Industrial Activity BMPs demonstration, implementing BMPs to prevent future NAL exceedances for the Level 2 parameter(s), and if results from four (4) subsequent consecutive QSEs sampled indicate no additional NAL exceedance for that parameter(s).

The facility is ineligible to return to Baseline status if it elected to submit a non-industrial pollutant source demonstration or natural background pollutant source demonstration, or industrial activity BMP demonstration where additional BMPs implemented caused the site to achieve IGP compliance but is not expected to eliminate future NAL exceedances.

The facility can request a single time extension on the Level 2 ERA Technical Report for up to six (6) months by submitting via SMARTS the reasons for the extension, a revised ERA Action Plan including a schedule and description of necessary tasks still to be performed to complete the Level 2 ERA Technical Report, and a description of temporary BMPs that will be implemented while constructing the permanent BMPs.


Metro Biosolids Center
N
Wastewater Pump Station
Sampling Pt. I1
South Outfall
Sampling Pt. S
Truck Wash
Pipe Gallery
Area 3
Area 7
Area 27
North Staging Area
Pinetree Lane
Biosolids Storage & Centrifuge Building
Sampling Pt. F1
Biosolids Bldg
Odor Control & Chemical Building
Digester Complex
Sampling Pt. G
Highway 52
East Staging Area
Visitor Parking
East Outfall
Landfill Toll Booths
To Landfill
Sampling Pt. N
Sampling Pt. E
Convoy St.
Recycling Center
Legend
Sampling point
Storm drain inlet
Chemical loading
Note: Both outfalls drain to Mission Bay

Appendix B - ACRONYM LIST

BMP Best Management Practices ERA Exceedance Response Action

MS4 Municipal Separate Storm Sewer System NAL Numeric Action Level

NEC No Exposure Certification

NEL Numeric Effluent Limitation

NOI Notice of Intent

NONA Notice of Non Applicability NOT Notice of Termination

NPDES National Pollutant Discharge Elimination System NSWD Non Storm Water Discharges

O&G Oil and Grease

PRDs Permit Registration Documents QA/QC Quality Assurance/Quality Control

QISP Qualified Industrial Storm Water Practitioner QSE Qualifying Storm Event

SMARTS Storm Water Multiple Application and Report Tracking System SWPPP Storm Water Pollution Prevention Plan

TBEL Technology Based Effluent Limitation TDS Total Dissolved Solids

TOC Total Organic Carbon

TSS Total Suspended Solids

U.S. EPA United States Environmental Protection Agency WDID Waste Discharge Identification Number

Appendix C - Glossary

Beneficial Uses
As defined in the California Water Code, beneficial uses of the waters of the state that may be protected against quality degradation, include but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Best Management Practices (BMPs)
Scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Chain of Custody
Form used to track sample handling as samples progress from sample collection to the laboratory. The chain of custody is also used to track the resulting analytical data from the laboratory to the client. Chain of custody forms can be obtained from an analytical laboratory upon request.

Debris
Litter, rubble, discarded refuse, and remains of destroyed inorganic anthropogenic waste.

Detected Not Quantifiable
A sample result that is between the Method Detection Limit (MDL) and the Minimum Level (ML).

Drainage Area
The area of land that drains water, sediment, pollutants, and dissolved materials to a common discharge location.

Effective Date
The date, set by the State Water Resources Control Board (State Water Board), when at least one or more of the General Permit requirements (such as SMARTs submittals, minimum BMPs, sampling and analysis requirements) to take effect on July 15, 2015.

Effluent
Any discharge of water, either to the receiving water or beyond the property boundary, controlled by the Discharger.

Effluent Limitation
Any numeric or narrative restriction imposed on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, waters of the contiguous zone, or the ocean.

Erosion
The process by which soil particles are detached and transported by the actions of wind, water or gravity.

Erosion Control BMPs
Vegetation, such as grasses and wildflowers, and other materials, such as straw, fiber, stabilizing emulsion, protective blankets, etc., placed to stabilize areas of disturbed soils, reduce loss of soil due to the action of water or wind, and prevent water pollution.

Facility
A collection of industrial processes discharging storm water associated with industrial activity within the property boundary of operational unit.

Field Measurements
Testing procedures performed in the field with portable field-testing kits or meters.

Good Housekeeping BMPs
BMPs designed to reduce or eliminate the addition of pollutants through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

Industrial Materials
Includes, but is not limited to: raw materials, recyclable materials, intermediate products, final products, by product, waste products, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERLCA); any chemical the facility is required to report pursuant to Section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge and that are used, handled, stored, or disposed in relation to a facility's industrial activity.

Method Detection Limit
The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

Minimum Level
The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.

Monitoring Implementation Plan
Planning document included in the Storm Water Pollution Prevention Plan (SWPPP). Dischargers are required to record information on the implementation of the monitoring requirements in this General Permit. The MIP should include relevant information on: the Monthly Visual Observation schedule, Sampling Parameters, Representative Sampling Reduction, Sample Frequency Reduction, and Qualified Combined Samples.

Monitoring Requirements
Includes sampling and analysis activities as well as visual observations.

Natural Background
Pollutants including substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from previous activity at a facility, or pollutants in run-on from neighboring sources which are not naturally occurring.

