LAS GALLINAS VALLEY SANITARY DISTRICT  
Marin County, California

REQUEST FOR PROPOSALS

SECONDARY TREATMENT UPGRADES  
Job No. 12600-02

For Design Engineering and CEQA Preparation for the

Upgrade of Secondary Treatment Facilities

Submit proposals to:

Mark R. Williams  
General Manager  
Las Gallinas Valley Sanitary District  
300 Smith Ranch Rd., San Rafael, CA 94903

Contact Person:

Michael P. Cortez, PE  
District Engineer  
Las Gallinas Valley Sanitary District  
300 Smith Ranch Rd., San Rafael, CA 94903  
Office: 415-472-1734; mcortez@lgvsd.org  
Direct Line: 415-472-1033 ext. 18

RFP Issue Date: January 13, 2015

Pre-proposal meeting and site visit: 10:00 AM, Wednesday February 4, 2015

Deadline for submittal of proposals: 12:00 Noon, Thursday February 12, 2015
January 13, 2015

To: Interested Parties

Re: Request for Proposals (RFP)  
Secondary Treatment Upgrades Project  
Job No. 12600-02

Dear Sir/Madam:

Las Gallinas Valley Sanitary District is soliciting proposals from qualified consultants to provide design engineering services for the Secondary Treatment Upgrades Project. The proposal shall be prepared as per the guidelines set forth in the attached RFP.

If you would like your firm to be considered, five (5) hard copies and a CD version of a PDF file of your proposal must be received at the LGVSD Administration Building, 300 Smith Ranch Road, San Rafael, CA 94903; Attention: Mark R. Williams, General Manager, no later than 12:00 PM on February 12, 2015. An interview process for the selection of a consultant, if deemed necessary by the District, is tentatively scheduled for February 19, 2015. Award of a contract for this RFP is scheduled for March 12, 2015.

Please call me at (415) 472-1033, extension 18 if you have any questions.

Sincerely,

Michael P. Cortez, PE  
District Engineer

Attachment:
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1.0 BACKGROUND

The Las Gallinas Valley Sanitary District (LGVSD) serves the northerly portion of the City of San Rafael together with unincorporated areas north of San Rafael. LGVSD is primarily residential with a complement of commercial and light industrial users. The District maintains an advanced secondary wastewater treatment plant with a dry weather flow of 2.2 mgd. Wet weather flows can exceed 20 mgd on an instantaneous basis. LGVSD also maintains 120 miles of sewer lines, 7 miles of force mains and thirty one pump stations. Minimal future growth of the District is expected.

The LGVSD wastewater treatment plant utilizes a two stage trickling filter process for secondary treatment with ammonia removal through a biotower, followed by effluent filters. The plant headworks include screening and aerated grit chambers. Prior to discharge the effluent is disinfected with sodium hypochlorite and dechlorinated with sodium bisulfite. Sludge is thickened and anaerobically digested. Digested sludge is injected into a dedicated sludge disposal field owned by the District.

LGVSD maintains a microfiltration/UV plant which treats effluent for recycling uses in southern Novato by the North Marin Water District. LGVSD also provides effluent to the Marin Municipal Water District which treats it for recycling uses in northern San Rafael.

Between November 1st and May 31st LGVSD is allowed to discharge treated effluent to the estuary portion of Miller Creek. Between June 1st and October 31st LGVSD is prohibited from discharging effluent to Miller Creek. During this period (and frequently during the month of May) effluent is either recycled or discharged to the District’s reclamation facility. The reclamation facility consists of a managed freshwater wetland, two storage ponds and pasture irrigation. A significant portion of the summertime effluent is treated and recycled for landscaping, toilet flushing and other uses.

2.0 THE SECONDARY TREATMENT UPGRADES PROJECT

The project will consist of the expansion of the secondary treatment facilities at the Las Gallinas Valley Sanitary District wastewater treatment plant. The secondary treatment expansion project will be constructed in phases and will most likely occur as one construction project. Space is very limited and it is unlikely additional land can be made available for project staging.
The project is described as Alternative 3 in the report titled Secondary Expansion Predesign prepared by Brown and Caldwell, dated December 2014 (see Exhibit A) and will consist of the following elements:

- **Primary Effluent Pump Station**
- **Secondary Clarifier selection and design** (work with LGVSD staff to select the type of clarifier)
  - Rehabilitate/replace existing secondary clarifier
  - Design a new secondary clarifier
- **Flow Equalization Basin**
  - Develop basin comparison (work with LGVSD staff to select the type of flow equalization basin, i.e., round, square, rectangular)
- **STM Aerotor Process** (to include the following)
  - Pre & post anoxic zones (for nitrogen and phosphorus removal)
  - Step feed option
  - RAS return to include return to the primary effluent pump station
  - Emergency stops at:
    - Each STM barrel
    - Entire stop for each basin
  - Provision for carbon source addition
- **Thickening (co-mingled sludge thickening)**
  - DAFT (convert existing gravity thickener/work with LGVSD staff to identify most reliable air diffusion system)
    - Replace components with stainless steel
    - Add new components as needed for DAFT
    - New sludge pump pit
  - Emergency thickening (work with LGVSD staff to select the type of emergency thickener, i.e., backup rotary drum, disk, gravity belt etc.)
- **SCADA**
  - Develop SCADA components for new treatment plant equipment and processes
  - Re-commission existing SCADA
- **Design New Electrical Systems**
  - Include redundant conduit
  - Provisions for future analyzers and monitoring equipment
  - Process analyzers
  - Redundant treatment plant switchgear to provide the ability to service switch gear and provide redundant switch gear in the event of failure.
  - Emergency generator if required
  - Dual utility power feed
- **RAS/WAS Pump Station**
- In addition to the above improvements the project shall include the evaluation of related headworks, primary treatment, tertiary treatment, disinfection, and solids handling facilities, including but not limited to, odor control, plant water system, polymer addition, and existing facilities that are close to the end of their useful lives.
3.0 DESIGN AND PREPARATION OF PLANS, SPECIFICATIONS AND COST ESTIMATES

Consultant shall design and prepare plans, specifications and cost estimates (PS&E) for the secondary treatment upgrade project as shown in Exhibit A and as described in more detail in the Brown and Caldwell report (see Exhibit B). The design and PS&E shall include project phasing and specific requirements for tie-ins, management of service interruptions and continuous compliance with discharge and effluent quality requirements.

Consultant shall also recommend and prepare specifications for pre-purchase of specific equipment as necessary to facilitate project construction on schedule.

The District will provide the Notice Inviting Sealed Proposals, Instructions to Bidders and General Conditions documents only. The District will print and distribute the bid documents to the bidders.

4.0 PHASING/CONSTRUCTION SCHEDULING

The LGVSD wastewater treatment plant is an operating secondary treatment plant meeting its NPDES requirements. Construction of the Secondary Treatment Upgrades Project must be phased in such a way that the effluent continues to meet all NPDES requirements (see Exhibit C). In developing the construction phasing the following should be noted:

- Summer discharge requirements are different than the requirements for the remainder of the year.
- During wet weather the treatment plant experiences high sewage flows.

Consultant shall become familiar with the NPDES requirement and develop a phased construction plan for the overall project which will allow the treatment plant to meet all discharge requirements. Project phasing shall consider the following:

- Minimize disruption of the existing plant operation – take units out of service during the dry season and minimize the treatment volume taken out of service.
- First add facilities that will provide the best near term value related to capacity, redundancy and replacement of those facilities with limited remaining useful life.
- Add treatment units for higher level of treatment as required by the NPDES permit or expected in the near future.
- Manage cash flow to minimize the impacts on rates.

The following construction phasing was recommended in the Brown and Caldwell report for Alternative 3:
Phase 1 – Maximize secondary capacity with construction of a new secondary clarifier, primary effluent pump station and flow equalization.

Phase 2 – Increase treatment efficiency for suspended solids/turbidity removal and rehabilitate existing facilities that are part of the long term plan. This would consist of replacing the existing 110 foot diameter trickling filter with new activated sludge aeration tanks with STM Aerotors. The existing 150 foot diameter trickling filter would remain in service.

Phase 3 – Add facilities that are required for higher level of nutrient removal (phosphorus and nitrogen) consisting of expansion of the activated sludge for biological nutrient removal without a chemical carbon source and denitrifying filters. The treatment process must have the ability to operate in either nutrient or no-nutrient removal modes.

Consultant shall review all phasing issues including feasible construction timing and make recommendations regarding the project scheduling and the advisability of undertaking the project in one or more construction contracts.

5.0 CEQA REVIEW

Consultant shall prepare a California Environmental Quality Act (CEQA) review of the project. The environmental review shall be integrated into the project design activities and shall consider potential issues associated with the construction of the new facilities and continuous plant operation to meet NPDES requirements. Issues to be considered shall include but not be limited to air regulations including greenhouse gas and odor emissions, environmental and worker safety risks, project staging needs, management of sludge lagoon excavation and control measures for management and disposal of any contaminated soils and groundwater, potential of the sludge lagoon to provide habitat to any sensitive species from adjoining areas.

