



Request for Proposals

COST ESTIMATING SERVICES

PSA2026-002

June 16, 2026

REQUEST FOR PROPOSALS

for

ORANGE COUNTY SANITATION DISTRICT

COST ESTIMATING SERVICES PSA2026-002

I. GENERAL

The Orange County Sanitation District (OC SAN) invites proposals for **COST ESTIMATING SERVICES, PSA2026-002**, from firms or individuals capable of performing the Scope of Work. (**Attachment “A”**).

Those firms interested in submitting proposals must demonstrate their expertise and experience in the performance of similar projects and project elements as described in the attached Scope of Work. The purpose of this project is to provide on-call Cost Estimating Professional Services to support its engineering projects, which includes large and small capital projects and operationally funded repair projects.

Firms proposing in response to this Request for Proposals (RFP) are advised that the firm and their subconsultants, if selected, will be precluded from proposing on any engineering or construction-related projects advertised by OC SAN during the term of this Professional Services Agreement (PSA).

Should the proposal allow for a team of firms to complete the work per this Scope, only the lead firm shall be allowed to perform the project management duties and interact with OC SAN. OC SAN will enter into the Professional Services Agreement (PSA) with this firm only.

II. PROPOSAL SCHEDULE

The following key dates and times have been set for the selection of a CONSULTANT:

Event	Date
Issuance of RFP	June 16, 2026
Non-mandatory Virtual Pre-Proposal Meeting	June 30, 2026 at 11:00 A.M. Pacific Time Zone
Question Submission Due Date	July 8, 2026 at 5:00 P.M. Pacific Time Zone
Proposals Submission Due Date	July 30, 2026 at 11:00 A.M. Pacific Time Zone

Notification of top ranked Proposers for oral interviews*	August 20, 2026
Date of Oral Interviews*	September 2, 2026

*Subject to change at the discretion of OC SAN. Proposers will be notified one week in advance of any date change.

A. Pre-Proposal Meeting

A virtual, non-mandatory virtual pre-proposal meeting will be held at the time and date shown above in Section II PROPOSAL SCHEDULE. Please use the following link to participate:

[PSA2026-002 Virtual Pre-Proposal Meeting](#)

Interested firms may use either a computer, iOS, or Android device to join the meeting.

B. Question Submission Due Date

All communications concerning this RFP must be in writing. Written questions regarding details of the RFP will be accepted and must be received by OC SAN by the date and time shown in Section II PROPOSAL SCHEDULE.

Written questions must be sent via e-mail to professionalservices@ocsan.gov. All questions submitted shall contain the following title in the Subject line: "PSA2026-002 RFP – Proposer Questions." Telephone questions will not be accepted. Any questions received after this date may not receive a response.

C. Disqualification of Proposers

All inquiries, contacts, or questions related to this RFP shall be directed to:

Jenny H. Holliday – Senior Contracts Administrator
professionalservices@ocsan.gov

Once the RFP documents are issued, proposers are advised not to discuss this RFP with any official or employee of OC San other than the staff identified above. Neither proposers, nor anyone representing the proposer, may discuss this RFP with any consultant or contractor engaged by OC San to assist in preparing responses to the RFP. Violation of this prohibition may result in disqualification of the proposer.

D. Submittal of Proposals

Proposals, including the Technical Proposal and separate Fee Proposal, are to be submitted electronically and must be received through OC SAN's Vendor Portal in OpenGov on or before **11:00 A.M. (Pacific Time Zone) on July 30, 2026**.

Proposers may access the PSA2026-002 RFP and submit their proposals through OC SAN's Vendor Portal in OpenGov.

- Go to OC SAN's Website (www.ocsan.gov)
 - Under "What We Do" – select "Doing Business with OC San"
- Go to the "OpenGov" window at the end of the "Announcement" section
- Select "**PSA2026-002, Cost Estimating Services**"
- If your firm is not already subscribed in OpenGov, select the "Subscribe" button.
- Log in to your firm's OpenGov Account
- Select the "Draft Response" button
- Ensure all documents have been downloaded and all Addenda have been acknowledged
- Upload the required Technical Proposal and separate Fee Proposal
- Proceed to submit your Proposal

The complete Proposal shall be submitted with the Proposer's Name, Project Title, and Project Number, on the RFP cover page. OC SAN will assume that those firms not responding by the date and time stipulated herein have elected not to participate in the proposal submittal process. It is the sole responsibility of the Proposer to ensure that their Proposal is received electronically, by the date and time indicated above. Proposals and/or revisions to Proposals submitted after the date and time indicated above will not be accepted by OC SAN. **Proposers must allow sufficient time to complete the uploading process when uploading and submitting the Proposal electronically through OC SAN's Vendor Portal in OpenGov.**

D. Oral Interviews

The top-rated Proposers may be invited to meet with the Evaluation Committee for an oral interview. If interviews are held, OC SAN expects to hold them on the date shown in Section II PROPOSAL SCHEDULE above. All Proposers are asked to keep this date available.

III. REQUIRED SERVICES AND PROCESS

A. Scope of Work

The services OC SAN will require under this PSA are described in the Scope of Work set forth in **Attachment "A"**, which is an integral part of this RFP. The final negotiated Scope of Work will be attached to the signed PSA.

B. Rules of Engagement and Roles and Responsibilities

Following award of an agreement, OC SAN will determine when specific services are required. The mechanisms for requesting, reviewing, authorizing, and terminating services under this agreement are documented in **Attachment "A1"** – Rules of Engagement and;

Attachment "A2" – Roles and Responsibilities, defines the roles, responsibilities, coordination, and review expectations associated with preparing cost estimates developed by CONSULTANT working directly for OC San, as compared to estimates prepared by design engineers.

C. Competing Contracts

OC SAN intends to award Cost Estimating Services Agreements to a minimum of two top qualified firms. Final determination of top selected Consultants recommended for award will be based on OC SAN's anticipated work and Engineering services needs.

IV. **PROPOSAL REQUIREMENTS**

The Proposal shall be submitted through OC SAN's Vendor Portal in OpenGov in two parts:

- **Technical Proposal:** To be submitted in one searchable PDF file. Attach the file in the Attachment Type entitled "**Technical Proposal Package**" and,
- **Fee Proposal:** To be submitted in one PDF file. Attach the file in the Attachment Type entitled "**Fee Proposal (Cost File)**".

Sections 1 through 4, as described below shall be printable on letter-sized paper with a minimum 11-pt font size and 3/4-inch margins. For those sections, tabloid-size pages (printable on 11x17) may be used only when needed for graphics or tables that cannot be easily read on letter-sized paper. The total length of Sections 1 through 4 shall not be more than 20 single-sided pages.

The contents of the Technical Proposal and Fee Proposal shall be as described below.

V. **TECHNICAL PROPOSAL**

The Technical Proposal shall be organized as described below with the content described. Any additional material which the Proposer feels will aid OC SAN in determining the Proposer's qualifications for performing the required work should be included in the most appropriate section or sections described below.

A. Cover Letter

The cover letter shall include the names, addresses, and phone numbers of Proposer and subconsultant offices that are proposed to be involved in the project. The letter shall also clearly identify who OC SAN shall contact regarding the Proposal. Lead offices for the various areas of work (i.e., project management) shall be identified. The cover letter shall be signed by a person authorized to bind Proposer to the terms of the Proposal.

Proposers shall provide their Department of Industrial Relations registration number as applicable and the registration numbers of any and all applicable Subconsultants, as stated elsewhere in the RFP.

B. Section 1. Project Understanding and Approach

The services under this PSA will be executed through Task Authorizations, Task Directives, and Program Role Assignments as defined in Attachment “A1” – Rules of Engagement. Most of the effort will involve PROPOSER providing remote staff. In some cases, staff will be required to travel to OC SAN facilities for meetings, site investigation, and field walks. This section should describe the following aspects of the PROPOSER’s approach to managing the services requested.

Qualified Staff. OC SAN will identify specific project roles, or portions of project roles, for PROPOSER to provide staff to perform those roles. This section should describe how PROPOSER will manage the process of identifying, screening, proposing, and supplying approved candidates.

Negotiation of Task Authorizations. PROPOSER should describe how OC SAN requests for task authorizations will be managed including preparation of task authorization proposals, negotiation of staff, budget, and schedule, and processing of task authorization approvals.

Management of Task Authorizations. OC SAN will expect the PROPOSER to manage each task authorization to the negotiated budget, schedule and quality expectations. PROPOSER should describe how project management of task authorizations will be conducted.

The highest score for this section will be based on the ability of the PROPOSER to demonstrate the following:

1. Processes, policies, and procedures that will provide OC SAN with the most appropriate staff based on services requested in a timely and responsive manner.
2. An approach focused on cost estimation, accuracy and constructability review quality.
3. An approach for reviewing consultant designs so cost estimates and other requested service can be provided.

C. Section 2. Related Project Experience

This section shall demonstrate that the PROPOSER has successfully completed projects of a similar nature. This section should include at least three reference projects with the following information:

- Project Name and Location, and Owner’s name.
- Client contact information including the name, title, phone number and email address.
- The dates work was performed. If work has not yet been completed, list the anticipated date of completion. Projects completed more recently are considered more relevant.

- The involvement of team members proposed for this project and their role and responsibility on that project.
- Final cost estimate accuracy relative to contractor's bid.

D. Section 3. Project Team and Staff Qualifications

This section shall demonstrate that the PROPOSER is proposing a team that is well configured for the needs of the project, includes staff with appropriate qualifications, and that the Key Team Members are sufficiently committed to the project to complete the work in the specified schedule.

The definition of which team members are Key Team Members is at the PROPOSER's discretion.