Numeric Action Level (NAL) Exceedance
Annual NAL exceedance – the Discharger shall determine the average concentration for each parameter using the results of all the sampling and analytical results for the entire facility for the reporting year (i.e., all "effluent" data) and compare this to the corresponding Annual NAL values in Table 2. For Dischargers using composite sampling or flow measurement in accordance with standard practices, the average concentrations shall be calculated in accordance with the U.S. EPA Guidance Manual for the Monitoring and Reporting Requirements of the NPDES Multi-Sector Storm Water General Permit. An annual NAL exceedance occurs when the average of all the analytical results for a parameter from samples taken within a reporting year exceeds an annual NAL value for that parameter listed in Table 2 (or is outside the NAL pH range);

Instantaneous maximum NAL exceedance
The Discharger shall compare all sampling and analytical results from each distinct sample (individual or composite) to the corresponding instantaneous maximum NAL values in Table 2. An instantaneous maximum NAL exceedance occurs when two or more analytical results from samples taken for any parameter within a reporting year exceed the instantaneous maximum NAL value (for TSS and O&G), or are outside of the instantaneous maximum NAL range (for pH).

Non Detect
Sample result is less than Method Detection Limit; Analyte being tested cannot be detected by the equipment or method.

Non-Storm Water Discharges (NSWDs)
Discharges that do not originate from precipitation events. Including but not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

Numeric Action Level (NAL)
Pollutant concentration levels used to evaluate if best management practices are effective and if additional measures are necessary to control pollutants. NALs are not effluent limits. The exceedance of an NAL is not a permit violation.

Operator
In the context of storm water associated with industrial activity, any party associated with an industrial facility that meets either of the following two criteria:

a. The party has operational control over the industrial SWPPP and SWPPP specifications, including the ability to make modifications to those plans and specifications.

b. The party has day-to-day operational control of activities at the facility which are necessary to ensure compliance with a SWPPP for the facility or other permit conditions (e.g., authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

pH
Unit universally used to express the intensity of the acid or alkaline condition of a water sample. The pH of natural waters tends to range between 6.0 and 9.0 with neutral being 7.0.

Plastic Materials
Plastic Materials are virgin and recycled plastic resin pellets, powders, flakes, powdered additives, regrind, dust, and other similar types of preproduction plastics with the potential to discharge or migrate off-site.

Qualified Industrial Storm Water Practitioner (QISP)
Only required once a Discharger reaches Level 1 status, a QISP is the individual assigned to ensure compliance with this General Permit or to assist New Dischargers with determining coverage eligibility for discharges to an impaired water body. A QISP's responsibilities include implementing the SWPPP, performing the Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation), assisting in the preparation of Annual Reports, performing ERAs, and training appropriate Pollution Prevention Team members. The individual must take the appropriate state approved or sponsored training to be qualified. Dischargers shall ensure that the designated QISP is geographically located in an area where they will be able to adequately perform the permit requirements at all of the facilities they represent.

Qualifying Storm Event (QSE)
A precipitation event that:

a. Produces a discharge for at least one drainage are; and

b. Is preceded by 48 hours with no discharge from any drainage are.

Regional Water Board
Includes the Executive Officer and delegated Regional Water Board staff. San Diego is in Region 9. The local Regional Water Quality Control Board is located at 2375 Northside Drive, Suite 100, San Diego, CA 92108.

Runoff Control BMPs
Measures used to divert run-on from offsite and runoff within the site.

Run-on
Discharges that originate offsite and flow onto the property of a separate facility or property or, discharges that originate onsite from areas not related to industrial activities and flow onto areas on the property with industrial activity.

Scheduled Facility Operating Hours
The time periods when the facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed.

Sediment
Solid particulate matter, both mineral and organic, that is in suspension, is being transported, or has been moved from its origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

Sedimentation
Process of deposition of suspended matter carried by water, wastewater, or other liquids that flow by gravity. Control of sedimentation is accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material.

Sediment Control BMPs
Practices that trap soil particles after they have been eroded by rain, flowing water, or wind. Includes those practices that intercept and slow or detain the flow of storm water to allow sediment to settle and be trapped (i.e., silt fence, sediment basin, fiber rolls, etc.).

Sheet Flow
Flow of water that occurs overland in areas where there are no defined channels and where the water spreads out over a large area at a uniform depth.

Source
Any facility or building, property, road or area that causes or contributes to pollutants in storm water.

Storm Water
Storm water runoff, snowmelt runoff, and storm water surface runoff and drainage.

Storm Water Discharge Associated With Industrial Activity
The discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. The term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used for traveled by carriers of raw materials; manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application of or disposal of process wastewaters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

Material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas.

Structural Controls
Any structural facility designed and constructed to mitigate the adverse impact of storm water and urban runoff pollution.

Total Suspended Solids (TSS)
The measure of the suspended solids in a water sample including inorganic substances such as soil particles, organic substances such as algae, aquatic plant/animal waste, and particles related to industrial/sewage waste, etc. The TSS test measures the concentration of suspended solids in water by measuring the dry weight of a solid material contained in a known volume of a sub-sample of a collected water sample. Results are reported in mg/L.

Toxicity
The adverse response(s) of organisms to chemicals or physical agents ranging from mortality to physiological responses, such as impaired reproduction or growth anomalies.

Turbidity
The cloudiness of water quantified by the degree to which light traveling through a water column is scattered by the suspended organic and inorganic particles it contains. The turbidity test is reported in Nephelometric Turbidity Units (NTU) or Jackson Turbidity Units (JTU).

Waters of the United States
Generally refers to surface waters, as defined for the purposes of the federal Clean Water Act.

Appendix D – Authorized Discharges

The following non-storm water discharges (NSWDs), also called dry weather discharges, are authorized provided they meet certain conditions.