6.0 PERMITS

Consultant shall identify the permitting needs for the project and prepare the necessary permit applications. LGVSD will pay the permit fees. It is anticipated that as a minimum the following permits will be required:

- NPDES Permit – The District’s NPDES permit will renew in April 2015 tentatively. Consultant shall assist the LGVSD staff and its consultant, EOA, in providing any process design information that may needed in connection with the renewal of the NPDES permit. The renewal process is expected to start immediately and consultant shall provide input relating to process design and potential construction issues.
- BAAQMD Permit – Prepare the application for the BAAQMD permit to construct and operate and if necessary prepare the permit application for remediation of contaminated soil.
- Stormwater Runoff Permit – Prepare the necessary stormwater management permit application.
• Building Permit – If necessary, prepare the application for any building permits for the project.

Other permits that may be necessary for the project shall be identified and permit applications shall be prepared. Consultant shall provide all communications with the agencies and follow up as necessary to secure the permit.

7.0 MINIMUM REQUIREMENTS

The proposal needs to present your firm's approach and ability to complete the above tasks. It is anticipated that the entire process will include, but not be limited to, detailed design report including a phasing analysis and recommendations, equipment selection, preparation of plans and specifications, CEQA review and obtaining required permits, assistance during bidding, limited support during construction (see Task 8 below), and preparation of an operation and maintenance plan. Construction management and inspection services during construction are not included in this RFP.

8.0 SCOPE OF WORK

The scope of work shall incorporate the following basic elements:

Task 1 – Document Review and Review of Existing Facilities

• Review existing reports regarding the treatment plant including the Secondary Expansion Predesign Report prepared by Brown and Caldwell (see Exhibit B).
• Review existing construction plans for the treatment plant (not all plans are “As Built”).
• Review NPDES permits and past self-monitoring reports as necessary to establish the best project phasing which will allow continuous compliance with current or future discharge requirements and also meet the LGVSD obligations to provide recycled water.
• Field-verify existing structures and equipment.
• Establish survey controls and elevations of the existing treatment plant as necessary for the design and layout of the new facilities. Set a job benchmark and centerline references for use during construction.

Task 2 – Design Memorandum

• Confirm or recommend changes to Alternative 3 as described in the Secondary Expansion Predesign report (see Exhibit A).
• Develop the specifics of the complete project including process sizing, site layout, hydraulic profile, piping arrangements, geotechnical investigations, electrical service and SCADA.
• Investigate the project phasing of each phase to assure the continuity of treatment and compliance with discharge requirements.
• Develop the timing together with a detailed construction schedule for each project phase and for the entire project together with cash flow projections.
• Determine the specific construction requirements for each project phase including tie-ins and process downtime.
• Develop backup measures to be included in the project to minimize outages and assure continuous compliance with discharge requirements.
• Identify specific items of equipment which should be pre-purchased to assure timely delivery to meet the construction schedule.
• Develop sea level rise criteria based on current NOAA or BCDC projections.
• Recommend a bidding strategy for the construction contract(s).
• Analyze the advisability of prequalifying construction contractors and critical subcontractors which would be allowed to bid on the construction contract as allowed in California Public Contract Code.
• Identify potential grant funding sources and application requirements, and provide assistance in grant application.
• Prepare a draft and final Design Memorandum summarizing the findings and project specifics.
• Prepare a Technical Memorandum on the evaluation of existing treatment facilities including recommended rehabilitation or replacement methods and budget level cost estimates.
• Make a presentation of the Design Memorandum to the LGVSD Board including a power point presentation.

Task 3 – Construction Contractor Pre-qualification

• Prepare the necessary documents for pre-qualifying construction contractors and critical subcontractors for this project which are consistent with the California Public Contract Code including questionnaires and financial statement forms.
• Prepare for adoption by the District a uniform system of rating bidders on objective criteria, on the basis of the completed questionnaires and financial statements.
• Prepare for adoption by the District an appeal procedure, by which a contractor that is denied pre-qualification may seek a reversal of that determination.
• Prepare guidelines and assist the District with the interview process.
• Assist the District in evaluating the respondents and making the contractor and critical subcontractor selection.
• Document and make a record of all selection procedures.

Task 4 – Equipment Pre-purchase

• Prepare bidding documents and technical specifications for equipment to be pre-purchased as recommended in the Task 2 Design Memorandum.
• Develop vendor selection criteria and service agreements.
• Develop equipment delivery schedules.
• Assist the District in evaluating the equipment bids.

Task 5 – State Revolving Fund (SRF) Loan Application
• Prepare SRF loan application.
• The requirements are summarized and presented in the State Water Resources Control Board’s (SWRCB) publication entitled “Policy for Implementing the State Revolving Fund for Construction of Wastewater Treatment Facilities”.
• Assist District staff and Construction Manager (TBD) in the preparation of progress reports, final reports, and miscellaneous correspondence required by SWRCB related to the SRF loan during design, bid, and construction phases.
• Monitor post-construction performance and submit required certifications to SWRCB.

Task 6 – CEQA Compliance and Permitting

• Prepare the Initial Study and either a Negative Declaration or Mitigated Negative Declaration as necessary for CEQA compliance. Coordinate the CEQA review with the project design, make all necessary field studies, manage the review by LGVSD, the public and the necessary agencies, respond to comments and prepare the final CEQA document for adoption by the LGVSD Board.
• Prepare, submit, and assist the District in obtaining all required permits required by all State and local regulatory and jurisdictional agencies needed to ensure this project is cleared for construction on the anticipated scheduled dates. The District will pay the permit fees only.
• Conduct meetings with the various regulatory and permitting agencies in connection with the CEQA review and permitting for the project.
• Conduct a public hearing(s) as necessary.

Task 7 – Preparation of Plans, Specifications and Cost Estimates (PS&E)

• Prepare final plans and technical specifications sufficient for bidding. Plans shall include all necessary general, site, demolition, civil, structural, mechanical, electrical, SCADA and process drawings. Submit progress sets of plans and specifications at the 30%, 65%, and 90% levels for review and comment by LGVSD.
• Prepare estimates of the probable construction cost at the 65%, and 90% design submittals.
• LGVSD will provide “front end” Notice, Instruction to Bidders and General Conditions boiler plate contract language for incorporation into the bid documents. Consultant shall review and update the boiler plate languages for consistency with the plans and specifications.
• After LGVSD review provide 100% sets of plans and specifications and all necessary bid documents in digital form for printing as well as electronic distribution to bidders.
• Provide for progress meetings during the various tasks as may be required by the permitting agencies.

Task 8 – Bidding Services

• Provide services during bidding including attendance at the pre-bid meeting and job walk, answering contractor’s questions and preparation of all necessary addenda.
• Coordinate with District the distribution of bidding documents to builder’s exchanges and potential bidders.
• Attend bid opening, prepare bid summary, and evaluate bids for District review and approval.

Task 9 – Design Engineering Services During Construction

• Provide design engineering services during construction including review of all submittals and shop drawings, attendance at job meetings and responding to RFIs.
• Prepare drawings and all necessary materials and documents to direct the contractor on contract changes or revisions. All changes shall be incorporated into the final As-Built drawings. Coordinate with the Construction Manager (TBD) on all construction and other issues.
• Attend weekly construction meetings.

Task 10 – Project Closeout

• Prepare final As-Built drawings.
• Compile the operations and maintenance manuals, final reports, additional permitting requirements, etc.
• Prepare project O & M Manual (in addition to specific instruction or O & M manuals submitted by vendors and equipment manufacturers.)
• Prepare Standard Operating Procedure (SOP) manuals for core processes including contingency plans for failure modes.

9.0 DELIVERABLES

The following deliverables are required:

• Design Memorandum
• Detailed construction schedule and cash flow projection
• Documents for pre-qualifying the construction contractor and critical subcontractors
• Pre-purchase specifications
• SRF loan application and miscellaneous documents
• 30%, 65% and 90% design submittals with cost estimates
• Bid documents including biddable plans in AutoCAD format, specifications and all necessary bid documents, all in digital format
• Detailed final estimate of probable construction cost
• CEQA documentation
• Permit applications
• Addenda, bid summary, and bid evaluation during the bid period
• RFI, submittal reviews, and design revisions if any, during construction
• As-Built drawings in PDF and AutoCAD formats, and all product or equipment installation and O&M manuals
• O & M manual of all new facilities.
- Standard Operating Procedure (SOP) manuals for core processes including contingency plans for failure modes
- Technical memoranda, design calculations, studies, and miscellaneous documents prepared by the Consultant during various stages of design and construction
- Separate report on the evaluation of other treatment facilities including recommended replacement or rehabilitation of existing facilities that are close to the end of their useful lives.

10.0 PROPOSAL CONTENT REQUIREMENTS

LGVSD welcomes a response to this RFP in any format that best expresses the qualifications of the Consultant. Proposals submitted in response to this RFP must include the following items:

- Qualifications
  - Submit a description and qualifications of the firm and proposed subconsultants, including:
    - Similar project experience: no more than 2 pages.
    - References: provide name and telephone number of at least two references for similar projects that can attest to the quality and effectiveness of the Consultant’s work.
  - Submit qualifications on the individuals responsible for the design, if different than the entity’s principals.
  - Provide an organization chart for all work.
- Project Approach
  - Describe the approach to the project which will allow compliance with discharge requirements and expedite its implementation.
  - Describe the organizational approach and methodologies the Consultant will use to implement a sustainable, high quality design.
  - Identify any particular problems or design issues and options that the Consultant may need to investigate.
- Project Schedule
  - Provide a schedule (Microsoft Project) of tasks to be performed including project milestones.
  - See anticipated schedule for design and construction below.