This section shall include the following information:

1. Project Team Organization and Roles. The highest scores will be given to those firms who present an organization chart where the roles, responsibilities, and lines of communication are apparent to the team members involved and to OC SAN staff. The division of work and responsibilities between the PROPOSER and subconsultants is ideally based on clear lines of responsibility, accountability, and communication.
2. Staff Qualifications. Resumes for all individuals indicated in the Organization Chart should be included in an appendix as described below. This section should, as a minimum, summarize the key aspects of each Key Team Member's qualifications, and include a personal reference. The highest scores for this consideration will be the result of an optimum fit of individual experience and success, and the requirements of the role on the project.
3. Reference Information for Key Team Members. At least three client references, including name, description of past working relationship, and current contact information, shall be listed for each Key Team Member.

E. Appendix A – Resumes

This appendix shall include resumes for all individuals shown on the proposed Organization Chart. Resumes shall be sorted first by firm, and then by last name. Resumes for the prime PROPOSER shall be listed first. Resumes shall indicate PROPOSER/subconsultant affiliation, and professional engineering licenses, including discipline and state of licensure. Where resumes indicate related experience, the description should include that person's role on the project, rather than just a description of the project.

F. Appendix C – Conflict of Interest Disclaimer

The PROPOSER shall include in this appendix a completed Conflict of Interest Disclaimer included as **Attachment "C"** disclosing interest, ownership, or remuneration of any type that has been received or is anticipated from any manufacturer, supplier, or distributor which may be recommended on the project.

G. Appendix E – Subconsultant Scopes of Work

In order to demonstrate the proposed role of subconsultant, scopes of work for each subconsultant shall be submitted. Any gaps between the Scope of Work included in **Attachment “A”** and the proposed subconsultant scopes of work will be understood to the responsibility of the prime PROPOSER.

H. Appendix H - Acknowledgment of Professional Services Agreement (PSA)

The PROPOSER shall include a signed copy of **Attachment “G”** with any exceptions or proposed deviations attached. If no exceptions are noted, PROPOSER accepts all terms and conditions of the attached PSA Agreement.

I. Appendix I – Ability to Meet Insurance Requirements

Section 8 of the PSA requires the PROPOSER to maintain, during the life of this Agreement, certain insurance levels and endorsements. PROPOSER shall include in this an appendix a signed statement of whether these insurance requirements can be met by the prime PROPOSER.

Although all subconsultants will be required to provide insurance in amounts and types reasonably sufficient as to the level of the subconsultant work, documentation of subconsultant insurance is not required in the Proposal.

J. Appendix J – Acknowledgment of Addenda Receipt

The PROPOSER shall include a signed copy of **Attachment “J”** acknowledging receipt of all addenda issued by OC SAN for this solicitation. If no addendum has been issued, the form shall be completed with the words “No addendum received” on the line reading “Addenda number(s) received:”.

K. Appendix K – Iran Contracting Act Verification

The Iran Contracting Act of 2010 (Public Contract Code sections 2200-2208) prohibits consultants engaged in investment activities in Iran from submitting proposals for or entering into or renewing contracts with public entities for goods and services of one million dollars (\$1,000,000) or more.

Consultants submitting a proposal or entering into or renewing contracts for an OC SAN’s contract for goods or services of \$1,000,000 or more must either:

1. certify it is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (DGS) pursuant to Public Contract Code section 2203(b) and is **not** a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current DGS list of persons engaged in investment activities in Iran; or

2. demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code section 2203(c) or (d).

The DGS list of entities prohibited from contracting with public entities in California per the Iranian Contracting Act of 2010 may be found at:

<https://www.dgs.ca.gov/PD/Resources/Page-Content/Procurement-Division-Resources-List-Folder/List-of-Ineligible-Businesses#@ViewBag.JumpTo>.

California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; termination of an existing contract; and inability to bid on a contract for three years.

When submitting its Proposal, Proposer shall complete and submit the Iran Contracting Act Verification form, included as **Attachment “M”**, and any necessary documentation, when applicable.

L. Appendix L – California Air Resources Board Mobile Source Certifications

As required by California Air Resources Board (CARB) Mobile Source Regulations, CONSULTANTS are required to provide certification(s) that the CONSULTANT and its Subconsultants and Subcontractors comply with the new CARB requirements. CARB set emission standards for mobile sources to protect the public health and welfare of Californians. Therefore, when submitting its Proposal, the CONSULTANT shall complete and submit the California Air Resources Board Mobile Source Certifications, included as **Attachment “N”** and any necessary documentation, when applicable. Failure to submit the required certifications for the CONSULTANT and its Subconsultants and Subcontractors may deem the Proposal incomplete and may not be accepted.

CONSULTANTS shall assess their current fleet to determine if they need to make adjustments or updates to meet the new standards. The regulatory requirements may be viewed at the websites specified below.

- Advanced Clean Fleet Regulation
<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>
- Truck & Bus Regulation
<https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation>
- Clean Truck Check
<https://ww2.arb.ca.gov/our-work/programs/CTC>
- Off-Road Diesel Amendments
<https://ww2.arb.ca.gov/resources/fact-sheets/overview-amendments-use-road-diesel-fueled-fleets-regulation>

VI. FEE PROPOSAL

A. Fee Proposal Contents

The CONSULTANT shall propose fringe and overhead rates for the CONSULTANT and for each subconsultant/subcontractor in Attachment “E”. The Fee Proposal cover letter shall be signed by a person authorized to bind PROPOSER to the terms of the Fee Proposal.

Fees for this agreement will be reimbursed on a time-and-material basis as authorized by approved Task Authorizations, Task Directives, and Program Role Assignments. The actual effort required to complete this work will depend on the type of approved authorizations.

The CONSULTANT recommended for award shall provide to OC SAN, if available, an audit performed for another public agency which documents the CONSULTANT’s labor burden rate and overhead rate. This audit shall be the most current available and have been conducted for a period that ended within twelve months of the proposal due date. All Major Subconsultants (those with labor-related fees more than \$100,000) will be required to provide the same information as the CONSULTANT. This information shall be provided by the recommended CONSULTANT and its major subconsultants within ten (10) business days after notification.

Attachment “E” – Fee Proposal and Rounding Instructions

The total proposed fee shall be summarized in **Attachment “E”**, which includes detailed instructions on rounding of numbers. The table used to generate this form is available from OC SAN in a Microsoft Excel spreadsheet. The PROPOSER may use this spreadsheet, but accepts full responsibility for the accuracy of the formulas and calculations.

B. Calculation of Fees

Fees shall be calculated according to the terms listed in the PSA. The PROPOSER will be compensated for labor, subconsultants, and allowable direct costs, as summarized below.

Labor Compensation and Profit

Total compensation for labor for both the prime PROPOSER and Subconsultants will be based on burdened labor costs, overhead, and profit.

Burdened Labor costs include actual salary paid to employees plus the cost of fringe benefits such as insurance, paid time off, etc. The cost of fringe benefits is expressed as a multiple of actual salary, referred to as the PROPOSER’s Fringe Factor.

Overhead includes all other costs for doing business including telecommunications, fax, computers, and computer-aided design (CAD) equipment. Separate charges for communications and electronic equipment will not be allowed. Overhead is

expressed as a multiple of burdened labor costs.

Profit for PROPOSER and Subconsultants shall be a percentage of the sum of burdened labor plus overhead. The calculation of the allowable profit percentage will be calculated separately for the prime PROPOSER and each Subconsultant, based on the total of burdened labor and overhead costs for each.

Profit shall be 10% of the total Burdened Labor and Overhead. This percentage established for both the PROPOSER and subconsultant will remain the same for subsequent amendments.

Subconsultants

Subconsultants shall be compensated by the same method as for the prime PROPOSER, with no markup allowed for the prime PROPOSER. Separate factors shall be included in the Fee Proposal and PSA for each Subconsultant's Fringe Factor, Overhead Factor, and allowable Profit. The compensation for each Subconsultant, including both labor related fees, and direct costs shall not exceed the amount shown in the Fee Proposal and incorporated into the PSA.

Allowable Direct Costs

Direct costs will be compensated at actual costs incurred, for the Prime PROPOSER and Subconsultants. Allowable Direct Costs are described in Attachment "D", which will also be attached to the signed PSA. The list of Allowable Direct Costs applies to the prime PROPOSER and Subconsultants.

C. California Department of Industrial Relations (DIR) Registration and Record of Wages

To the extent CONSULTANT's employees and/or Subconsultants who will perform Work during the design and preconstruction phases of a construction contract for which Prevailing Wage Determinations have been issued by the DIR and as more specifically defined under Labor Code Section 1720 et seq., CONSULTANT and Subconsultants shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, such Work is subject to compliance monitoring by the California Department of Industrial Relations.

CONSULTANT shall maintain accurate payroll records and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a) (3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.

Pursuant to Labor Code Section 1776, CONSULTANT and Subconsultants shall furnish a copy of all certified payroll records to OC SAN and/or general public upon request, provided the public request is made through OC SAN, the Division of Apprenticeship Standards or the Division of Labor Enforcement of the Department of Industrial Relations.

CONSULTANT shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulations Section 16461(e).

VII. AGREEMENT EXECUTION

The PROPOSER shall enter into an Agreement with OC SAN by signing OC SAN's PSA. The PSA for this project is included as **Attachment "F"**.

Enclosed as **Attachment "G"** is an "Acknowledgement of PSA" form on which the PROPOSER indicates its acceptance of the terms and conditions described in the sample Agreement. The PROPOSER shall identify any exceptions on the form itself or include as a separate sheet. The signed form shall be submitted in the appropriate appendix of the PROPOSER's Proposal.

VIII. EVALUATION PROCEDURES

Proposals submitted without required documents may be considered nonresponsive and may be rejected.

Proposals will be scored using the following criteria and weighting:

Criterion	Weighting	Proposal Content Used for Scoring
Project Understanding and Approach	30%	Section 1
Related Project Experience	35%	Section 2 Appendix A
Project Team and Staff Qualifications	35%	Section 3 Appendix A

The Evaluation Committee will evaluate and rank the Technical Proposals in accordance with policies established by OC SAN Board of Directors and the requirements of this RFP. The Evaluation Committee will review and evaluate based on criteria in the RFP. Based on this evaluation, the Evaluation Committee will establish a short list of top-rated Proposers who may be invited for oral presentations. There is no predetermined number of firms to be shortlisted.