The **types of discharges** allowed are:

1. Fire-hydrant and fire prevention or response system flushing
2. Potable water sources including potable water related to the operation, maintenance or testing of potable water systems
3. Drinking fountain water and atmospheric condensate, including refrigeration and compressor condensate
4. Irrigation drainage and landscape watering provided all pesticides, herbicides and fertilizers have been applied in accordance with the manufacturer's label
5. Uncontaminated natural springs, groundwater, foundation drainage and footing drainage
6. Seawater infiltration where the seawater is discharged back into the source
7. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portion of the facility but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains)

The above discharges are authorized only **if the following conditions are met**:

1. They are not in violation of any regional Water Quality Control Plan (Basin Plan), statewide water quality control plans, policies, or other requirements

2. They are not in violation of any municipal agency ordinance or requirements

3. BMPs are included in the SWPPP and implemented to:
    a. Reduce or prevent the contact of the discharge with materials or equipment that are potential sources of pollutants
    b. Reduce, to the extent practicable, the flow or volume of the discharge
    c. Ensure the discharge does not contain quantities of pollutants that cause or contribute to an exceedence of a water quality standard
    d. Reduce or prevent discharges of pollutants in a manner that reflects best industry practice considering technological availability and economic practicability and achievability

4. The site staff conducts and documents monthly visual observations to ensure adequate BMP implementation and effectiveness

5. The annual report lists and describes all the authorized discharges.

APPENDIX E - REVISIONS

The facility SWPPP is a working document. Any approved changes or modifications, whether administrative (A) or operational (O), and results of annual site compliance evaluations must be noted/recorded in the following table to maintain an updated document.

DATE	TYPE OF REVISION	DESCRIPTION OF CHANGE(S)	SIGNATURE
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____
			Staff: _____ Position: _____ Signature: _____

COUNTY OF SAN DIEGO, AIR POLLUTION CONTROL DISTRICT
10124 OLD GROVE ROAD, SAN DIEGO, CA 92131
PHONE (858) 586-2600 FAX (858) 586-2601
www.sdapcd.org

Sectors: 3, I
Site ID: APCD1976-SITE-02083
App ID: APCD2014-APP-003702

PERMIT ID
APCD2015-PTO-002381

SD City of Metro Wastewater Dept
Salvador Coria
2392 Kincaid Rd
San Diego CA, 92101

EQUIPMENT ADDRESS
City of San Diego-Metropolitan
Salvador Coria
1902 Gatchell Road
San Diego CA 92106

PERMIT TO OPERATE

This permit is not valid until required fees are received by the District.

The above is hereby granted a Permit To Operate the article, machine, equipment or contrivance described below. This permit is not transferable to a new owner nor is it valid for operation of the equipment at another location except as specified. This Permit To Operate or copy must be posted on or within 25 feet of the equipment, or readily available on the operating premises.

EQUIPMENT OWNER

SD City of Metro Wastewater Dept Owner Manager 2392 Kincaid Rd, San Diego, CA 92101

EQUIPMENT DESCRIPTION

Five (5) prime diesel engines (ATCM portable): each engine rated up to 100 bhp, Tier 4 certified.

Every person who owns or operates this equipment is required to comply with the conditions listed below and all applicable requirements and District rules, including but not limited to Rules 10, 20, 40, 50, 51.

Fee Schedules: 5 [34G] Engine for Non-Emergency and Non-Cogeneration Operation

BEC: APCD2015-CON-001079

FAILURE TO OPERATE IN COMPLIANCE IS A MISDEMEANOR SUBJECT TO CIVIL AND CRIMINAL PENALTIES

A. FEDERALLY-ENFORCEABLE AND DISTRICT-ENFORCEABLE CONDITIONS

3. Each engine shall have an original manufacturer label containing the following information: make, model, family number and serial number. [Rule 10]
4. Each engine shall not operate at this location for more than 960 hours per calendar year, as evidenced by operational log records. Engine identifications (Make, Model, Serial Number, PERP Number), hours of operation and hour meter readings shall be recorded on each day of engine usage. [Rule 20.3, Rule 1200]
5. This engine shall use only carb diesel fuel. [Rule 69.4.1, 17 CCR 93116]
6. Visible emissions including crank case smoke shall comply with Air Pollution Control District Rule 50. [Rule 50]

COUNTY OF SAN DIEGO, AIR POLLUTION CONTROL DISTRICT
10124 OLD GROVE ROAD, SAN DIEGO, CA 92131
PHONE (858) 586-2600 FAX (858) 586-2601
www.sdapcd.org