11.0 SELECTION CRITERIA AND PROCESS

- Selection Criteria
  - LGVSD will evaluate the written proposal based on the following criteria:
    - Responsiveness to the RFP.
    - Firm’s experience with design and construction review of similar projects.
    - Evidence that the Consultant understands the aspects of the project, including CEQA preparation, permits and construction bidding process as well as BAAQMD requirements and relevant portions of the LGVSD’s NPDES permit conditions.
- Evidence of the Consultant’s ability to prepare well-written documents and accompanying technical drawings.
- Evidence that the Consultant has the resources and capacity to commit to a schedule.
  - Firm’s ability to identify and obtain grant funding.
  - Consultants selected for an interview will be further evaluated based upon their oral presentation and understanding of the project.

12.0 GENERAL CONDITIONS

- LGVSD reserves the right to:
  - Waive minor irregularities.
  - Modify or cancel the selection process or schedule at any time.
  - Negotiate with the second choice Consultant if it is unable to negotiate an acceptable contract with the first choice Consultant within a reasonable period of time.
  - Reject any and all proposals and to issue a new Request for Proposals when it is in the best interest of LGVSD to do so.
  - Seek any clarification or additional information from Consultants as is deemed necessary to the evaluation of a response.
  - Judge the veracity, substance and relevance of the Consultant’s written or oral representations; including seeking and evaluating independent information on any of the Consultant’s works cited as relevant experience.
  - Contract with separate entities for various components of the services.
- All expenses related to any Consultant’s response to the RFP, or other expenses incurred during the period of time the selection process is underway, are the sole obligation and responsibility of that Consultant. LGVSD will not directly or indirectly assume responsibility for such costs except as otherwise provided by written agreement.

13.0 CONTRACT AND OTHER REQUIRED DOCUMENTS

- Within ten (10) calendar days of the date of issuance by LGVSD of the Notice of Award, the Consultant shall submit the following documents to LGVSD:
  - A Consultant Services Agreement executed in duplicate by the successful firm (See Attachment 1).
  - Evidence of the required insurance coverage.
  - A completed Internal Revenue Form W-9.
- Failure of the Consultant to make a timely submission to LGVSD may result in a rescission of acceptance of the proposal by LGVSD and in award of the contract to another firm.

14.0 DISCLAIMERS

- This RFP does not commit LGVSD to award a contract or to pay any costs incurred in the preparation of a proposal in response to this RFP.
• LGVSD reserves the right to accept or reject any or all proposals received, to negotiate with the qualified firm, or to cancel the RFP.
• LGVSD may require the firm to submit additional data or information LGVSD deems necessary to substantiate the costs presented by the proposer. LGVSD may also require the proposer to revise one or more elements of its proposal in accordance with contract negotiations.
• LGVSD reserves the right to evaluate proposals for a period of thirty (30) days.

15.0 DEADLINE FOR SUBMISSION OF PROPOSALS

• The Consultant shall submit five (5) hard copies and a CD version of a PDF file, and one (1) copy of its cost proposal in a separately marked (clearly identifying the proposer) and sealed envelope to:

  Mark R. Williams  
  General Manager  
  Las Gallinas Valley Sanitary District  
  300 Smith Ranch Rd., San Rafael, CA 94903

• To be considered, proposals must be received at the address in the above paragraph and by the proposal due date shown below. Proposals received after this date and time will not be accepted and will be returned to the proposer unopened unless necessary for identification purposes.

• The following is the anticipated schedule for Consultant selection and contracting:

  Pre-proposal meeting and site visit           10:00 AM, Wednesday February 4, 2015  
  Proposals Due:                               12:00 Noon, Thursday February 12, 2015  
  Interviews (if required):                   February 19, 2015  
  Negotiations and Final Scope:               February 26, 2015  
  Award of Contract                           March 12, 2015  
  Notice to Proceed                           March 19, 2015

• The following is the anticipated schedule for design and construction:

  Design Memorandum                          May 7, 2015  
  Board Presentation                         May 14, 2015  
  Contractor Pre-qualification Documents     April 1, 2015  
  CEQA Initial Study                         May 7, 2015  
  30% Design Package                         June 18, 2015  
  Equipment Pre-purchase Specifications      August 1, 2015  
  Submit All Permit Applications             September 1, 2015  
  65% Design Package                         October 15, 2015  
  Conduct Contractor Pre-qualification       October 15, 2015  
  90% Design Package                         January 31, 2016  
  Final Contract Documents                   March 14, 2016
Bid Phase + 2 Months
Complete CEQA Compliance May 14, 2016
Construction Phase TBD
Project Phasing, Closeout & Testing TBD

16.0 CONTACT PERSON

• Inquiries relating to this Request for Proposals and/or the required services should be directed to:

  Michael P. Cortez, PE
  District Engineer
  Las Gallinas Valley Sanitary District
  300 Smith Ranch Rd., San Rafael, CA 94903
  Office: 415-472-1734; mcortez@lgvsd.org
  Direct Line: 415-472-1033 ext. 18

17.0 ATTACHEMENTS

ATTACHMENT A – Agreement For Consultation and Engineering Services. The Consultant selected to provide the scope of services shall use LGVSD’s standard consultant services agreement. A copy of the template of this agreement is attached to this RFP. By submitting a proposal for the work, the Consultant agrees to utilize the LGVSD standard agreement form for the contract. Contractually required insurance coverage and endorsement information is shown in the body of the document.

18.0 EXHIBITS

(Please download the following exhibits from the District website. Link: http://www.lgvsd.org/document-library/current-construction-projects/)

Exhibit A: Alternative 3 (AS/BNR) – Phased Conversion to Full Activated Sludge with BNR, Section 4.7, Secondary Expansion Predesign by Brown and Caldwell, dated December 2014
Exhibit B: Secondary Expansion Predesign by Brown and Caldwell, dated December 2014
Exhibit C: San Francisco Bay Water Board Orders:
  ORDER NO. R2-2009-0070, NPDES NO. CA0037851
  ORDER NO. R2-2014-0014, Other orders that may apply to LGVSD
AGREEMENT
FOR CONSULTATION AND PROFESSIONAL ENGINEERING SERVICES
_________________________________________ PROJECT
(JOB NO. _____-__)

THIS AGREEMENT made this _____ day of ________________, _______ by and between the LAS GALLINAS SANITARY DISTRICT (hereinafter referred to as “District”), and ____________________________________________, whose address is, __________________________________________________ hereinafter referred to as “Consultant”);

WITNESSETH:

IN CONSIDERATION of the mutual covenants and conditions herein contained, the parties do hereby agree as follows:

1. General

DISTRICT engages CONSULTANT to furnish the services hereinafter mentioned upon the covenants and conditions of this Agreement, at the compensation herein stipulated, and CONSULTANT accepts said engagement upon said terms.

2. Duties of Consultant; Services to be Performed by Consultant

CONSULTANT shall perform such duties and services as are listed on Exhibit A attached hereto, and is hereby referred to and made a part hereof by reference. Said services shall be completed according to the time schedule contained in Exhibit A.

3. Services or Materials to be Performed or Furnished by District

DISTRICT shall perform such services or furnish such materials to CONSULTANT in connection with this Agreement as are set forth on Exhibit B. If there are no entries on said Exhibit B, DISTRICT, shall not be required to provide any services or furnish any materials to CONSULTANT. Unless otherwise provided on Exhibit B, all said services and materials to be furnished by DISTRICT will be without cost to CONSULTANT.

4. Payment by District: Time and Manner of Payment

DISTRICT shall pay CONSULTANT, for all services to be rendered and all materials to be furnished under this Agreement, the amount specifically set forth and in the manner specifically set forth on Exhibit C. CONSULTANT agrees to accept said sum as full compensation for all services due under this Agreement. Notwithstanding any other language in the Agreement or any exhibits, CONSULTANT agrees that it will perform all tasks for a sum not to exceed __________________________ ($___________ U.S. Dollars). This is an Agreement for a specific task as defined in Exhibit A, Consultant Services
(Scope of Work), for ____________________________, and CONSULTANT has accurately determined the price of those tasks.

5. Authorization To Perform Services

The CONSULTANT is not authorized to perform any services, or incur any costs whatsoever under the terms of this Agreement until receipt of written authorization from the DISTRICT.

6. Additional Work

CONSULTANT shall be entitled to extra compensation for services or materials not otherwise required under this Agreement or described in Exhibit A, provided that DISTRICT shall first have identified the services or materials as extra, and requested such extra services or materials in writing, but in no event shall DISTRICT be liable for payment unless the amount of such extra compensation shall first have been agreed to in writing by DISTRICT.

7. Professional Skill

CONSULTANT represents that it is skilled in the professional calling necessary to perform the work agreed to be done by it under this Agreement. CONSULTANT represents and warrants to DISTRICT that it has all licenses, permits, qualifications that are legally required for CONSULTANT to practice its profession and that CONSULTANT shall, at its sole cost and expense, keep all such licenses, permits, and approvals which are legally required for CONSULTANT to practice its profession in effect. DISTRICT relies upon the skill of CONSULTANT to do and perform its work in a skillful manner, and CONSULTANT agrees to thus perform its work, and the acceptance of its work by DISTRICT shall not operate as a release of CONSULTANT from said Agreement. For purposes of this Agreement, “skillful manner” shall mean the standard of care prevailing in the industry in the San Francisco Bay Area during the term of this Agreement.

8. Equal Employment Opportunity

CONSULTANT shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, amnesty, physical handicap, medical condition, marital status or sex of such person as provided in Section 12940 of the Government Code.