Once the short list has been established, the scores for the Technical Proposal will be set aside, and all short-listed Proposers will enter the oral presentations on an equal basis. Following the oral presentations, the Evaluation Committee will re-evaluate each PROPOSER using the criteria in the RFP and generate a new set of scores. Both the Technical Proposal and the oral presentations will be considered at this point to arrive at final scores. Once a top-ranked firm is established, the cost proposal for that firm only will be opened. Once the contract is awarded, all unopened cost proposals will be returned to the Proposers.

Negotiations will be conducted with the top-ranked firm. If negotiations are not successful with the top ranked firm, OC SAN will negotiate with the next highest-ranked firm until a satisfactory agreement has been achieved.

IX. Visitor Identification and Sign-In (NOT USED)

X. Site Visit Safety Requirements (NOT USED)

XI. ADDENDA

Any OC SAN changes to the requirements of this RFP will be made by written addendum. Addenda will be posted in OC SAN's Vendor Portal in OpenGov. Only firms who have elected to be a prospective bidder will receive Addenda. Any written addenda issued pertaining to this RFP shall be incorporated into the terms and conditions of any resulting Agreement. OC SAN will not be bound to any modifications to or deviations from the requirements set forth in this RFP as the result of oral instruction. Proposers are required to acknowledge receipt of all addenda in **Attachment "J"**, which must be included in the PROPOSER's proposal.

XII. PUBLIC RECORDS ACT

Proposals submitted in response to this RFP shall become the exclusive property of OC SAN and shall be deemed public records subject to the provisions of the California Public Records Act (California Code Government Code section 7920.000 et seq.). Such public records may be released upon request after the issuance of the award recommendation. Any information or documents in the Proposal, which is "Trade Secret", "Confidential", "Proprietary", or "Intellectual Property" shall be clearly marked as such in the Proposal. The entire Proposal may not be marked as "Trade Secret", "Confidential", "Proprietary", or "Intellectual Property".

XIII. FILING OF PROTESTS AND PROTEST PROCEDURES

This Section sets forth the procedure and remedies concerning submittal and consideration of all protests received by OC SAN with respect to this Request for Proposal (RFP). All communications to OC SAN relating to a Protest shall be in writing and submitted electronically to professionalservices@ocsan.gov. By submitting a Proposal, each Proposer hereby agrees and understands that the Proposer must comply with these protest procedures and exhaust all the administrative remedies set forth herein prior to the initiation of any type of related legal action. Upon the express written agreement of the parties, this protest procedure can also be used to resolve issues surrounding OC SAN's determination of a proposer as not responsible. This procedure is not intended to address issues concerning proposal responsiveness. The following terms as used in this Section shall have the following meanings:

Protest shall mean a written objection by an interested party or Affected Party to (i) the requirements or specifications contained in a formal RFP (solicitation protest); or (ii) a proposed award recommendation (award protest).

Protestor shall mean an interested party or affected party who submits a solicitation protest or an award protest.

Days shall mean calendar days, unless otherwise specified.

Interested Party shall mean: (1) on solicitation, all proposers or prospective proposers; (2) on award, the unsuccessful proposer with a direct economic interest in the outcome of their protest.

Solicitation Protest Statement shall mean a written objection during the solicitation phase of the procurement, which shall be submitted prior to the proposal due date as specified herein.

Award Protest Statement shall mean a written objection to the award recommendation prior to final action to award the contract, which shall be submitted after receipt of proposals, but before award of a contract, as specified herein.

File or Submit shall refer to the date of receipt by OC SAN.

Affected Parties shall mean proposers on a procurement, whose direct economic interest would be affected by a submitted protest.

Specific procedures and requirements are as follows:

A. Solicitation Phase Protest

The purpose of this RFP is to obtain competitive Proposals from Interested Party. Any interested party who has reason to believe that a free and open competition has not taken place or that a particular specification or requirement is impractical, unduly restrictive, or ambiguous may advise OC SAN of its concerns by submitting a detailed Solicitation Protest Statement in accordance with the requirements set forth below in this Section A.

1. Contents and Requirements

A Solicitation Protest Statement must be submitted to OC SAN 's Contracts Administrator identified in the RFP via electronic mail (e-mail) at professionalservices@ocsan.gov by 4:00 p.m. (Pacific Time zone) no less than fifteen (15) days prior to the proposal due date, and must contain all of the following to be considered:

- a. The name, address, and telephone number of the Protestor;
- b. The Project Name and Project Number of the RFP being protested;
- c. A detailed statement setting forth the grounds for protest, which shall include, in sufficient detail to establish the merits of the protest, all the factual and legal documentation in support of the protest; and
- d. The desired resolution to the protest.

If the submitted Solicitation Protest Statement does not comply with the requirements set forth herein, then it will not be considered for evaluation and will be returned to the Protestor. The Solicitation Protest Statement shall not be amended after filing, and OC SAN will not consider any unsolicited information provided after filing. Any argument not raised in the Solicitation Protest Statement shall be deemed waived, including as a part of the award protest. Failure to file the Solicitation Protest Statement within the time period specified herein shall constitute a waiver of the right to protest the specifications or requirements of the RFP.

Solicitation Protest Statements are public documents. OC SAN will provide copies of the Solicitation Protest Statements upon written request.

2. Evaluation and Determination

No hearing will be held on the protest. OC SAN's Contracts, Purchasing and Materials Management Division Manager (Purchasing Manager), or designee, will review all material submitted, conduct an investigation of the facts, and may, but need not, request additional information or provide an opportunity for other Proposers to submit statements or arguments regarding the protest. OC SAN's Purchasing Manager, or designee, may in his/her sole discretion, discuss the protest with the Protestor.

OC SAN's Purchasing Manager, or designee, shall issue a final written decision regarding any solicitation protest to each Proposer prior to the Proposal due date. The written decision will cite any actions that will or will not be taken in response to the Solicitation Protest Statement. The decision of the Purchasing Manager concerning the Solicitation Protest Statement shall be final, and there shall be no further administrative recourse.

B. Award Protest

1. Award Recommendation

Following receipt and evaluation of the proposals, but prior to final action to award the contract, OC SAN will issue an award recommendation to each Proposer through any one of the following methods:

- a. Delivery via overnight carrier; or
- b. Posting the award recommendation on OC SAN's online bidding system as identified within the RFP.

On the date OC SAN issues an award recommendation, OC SAN shall make copies of all submitted proposals available upon request. Requests shall be made to professionalservices@ocsan.gov, and shall contain the following in the subject line of the e-mail: "PSA2026-002 RFP – Request for Copies".

2. Contents and Requirements

Any Interested Party, who has reason to believe that a free and open competition has not taken place in the evaluation of the proposals and award recommendation, is permitted to protest OC SAN's award recommendation by submitting an Award Protest Statement to OC SAN Contracts Administrator identified in the RFP via electronic mail (e-mail) at professionalservices@ocsan.gov no later than 4:00 p.m. (Pacific Time zone) on the seventh (7th) day after OC SAN issues the award recommendation or some similar announcement. OC SAN will not accept an Award Protest Statement, or similar document, prior to the date OC SAN issues its award recommendation to the Proposers. Award Protest Statements, or similar document, received prior to the issuance of OC SAN's award recommendation will be considered premature and will be immediately returned to the party filing the Protest without consideration.

The Award Protest Statement must be submitted timely and contain all of the following to be considered:

- a. The name, address and telephone number of the Protestor;
- b. The Project Name and Project Number of the RFP being protested;
- c. OC SAN action or recommendation that is being protested;
- d. The name(s) of all Affected Parties;
- e. A detailed statement setting forth the grounds, legal authority and facts in support of the protest, including all documents and evidence;
- f. Each and every ground on which the Protestor bases the protest by specific references to parts of the RFP, which shall be attached as exhibits;
- g. Each and every reason that all other Affected Parties who may be in line for the contract award should not be awarded the contract;
- h. A clear statement of the relief requested and the statutory or case law basis for such relief; and
- i. Signed and sworn by a principal of the Protestor.

If the submitted Award Protest Statement does not comply with the requirements set forth herein, then it will not be considered for evaluation, and will be returned to the Protestor. The Award Protest Statement shall not be amended after filing, and OC SAN will not consider any unsolicited information provided after filing. Any argument not raised in the Award Protest Statement shall be deemed waived.

Award Protest Statements are public documents. OC SAN will notify the Affected Parties when a protest has been submitted, and will provide copies of the Protest Statements to the Affected Parties as soon as is reasonably practical.

3. Evaluation and Determination

The Affected Parties may file responsive statements in support of or in opposition to the protest no later than 4:00 p.m. (Pacific Time zone) on the third (3rd) business day after the receipt of the Award Protest Statement from OC SAN. The Purchasing Manager, or designee, shall review the facts and all submittals relative to the Award Protest Statement and shall issue a written decision setting forth the basis for such decision. The written decision will be issued to the Protestor and to all Affected Parties.

Unless otherwise required by law, no evidentiary hearing or oral argument shall be provided, except in the sole discretion of the Purchasing Manager, or designee.

In the event a hearing is conducted, the Purchasing Manager, or designee, shall issue written notice to the Protestor and Affected Parties identifying the date and time for the hearing, along with rules concerning the hearing.