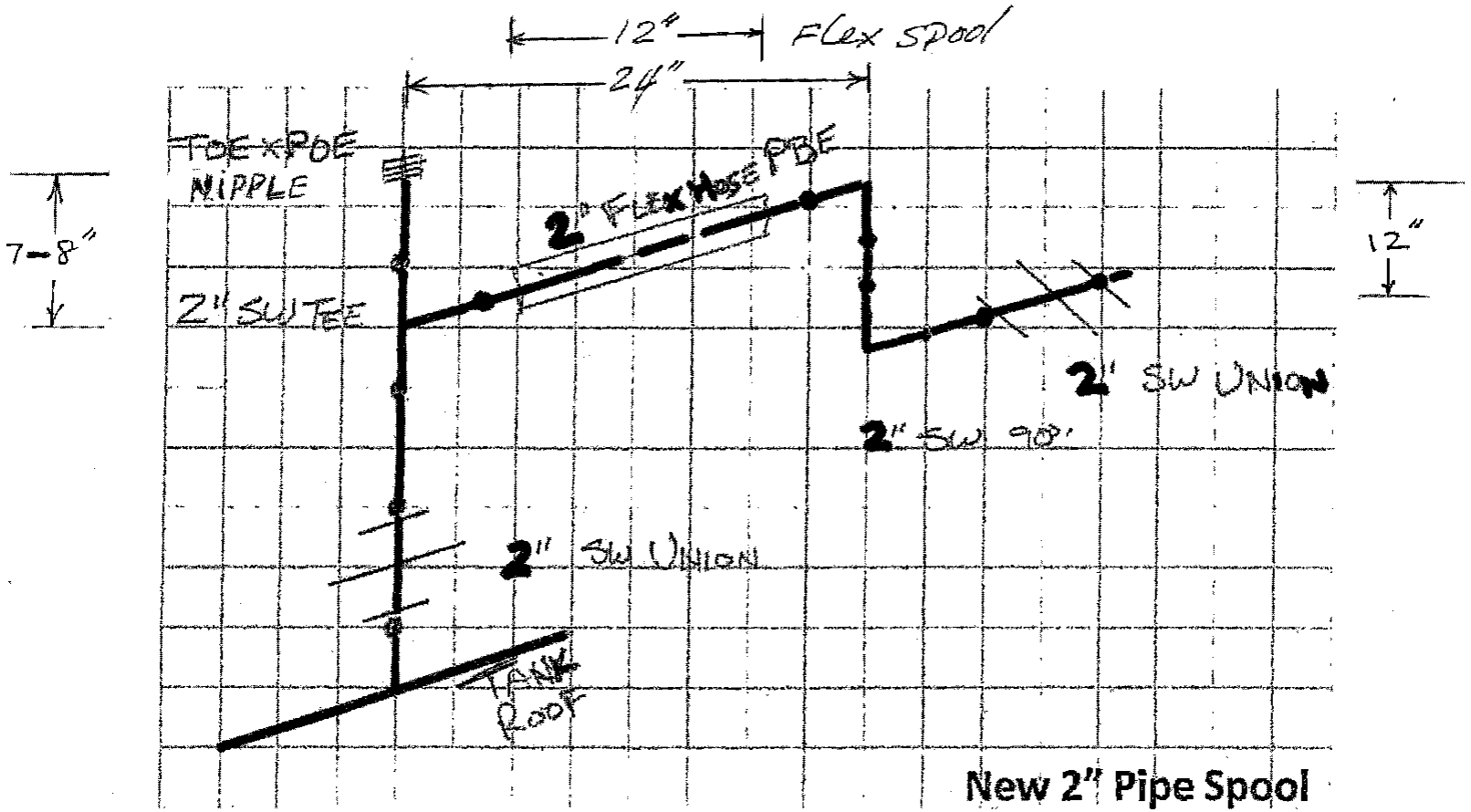
Sectors: 3, I
Site ID: APCD1976-SITE-02083
App ID: APCD2014-APP-003702

PERMIT ID
APCD2015-PTO-002381

7. A non-resettable engine hour meter shall be installed on this engine, maintained in good working order, and used for recording engine operation hours. If a meter is replaced when the emission unit is operating on site, the Air Pollution Control District's Compliance Division shall be notified in writing within 10 calendar days. The written notification shall include the following information:
(a) old meter's hour reading
(b) replacement meter's manufacturer name, model and serial number if available and current hour reading on replacement meter
(c) copy of receipt of new meter or of installation work order. A copy of the meter replacement notification shall be maintained onsite and made available to the Air Pollution Control District upon request.
[Rule 69.4.1; 17CCR 93116]
8. The owner or operator of this engine shall conduct periodic maintenance of the engine and add-on control equipment, if any, as recommended by the engine and control equipment manufacturers or as specified by the engine servicing company's maintenance procedures. The periodic maintenance shall be conducted at least once every 4000 hours of operation, or every six months, whichever occurs first. [Rule 69.4.1]
9. The owner or operator shall maintain documentation identifying all fuel used in this engine as CARB diesel or an alternative fuel meeting the requirements of 17 CCR 93116.3(a) and with a sulfur content not to exceed 15 ppm sulfur by weight. These records shall be kept on site for at least the same period of time as the engine to which the records apply is located at the site. [Rule 69.4 and/or 69.4.1, 17 CCR 93116]
10. The owner or operator of the engine shall maintain a manual of recommended maintenance provided by the manufacturer, or maintenance procedures specified by the engine servicing company on site for at least the same period of time as the engine to which the records apply is located at the site. [Rule 69.4.1]
13. All operational and maintenance logs required by this permit shall be kept a minimum of 3 years unless otherwise indicated by the conditions of this permit, and these records shall be made available to the Air Pollution Control District upon request. [Rules 69.4 and 69.4.1]
14. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District. [Rule 19]

B. DISTRICT-ONLY ENFORCEABLE CONDITIONS

1. This permit authorizes operation only at the stationary source(s) listed on this permit to operate. This engine shall be operated as a portable unit as defined by the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater. This permit does not preclude off-site operations under a valid registration issued by the California Air Resources Board (CARB) under the Portable Equipment Registration Program (PERP). (17CCR93116).
2. This engine shall be certified to meet the Federal or California tiered emission standard for non-road engines as shown in the equipment description above. (17 CCR 93116)
11. This engine, as part of the fleet that it is included in, shall comply with the fleet averaging standards of 17CCR 93116. A copy of the most recent compliance statement submitted to the California Air Resources Board under 17CCR 93116 shall be provided to District personnel upon request. (17CCR 93116)
12. The responsible official shall submit compliance statements as required by 17CCR 93116. These compliance statements are due to the California Air Resources Board by March 1, 2013, March 1, 2017 and March 1, 2020.
15. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.
16. The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)


12" Flex Spool
24"
7-8"
12"
TOE x POE
NIPPLE
2" FLEX HOSE PBE
2" SW TEE
2" SW UNION
2" SW 90°
2" SW UNION
TANK ROOF
New 2" Pipe Spool

(1) Ductile Iron Pipe

(a) 3 to 6 inch diameter: 350 psi (2:1 safety factor)
(b) 18 to 48 inch diameter: 250 psi (2:1 safety factor)

(2) PVC Pipe

(a) 3 to 36 inch diameter: full pressure rating or pressure class of pipe (2.5:1 safety factor)

b. Push-on joints for steel pipes shall be in accordance with the appropriate reference standards and standard practice.