9. Compliance with Laws

CONSULTANT shall comply with all federal, state and District laws, statutes, ordinances, rules and regulations and the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of the Agreement. Any suit or action by either party shall be brought in the Superior Court for the County of Marin, California. The laws of the State of California shall govern this Agreement.

10. Independent Contractor; Not An Agent

CONSULTANT, at all times during the term of this Agreement is acting as an independent contractor in furnishing the services or materials and performing the work required by this Agreement and is not an agent, servant or employee of DISTRICT. Notwithstanding any
other DISTRICT, state or federal policy, rule, regulation, law, or ordinance to the contrary, CONSULTANT and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by DISTRICT, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of DISTRICT and entitlement to any contribution to be paid by DISTRICT for employer contributions and/or employee contributions for PERS benefits.

Except as DISTRICT may specify in writing, CONSULTANT shall have no authority, express or implied, to act on behalf of DISTRICT in any capacity whatsoever as an agent or pursuant to this Agreement to bind DISTRICT to any obligation whatsoever.

11. Time

CONSULTANT shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of CONSULTANT’S obligations pursuant to this Agreement.

12. Indemnity

CONSULTANT agrees to indemnify and save harmless and defend with counsel acceptable to DISTRICT, the DISTRICT, its officials, officers, employees, agents, and volunteers from and against any and all losses, liability, suits, actions, costs, expenses, claims, causes of action and damages (including costs of defense) arising out of any personal injury, bodily injury, loss of life, or damage to property, or any violation of any federal, state, or municipal law or ordinance to the extent caused, in whole or in part, by recklessness, the willful misconduct or negligent acts or omissions of CONSULTANT, its officers, employees, agents, consultants, subcontractors or any officer, agent or employee thereof but excluding liabilities due to the sole negligence or willful misconduct of the DISTRICT or any third party. For purposes of Section 2782 of the Civil Code the parties hereto recognize and agree that this Agreement is not a construction contract. By execution of this Agreement, CONSULTANT acknowledges and agrees that CONSULTANT has read and understands the provisions hereof and that this paragraph is a material element of consideration. DISTRICT and CONSULTANT agree that this Agreement is consistent with Section 2782.8 of the Civil Code.

13. Insurance: Public Liability, Workers’ Compensation, Errors and Omissions

CONSULTANT shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the CONSULTANT, its officers, subcontractors, agents, representatives, or employees.

CONSULTANT shall be required to meet all District Insurance Requirements. See Exhibit D for District Insurance Requirements.

14. Consultant Professional Team

CONSULTANT shall provide and maintain the professional team to perform and furnish the materials in connection with this Agreement whose names and capacities are set forth on Exhibit E. In the event that any member of said team shall leave the employ of CONSULTANT
or be transferred to another office of CONSULTANT, CONSULTANT shall so advise DISTRICT and replace that member with a new member who is competent to perform the required work and who shall be satisfactory to DISTRICT. Such other agents or employee contractors or subcontractors not listed on Exhibit E as may be required to perform any portion of this Agreement shall be competent and shall be suitably experienced in the function which they perform.

15. Notices

Unless otherwise provided herein, all notices required hereunder shall be given by certified mail, postage prepaid and addressed to the party at the address indicated in the opening paragraph of this Agreement provided, however, that in lieu thereof, notice may be given by personal delivery to the party at said address.

16. Title to Documents

All original calculations, photographs, maps, drawings, plans, design notes and other material or documents developed or used in connection with the performance of this Agreement shall be the property of DISTRICT provided, however, that CONSULTANT may provide DISTRICT with legible photostatic copies thereof in lieu of the originals upon approval by DISTRICT representative. All such material and documents shall remain confidential and may not be divulged, published or shared by CONSULTANT without the prior written consent of DISTRICT. Any plans and specifications shall bear the name of the CONSULTANT together with his certificate number, if any. If CONSULTANT’S working papers or product includes computer generated statistical material, CONSULTANT shall provide the material including the data base upon which it is based to DISTRICT in a mutually agreed upon computer machine-readable format and media.

17. Assignment

Neither party shall assign or sublet any portion of this Agreement without the written consent of the other party in writing.

18. Termination

Without limitation to such rights or remedies as DISTRICT shall otherwise have by law, DISTRICT shall also have the right to terminate this Agreement for any reason upon seven (7) days’ written notice to CONSULTANT. This Agreement may also be terminated by either party upon seven (7) days’ written notice should the other party fail substantially to perform in accordance with this agreement through no fault of the other or if the project is stopped by conditions beyond the control of the DISTRICT.

In addition to terminating this Agreement if CONSULTANT materially breaches any of the terms of this Agreement, DISTRICT’S remedies shall include, but not be limited to:

- Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by CONSULTANT pursuant to this Agreement;
- Retain a different consultant to complete the work described in Exhibit A not finished by CONSULTANT; and/or
This description of DISTRICT's remedies does not otherwise limit DISTRICT's remedies at law or equity.

19. Entire Agreement; Amendment

This writing constitutes the entire Agreement between the parties. Any prior agreements of any nature merge into this Agreement. No modification hereof shall be effective unless such modification is in writing signed by all parties to this Agreement.

20. No-Waiver; Construction

Failure on the part of either party to enforce any provisions of this Agreement shall not be construed as a waiver of the right to compel enforcement of such provisions or any other provision. The singular number shall include the plural, and the masculine gender shall include the feminine gender and neuter gender whenever the context of this Agreement permits.

21. Validity

The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

22. Mediation

Should any dispute arise out of this Agreement, the parties shall meet in mediation and attempt to reach a resolution with the assistance of a mutually acceptable mediator. Neither party shall be permitted to file a legal action without first meeting in mediation and making a good faith attempt to reach a mediated resolution. The costs of the mediator, if any, shall be shared equally by the parties. If a mediated settlement is reached, neither party shall be deemed the prevailing party for purposes of the settlement and each party shall bear its own legal costs.

23. Attorney’s Fees

If a party brings any action, including an action for declaratory relief, to enforce or interpret the provisions of this Agreement, the prevailing party is entitled to reasonable attorneys’ fees in addition to any other relief to which that party may be entitled. Such fees may be set by the court in the same action or in a separate action brought for that purpose.

24. Survival

All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between DISTRICT and CONSULTANT survive the termination of this Agreement.

25. Conflict of Interest

CONSULTANT may serve other clients, providing that activities in the service of other clients do not place CONSULTANT in a “conflict of interest” as that term is defined in the Political Reform Act codified at California Government Code § 81000 et seq. or Section 1090 et seq. of the Government Code.
26. Severability

If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

27. Consultant Nondisclosure

a. CONSULTANT will not directly or indirectly use (other than for the DISTRICT), publish, or otherwise disclose at any time (except as CONSULTANT’S duties may require), either during or subsequent to the performance of consulting services, any of DISTRICT’s confidential information (whether or not conceived, originated, discovered, or developed in whole or in part by CONSULTANT) as defined below.

b. “Confidential information” means information or material that is not generally available to or used by others, or the utility or value of which is not generally known or recognized as standard practice whether or not the underlying details are in the public domain, including without limitation:

- Information or material that relates to DISTRICT’S inventions, technological developments, “know how”, purchasing, accounting, merchandising or licensing;
- Trade secrets;
- Software in various stages of development (source code, object code, documentation, diagrams, flow charts), designs, drawings, specifications, models, data and customer information; and
- Any information of the type described above that DISTRICT obtained from another party and that the DISTRICT treats as proprietary or designates as confidential, or is obligated to do so by virtue of a third-party agreement, whether or not owned or developed by the DISTRICT.

c. The obligations of confidentiality imposed herein will not apply to confidential information that:

- Is or has been generally available to the public by any means, through no fault of CONSULTANT and without breach of these provisions.
- Is or has been lawfully disclosed to CONSULTANT by a third party without an obligation of confidentiality being imposed upon CONSULTANT.
- Has been disclosed without restriction by the DISTRICT or by a third party owner of confidential information.
- Was required to be disclosed pursuant to law.

d. CONSULTANT agree to deliver to DISTRICT promptly on request, or on the date of termination of CONSULTANT’S services, all documents, software, including any copies, and other materials in CONSULTANT’S possession pertaining to the business of DISTRICT and originating with the DISTRICT that came into CONSULTANT’S possession.
e. The disclosure of confidential information shall not be construed as granting either a license under any patent, patent application or any right of ownership in said confidential information.

f. CONSULTANT acknowledges and agrees that in the event of a breach or threatened breach of any provisions of this Agreement, the DISTRICT shall have no adequate remedy at law and shall therefore be entitled to enforce any such provision by temporary or permanent injunctive or mandatory relief obtained in any court without the necessity of proving damages, posting any bond or other security, and without prejudice or diminution of any other rights or remedies which may be available at law or in equity.