4. Appeal Process

If the Protestor intends to appeal the decision by the Purchasing Manager, or designee, the Protestor shall submit a written appeal to the Director of Finance and the Director of the Department requesting the Procurement, and immediately send copies to all Affected Parties. The appeal must be submitted no later than 4:00 p.m. (Pacific Time zone) within seven (7) days after the date the Purchasing Manager, or designee, rendered a decision. The Protestor shall only submit: (1) information and documentation previously submitted to the Purchasing Manager, or designee; (2) a copy of the final decision of the Purchasing Manager, or designee; and (3) a brief statement setting forth all factual and legal bases for the appeal. The Director of Finance, together with the Director of the Department requesting the Procurement shall evaluate each Award Protest Statement and determine whether to uphold or reject the Purchasing Manager's determination. For Contracts to be awarded by District Staff, the decision of the Director of Finance and the Director of the Department requesting the Procurement shall be final. For Contracts to be awarded by the Board of Directors, the Board may consider any Award Protest Statements in connection with its consideration of the Contract.

C. Delay in Award

Execution of any proposed contract shall be delayed pending the resolution of the protest unless one or more of the following conditions is present:

1. The items or services being procured are urgently required;

2. Delivery or performance will be unduly delayed by failure to make award promptly; or
3. Failure to make prompt award will otherwise cause undue harm to OC SAN.

D. No Limitation on Remedies

Nothing contained herein shall be construed to act as a limitation on OC SAN's choice of remedies or confer any right upon any Interested Party or Affected Party to a remedy.

E. Basis for Choice of Remedy

In determining the appropriate remedy, OC SAN shall consider all the circumstances surrounding the RFP and/or award, including, but not limited to:

1. The seriousness of any deficiency found to exist in the contracting process;
2. The effect of the action on the competitive process;
3. Any urgency surrounding the contract requirement; and
4. The effect that implementing the remedy will have on OC SAN.

F. Remedies

If OC SAN determines that the award was not made in accordance with applicable statutes, regulations, policies and/or procedure, OC SAN, in its sole discretion, may grant any of the following remedies or any other remedy it deems appropriate:

1. Prior to award, OC SAN may issue a new solicitation, make a new selection/award recommendation, or award a contract consistent with applicable statutes, regulations, policies and procedures;
2. In its sole discretion, take no further action; or
3. Take any other action that is permitted by law to promote compliance.

G. Legal Action

Any legal action to set aside the final determination of OC SAN must be filed no later than the 90th day following the date of the final determination consistent with Code of Civil Procedure section 1094.6. In the event a protester files a legal action related to the protest, if OC SAN prevails, OC SAN reserves the right to seek reimbursement of its costs, including attorneys' fees, to the fullest extent permitted by law.

XIV. ATTACHMENTS:

Attachment "A"	Scope of Work
Attachment "A1"	Rules of Engagement
Attachment "A2"	Roles and Responsibilities
Attachment "B"	Not Used
Attachment "C"	Conflict of Interest Disclaimer
Attachment "D"	Allowable Direct Costs
Attachment "E"	Fee Proposal
Attachment "F"	Sample Professional Services Agreement
Attachment "G"	Acknowledgement of PSA
Attachment "H"	Not Used
Attachment "I"	Not Used
Attachment "J"	Acknowledgement of Addenda Receipt
Attachment "K"	Not Used
Attachment "L"	Contractor Safety Standards
Attachment "M"	Iran Contracting Act Verification
Attachment "N"	California Air Resources Board Mobile Source Certifications
Attachment "O"	Acknowledgement of California Voluntary Protection Program Annual Reporting Requirement
Attachment "P"	Human Resources Policies

JH:ms

ATTACHMENT “A”

SCOPE OF WORK

ATTACHMENT "A"

SCOPE OF WORK

1. SUMMARY

- a. The Orange County Sanitation District (OC SAN) is a special district responsible for wastewater conveyance and treatment for northern and central Orange County, California. OC SAN is a public agency that operates one of the largest wastewater facilities in the United States of America.
- b. OC SAN is soliciting Proposals to provide on-call Cost Estimating Professional Services to support its engineering projects, which includes large and small capital projects and operationally funded repair projects.

2. BACKGROUND

- a. OC SAN has budgeted for a 10-year \$3.6 billion capital improvement program, the vast majority of which is managed by the Engineering Department. OC SAN also has an active asset management program which includes many repair projects that, due to their complexity, are managed by its Engineering Department.
- b. OC SAN currently utilizes in-house staff and on-call Supplemental Engineering Services to:
 1. Develop Asset Management Program cost estimates for the Capital Improvement Program (CIP)
 2. Review contractor/consultant's cost estimates during preliminary and final design
 3. Review contractor's change orders and proposals
 4. Evaluate Value Engineering savings
- c. OC SAN understands the importance of having accurate cost estimates to properly plan the CIP and ensure projects are properly scoped and budgeted before they go out to bid. OC SAN has experienced some difficulty developing construction cost estimates that reflect the current market volatility, including fluctuations in material and labor costs, and requires on-call cost estimating services to provide these services on an as-needed basis.

3. PROFESSIONAL SERVICES REQUIRED

Provide cost estimating services as follows:

3.1 Cost Estimator Qualifications

CONSULTANT shall provide cost estimator(s) with the following knowledge and qualifications:

- a. Eight to ten years of cost estimation experience.
- b. Proficiency in HeavyBid construction cost estimating software by Heavy Construction Systems Specialists, Inc., unless otherwise approved by OC SAN in writing.
- c. Working knowledge of:

1. Construction methods, materials, procedures, equipment, and labor classifications
2. Sewer collection systems, including new construction and rehabilitation of pipelines (12-inch diameter and larger), manholes, and pump stations
3. Wastewater facilities, including pump stations, process and electrical buildings, clarifiers, digesters, pumps, concrete rehabilitation, piping, structural and seismic systems, electrical systems, instrumentation, and control systems
- d. Estimation work may include disciplines such as civil, mechanical, electrical, instrumentation and control, structural, plumbing, heating and air conditioning, fire protection, geotechnical, architectural, metallurgical, corrosion, acoustic, commissioning/startup, and landscape architecture.

3.2 Cost Estimating Services

CONSULTANT's cost estimator(s), shall be responsible for the following:

3.2.1 General Requirements

- a. Prepare independent cost estimates in accordance with the latest Engineering Design Guidelines, Chapter 15 Construction Cost Estimates (attached for reference).
- b. Provide recommended edits to the guidelines as appropriate.

3.2.2 Basis of Estimates

- a. OC SAN will provide available project documents throughout design, including:
 1. Plans
 2. Specifications
 3. Preliminary project schedules
 4. Geotechnical Reports
 5. Other Reports
- b. CONSULTANT shall prepare cost estimates commensurate with the level of design definition.

3.2.3 Planning-level Estimates (Class 4 and 5)

- a. Prepare estimates for future CIP projects as part of the annual budget validation process.
- b. Base estimates on project descriptions and defined project elements.
- c. Include a basis of estimate describing assumptions, references, suppliers, subcontractors, and tools used.

3.2.4 Preliminary and Midpoint Estimates (Class 2 and 3)

- a. Prepare estimates during design development.
- b. Include a basis of estimate with assumptions, references, suppliers, subcontractors, equipment, and tools used.

3.2.5 Final Design Estimates (Class 1)

- a. Prepare detailed estimates to establish the expected bid range.
- b. Include detailed quantity take-offs, unit costs, production rates, equipment and material quotes, and work breakdown structure.
- c. Account for sequencing, work restrictions, and commissioning/startup requirements.
- d. Provide documentation including:
 - 1. Basis of estimate
 - 2. Exclusions, allowances, and contingencies
 - 3. Dates of quotations
 - 4. Assumptions and risk analyses
- e. Include detailed line items with quantities, unit costs, labor hours, labor rates, and total costs.
- f. Identify separate costs for engineering/procurement, construction management, startup/commissioning, and project indirect costs.
- g. Identify risks that may impact bids, including limited bidder interest, sole-source items, restrictive work conditions, and volatile market conditions.

3.2.6 Progressive Design-Build (PDB): Independent Cost Estimating Support

- a. Serve as Owner's Independent Cost Estimator (ICE), preparing independent estimates at concept, 30%, 60%, and pre-GMP (Guaranteed Maximum Price)/GMP phases
- b. Review and validate Design-Builder estimates for quantities, unit pricing, productivity assumptions, and indirect costs
- c. Conduct open book cost reviews covering subcontractor quotes, vendor pricing, labor rates, general conditions, and contingency
- d. Perform side-by-side ICE vs. Design-Builder reconciliation, identifying variances, scope gaps, and overlaps
- e. Support GMP development and negotiations, validating pricing and recommending acceptance or adjustments
- f. Review risk and contingency coverage, identifying gaps or duplication and recommending optimization
- g. Validate cost impacts of constructability factors including facility constraints, shutdowns, tie-ins, and phasing
- h. Provide change order and claims cost validation during construction (optional)
- i. Deliver ICE estimates (Excel/CSI), BOE documentation, reconciliation reports, cost driver analysis, and GMP recommendation memos

3.2.7 Estimate Reviews

- a. Review estimates prepared by OC SAN staff or others for scope, schedule, production rates, labor, material, equipment, subcontractor rates, and indirect costs.
- b. Evaluate overhead and profit markups.
- c. Prepare a Cost Estimating Review Report with recommended adjustments.
- d. Provide comparative data analysis between projects.

3.2.8 Alternatives Evaluation

- a. Evaluate and advise on alternative construction methods, materials, and equipment.

3.2.9 Bid Evaluation

- a. Evaluate construction bids against OC SAN estimates and provide award recommendation.
- b. Reconcile estimates as directed by OC SAN within 10 working days after contract award.

3.2.10 Market Conditions Monitoring

- a. Monitor construction industry developments affecting costs.
- b. Provide quarterly summary emails with recommendations.

3.2.11 Model Validation

- a. Compare contingency and escalation models against actual bids.
- b. Recommend adjustments as needed.

3.2.12 Coordination

- a. Coordinate with designer through OC SAN's Project Manager. Requests for clarification from the design consultant shall be routed through OC SAN. The CONSULTANT shall participate in review meetings as requested.
- b. Coordinate with other OC SAN departments, such as Operations and Maintenance and Public Affairs.