c. Restrained push-on joints for all other pipe materials shall be comprised of two rings with connecting rods. The restraint ring shall be on the spigot, and a plain or slit bell ring shall be on the bell. Pressure ratings shall be:

(1) Ductile Iron Pipe

(a) 3 to 16 inch diameter: 350 psi (2:1 safety factor)
(b) 18 to 48 inch diameter: 250 psi (2:1 safety factor)

(2) PVC Pipe

(a) 3 to 10 inch diameter: 200 psi (4:1 safety factor)
(b) 12 inch diameter: 150 psi (4:1 safety factor)
(c) 14 to 16 inch diameter: 235 psi (2:1 safety factor)
(d) 18 to 30 inch diameter: 165 psi (2:1 safety factor)
(e) 36 inch diameter: 125 psi (2:1 safety factor)

(3) Dimensions of push-on bell restraints shall be compatible with ANSI/AWWA C150 and C900 or C905 for ductile iron or PVC pipe, respectively.

d. Restraint glands shall be of ductile iron conforming to ASTM A 536. Dimensions of the glands shall be compatible with standard mechanical joint bell and tee head bolts conforming to ANSI/AWWA C111 and C153, respectively.

(e) Bolts and nuts shall conform to Section 05500.

2.6 FLEXIBLE CONNECTORS

A. Flexible connectors shall be provided in all piping connections to engines, blowers, compressors, vibrating equipment, and where indicated. Flexible connectors for service temperatures up to 180 degrees F shall be flanged reinforced neoprene or butyl rubber spools, rated for working pressures of 40 to 150 psi or reinforced flanged rubberized duck, as best suited for the application. For temperatures above 180 degrees F, flexible connectors shall be flanged braided Type 316 stainless steel spools with inner corrugated stainless steel hose rated for minimum 150 psi working pressure unless indicated otherwise. Connectors shall be minimum of 9 inches face to face between flanges. Material selection shall be proposed by the manufacturer based on the application.

2.7 EXPANSION JOINTS

A. Linear Expansion Only: Use expansion loops, bellows-type expansion joints, or sliding type expansion joints of ductile iron, stainless steel, monel, or rubber.

B. Linear, Angular, and Lateral Movement: Use flexible expansion joints consisting of expansion sleeve and ball-and-socket joints in a single unit. Each unit shall be capable of minimum 15 degrees angular motion in any direction, and the expansion sleeve shall be capable of minimum 4 inches of linear travel. Joints shall be suitable for the pressure and temperature application and be ductile iron conforming to ANSI/AWWA C153. All surfaces containing pressure and sealing surfaces shall be coated with minimum 15 mils of fusion bonded epoxy conforming to ANSI/AWWA C213.

2.8 METAL BELLOWS EXPANSION JOINTS

A. Except as otherwise specified in the Specifications or indicated on the Plans, metal bellows expansion joints shall be of the flexible bellows type with equalizing rings.

B. Design:

1. Expansion joints shall be rated for 150 pounds per square inch, gauge, at 400 degrees F.

2. Bellows shall be of laminated stainless steel and shall be equipped with a self-draining liner guide.

3. Axial extension shall be not less than 0.25 inches and the installation offset from centerline shall be not less than 0.13 inches..

4. Ends shall be 150-pound ANSI flanges, or plain suitable for welding connections.

2.9 PIPE THREADS

A. Pipe threads shall comply with ANSI/ASME B1.20.

2.10 PIPE INSULATION

A. Hot and cold liquid piping, flues, and engine exhaust piping shall be insulated where indicated, in accordance with Section 15250.

2.11 AIR AND GAS TRAPS

A. Air and gas pipes shall be sloped to low points, provided with drip legs, strainers and traps. The traps shall be piped to the nearest drain. Air and gas traps shall be 150-lb iron body float type with copper or stainless steel float. Bracket, lever, and pins shall be of stainless steel.

2.11 STEAM TRAPS

A. Steam traps shall be installed in all low points of steam piping, at minimum 300-foot intervals in mains, at steam appliances, heat exchangers, heaters, and control valves, and where indicated. Steam traps shall be preceded by drip legs, gate valves and strainers, and shall be connected to the condensate system. Steam traps shall be of the float and

SECTION 15012 - STAINLESS STEEL PIPING

PART 1 -- GENERAL

1.1 WORK OF THIS SECTION

A. The WORK of this section included providing stainless steel piping for applications as indicated.

1.2 RELATED SECTIONS

A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.

1. Section 15000 Piping Components

1.3 SPECIFICATIONS AND STANDARDS

A. Except as otherwise indicated, the current editions of the following applies to the WORK of this Section:

1. ASTM A 312 Seamless and Welded Austenitic Stainless Steel Pipe

2. ASTM A 403 Wrought Austenitic Stainless Steel Pipe Fittings

1.4 DEFINITIONS

A. Except as otherwise indicated, the following definitions shall apply to the WORK of this section:

1. High Pressure Digester Gas Service: High pressure digester gas service is any digester gas service with a working pressure equal to or greater than one (1) psi.

2. Low Pressure Digester Gas Service: Low pressure digester gas service is any digester gas service with a working pressure less than one (1) psi.

1.5 SHOP DRAWINGS AND SAMPLES

A. The following shall be submitted in compliance with Section 01300:

1. Manufacturer's product data.

2. Submittals as required by Section 15000.

1.6 OWNER'S MANUAL

A. The following shall be included in the OWNER'S MANUAL in compliance with Section 01300:

1. Manufacturer's product data.

2. Manufacturer's installation instructions.

3. Manufacturer's certification of compliance.

1.7 INSPECTION, TESTING AND WELDING

A. Inspection: Products shall be inspected at the manufacturer's plant.

B. Tests: Materials used in the manufacture of the pipe shall be tested in accordance with the applicable Specifications and Standards.