28. Additional Provisions, Exhibits

Additional provisions of this Agreement are set forth on Exhibits A through Exhibit F. All Exhibits shall be attached to, and are hereby referred to and made a part hereof by reference.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

LAS GALLINAS VALLEY SANITARY DISTRICT

By _____________________________________________
Mark R. Williams, General Manager    Date

______________________________________________
________________________________________________

Signature                                Date

By _____________________________________________
Print Name                               Title

NOTE: The following exhibits are hereby incorporated into this agreement by this reference:

Exhibit A: Consultant Services (Scope of Work)
Exhibit B: Services or Materials to be Performed or Furnished by District
Exhibit C: Payment Schedule
Exhibit D: District Insurance Requirements
Exhibit E: Consultant Team
Exhibit F:  1. Contractor/Consultant Safe Work Requirements
           2. Confined Space Entry Program
Exhibit A
Consultant Services (Scope of Work)

(Placeholder)
Exhibit B

Services or Materials to be Performed or Furnished by District

1. Contract Documents – Bidding Forms, Contract Forms, and General Conditions
Exhibit C
Payment Schedule

(Placeholder)
Exhibit D

District Insurance Requirements

Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Consultant, his agents, sub-consultants, sub-contractors, representatives, or employees.

Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage (occurrence Form CG 00 01).
2. Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code 1 (any auto), Code 9 (hired) and 9 (non-owned).
3. Workers’ Compensation insurance as required by the State of California and Employer’s Liability Insurance.
4. Errors and Omissions Liability insurance appropriate to the consultant’s profession. Architects’ and engineers’ coverage is to be endorsed to include contractual liability.

Minimum Limits of Insurance

Consultant shall maintain limits no less than:

<table>
<thead>
<tr>
<th>Coverage Type</th>
<th>Minimum Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Liability:</strong></td>
<td>$1,000,000</td>
</tr>
<tr>
<td>(Including operations, products and completed operations, as applicable.)</td>
<td>per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.</td>
</tr>
<tr>
<td><strong>Automobile Liability:</strong></td>
<td>$1,000,000</td>
</tr>
<tr>
<td></td>
<td>per accident for bodily injury and property damage.</td>
</tr>
<tr>
<td><strong>Employer’s Liability:</strong></td>
<td>$1,000,000</td>
</tr>
<tr>
<td></td>
<td>per accident for bodily injury or disease.</td>
</tr>
<tr>
<td><strong>Errors and Omissions Liability:</strong></td>
<td>$1,000,000</td>
</tr>
<tr>
<td></td>
<td>per claim, and $2,000,000 aggregate.</td>
</tr>
</tbody>
</table>

Higher Limits of Insurance

If the Consultant maintains higher limits than the minimums shown above, the District requires and shall be entitled to coverage for higher limits maintained by the Consultant.

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

1. **Additional Insured Status**

The District, its officers, officials, employees, and volunteers are to be covered as additional insureds on the auto policy with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Consultant; and on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant 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 the Consultant’s insurance (at least as broad as ISO Form CG 20 10, 11 85 or both CG 20 10 and CG 23 37 forms if later revisions used).

2. **Primary Coverage**

For any claims related to this contract, the Consultant’s insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the District, its officers, officials, employees, or volunteers shall be excess of the Consultant’s insurance and shall not contribute with it.

3. **Notice of Cancellation**

Each insurance policy required above shall state that coverage shall not be canceled, except with notice to the District.

4. **Waiver of Subrogation**

Consultant hereby grants to District a waiver of any right to subrogation which any insurer of said Consultant may acquire against the District by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the District has received a waiver of subrogation endorsement from the insurer.

5. **Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared to and approved by the District. The District may require the Consultant to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

6. **Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best’s rating of no less than A:VII, unless otherwise acceptable to the District.

7. **Claims Made Policies**

If any of the required policies provide coverage on a claims-made basis:
   a. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
b. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

c. 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, the Consultant must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.

8. Verification of Coverage

Consultant shall furnish the District 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 the District before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant’s obligation to provide them. The District reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

9. Subcontractors

Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein.

10. Special Risks or Circumstances

District reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.
Exhibit E

Consultant Team

(Placeholder)
Exhibit F

1. Safe Work Requirements
SAFETY POLICY

(Note: “Contractor” or “Subcontractor” whenever mentioned in this appendix shall also mean “Consultant” or “Subconsultant” respectively.)

Contractors and their subcontractors working for the Las Gallinas Valley Sanitary District shall comply with all applicable federal, state, and local safety orders in the performance of any work on District projects. In addition, Contractors and their subcontractors shall comply with all safety regulations and procedures listed in this Safe Work Requirements. Contractors shall take any additional precautions necessary to prevent injury or damage to persons, property, or interference with District operations.

Contractors shall be responsible for notifying employees, subcontractors, and invitees of these District Safe Work Requirements. No work within District facilities or on District contract work sites shall begin prior to such notification. Contractor shall not allow a new employee or new subcontractor to begin work on District projects without having conducted a full and proper safety orientation.

Contractors doing work at the Treatment Plant facility, lift stations or sewage conveyance systems shall schedule a safety orientation session for their site Superintendent and other Contractor-designated personnel with the Authorized District Representative prior to commencing work. The orientation session shall include emergency procedures, an explanation of applicable District safety policies, and any unique and inherent hazards of District facilities. It is then the responsibility of the Contractor's Superintendent or designated personnel to orient and so inform all personnel under the Contractor’s supervision.

The District may, in its sole discretion, either temporarily or permanently remove a Contractor’s employee from District work and/or terminate the Contractor’s right to proceed for any violation of applicable Cal/OSHA Construction Safety Orders or these District Safe Work Requirements.

DEFINITIONS

As used in this Safe Work Requirement, the following definitions are applicable:

A. Parts and Materials:
All products, materials, devices, systems, or installations installed by Contractor shall have been approved, listed, labeled, or certified as conforming to applicable governmental or other nationally recognized standards, or applicable scientific principles.
The listing, labeling, or certification of conformity shall be based upon an evaluation performed by a person, firm, or entity with appropriate registered engineering competence; or by a person, firm, or entity, independent of the manufacturer or supplier of the product, with demonstrated competence in the field of such evaluation.

B. **Contractor**
Designates “Contractor”, “Contractors”, “Sub-Contractors”, “Suppliers”, and all employees of each.

C. **Authorized District Representative**
The District’s Authorized Representatives shall be the employee(s) designated by the District to be responsible for communicating with the Contractor.

D. **District Jurisdiction**
For the purposes of these regulations, “District” Shall mean the Las Gallinas Valley Sanitary District.

E. **Treatment Plant and Facilities**
For the purposes of these regulations, “Treatment Plant & Facilities” shall include the District's Wastewater Treatment Plant, lift stations and sewage conveyance systems located within the boundaries of the District.

**EMERGENCY PROCEDURES**

A. **First Aid**
Contractors shall be responsible for providing first aid and medical treatment for their employees and for compliance with the first aid requirements of all applicable Cal/OSHA Construction Safety Orders.

Contractors shall be responsible for making prior arrangements for emergency medical care and for transportation of injured Contractor personnel.

B. **Fire**
When work is being performed which generates sparks or open flames, the Contractor will provide a fire watch, a person trained in the use of appropriate firefighting equipment, whose only task is to observe and extinguish fires. A District “Hot Works” permit must be filled out and turned into the Collection System / Safety Manager, or General Manager when the Safety Manager is not available, when work is completed. Contractor shall ensure that appropriate fire extinguisher(s) are available at the specific work site for use in case of a fire. All Contractor’s employees shall be properly trained to use them.

In the event of a fire, Contractor shall immediately notify the nearest District employee, and if possible, call emergency (911) and give the location of the plant, which is 300 Smith Ranch Rd. San Rafael. A map of the wastewater plant is included in this policy. Refer to Attachment A.
BASIC SAFETY RESPONSIBILITIES AT DISTRICT FACILITIES

A. COMMUNICATION
Contractor shall maintain close communication with the Authorized District Representative. Contractors should sign-in at the office at the beginning and end of each day along with a headcount of crew members.

B. RESPONSIBILITY
Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss, to:

1. All employees on the work site and other persons and organizations who may be affected thereby.
2. All the work, materials, and equipment to be incorporated therein, whether in storage or off the site.
3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation, or replacement in the course of construction.

Contractor shall comply with all applicable laws and regulations (whether referred to herein or not) of any public agency having jurisdiction over the safety of persons or property, or the protection of persons from damage, injury, or loss, and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and facilities when performance of the work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property and facilities.

Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless otherwise designated in writing by the Contractor to the District.

C. GENERAL SAFETY REGULATIONS
Basic Rules:
- Work shall not begin until the Contractor's personnel have been informed of the District's Safe Work Requirements and potential hazards. The District employee responsible for the project is responsible for advising the Contractor of the District’s Safe Work Requirements and potential hazards.
- All safety procedures applicable to the job being performed, including use of appropriate protection equipment, shall be followed.
- The Contractor’s personnel shall never operate, use, adjust, modify or relocate any District equipment, switches, valves, or other controls. The Authorized
District Representative must be contacted should operation, adjustment, modification, or relocation of District equipment be necessary.

- Contractor’s use of District instruments, tools, ladders, scaffolding or other equipment is not permitted except in cases of emergency as determined by a District supervisor or by permission from a senior Manager of the District.

- Drinking water shall be supplied by Contractor. **Do Not Drink Water from Hose Connections at any District Facility.**

  1. Hose bib connections are located throughout the treatment plant. Most of these supply treated wastewater and may or may not be posted with signs reading “Do Not Drink.” In any case, **never** drink water from hose bibs or hoses.

  2. Water lines throughout the treatment plant are color coded (when not stainless steel) and labeled as follows:
     - Recycle Water Piping    Purple
     - Domestic Water Piping    Blue
     - Service Water Piping (Plant Effluent)    Gray

  3. Hose connections may be used to wash down equipment. Never hose down electrical or heated equipment of any kind. If an employee has used a gray or purple water hose for wash down, he/she should immediately wash their hands in domestic water with soap.