3.2.13 Standardization

- a. Develop processes and techniques to standardize estimating methods across projects.

3.2.14 Change Order Review

- a. Review contractor cost estimates and change orders and provide recommendations.

3.2.15 Value Engineering Cost Review

- a. Review value engineering recommendations and validate estimated cost savings.

3.2.16 Cost Benefit Analysis

- a. When requested, perform cost benefit analyses using present worth methods to evaluate project alternatives.

3.2.17 Life-Cycle Cost Analysis (LCCA)

- a. Perform life-cycle cost analyses to compare design alternatives and support decision-making
- b. Evaluate total cost of ownership, including:
 - 1. Capital
 - 2. Operations
 - 3. Maintenance
 - 4. Repair/replacement
 - 5. Energy
 - 6. Disposal costs
- c. Use appropriate:
 - 1. Analysis periods
 - 2. Discount rates
 - 3. Escalation assumptions (per OC SAN standards or direction)
- d. Document:
 - 1. Assumptions
 - 2. Methodologies
 - 3. Data sources
 - 4. Sensitivity analyses
- e. Identify long-term cost drivers and risks.

3.2.18 Budget Development

- a. Develop and update construction budgets at:
 - 1. Planning phase
 - 2. Design phase
 - 3. Pre-bid phase
- b. Align budgets with estimate class (Class 5 → Class 1).
- c. Provide:
 - 1. Contingency recommendations
 - 2. Escalation assumptions
 - 3. Allowance structures
- d. Reconcile budgets with updated estimates and:

1. Document changes
2. Explain variances
3. Identify cost drivers

3.2.19 Cash Flow Planning

- a. CONSULTANT shall develop cash flow projections to support CIP planning and financial management.
- b. General Requirements
 1. Develop time-phased cost projections aligned with the project schedule
 2. Distribute total project costs across the project duration by fiscal year, and by month
 3. Ensure consistency with the estimate class and level of project definition
- c. Schedule Integration
 1. Align cash flow with Critical Path Method (CPM) schedules
 2. Tie cost distribution to major activities, including design, procurement, construction, and startup/commissioning
 3. Reflect sequencing, work restrictions, outages, and procurement lead times
- d. Cost Phasing
 1. Develop realistic spending curves that reflect typical project progression (ramp-up, peak, and closeout)
 2. Phase major cost components, including labor, materials, equipment, subcontractors, and indirect costs
- e. Deliverables
 1. Provide annual cash flow projections for estimates
 2. Provide monthly cash flow projections for projects as directed by OC SAN
 3. Submit cash flow data in formats compatible with OC SAN systems (e.g., Excel)
- f. Basis and Assumptions
 1. Document assumptions used to develop cash flow projections, including production rates, sequencing, and procurement durations
 2. Identify risks and uncertainties that may impact spending profiles

3.3 Other Services

3.3.1 Pre and Post Bid Survey

- a. Lead pre and post bid survey regarding cost estimates upon request by OC SAN.

3.3.2 Schedule of Values

- a. Recommend bid items based on market conditions, pre-bid survey, and bidder requests.

3.3.3 Cost Database Development and Management

The CONSULTANT shall develop, implement, and maintain a structured construction cost database for OC SAN use.

- a. Unit costs by discipline
- b. Vendor and subcontractor pricing
- c. Historical bid results
- d. Escalation trends
- e. Organize data using consistent WBS and CSI structure
- f. Normalize costs to base year and location
- g. Provide database in OC SAN-compatible formats (Excel, Power BI, or approved platforms)
- h. Update periodically (minimum yearly)
- i. Incorporate bid results and reconciliation data
- j. All data developed shall be the property of OC SAN. CONSULTANT shall provide documentation and training upon request.

3.3.4 Construction Scheduling

- a. Prepare schedules using CPM software such as Microsoft Project, Primavera, or similar.
- b. Provide schedule detail commensurate with the class of estimate.

3.3.5 Construction Sequencing, Constraints, and Duration

- a. Review the construction sequencing, work restrictions, commissioning requirements, and work described in the design documents and anticipate the construction sequencing and required resources.
- b. Determine the required construction duration to complete the work, incorporating feasible crew size and work hours and equipment submittal and procurement durations.
- c. Identify sequencing and constructability issues and design elements that may increase cost or risk and make recommend revisions to the contract documents.
- d. Identify unclear or conflicting design elements.
- e. Identify temporary facilities, bypassing, tie-ins, access constraints, startup, and commissioning.
- f. Identify constraints that may impact schedule or productivity, including:
 - 1. Work restrictions
 - 2. Permitting constraints (e.g., environmental or traffic limitations)
 - 3. Seasonal or hydraulic constraints
 - 4. Equipment outage limitations

5. Cost-saving opportunities identified during estimating

3.3.6 Risk Planning

- a. Facilitate risk planning workshops with the goal of identifying unforeseen risks during design that will require further action by the design team.

3.3.7 Other Services

- a. Other services as needed to support cost estimation.

4. TASK ASSIGNMENTS

- a. OC SAN will assign work under this Agreement in accordance with **Attachment "A1"** – Rules of Engagement and the Roles and Responsibilities set forth in **Attachment "A2"** – Roles and Responsibilities. Work assignments include:
 1. **Task Authorizations:** Formal scopes of work with CONSULTANT-provided proposals and fees
 2. **Task Directives:** Smaller assignments with OC SAN-defined scope and negotiated not-to-exceed fees
 3. **Program Role Assignments:** Staff augmentation to fill defined roles across multiple projects
- b. OC SAN will authorize tasks and assign roles as needed.

5. LOGISTICS AND CONTRACT MANAGEMENT

5.1 Work Location

- a. CONSULTANT staff may work at OC SAN facilities in Fountain Valley or Huntington Beach, other OC SAN facilities, project sites, or the CONSULTANT's office with OC SAN approval.

5.2 Point of Contact/Supervision

- a. CONSULTANT shall designate a single point of contact responsible for staff supervision, including work assignments, scheduling, quality, and performance. Changes require prior written notification to OC SAN.

5.3 Document Management

- a. CONSULTANT staff shall store project documents in OC SAN-approved systems, including SharePoint, Bluebeam, PMWeb, or OneDrive, in compliance with Public Records Act requirements.
- b. Electronic Submittals
 1. Coordinate file formats, software versions, and operating systems with OC SAN.
 2. Provide submittals in accordance with OC SAN requirements at the time of submission.

5.4 Facilities & Equipment

- a. OC SAN shall provide for CONSULTANT's on-site staff:
 - 1. Office space
 - 2. Computers, software, network, and printing

5.5 Personal Protective Equipment

- a. CONSULTANT staff assigned to OC SAN facilities may be exposed to known plant process and work hazards and therefore shall have appropriate Personal Protective Equipment (PPE) such as: eye and face protection (safety glasses), head protection (hard hat), hand protection (gloves), foot protection (safety toed shoes), high visibility clothing (Class 3 vests), hearing protection, personal gas monitor (4 gas), fall protection (harness and lanyard), and other forms of PPE.
- b. CONSULTANT shall provide all equipment and training necessary to comply with OC SAN safety policies. Refer to **Attachment "L"** - Contractor Safety Standards.

5.6 Time Tracking & Invoicing

- a. Submit monthly invoices by the 15th of each month.
- b. Provide hours and cost data in an importable format (e.g., Excel), including:
 - 1. Project number
 - 2. Work package number
 - 3. Employee ID and name
 - 4. Work date
 - 5. Weekly hours (including overtime, if applicable)
 - 6. Total burdened cost

5.7 Work Quality

- a. CONSULTANT is responsible for the professional quality, technical accuracy, and coordination of all services.

5.8 Billing Guidance

- a. Non-Billable Activities:
 - 1. Proposal preparation and staffing activities
 - 2. Pre-selection communications outside designated channels
 - 3. General training not specific to OC SAN
 - 4. Internal performance management
 - 5. Unauthorized or unrequested work
- b. Billable Activities:
 - 1. Invoice preparation and submission

2. Internal billing management
 3. Progress reporting
 4. Technical oversight
 5. Task management
 6. Quality control
 7. Coordination meetings
 8. OC SAN-specific training
- c. Program-level support shall be billed to Project SP-195.

5.9 Resource Management

- a. OC SAN will use PMWeb or similar tools to manage task assignments. The CONSULTANT shall track assignments through their full lifecycle. OC SAN will verify invoiced costs against approved assignments.

Chapter 15 CONSTRUCTION COST ESTIMATES

Table of Contents

Chapter 15	CONSTRUCTION COST ESTIMATES	<i>i</i>
15.0	HISTORY OF CHANGE	1
15.1	CONSTRUCTION COST ESTIMATE	2
15.1.1	GENERAL	2
15.1.2	DEFINITION AND TYPES OF COST ESTIMATES	2
15.1.3	BASIS OF COST ESTIMATE	3
15.1.4	FORMAT REQUIREMENTS AND COMPONENTS OF THE COST ESTIMATE	4
15.1.5	ALLOWANCES	6
15.1.6	SAMPLES	7

15.0 HISTORY OF CHANGE

Major or Minor Revision	Revision and Version	Author	Date	Change	Revision Approval
NEW	0	M. Kleine, A. McGuire	Mar 29, 2024	New chapter for EDAC approval.	

15.1 CONSTRUCTION COST ESTIMATE

15.1.1 GENERAL

A. The Consultant shall apply these guidelines during the preparation of construction cost estimates to achieve uniformity in the development of estimates and to facilitate review by various project participants. The Consultant shall apply the best estimating practices of the engineering and construction industries in preparing these cost estimates.

B. Construction cost estimates prepared under contract with the Orange County Sanitation District (OC SAN) are strictly confidential and distribution is prohibited beyond that specified in the project Scope of Work (SOW).