C. Welding Requirements: Welding procedures used to fabricate pipe shall be prequalified under the provisions of ANSI/AWS D10.9. Welding procedures shall be required for longitudinal and girth or spiral welds for pipe cylinders, spigot and bell ring attachments, reinforcing plates and ring flange welds, and plates for lug connections.

D. Welder Qualifications: Welding shall be performed by skilled operators who have had adequate experience in the methods and materials to be used and have been qualified under the provisions of ANSI/AWS D10.9 by an independent approved testing agency not more than 6 months prior to commencing work on the pipeline. Machines and electrodes similar to those used in the WORK shall be used in qualification tests.

1.8 FACTORY TESTING

A. Product Testing: Products shall be tested at the factory for compliance with the indicated referenced standards. Test reports and certification reports are required.

B. Witnesses: The OWNER and the CONSTRUCTION MANAGER (at the option of either) reserves the right to witness factory tests.

1.9 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Delivery of Materials: Products shall be delivered in original, unbroken packages, containers, or bundles bearing the name of the manufacturer.

B. Storage: Products shall be carefully stored in a manner that will prevent damage and in an area that is protected from the elements.

PART 2 -- PRODUCTS

2.1 General

A. Provide stainless steel piping in sizes as required.

B. Pipe shall be designed for the following working pressures:

1. Water, Air and High Pressure Digester Gas Service: 150 psig

2. Low Pressure Digester Gas Service: 80 psig

C. Maximum design temperature shall be 400 degrees F.

D. Pipe and fittings shall be fabricated from Grade TP 316L stainless steel.

E. Pipe and fittings 3 inches and smaller shall be NPT threaded.

F. Pipe and fittings 4 inch and larger

1. Water, Air and High Pressure Digester Gas Service:

a. Pipe and fittings shall have weld neck forged flanges. Bolt hole patterns shall comply with ANSI/ASME B 16.1, Class 150.

2. Low Pressure Digester Gas Service:

a. Pipe and fittings stub ends shall be cast stainless steel butt-welded stub ends. Flanges shall be cast stainless steel backing flanges or forged and welded flanges meeting ANSI/ASME B16.5. Bolt hole patterns shall comply with ANSI/ASME B 16.1, Class 150.

3. Butt welds shall be:

a. Sizes 4 inch and smaller shall be single butt-welded.

b. Sizes 5 inch and greater shall be double butt-welded.

4. Flange bolts shall be Type 316 stainless steel bolts.

5. Flange gaskets shall comply with Section 15000.

2.2 PIPE

A. Pipe shall be seamless or automatic welded and fabricated in accordance with ASTM A 312. No filler metal shall be used in the welding process.

B. The minimum wall thickness shall be:

1. Threaded Pipe:

a. Schedule 40

2. Welded Pipe:

a. 3 inch and smaller: Schedule 40.

b. 4 inch and larger: Schedule 10S.

3. Grooved End Pipe:

a. Schedule 40

4. Provide greates wall thickness as required to meet design pressures at design temperatures.

C. The diameters and wall thickness shall comply with ANSI B 36.19.

D. Pipe shall be supplied in 10 or 20 lengths without intermediate butt-welds.

2.3 FITTINGS

A. Fittings shall comply with the requirements of ASTM A 403, Class WP-S.

B. Dimensions shall be in accordance with ANSI B 16.9.

C. Fittings shall have the same pressure and temperature rating as the pipe.

D. Reducers shall be conical or eccentric as shown.

E. Wyes shall be true wyes.

F. Caps shall conform to the requirements of ASME Code for ellipsoidal heads.

2.4 GROOVED END COUPLINGS

A. Where indicated on the Drawings install grooved end couplings.

B. Pipe ends shall be shouldered. Shoulders shall be fabricated ends; Type B or D as recommended by the pipe manufacturer conforming to AWWA C-606. The pipe shall not be rolled or grooved cut.

C. The coupling shall be a rigid-groove type.

D. The coupling shall be manufactured from cast steel conforming to ASTM A743 or A351, Grade CF-8.

E. Gaskets shall be EPDM with a temperature range of -30°F to 230°F.

F. Bolts and nuts shall be type 316 stainless steel hexhead machine bolts per ASTM A193, Grade B-8, Class 2.

2.5 MANUFACTURERS

A. Manufacturers: Products of the type or model (if any) indicated shall be manufactured by one of the following (or equal):

Flowline

PART 3 -- EXECUTION

3.1 GENERAL

A. Pipe and fittings shall be installed in accordance with the manufacturer's installation instructions.

3.2 WELDING

A. Ensure that weld seams have full penetration and be free of oxidation, crevices, pits, cracks, and protrusions.

1. Weld seams without undercuts.

2. Provide weld crowns of 1/16 inch with tolerance of plus 1/16 inch and minus 1/32 inch.

B. Accomplish longitudinal welds on fittings, except elbows by the same procedures as for pipe.

C. Manually weld pipe spools with Type 316L filler metal:

1. Where internal weld seams are not accessible, use gas tungsten-arc procedures with internal gas purge.

2. Where internal weld seams are accessible, weld seams inside and outside using manual shielded metal-arc procedures.

3. Following fabrication, pickle and passivate pipe, spools, fittings, and other shop fabricated pieces by immersion in sulfuric acid solution followed by immersion in a nitric-hydrofluoric bath and subsequent wash at the proper temperature and length of time to remove free iron, weld scale, and other impurities, and to obtain a passive finished surface.