- **NEVER** make any connection to any water line without first verifying with the Authorized District Representative that contamination of the water lines will not occur.

- Use of alcoholic beverages and/or illegal drugs by Contractor or any employee is strictly prohibited. Smoking within the plant is prohibited. Use of prescription or non-prescription drugs which interfere with the individual’s ability to work safely is also prohibited.

- Contractor shall advise the Authorized District Representative of any employee with any medical conditions that could put the employee in danger.

**Personal Protection Equipment:**

- Contractor shall be responsible for providing and assuring use by employees of all OSHA required protective equipment.

- Approved respiratory equipment shall be worn when the possibility of exposure to hazardous dusts, vapors, fumes, mists, or gases exists. In addition to all other safety regulations, pipes or conduit should be mechanically BLOCKED off when being worked on. District safety procedures shall be followed when working on, but not limited to, the following systems:
  1) Natural gas and sludge gas (Methane)
  2) Ferrous Chloride
3) Polymer
4) Hypochlorite
5) Compressed Air
6) Sodium Bisulfite

Contractor shall be responsible for determining the existence and location of such systems prior to commencement of work.

**Power Tools and Welding Equipment:**

- Gasoline and electrical powered hand tools shall be protected by approved ground fault circuit interrupters, or shall be double insulated. Cords shall be inspected daily prior to use. Damaged cords shall not be used on District work.

- Pneumatic driven power tools shall be disconnected from air lines when not in use. Hoses shall be inspected daily prior to use. Damaged hoses shall not be used on District work.

- Power tools shall be used only by trained personnel who have a valid license (when applicable, i.e., welding) in their possession. Proper warning signs shall be posted when these tools are in use.

- Electric and gas welding and cutting tools, including cords and gas hoses, shall be inspected daily prior to use. Damaged cords and gas hoses shall not be used on District work.

- Contractor and Contractor employees’ tools and equipment used on District work sites shall be in safe operating condition and shall conform to the requirements of Cal/OSHA regulations. All personnel using such tools shall be properly trained.

**D. BARRICADES AND SIGNS FOR TRAFFIC CONTROL**

All Contractors, permittees, or agencies doing work for District which requires traffic control shall:

1) Install and maintain required traffic devices.
2) Provide appropriately equipped flag persons when required.
3) Provide adequate safeguards for workers and District personnel.
4) Maintain access for District personnel to all District facilities.

All work on streets, roadways, or similar thoroughfares shall comply with the Federal Highway Administration’s “Manual on Uniform Traffic Control Devices for Streets and Highways” and any local ordinances. District Plant speed is *maximum* 10 mph.
SPECIAL PROCEDURES AND UNIQUE HAZARDS

A. **CONFINED SPACE ENTRY**
Confined spaces of all types exist throughout the District and throughout the plant and range from open trenches and manholes, to tanks, clarifiers and digesters. Contractors are required to meet Cal/OSHA safety standards for CONFINED SPACE ENTRY OPERATIONS, Title 8 Article 108 (Sections 5156-5159), or the most current CAL/OSHA applicable standards, and to provide a safe working environment for their employees. All Contractors directing or working in confined spaces are required to notify the Authorized District Representative. Contractors are responsible for all operations, testing, equipment calibration, ventilation, and entry per the Cal/OSHA standards. Contractors are responsible for all confined space permits and all appropriate equipment. Completed confined space permits are to be turned in to the District’s safety manager.

B. **ELECTRICAL SUPPLY SYSTEMS**
The treatment plant’s Electrical Supply System consists of one 85KW digester/methane gas fired engine driven generator, one 500KW diesel oil engine driven standby generator and one 380 KW trailer mounted standby generator, and solar power. All electrical power generated in the plant and PG&E power (beyond their transformer) is 480 volt, 3 phase, 60 Hz electricity and is delivered to one 480 volt switchgear panel. This panel is interconnected by cables and protected by breakers, relays and monitoring devices.

Electricity is dispersed from the switchgear through breakers and cables to motor control centers (MCC’s), to power panels, to transformers (voltage reducers), to lighting panels and to motor driven pumps and equipment. Lockable control stations are located at each piece of equipment. 480 volt, 208 volt and 120 volt electricity is used in the plant. Contact the duty operator prior to working on any piece of electrical equipment. Electricity is hazardous and can burn or kill people.

All work on electrical systems shall be done in accordance with the State of California, CAL/OSHA, Article 33, Electrical Requirements for construction work, Low Voltage Electrical Safety Orders.

C. **FERROUS CHLORIDE SYSTEMS - AS OF 04/2010 FERROUS CHLORIDE IS CURRENTLY NOT BEING USED**
The Ferric Chloride System consists of a large steel cylindrical (rubber lined) storage tank with loading and unloading nozzles, pressure relief valve and a positive displacement pump with feed rate adjustment. Shut-off valves are located before and after the pump. Before working on this system, close all valves and disconnect the pump from electricity.

Ferric Chloride is a dangerous chemical which will attack the skin, eyes and the mucous membranes of the mouth, throat and lungs. Contact the plant duty operator prior to working on this system.
D. **DIGESTER GAS SYSTEM**
The Digester Gas System consists of one steel tank, associated piping, compressors, flare, etc. Sludge is bacterially reduced in the tanks creating principally methane (CH) and other combustible hazardous gases, including hydrogen sulfide (H₂S). Hydrogen sulfide is toxic at very low concentrations. These gases are contained by the tank covers and piping which is located on overhead racks, in pipe trenches and buried throughout the plant. The gases are burned in large engines driving generators to make electricity for the plant. Heat from the engines is captured and piped to the digesters to heat the sludge, speeding up the digestion process.

Digesters and the stored gases within them are hazardous. No smoking, cutting, or spark-generating equipment is allowed on or within ten feet of any digester. Contact the duty operator prior to working on digesters.

E. **HYPOCHLORITE SYSTEM**
Hypochlorite, or concentrated chlorine bleach (12.5%), is used to disinfect, or kill bacteria and virus in the final effluent (water) discharged from the plant. Two tanks, one 6,000 gallons and one 3,400 gallons are used to store hypochlorite. Piping, valves, pumps, strainers (filters) and flow measuring and control equipment make up the system. Hypochlorite will attack clothing, skin, eyes and mucous membranes of the nose, mouth, throat and lungs. Contact the duty operator prior to working on the hypochlorite system.

F. **SODIUM BISULFITE**
Sodium bisulfite is used when neutralizing sodium hypochlorite. Two tanks, one 4,000 gallons and one 2,500 gallons are used to store sodium bisulfite. Piping, valves, pumps, strainers (filters) and flow measuring and control equipment make up the system. Sodium bisulfite is an irritant to eyes, skin and mucous membranes. Inhalation of mist may cause irritation to respiratory tract. Contact the duty operator prior to working on the sodium bisulfite system.

G. **GENERAL HAZARDS**
Throughout District’s treatment plant and facilities there are a number of extremely hazardous elements that are dangerous. They include, but are not limited, to:

- Flammable gas and petroleum.
- H₂S (hydrogen sulfite)
- Deep pools of liquid sewage which are rarely patrolled, and for which self-rescue is unlikely.
- Automatic start equipment.
- HBV (Hepatitis B Virus)
The undersigned acknowledges receipt of and has read and fully understands these District Safe Work Requirements.

**CONTRACTOR/CONSULTANT**

Signed: __________________________

Name: __________________________

Title: __________________________

Date: __________________________

Company: __________________________
Exhibit F

2. Confined Space Entry Program
INTRODUCTION 1
PERMIT-REQUIRED CONFINED SPACES 2
ALTERNATE ENTRY PROCEDURES 2
SPECIAL ENTRY PROCEDURES 3
THE ENTRY PERMIT SYSTEM 3
HOT WORK PERMIT 3

Table 1: Main Plant PRCS 4

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DUTIES OF ENTRY TEAM 6
Entry Supervisor
Entrant
Attendant

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Entry
Post-Entry

RESCUE PROCEDURES 8
Self-Rescue
Non-Entry Rescue
Entry Rescue
Outside Rescue Services

NON-PERMIT CONFINED SPACES 9

CONTRACTORS 9

TRAINING 10

LGVSD CONFINED SPACE ENTRY PERMIT FORM 11

LGVSD HOT WORK PERMIT FORM 12
INTRODUCTION

The purpose of Las Gallinas Valley Sanitary District's confined space entry program is to protect employees who work in manholes, pump stations, tanks, or any other confined space that could expose employees to hazardous conditions or substances. The program establishes an entry permit system and procedures to ensure that potential hazards of each confined space are identified and evaluated and that appropriate safety precautions are taken before an employee enters the space.

Employees will be given an opportunity to participate in the development and implementation of LGVSD's confined space procedures. The program will be revised or procedures will be modified whenever suggestions or recommendations from employees would improve confined space safety.

The policies and procedures in this program are consistent with the requirements of Cal/OSHA General Industry Safety Orders, Title 8, Sections 5156 and 5157 and supersede previous confined space policies and procedures. The program applies to all employees who work in, or in connection with LGVSD confined spaces.

Confined spaces at LGVSD have been identified based on the definitions in Section 5157 as follows:

**Confined Space** is a space that:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work; and
2. Has limited or restricted means for entry or exit; and
3. Is not designed for continuous employee occupancy.