15.1.2 DEFINITION AND TYPES OF COST ESTIMATES

A. The American Association of Cost Engineers' (AACE) definition of Cost Estimate Types/Classes shall be used to derive construction cost estimates. The Consultant shall provide construction cost estimates with each design submittal as defined below unless otherwise stated in the project Scope of Work. The cost estimate includes an assessment of the difficulties inherent in the construction work and documents the determination of productivity, production, and pricing. This includes factors such as labor conditions, construction equipment, construction supervision, material costs, and equipment installation costs. All likely costs a Contractor can expect to incur shall be included.

B. Estimates shall conform to AACE International Recommended Practice No. 18R-97 "Cost Estimating Classification System – As Applied in Engineering, Procurement, and Construction for the Process Industries." The level of accuracy for the cost estimate shall be appropriate to the design submittal, per the following table.

1. The Consultant shall provide the following types of construction cost estimates to OC SAN's Project Manager:

Submittal	AACE Int. Estimate Class ¹	Expected Accuracy Range ¹	Project Level Allowance ²
PDR	Class 3	-20% to + 30%	20%
DS-1	Class 3	-15% to +20%	20%
DS-2	Class 2	-15% to +20%	15%
DS-3	Class 2 ³	-10% to +10%	10%
FDS	Class 2 ³	-10% to +10%	10%
IFB	Class 2 ³	-5% to +10%	5%

¹ See AACE 18R-97

² OC SAN standard – Actual value to be agreed upon by the Project Estimator, the Consultant's Project Manager, and OC SAN's Project Manager.

³ To achieve the required level of accuracy, selected areas of the estimate may need to be Class 1 or Market-backed estimates.

- C. Refer to the following paragraphs for the definitions of estimate types:

1. Class 3 estimate at PDR. This is the first construction cost estimate developed from project specific design criteria. The estimate is submitted at the same time as the Preliminary Design Report (PDR). The framework of this estimate is based on quantities and unit price models developed from the design criteria, similar projects (in size and scope of work), site layout, soils reports and the completed PDR.

2. Class 3 estimate at DS-1. This estimate shall conform to the latest project-specific design criteria and design documents, including cost impacts per major decisions made since PDR. For those areas of the project still undefined, an assumed level of detail takeoff (forced

detail) may be developed to use as line items in the estimate instead of relying on factoring methods. The Class 3 estimate is submitted within 2 weeks after the Consultant submits the DS-1 design documents.

3. Class 2 estimate at DS-2. For those areas of the project still undefined, an assumed level of detail takeoff (forced detail) may be developed to use as line items in the estimate instead of relying on factoring methods. The Class 2 estimate is submitted within 2 weeks after the Consultant submits the DS-2 design documents.

4. Class 2 estimate at DS-3 & Final Design. Though a Class 2 estimate, to achieve the required level of accuracy, selected areas of the estimate may need to be Class 1 or market-backed estimate. The Consultant shall submit the estimate within 2 weeks after submittal of the design documents to OC SAN. The DS-3 Construction Cost Estimate shall include the proposed Schedule of Prices.

5. Class 2 estimate at IFB is referred to as the Engineer's Estimate. The Engineer's Estimate must reflect the actual bidding climate, site conditions, and any operational or staging restrictions placed upon the contractor during execution of their contract. The IFB Construction Cost Estimate is intended to serve as a comparison to the construction bids and will include an update to the Schedule of Prices.

D. Post-Bid Evaluation. If the lowest bidder exceeds the engineer's estimate by 10%, the Consultant is required to conduct a confidential bid evaluation within two weeks from the bid due date. This evaluation should include a detailed analysis of the deviation, providing insights for the variance. The Post-Bid Evaluation will be used to discover the reason for discrepancy between the Engineer's Estimate and Contractor's Bid or simply validate the Contractor's Bid.

E. Market-backed estimates: Market-backed estimates leverage input from subcontractors and vendors, incorporating their quotes based on current market prices for labor, materials, and services. This practice enhances accuracy, transparency, and risk mitigation in project cost projections. (Note of caution: Project specific information cannot be shared such that the contractor or subcontractor is provided an unfair advantage in bidding).

F. Each of the aforementioned cost estimates may include an allowance as indicated in the table. Allowances are for known cost items that cannot be quantified because of lack of detail.

15.1.3 BASIS OF COST ESTIMATE

A. The Consultant shall prepare Construction Cost Estimates. All costs shall be current costs as of the date of the estimate. No inflation or escalation allowance shall be made for construction costs at a future date. Estimates shall be tied to Engineering News-Record's Los Angeles Construction Cost Index (ENR L.A. CCI) for the month in which the estimate is completed. The goal of the cost estimate is not to represent the low bid, but to represent the median bid.

B. The Consultant shall document the basis of the cost estimate. This documentation includes lists of drawings and specifications, quantities, equipment lists, qualifications, assumptions, inclusions, exclusions, a brief narrative to properly define the cost estimate relative to the current design completion, and construction approach used in developing the cost estimate. (See SOW Exhibit 10a – Construction Estimate Format Sample 1).

C. The Consultant fees and OC SAN staff costs shall not be included in the cost estimate. The Consultant shall determine project specific and appropriate values to use for the percentages for profit, bond, and insurance. The costs for project level allowance, insurance, profit, and bond shall be cumulative and listed as individual line items.

D. It is expected that the Consultant will get quotes from manufacturers/suppliers for major equipment, any specialty items, and any other items that significantly impact the total cost of the project. Written and telephone quotations shall be submitted with the estimating worksheets. The Consultant shall propose beforehand which items require quotations and obtain concurrence from the OC SAN's Project Manager prior to submittal of the construction cost estimate.

E. The estimator shall include contractor costs associated with construction phasing and operational requirements given in the plans and specifications. For example, the costs of keeping a plant in operation during a rehabilitation project shall be included in the estimate.

F. The cost estimating system used shall have summarization, sorting and selecting capabilities for items such as category of work, materials, CSI section and CSI Division. The choice of the estimating software package is at the Consultant's discretion as long as these requirements are met.

G. The cost estimate shall be prepared by a qualified cost estimator. For projects with a construction cost of \$10,000,000 or more, the person preparing the estimate shall have a minimum of five years of cost estimating experience and shall have prepared estimates for at least four projects of similar size and complexity. Although not required, OC SAN prefers that the estimator be certified by a national cost estimating organization or society.

15.1.4 FORMAT REQUIREMENTS AND COMPONENTS OF THE COST ESTIMATE

A. The format of the cost estimate allows for both a detailed and a summary presentation of project costs. The cost breakdown facilitates review, comment, and reconciliation of cost estimates with other participants. All submittals shall be provided in both native and .pdf format.

B. The Construction Cost Estimate submitted at the PDR and DS-1 shall consist of the following reports:

1. Cover Memo
2. Basis of Estimate
3. Summary Cost Estimate Report by Work Task and CSI Division
4. Worksheets

C. The Construction Cost Estimate submitted at DS-2, DS-3 and FDS shall consist of the following reports:

1. Cover Memo
2. Basis of Estimate
3. CSI Division Cost Estimate Report (by Work Task, Sorted by CSI Division)
4. CSI Division Summary (Sorted by CSI Section Number)
5. Schedule of Prices (DS-3 and FDS only)
6. Worksheets
7. Cost Variance Report by CSI Division

D. The Construction Cost Estimate submitted at the IFB shall consist of the following reports:

1. Cover Memo
2. Basis of Estimate
3. Schedule of Prices
4. CSI Division Cost Estimate Report (by Work Task, Sorted by CSI Division)
5. CSI Division Summary (Sorted by CSI Section Number)

E. Components of the Construction Cost Estimates are described in more detail below:

1. Cover Memo. The cover memo shall identify the type and purpose of construction estimate, the estimated cost, the individual who prepared the estimate and how they can be contacted, and shall briefly describe any major differences in the estimate since the last submittal.
2. Basis of Estimate (SOW Exhibit 10a – Construction Estimate Format Sample 1). This documentation includes quantities, equipment lists, qualifications, assumptions, inclusions, exclusions, a brief narrative to properly define the cost estimate relative to the current design completion and construction approach used in developing the cost estimate. If the estimated construction cost varies from a prior estimate, the basis of estimate shall briefly describe the major items that have caused the variance.
3. CSI Division Cost Estimate Report (SOW Exhibit 10b – Construction Estimate Format Sample 2). The CSI Division Cost Estimate Report is a high-level summary of the construction costs, by CSI Division. Work Tasks are portions of the projects that can be identified as separate elements, such as buildings, areas, and process units. The Consultant's Project Manager and OC SAN's Project Manager should agree beforehand about which portions of the project shall be defined as work tasks. The CSI Division Cost Estimate Report shall detail costs down to the CSI Division level (01-17).
4. CSI Division Summary (SOW Exhibit 10b – Construction Estimate Format Sample 3). The CSI Division Summary shall detail costs by work task down to the CSI section level. When specific items constitute a significant portion of the cost of the project, those items should be listed individually under their specification division. For example, on a pipeline project the cost of the pipe and the cost of the trenching shoring, and backfilling are a large percentage of the total cost of the project. These costs should be itemized separately under their respective CSI section.
5. Development of the CSI Section Cost Estimate Report may require a Class I or market-backed estimate for portions of the work (Refer to table above). The report shall be organized by work task (process unit, building, or area). Provide a quantity takeoff with each applicable cost estimate and defines the unit cost (pricing) data used to calculate each line item. The quantity takeoff is adjusted between cost estimates. For pricing, the Consultant may use industry costs databases or estimates on unit costs developed specifically for the project. Clearly define the cost sources on which the pricing is based, including indirect costs and direct costs for labor, material, equipment, subcontractors, and suppliers.
6. Worksheets. The Consultant shall include any additional documents used to develop the estimate, including Live Excel spreadsheets and vendor quotes. The Excel spreadsheet shall include references to the source of the unit cost (such as RS Means or vendor quote, etc.). Major equipment quotations shall be in writing from the manufactures or suppliers. Minor equipment costs may be documented by email quotations. Worksheets will be complete,

detailed printouts of each work task in the project with costs typically shown by materials, labor, equipment etc. The exact format of this report is at the Consultant's discretion.