4. All field welds shall be passivated. The CONTRACTOR shall submit the passivation procedure and waste disposal method to the CONSTRUCTION MANAGER for approval. The CONTRACTOR shall be responsible for the disposal of all wastes. The disposal shall be done in accordance with all applicable laws, regulations, and rules.

D. Seal weld all screwed digester gas piping. Provide unions to disassemble the piping.

** END OF SECTION **

ITB 10089637-20-W, PLWTP Digesters C1 and C2 and MBC Tank 17 Cleaning
Questions and Answers

Question 1: Is the term "Hydro-blast" synonymous with the term "fire hose cleaning"? Industry standard is to wash down the interior walls to remove accessible debris using a fire hose with plant available water pressure. Please confirm that this will be adequate upon completion of the removal of digester contents.

Response: Question was previously addressed in Addendum A.

Question 2: Scope of Work section F.9. regarding electrical connection. While on site it was discussed that the Plant would supply the 1600 Amp power connection from the breaker in the cabinet to a temporary location breaker nearby. Please confirm.

Response: As discussed during the Mandatory Site Inspection, the City will provide power from the electrical cabinet to location nearby. The Contractor will be responsible to make any connections required to the staging area.

Question 3: Scope of Work section G.4. What is the exact location of the steel plate?

Response: As stated in the scope of work for MBC, the steel plates will be installed between Digester 1 and Digester 3. The exact location will be directed by the Construction Manager during the cleaning process.

Question 4: Scope of Work section H.4. Does the City have a type and/or model (maybe used in the past) for the Contractor to consider to supply the programmable sampler of the decant?

Response: Composite samplers were used in the previous cleaning projects. Other types and model can be discussed with the Construction Manager when contract is awarded.

Question 5: Scope of Work section H.5. If the decant parameters are met, will the Contractor still need to utilize a de-gritter as mentioned in section H.6.?

Response: As long as the decant parameters are met, "de-gritter" of the decant should not be required.

Question 6: Scope of Work section H.8. Can the City provide a copy of the San Diego Air Pollution Control Rule 51?

Response: Refer to Addendum B, Attachment A.

Question 7: Scope of Work section H.9. Can the City provide a copy of the current Industrial-Activities Storm Water Pollution Prevention Plan?

Response: Refer to Addendum B, Attachments B and C.

Question 8: Scope of Work section L. regarding the weighing of loads. Does the phrase "processing/disposal" mean, "processing or disposal"

Response: Yes, it means processing or disposal.

Question 9: Scope of Work section M. This section ends with the statement that no maintenance will be performed on site. What is this statement trying to control? Does this include daily operational maintenance?

Response: This section is related to trucks only. No truck maintenance is allowed at the job site. Any other equipment maintenance requires a containment area to capture spills on concrete/asphalt.

Question 10: Scope of Work section P. regarding disposal site documentation. If alternate disposal other than a landfill can be provided (for example a compost facility for beneficial reuse) will that be an approved use of the material provided all site permit and material acceptability requirements are met?

Response: Simply follow the requirements of contract for disposal to landfill.

Question 11: Scope of Work section U. May the Contractor remove the contents of Tank 17 and transport them in liquid form to the processing area at Point Loma for dewatering providing the activity is not occurring simultaneously with the cleaning of the digesters at Point Loma?

Response: Yes, the Contractor is given an option to remove the contents of MBC Tank 17 and transport in liquid form to the processing area at Point Loma Facility for dewatering.

Question 12: Scope of Work section W. If the City suspends the hauling of digester solids, will this delay fit into the 42 days allowed for City caused delays?

Response: No, this case is separate and shall be discussed between the Contractor and the Construction Manager for a potential time extension.

Question 13: Scope of Work section Z. regarding compensation. As explained in Addendum A, the City plans to pay monthly for the loads hauled and not for the gallons processed. How will the City determine the total loads to be hauled from each digester which will need to be used as a percentage of the total for payment? Does the City have historical knowledge that is being used to determine the relationship between gallons and loads that is not available to Contractors that

have not preformed this work in the past? Alternatively, would the City entertain an alternate method of estimating work in progress, i.e. measuring the tank level at the end of the billing period to determine the amount of gallons removed?

Response: Please refer to Answer to Question No. 25 in Addendum A. The compensation is based on gallons of solids to be removed from the digesters.

Question 14: Scope of Work section Z. regarding retention. This portion of the scope of work reads that at substantial completion the City "may refund any portion of the remaining retention". Please clarify when the remaining portion of the retention will be due to the Contractor?

Response: The option to refund any portion of the remaining retention would after completion of work, inspection/acceptance by City Staff that work has been completed. Upon processing of the final invoice, payment will be released per the City's standard of NET30.

Question 15: Scope of Work section CC. This section states that a change in regulations will not be justification for contract amendments. Does this also mean that a change in law which substantially alters the cost of performance or makes the performance of the project as scoped either illegal or commercially infeasible, will not be justification for contract amendment?

Response: Any changes in law which may substantially alter the Scope of Work would be handled on a case-by-case basis. Any required changes would be negotiated and fall under Section B of the pricing Schedule (Field Order Allowance).

Question 16: Scope of Work section CC. Can the City provide a copy of the PERP permit APCD2015-PTO-002381?

Response: Refer to Addendum B, Attachment D.

Question 17: Scope of Work section CC. regarding the PERP and engines allowed on site. Will a generator with hp in excess of 100 be permitted to operate on site?

Response: Parameters are covered under Scope of Work section CC. Any changes can be submitted to the Construction Manager for evaluation after contract is awarded.

Question 18: Scope of Work section CC. regarding the PERP. Will gas engines with hp less than 10 be allowed to operate on site?

Response: Parameters are covered under Scope of Work section CC. Any changes can be submitted to the Construction Manager for evaluation after contract is awarded.