**Permit-Required Confined Space** is a space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere;
2. Contains a material that has the potential for engulfing an entrant;
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section; or
4. Contains any other recognized serious safety or health hazard.

**Non-Permit Confined Space** is a space that does not contain (or with respect to atmospheric hazards, has no potential to contain) any hazard capable of causing death or serious physical harm.

Employees who work in or in connection with confined spaces are required to follow the procedures described in this program and to take all the appropriate precautions to ensure that the work is performed safely. At no time should an employee enter a confined space or perform work in the space unless it can be done safely.
PERMIT-REQUIRED CONFINED SPACES

The tables on pages B-4 and B-5 list confined spaces at LGVSD that require a permit to enter. Potential hazards associated with these spaces include engulfment, toxic gases, explosive or flammable gases, oxygen deficiency, electrical and mechanical hazards, and may under certain circumstances involve heat stress. Warning signs will be posted at wet wells and similar locations to inform employees that the space requires a permit to enter. To prevent unauthorized entry, each of these spaces will be secured.

Using the entry permit, a non-entry evaluation must be done so that potential hazards can be identified and the appropriate safety precautions taken. The types of hazards that may be encountered, pre-entry safety checks, and the types of safety equipment that will be used are entered on the permit. Only the person designated as the entry supervisor has the authority to authorize the entry permit. At least three employees are required for a permit-required confined space entry which would include an attendant and a standby rescuer.

The tables on pages B-4 and B-5 that list permit-required confined spaces at LGVSD are not all-inclusive. Other spaces may be determined to be permit-required after evaluating the conditions or circumstances of the entry. The type of work to be performed in the space could introduce hazards to an otherwise safe space. Working with flammable or toxic substances, welding or other hot work, or drifting vapors from outside sources would make a space hazardous or potentially hazardous and therefore require a permit to enter.

ALTERNATE ENTRY PROCEDURES

Alternate procedures are allowed in permit-required spaces where it can be demonstrated and documented that the only hazard or potential hazard is an atmospheric one, and that continuous forced air ventilation alone will maintain the space safe for entry. A trained, qualified employee may enter these confined spaces without an attendant or rescue preparations provided the following conditions are met.

1. All unsafe conditions are eliminated before the confined space cover is removed.
2. The entrance to the space is guarded with a railing or other type of barrier to prevent an accidental fall through the opening and to protect employee in the space.
3. The atmosphere is tested before entry in the following order: O2, LEL/LFL, H2S.
4. No entrance is made until hazardous atmosphere is eliminated.
5. There is no hazardous atmosphere when employees are in the space.
6. Continuous forced ventilation is used.
7. The air supply is clean and will not increase hazards.
8. The air supply is directed to area where employees are working.
9. The atmosphere is tested every 15 minutes to ensure a hazardous atmosphere is not developing.
10. Records of pre-entry and entry monitoring data and inspection data are maintained.
11. The entrant certifies, in writing, that the required pre-entry measures have been taken.
12. Monitoring and inspection data, and the certification information are made available to each employee entering the space.

If a hazardous atmosphere develops in the space, or other hazards arise, alternate procedures can no longer be used and the space must be reclassified as a fully permitted space.

SPECIAL ENTRY PROCEDURES
There are a few confined spaces at LGVSD that are not considered permit-required confined spaces. As far as can be determined, these spaces do not contain any known hazard. However, as a precautionary measure, employees are required to follow certain special procedures before entering these spaces.

1. Test the atmospheric conditions prior to entry.
2. If atmospheric conditions are acceptable, entry can be made.
3. If atmospheric conditions are not acceptable, use alternate procedures.
4. If any other hazardous condition exists, follow permit-required confined space procedures.

THE ENTRY PERMIT SYSTEM
Confined space entry permits are to be issued for a specific purpose, a specific work crew, and for a specified period of time. The entry permit is a written authorization of the location and type of work to be done. It also authorizes the personnel assigned to the job, and verifies that potential hazards have been evaluated and controlled or eliminated, that proper safety precautions have been taken, and it is safe for workers to enter. The permit must be kept at the work site (outside the space) for the duration of the work and cancelled after the work is completed.

HOT WORK PERMIT
A hot work permit must be issued for any work that produces heat, sparks or flame in a permit-required confined space. This includes but not limited to brazing, cutting, grinding, soldering, and welding.

TABLE 1: MAIN PLANT PERMIT-REQUIRED CONFINED SPACES (SEE NEXT PAGE)
<table>
<thead>
<tr>
<th>MAIN PLANT</th>
<th>Permit-Required</th>
<th>Alternate or Special Procedure</th>
<th>MAIN PLANT</th>
<th>Permit-Required</th>
<th>Alternate or Special Procedure</th>
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### TABLE 2: RECLAMATION, COLLECTION SYSTEM, AND PUMP STATIONS PERMIT-REQUIRED CONFINED SPACES

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**SPECIAL ENTRY PROCEDURES (SP)**
1. Test atmospheric conditions prior to entry.
2. If atmospheric conditions are acceptable, entry can be made.
3. If atmospheric conditions are not acceptable, use alternate procedures.
4. If any other hazardous condition exists, follow permit-required confined space procedures.
DUTIES OF ENTRY TEAM

A permit-required confined space entry team will include an entry supervisor, entrant(s), and at least one attendant. Before an employee begins confined space work, the work must be authorized by the District Manager or Plant Superintendent. In the absence of the District Manager and Plant Superintendent, the designated employee-in-charge may authorize the work.

As long as each individual can fully perform his/her duties, an entry supervisor may be the same person as the entrant or the attendant. The safety precautions that should be taken with a permit-required confined space entry will vary depending on the types of hazards or potential hazards involved. Regardless of the types of hazards, it is the District's policy that in addition to an attendant, a standby rescuer must be part of the entry team.

Duties of Entry Supervisor

1. Verifies that acceptable entry conditions exist.
2. Ensures acceptable entry conditions are maintained.
3. Verifies that the information and procedures on the entry permit are accurate and complete.
4. Verifies that the equipment specified on the permit is in place and in good condition.
5. Reviews permit conditions and procedures with entrants and attendants.
6. Ensures unauthorized persons do not enter the space.
7. Signs the permit to authorize entry.
8. Cancels and files permit.

Duties of Entrant

1. Properly uses the safety equipment and tools supplied.
2. Promptly notifies the attendant if any prohibited condition exists or any warning signs or symptoms appear.
3. Quickly evacuates space if an order is given by the attendant or entry supervisor, if any prohibited condition is detected, or if an alarm is activated.
4. Maintains communication with the attendant to enable attendant to monitor status of space conditions and the entrants.
5. Adheres to the procedures and precautions indicated on the permit and provided in training.

Duties of Attendant

1. Remains outside the permit space until relieved by another attendant.
2. Maintains communication with entrants.
4. Monitors activities inside and outside the space.
5. Orders entrants to evacuate if a prohibited condition exists, or behavioral effects of hazardous exposure are detected, or activities outside space could endanger entrants, or attendant cannot effectively perform all required duties.
6. Ensures unauthorized persons stay away from the space.
7. Performs non-entry rescue procedures or initiates on-site rescue operations.
8. Summons additional rescue services, when needed.

ENTRY PROCEDURES

Pre-Entry

1. Notify other work groups or employees who may be affected by any interruption in service.
2. Determine (by entry supervisor or other qualified person) what hazards or potential hazards are within the confined space.
3. Check that all safety equipment is available and in good working condition.
4. Check that atmosphere monitoring equipment has been calibrated as recommended by manufacturer.
5. Without entering space:
   a) Test atmosphere and record readings on permit.
      
      Acceptable atmospheric conditions: Oxygen not less than 19.5% or more than 23.5%, LEL/LFL not more than 10%, H2S not more than 10 ppm, CO not more than 25 ppm.
   b) Ventilate the space or check that ventilation system is operating properly.
6. Ensure that all affected employees observe pre-entry atmospheric testing.
7. Set up barrier around entrance to prevent accidental falls and to protect employees from vehicles, or falling objects.
8. Check for physical hazards such as poor footing, structures and equipment that hinder movement, and extreme temperatures or humidity that could affect worker safety.
9. Secure and lock out all energy sources (electrical, mechanical, hydraulic, pneumatic, chemical) that are potentially hazardous to confined space workers. Follow lockout/tagout procedures.
10. Disconnect, blind, or block lines to prevent development of hazardous conditions.
11. Use continuous forced air ventilation. Ensure that there is no recirculation of exhausted air from blowers or the introduction of contaminants from the outside, such as traffic exhaust, or vapors or toxic substances from other areas. Place blowers at least 10 feet away from opening of space.
12. Entry supervisor reviews and authorizes entry permit if the space is safe to enter, and all preparatory steps required for safe entry have been taken.

Entry

1. Only employees who have been trained on LGVSD's confined space entry and work procedures are allowed to work in or around confined spaces.
2. Only the work activity specified on the authorized permit is to be performed in the confined space.
3. At least one attendant is required for confined space work.
4. If at any time during the performance of confined space work, dangerous atmospheric conditions develop, work must stop and the space evacuate immediately.
5. An attendant must be stationed outside the space at all times during the confined space operations and remain in constant communication with workers in the space.
6. The attendant must order evacuation of the space whenever:
   a) A condition not allowed on the permit is observed
   b) Unusual behavior is observed
   c) An outside situation endangers the confined space workers
   d) The attendant must leave the work station
7. The permit must be cancelled if the air becomes hazardous after entry.
8. Respiratory equipment must be worn whenever a safe atmosphere cannot be assured after implementing pre-entry procedures.