7. Cost Variance Report by CSI Division (SOW Exhibit 10b – Construction Estimate Format Sample 4). This report shall provide a table of detailed breakdown of the cost changes and shall be organized by CSI divisions and sections and highlighting the reasons behind significant changes since the previous submittal. These variations may result from design scope changes, evolving estimates, market updates, or mark-up changes due to estimate level and class. Markup (Attachment B – Sample Construction Estimate Format – Sample 5): Markups represent additional percentages applied to the total cost, covering overhead, profit, project level allowance, bond, insurance, and unforeseen contingencies, ensuring a comprehensive and sustainable project budget.

8. General Conditions (SOW Exhibit 10b – Construction Estimate Format Sample 6). General conditions and requirements in construction estimates encompass essential non-specific costs such as site management, permits, insurance, and temporary facilities, providing a foundational framework for overall project planning and budgeting.

9. Schedule of Prices (SOW Exhibit 10c – Construction Estimate Format Sample 7). The Consultant fill out this document to match the bid items listed in the Measurement and Payment Specification 01155. Costs for all portions of the work included in the CSI cost estimate reports shall also be included in the Schedule of Prices estimate.

15.1.5 ALLOWANCES

A. Each of the aforementioned cost estimates may include an allowance as indicated in the table above. Project Level Allowance is an integral part of the total estimated construction cost of a project within the defined project scope, and should be separately estimated and itemized by the Consultant. Allowances are for known cost items that cannot be quantified because of uncertainties such as market volatility or because of complexities such as incomplete design or lack of precedence. The estimate accuracy range, on the other hand, is primarily related to refinement of the scope and the increasing detail of estimate data. Project Level Allowances shall be shown as a separate line item(s) added to the balance of construction costs before markups are applied.

B. Allowances shall not be used to set aside money for (a) construction change orders, (b) project level scope changes, (c) program level scope changes, (d) unanticipated changes to regulatory standards and (e) availability of new technologies.

15.1.6 SAMPLES

A. The listed samples are included in SOW Exhibit 10a, 10b, and 10c. The intent of the samples is to provide guidelines for the deliverables that the OC SAN requires for each submitted estimate.

1. Sample 1: Sample Basis of Estimate
2. Sample 2: CSI Division Cost Estimate Report (by Work Task, Sorted by CSI Division)
3. Sample 3: CSI Division Summary (Sorted by CSI Division)
4. Sample 4: Cost Variance Report
5. Sample 5: Markup
6. Sample 6: General Conditions
7. Sample 7: Schedule of Prices

ATTACHMENT “A1”

RULES OF ENGAGEMENT

ATTACHMENT “A1”

RULES OF ENGAGEMENT

This document describes how OC SAN may use Cost Estimating Professional Services agreement to support OC San’s Operating and Capital Improvement Program while complying with independent contractor classification laws.

There are three mechanisms by which professional services can be supplied through the Agreement:

- Task Authorizations
- Task Directives
- Program Role Assignments (most common)

These Rules of Engagement are intended to document how services are to be requested, authorized, and managed.

Task Authorizations

When OC SAN requires a specific task completed, OC SAN may request the CONSULTANT respond with the proposed team, fee, and, if applicable, an approach to perform the work.

Task Authorizations have a formal scope of work and a fixed upper limit. Distinguishing aspects of Task Authorizations include the following:

- Requests for Task Authorization Proposal (RFTAP) require a scope of work prepared by OC SAN staff.
- RFTAPs and Task Authorizations must be approved by the Director of Engineering.
- The scope of work must include schedule requirements, tasks, deliverables, and assumptions, similar in detail to a Design or Planning Study Task Order.
- Each Task Authorization must specify a firm, negotiated upper limit which may not be exceeded. Any changes must be processed as a formal Task Authorization Amendment before the work is performed.
- The CONSULTANT shall report incurred costs for the Task Authorization in their monthly invoices, including total costs to date and the remaining budget.
- Time charged to Task Authorizations does not count against approved Program Role hours.

Task Directives

Task Directives are typically smaller than Task Authorizations where OC SAN provides a scope and a not-to-exceed fee amount that will be negotiated with the CONSULTANT. Task Directives include the following:

- The scope of work may be less detailed than what is required for a Task Authorization.
- A schedule for completing the work should generally be specified, but it is not always required.
- Task Directive must specify a firm negotiated upper limit which may not be exceeded. If changes require a revision to that upper limit, it must be processed as a formal Task Directive Amendment prior to the work being authorized and performed.
- CONSULTANT shall report costs incurred for the Task Directive in their monthly invoices, including total costs to date and the remaining budget.

Program Role Assignments

Program Role assignments direct the CONSULTANT to assign a qualified individual to fill a specific role across multiple projects.

Requirement for Program Roles:

- Assignment, duration, and budget:
 - They are specific to one person.
 - Assignments will generally be made before the specific need arises.
 - Hours and costs will be tracked at the Program Role, project, and work package level. An authorized budget will be established based on the individual's burdened rate and the duration of the assignment. The burdened rate includes salary, overhead, and profit. Reimbursable expenses will also be tracked.
 - They are assigned for a specified duration. At the end of the specified duration, the Program Role will either be closed or renewed.
 - When on-site work is needed for a Program Role, they will be provided with office space, key cards, and internet access.
- The Engineering Manager responsible for the function must approve Program Role assignments. Only designated staff may initiate Program Role requests.

Project assignments are made under the Program Role to direct the CONSULTANT to assign qualified individuals to specific projects. A project assignment may cover the full project role or a defined portion.

Requirements for project assignments:

- Assignments will be made from existing Program Role assignments.
- Timing and duration depend on the project schedule or other designations.
- CONSULTANT assigned to a project will work directly with OC SAN.
- Assignment requests must specify total estimated hours.
- CONSULTANT shall identify a Technical Lead to support assigned CONSULTANT staff.
- Project direction will come from the CONSULTANT Point of Contact or CONSULTANT Supervision, in coordination with OC SAN Project Team and designated staff in Engineering.

CONSULTANT Staff Supervision

CONSULTANT is responsible for supervision of its entire staff, including the following:

- Administrative Supervision (CONSULTANT staff only)
 - Performance reviews
 - Timecard approvals
 - Work hours
- Supervision of assigned roles
 - Work prioritization
 - Technical input, guidance, and direction
 - Quality Control for assigned deliverables

OC SAN does not supervise CONSULTANT staff. However, OC SAN provides direction to CONSULTANT as an Owner, including:

- Project decisions and priorities
- Design standards related to cost estimation
- OC SAN preferences
- Financial and risk considerations
- Compliance with OC SAN Policies and Procedures
- Coordination with other OC SAN projects and activities

ATTACHMENT “A2”

ROLES AND RESPONSIBILTIES

ATTACHMENT “A2”

ROLES AND RESPONSIBILITIES

1. PURPOSE

- a. The Orange County Sanitation District (OC SAN) understands the importance of developing accurate cost estimates to effectively plan the Capital Improvement Program (CIP) and ensure projects are properly scoped and budgeted prior to bidding.
- b. Recent estimate performance has identified opportunities to improve estimate consistency, accuracy, coordination, and documentation throughout project planning and design.
- c. Accurate cost estimates are critical to maintaining confidence in OC SAN's project planning, budgeting, and delivery processes.
- d. This document defines the roles, responsibilities, coordination, and review expectations associated with preparing cost estimates developed by third-party estimators (CONSULTANT) working directly for OC SAN, as compared to estimates prepared by design engineers. In addition, this document identifies the standards of professional conduct, workplace behavior, and coordination expected of all OC SAN consultants while performing services for OC SAN.

2. OC SAN'S PROJECT MANAGER (PM) ROLE

2.1 Initiation

- a. Initiates requests for estimate preparation through designated staff (role defined in section 4).
- b. Clearly defines when estimates are required for the project.
 - 1. Examples include:
 - i. Design submittals
 - ii. Bid phase
 - iii. Alternatives analysis
 - iv. Key decision points
- c. Ensures estimates are requested in a timely manner.

2.2 Estimate Requirements

- a. Defines:
 - 1. Required estimate class level (Class 5, 4, 3, etc.)
 - 2. Project delivery type - Progressive Design-Build (PDB), Design Bid Build (DBB) etc.
 - 3. Early work packages
 - 4. Multiple bid packages

2.3 Project Information

- a. Provides project-specific background information prior to estimation.
 - 1. Scope
 - 2. Constraints

- 3. Risks
- 4. Other relevant considerations
- b. Ensures the design information provided to the CONSULTANT is complete.
 - 1. Clearly identifies areas where the design is:
 - i. Preliminary Design Submittal (PDS)
 - ii. Design Submittal 1 (DS1), DS2, DS3
 - iii. Final Design Submittal (FDS)
 - iv. Final Technical Plans and Specs (FTPS)
- c. Defines required assumptions.
- d. Identifies areas where CONSULTANT should develop assumptions.
 - 1. Coordinated with the Design Engineer and CONSULTANT.

2.4 Review

- a. Participates in CONSULTANT estimate review meetings.
- b. Responds to CONSULTANT inquiries.
- c. Coordinates with the Design Engineer.
- d. Reviews estimates from a project delivery perspective.
- e. Provides comments to the CONSULTANT estimator through Designated Staff.

2.5 Acceptance

- a. Accepts estimate as final.
- b. Escalates estimate to the midpoint of construction.

3. OC SAN'S PLANNING STAFF ROLE

3.1 Initiation

- a. Initiates requests for planning-level estimates through Designated Staff.