Question 19: Can the City describe and quantify the location, supply and configuration of the water supply available to Contractors on site that is expected to be used for processing?

Response: There are fire hydrants in close proximity to the staging area which can be used for water supply.

Question 20: Please provide the description and location of all lower access doors into Digesters C1 and C2.

Response: This was shown during the Mandatory Site Inspection.

Question 21: After the publishing of Addendum A, it appears the City does not want to share any historical information regarding the previous results from cleaning the digesters. This historical information, although not exactly representative of the tanks being cleaned in 2020, is critical to understanding what is to be expected in the current work. For the City to share this information it will provide a more level playing field for Contractors as well as produce more reliable bid responses for the City. We reference the Mission of the City Clerk: To provide accurate information and maximize access to municipal government. Accordingly, will the City provide information from the last two digester cleaning projects that indicates the gallons in place in each digester and the total wet tons and dry tons removed (if available)?

Response: For the 2017 Point Loma Wastewater Treatment Plant (PLWTP) Digesters S1, S2, and 7 Cleaning (ITB 10075233-17-K), 3,112,825 gallons were removed. For the 2018 Metropolitan Biosolids Center (MBC) Digester 3 Cleaning (ITB 10087210-18-K), 1,056,528.30 gallons were removed. The estimate for this Contract is approximately 1,000,000 gallons per digester.

Question 22: Scope of Work section LL (Performance Bond) was removed in Addendum A. Additionally, the City's response to Question 26 in Addendum A regarding this section refers to the City's General Contract Terms and Provisions, Article VIII, Bonds. That Article states "Prior to the execution of this Contract, City may require Contractor to post a payment and performance bond (Bond)." So that bidders may plan for all costs associated with this project, will the City require a Performance and Payment for 25% of the Contract amount as indicated in Article VIII?

Response: As outlined under the City's General Contract Terms and Provisions (Exhibit C), Article VIII, Bonds, Section 8.1.1, the Bond shall be in a sum equal to twenty-five percent (25%) of the Contract amount, unless otherwise stated in the Specifications.

Question 23: Exhibit A Instructions and Bid Requirements section A.2. Submission of Information and Forms includes the following requirement: "2.10 A Guarantee of Good Faith in the form of a certified check, a bank or postal money order, or a bid

bond executed by a corporation authorized to issue surety bonds in the State of California." Further language regarding a "Guarantee of Good Faith" was included in Scope of Work section LL which was removed in Addendum A. Does the City still require a bid bond be submitted with bids for this project? If so, for what percentage of the bid amount?

Response: Section 2.10 of Exhibit A, Instructions and Bid Requirements has been removed. Refer to Addendum B, Exhibit A, Instructions and Bid Requirements, page 5 of 9.

Question 24: Will the City consider adding the following force majeure clause to the contract?

Force Majeure. Neither Party shall be liable to the other Party for breach or for failure or delay in the performance of its obligations hereunder caused by any act or occurrence beyond its reasonable control, including, but not limited to: fires; floods; strikes (except any strikes involving a Party's personnel); a change in Federal, State, or local law or ordinance; orders or judgments of any Federal, State or local court, administrative agency or governmental body; change in permit conditions or requirements; accidents; extreme weather conditions including, for example, hurricanes, tornadoes, unusually high amounts of precipitation, unusual extremes of temperature or wind, or unusually extended periods of adverse weather conditions; acts of war, aggression or terrorism (foreign or domestic); equipment failure (other than due to the inadequate maintenance thereof); and acts of God. It is specifically understood that, without limitation, none of the following acts, events or circumstances shall constitute an act or occurrence beyond a Party's reasonable control: (i) reasonably anticipated weather conditions normal for the region in which the work is performed or (ii) any failure to pay any sums in accordance with the terms of this Agreement. Whenever the provisions of this Section are believed to apply, the Party relying thereon shall give prompt notice to the other Party of the circumstances, the basis for applicability of this Section and the time required to cure such breach or delay and Contractor and Customer shall use reasonable best efforts to agree on appropriate mitigating actions under the circumstances. This provision provides performance (including schedule) and financial relief if a Force Majeure event interferes with the Contractor's performance.

Response: The City does not accept the submitted Force Majeure clause.

Question 25: Would you provide detailed drawings and measurements of the flexible spools for the gas guns as this was not included in Addendum A?

Response: Refer to Addendum B, Attachments E, F, and G.

Question 26: Would you provide a detailed list of materials to be used for the flexible spools as this information was not included in Addendum A?

Response: Refer to Addendum B, Attachments E, F, and G.

Question 27: Would you please confirm that truck drivers hauling dewatered sludge to landfill for disposal will be required to be paid prevailing wages for all hours driving and not just the time when they are on the plant sites?

Response: The City does not make prevailing wage determinations. Contractors are responsible for ensuring compliance with DIR requirements and to seek guidance directly from the DIR.

Question 28: In Exhibit B, Scope of Work, Item E Digester and Tank Cleaning Residuals Quality, Section 1, it states the contractor must provide a sample to the City for title 22 testing that will require approximately 1 week to be completed. It was stated at the Site Visit Meeting that this testing could be done as soon as the contractor is given the Notice to Proceed and before mobilization of equipment rather than after equipment is mobilized and setup so there is no delay in starting. Would you please confirm this is correct?

Response: Following the issuance of the Notice to Proceed, coordination may begin with Construction Manager for the scheduling of the Title 22 testing.

Question 29: Can the City please give a complete description of the "spool" that is to be replaced on top of the digesters?

Response: In addition to what was covered in Addendum A, refer to Addendum B, Attachments E, F, and G.

Question 30: Can the City offer guidance for all size generators on site and their impact with the PERP?

Response: In addition to what was covered under Scope of Work Section CC, refer to Addendum B, Attachment D.