Post-Entry

The entry supervisor:

1. Cancels the permit by entering date and time of cancellation and signature.
2. On the reverse side of the permit, makes note of any problems encountered during entry operations.
3. Places the cancelled permit in the safety files.
4. Notifies the Plant Superintendent if any equipment, safety gear or tools need to be repaired or replaced.

RESCUE PROCEDURES

It is the District's policy that all employees who work in or in connection with confined spaces must be trained in rescue procedures. Members of a permit space entry team must be knowledgeable of the hazards or potential hazards, be able to recognize the signs and symptoms of exposure, be trained in the selection and use of personal protective equipment, and be certified in first-aid and cardiopulmonary resuscitation. Prior to each entry the team will plan and prepare for non-entry and entry rescues and ensure that at least one standby is immediately available to provide rescue services.

Self-Rescue

If possible, entrants should immediately leave the confined space:

1. When an alarm sounds.
2. At the first sign of any exposure symptoms.
3. When ordered to evacuate by attendant or entry supervisor.

Non-Entry Rescue

If entrants cannot immediately evacuate the space at the first sign of trouble, the attendant should attempt a non-entry rescue by retrieving the entrant using a harness and hoisting equipment. The
attendant must not enter the space unless relieved by another attendant. Retrieval systems must be used in vertical permit spaces more than 5 feet deep.

**Entry Rescue**

Rescuers are to assume that a hazardous atmosphere exists if an entrant has slurred speech, appears dizzy, disoriented, confused, unconscious, or displays any unusual behavior, or if communication with the entrant is lost. A self-contained breathing apparatus must be worn for entry rescues if a hazardous atmosphere is suspected or if there is any chance that it can develop. Call 911 for assistance or if specialized equipment is needed to remove a worker.

**Outside Rescue Services**

Although outside rescue services may be present at the time of the entry or summoned to give assistance and support in an emergency, members of the entry team must be prepared to give immediate assistance to any of the entrants who may need it.

**NON-PERMIT CONFINED SPACES**

All confined spaces are considered permit-required until pre-entry procedures demonstrate otherwise. A confined space may be designated a non-permit space, or a permit-required confined space may be reclassified a non-permit space if all hazards have been eliminated. Because atmospheric hazards are controlled with ventilation and not eliminated in spaces, these spaces cannot be classified as non-permit spaces.

**CONTRACTORS**

Contractors and subcontractors who plan to work in LGVSD confined spaces will be given all available information on LGVSD confined space hazards, the permit system, and entry procedures. Contractors are required to use a permit system for entry into LGVSD permit-required confined spaces. Contractors are also required to coordinate work and entry activities whenever LGVSD employees and contractor employees will be working in or near the permit spaces.

At the conclusion of the contractor's work, the LGVSD supervisor in charge will debrief the contractor to determine if any hazards were encountered or created during entry.

**TRAINING**

All employees who work in or around confined spaces must be trained before performing any confined space work. At a minimum, the training will include:
LAS GALLINAS VALLEY SANITARY DISTRICT  
CONFINED SPACE ENTRY REQUIREMENTS  
UPDATED FEBRUARY 14, 2007

1. Hazards of confined spaces.  
2. Signs and symptoms of hazard exposure.  
3. Duties of entrant, attendant, and entry supervisor.  
4. Pre-entry and entry procedures.  
5. LGVSD confined space permit system.  
6. Selection and use of personal protective equipment.  
7. Atmosphere test equipment.  
8. Rescue procedures and equipment.  
9. First Aid.  

In addition, employees involved in confined space work will participate in simulated rescue operations at least once per year. Review training will be provided whenever the need is indicated, such as changes in procedures, introduction of new equipment, the hiring of new employees or whenever deficiencies in implementing the program are observed.  

Training records will be maintained which will include names and signatures of trainees and trainers, dates and content of training. These records will be made available for inspection to employees or their representatives.
## LGVSD Confined Space Entry Permit

Date issued: ____________________  Permit Expiration Date/Time: ____________________  
Location/Description of Space: ___________________________________________________  
Reason for Entry: ________________________________________________________________  

**Work Site Permit:**

Authorized entry permit and monitoring data must remain at the work site until the job is complete.

### IN CASE OF EMERGENCY

CALL 911

**Entry Supervisor:** _____________________________________________________________

Authorized Attendants and Initials  
___________________________________________________  
___________________________________________________  
___________________________________________________

Authorized Entrant and Initials:  
___________________________________________________  
___________________________________________________  
___________________________________________________

Note: Indicate which attendant is assigned standby rescue duties. Initial of attendants and entrants indicate they understand their assignments, responsibilities and duties.

### Pre-Entry Checks (complete before obtaining work authorization):

- [ ] Notified other work groups.
- [ ] Notified office personnel.
- [ ] Checked that entry team training is current.
- [ ] Reviewed entry procedures with team.
- [ ] Set up barrier at entrance to space.
- [ ] Checked that gas detection equipment calibration is current.
- [ ] Performed pre-entry atmosphere tests.
- [ ] Checked ventilation system.
- [ ] Checked for physical hazards.
- [ ] Secured and locked out energy sources.
- [ ] Blocked or disconnected lines.
- [ ] Discussed potential hazards with team.
- [ ] Reviewed emergency response procedures.
- [ ] Checked condition of safety equipment.
- [ ] Obtained work authorization signatures.

### Potential Hazards:

- [ ] Oxygen deficiency
- [ ] Oxygen enrichment
- [ ] Flammable gases or vapors
- [ ] Toxic gases or vapors
- [ ] Mechanical hazards
- [ ] Electrical hazards
- [ ] Engulfment/entrapment
- [ ] Noise
- [ ] Heat/Cold
- [ ] Falls
- [ ] Falling objects
- [ ] Other

### Safety Equipment:

- [ ] Gas detection equipment w/spare batteries
- [ ] Safety harness
- [ ] Safety line
- [ ] Wristlets
- [ ] Hoisting equipment
- [ ] Manhole hook
- [ ] Barricades, cones, tape
- [ ] Portable blower and hose
- [ ] Explosion-proof lighting
- [ ] Non-sparking tools
- [ ] Tool bucket and line
- [ ] Ladder
- [ ] First aid kit
- [ ] Fire extinguisher
- [ ] Radio communication equipment
- [ ] Cell phone
- [ ] SCBA
- [ ] Hard hat
- [ ] Goggles, face shield
- [ ] Gloves
- [ ] Rain suit
- [ ] Rubber boots
- [ ] Other ______________________________

### Hot Work:

Does the entry involve hot work?  [ ] Yes  [ ] No  
If Yes, complete and attached a hot work permit.

### Special Instructions:

________________________________________________________________________________
________________________________________________________________________________

### Street Address:

__________

**Monitoring Data:** Record monitoring data at 15-minute intervals on the reverse side of this permit.

**Acceptable Atmospheric Conditions:**  
Oxygen not less than 19.5% or more than 23.5%, LEL/LFL/not more than 10%, H2S not more than 10 ppm.

### Work Authorization Signatures

All confined space work must be authorized by the General Manager, Plant Manager or Collection Crew Manager.

Work authorized by: ________________________________

Date/Time: ________________________________

### Entry Authorization

I certify that the confined space work authorized by this permit has been reviewed with the entry team and that acceptable entry conditions exist and the necessary equipment for safe entry has been provided.

Entry supervisor signature: ________________________________

### Permit Cancellation

Date: ________________________________

Time: ________________________________

Entry supervisor signature: ________________________________
# LGVSD HOT WORK PERMIT
This form is to be filled out by employee before performing hot work.

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: ____________________ Time: ______________ Location of job:</td>
</tr>
</tbody>
</table>

Detailed description of job:

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>If the job is planned to be done indoors, can it be done outdoors or in the welding shop?</td>
<td></td>
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<td></td>
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<tr>
<td>If yes, move to one of these locations.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>have all combustible materials (solids, liquids, gases) been removed from the work area?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any gas lines or other lines carrying combustible/flammable materials?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tr>
<td>4.</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>If yes, have all lines be disconnected, blanked or otherwise protected?</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>5.</td>
<td></td>
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<td></td>
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<tr>
<td>Has atmospheric test data been collected in the work area?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>6.</td>
<td></td>
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<td></td>
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<tr>
<td>Is a fire watch needed for this job?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>7.</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Is a fire extinguisher or water hose available and ready to use at the job site?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>8.</td>
<td></td>
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<tr>
<td></td>
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<tr>
<td>Can flame or sparks ignite materials in work area or on lower floors or levels?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tr>
<td>9.</td>
<td></td>
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<tr>
<td></td>
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<tr>
<td>Are non-flammable tarps used to cover combustibles in the work area?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>10.</td>
<td></td>
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<td></td>
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<tr>
<td>Have affected employees reviewed or given specific safety instructions?</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>11.</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Have screens been set up in the work area?</td>
<td></td>
</tr>
</tbody>
</table>

Special precautions to be taken:

____________________________________________________________________
____________________________________________________________________

I have reviewed and approved this permit:

Date: ___________ Time: ___________

________________________________________________
Signature of District Manager

Please make note of any actions taken based on the above responses.
The undersigned acknowledges receipt of and has read and fully understands these District Confined Space Entry Requirements.

CONTRACTOR/CONSULTANT

Signed: ____________________________

Name: ______________________________

Title: ________________________________

Date: ________________________________