3.2 Planning Requirements

- a. Defines:
 - 1. Planning objectives
 - 2. Assumptions
 - 3. Project drivers
 - 4. Required estimate level
- b. Defines:
 - 1. Future project elements
 - 2. Assumptions regarding implementation

3.3 Project Information

- a. Provides:
 - 1. Planning documents
 - 2. Studies
 - 3. Conceptual project information

3.4 Review

- a. Participates in estimate review meetings.
- b. Responds to CONSULTANT inquiries.
- c. Reviews estimates from a planning and budgeting perspective.
- d. Provides comments through Designated Staff.

3.5 Acceptance

- a. Accepts estimate as final.
- b. Escalates estimate to the midpoint of construction.

4. OC SAN'S DESIGNATED STAFF ROLE

4.1 Coordination

- a. Serves as the primary coordinator with the CONSULTANT cost estimator.
- b. Consolidates and submits final comments from PMs to the third-party estimator.

4.2 Estimate Review

- a. Reviews:
 - 1. Estimates
 - 2. Assumptions
 - 3. Exclusions
 - 4. Risks
 - 5. Related items

4.3 Standards Compliance

- a. Ensures markups conform to OC SAN standards and are appropriate for the design and estimate level.
 - 1. Overhead
 - 2. Profit
 - 3. Tax
 - 4. Project Level Allowance
 - 5. Other markups

- b. Ensures deliverables conform to:
 - 1. OC SAN cost standards (Defined in Engineering Design Guidelines)
 - 2. Schedule standards
 - 3. Work Breakdown Structure (WBS)

4.4 Schedule Management

- a. Ensures estimates are provided in accordance with the agreed-upon schedule.

5. CONSULTANT ESTIMATOR SUPPLEMENTAL STAFF ROLE (PER RFP/SOW)

5.1 Estimate Preparation

- a. Prepares estimates as requested.
- b. Performs detailed quantity takeoffs.

5.2 Scheduling

- a. Prepares project schedules.
 - 1. Critical path
 - 2. Sequencing
 - 3. Related schedule elements

5.3 Estimate Analysis

- a. Provides variance analysis between estimate iterations.
 - 1. Preliminary Design Submittal (PDS), Design Submittal 1(DS1), Design Submittal 2 (DS2), Design Submittal 3 (DS3), Final Design Submittal (FDS), Final Technical Plans and Specs (FTPS)
 - 2. Potential cost changes
 - 3. Scope changes
 - 4. Risk changes
- b. Identifies and incorporates potential market condition changes.

5.4 Coordination

- a. Coordinates with:
 - 1. Project Manager (PM)
 - 2. Design Engineer
 - 3. Designated staff

6. DESIGN ENGINEER ROLE

6.1 Technical Support

- a. Does not prepare estimates unless requested.

- b. Provides information needed for CONSULTANT estimate preparation.
 - 1. Reports
 - 2. Design Memos
 - 3. Plans
 - 4. Specifications
- c. Ensures:
 - 1. Design clarity
 - 2. Quantity accuracy
- d. Responds to estimator questions.

6.2 Review

- a. Participates in estimate review meetings.
- b. Reviews and provides comments on CONSULTANT estimates.
 - 1. Verifies the scope of work is complete and consistent with the project schedule.
 - 2. Highlights design risks or uncertainties.
 - 3. Evaluates whether the project can reasonably be built as assumed.

6.3 Constructability Review

- a. Reviews:
 - 1. Site access limitations
 - 2. Shutdown or tie-in constraints
 - 3. Temporary bypass requirements
 - 4. Sequencing feasibility
 - 5. Conflicts with ongoing plant operations
 - 6. Laydown and staging availability
 - 7. Crane access and equipment removal paths
 - 8. Underground utility conflicts
 - 9. Traffic control and operational restrictions
 - 10. Night or weekend work assumptions
 - 11. Assumed installation methods

6.4 Schedule Review

- a. Validates schedule logic.
- b. Reviews milestone assumptions.
- c. Reconciles provided comments.

7.0 CONSULTANT CONDUCT

- a. All CONSULTANT project personnel are expected to maintain professional behavior at all times while performing work on behalf of OC SAN. This includes demonstrating respect for coworkers, clients, visitors, company property, and workplace facilities.
- b. All OC SAN property and facilities must be used carefully, responsibly, and only for their intended purposes. CONSULTANT project personnel are expected to follow appropriate workplace standards regarding cleanliness, hygiene, safety, and professional conduct while on OC SAN premises.
- c. Improper or inappropriate use of company facilities or property, including conduct that creates unsanitary conditions or reflects unprofessional behavior, is not acceptable.
- d. Failure to comply with these expectations may result in corrective action, up to and including removal from the assignment or termination of the contract engagement.

ATTACHMENT “C”

CONFLICT OF INTEREST DISCLAIMER

ATTACHMENT "C"
CONFLICT OF INTEREST DISCLAIMER

(Submit with Proposal)

The undersigned, _____, declares that
(Print or Type Name)

_____ ☐ does have ☐ does not have
(Name of Firm)

interest, ownership or receives or anticipates receiving remuneration of any type from the manufacturer(s), supplier(s) or distributor(s) which may be recommended on the project, as listed below.

<u>Firm</u>	<u>Product</u>	<u>Remuneration</u>

Signature of President, Secretary, Partner,
Owner or Representative

Date

ATTACHMENT “D”

ALLOWABLE DIRECT COSTS

ATTACHMENT “D”

ALLOWABLE DIRECT COSTS

LONG DISTANCE TELEPHONE CHARGES	All long-distance telephone charges incurred will be reimbursed as direct costs. Telephone charges to area codes serving Los Angeles, Orange, Riverside, and San Bernardino Counties will not be reimbursed.
FACSIMILE TRANSMISSION CHARGES	Facsimile transmission charges will not be reimbursed, except the long-distance toll charges, as described above.
REPRODUCTION AND PRINTING CHARGES	In-house reproduction of records and documents will not be reimbursed by OC SAN. Use of an outside copy service for specialty items and volume reproduction will be reimbursed at direct cost. Use of a professional printing service will be reimbursed at actual cost.
OVERNIGHT MAIL DELIVER AND MESSENGER SERVICE	Use of Federal Express, Express Mail, UPS, or such similarly-related service, as well as a messenger service, will be reimbursed at direct cost only when necessary.
POSTAGE	Incidental postage will not be reimbursed by OC SAN.
FILM PROCESSING	Film processing will be reimbursed at actual cost.
COMPUTER USAGE	Computer use by Consultant and/or support staff will not be reimbursed.
MILEAGE	Per mile reimbursement will be at the current rate set by the Internal Revenue Service.
TEMPORARY STAFF	The use of outside temporary support staff will be reimbursed at direct cost with prior approval of OC SAN.
OFFICE SUPPLIES	The purchase of office supplies by Consultant will not be reimbursed.
LODGING	<p>The cost of lodging including room and all applicable taxes will be reimbursed on a per diem basis as an allowable maximum as established by U.S. General Service Administration. Lodging incidentals as defined by IRS are included in the per diem rates. Lodging personal incidentals including movies, internet, laundry service, valet service, room service, etc., will not be reimbursed. Receipts must be provided for the actual incurred cost.</p> <p>Cancellations of the hotel reservations by the Consultant must be per the hotel policy. Late cancellations, early or late departure will not be reimbursed by OC SAN.</p>
GROUND TRANSPORTATION	The cost of ground transportation for taxi, shuttle, train, etc., will be reimbursed. Limousine service will not be reimbursed. The Consultant shall use the most economic and practical mode of transportation that is reasonably available.

AIRFARE	Airline ticket cost including one bag will be reimbursed only if pre-approved by OC SAN. First class tickets will not be reimbursed unless pre-approved by OC SAN. Membership dues for corporate card frequent user programs or the cost of airline club membership will not be reimbursed.
AUTO RENTAL	Rental car cost for intermediate or standard model, mid-size car (Class "C") or the smaller car compatible with the specific need and rental car gas will be reimbursed. Receipts must be provided to substantiate requested reimbursements.
PARKING FEE	Parking fees for hotel, airport, rail station, etc. will be reimbursed. Consultant shall use the most economic and practical parking location as reasonably available. Excessive parking fees that are deemed unreasonable by OC SAN will not be reimbursed.
TRAVEL MEALS	Travel meals will be reimbursed on a per diem basis as established by U.S. General Service Administration. Per diem rates include gratuities (tips) and will not be separately reimbursed by OC SAN. Personal expenses such as cost of alcoholic beverages will not be reimbursed. No receipts are required for the approved meals. The daily total reimbursement for meals shall not exceed OC SAN per diem rate which is available upon request.
PER DIEM DAILY RATE FOR LODGING AND MEALS	OC SAN may utilize per diem daily rate that includes lodging, meals and incidentals (M&IE) as established by IRS and U.S. General Service administration for pre-approved travel when reasonable.
RENTAL EQUIPMENT	Consultant will be reimbursed at actual cost, no mark-up.
OTHER DIRECT COSTS	OC SAN may authorize other items that may be necessitated due to modifications in scope of work resulting from field investigations and field work required by Contract. These items may include special equipment, test equipment and tooling and other materials and services not previously identified. These items will be reimbursed based on actual cost incurred. A one-time mark-up of 15% for additional equipment rentals, materials and outside services required for field work and investigations may be allowed, as applicable, if justified. No additional markup is allowed by Consultant on other direct costs resulting from work performed by its Contractors.
MISCELLANEOUS	Cost of miscellaneous personal items such as, but not limited to newspapers, toiletries, shoeshine, tobacco products, pay TV, movies, valet services, health club charges, in-room mini bars, clothing and footwear will not be reimbursed. ATM/bank fees incurred by Consultant while traveling will not be reimbursed. Costs for project team lunches will not be reimbursed unless pre-approved by OC SAN.

ATTACHMENT “E”

FEE PROPOSAL

ATTACHMENT "E"

FEE PROPOSAL

Submitted by: _____
(Name of Firm)

Consultant Name:						
Raw Labor						
Fringe Costs		\$ -				
Note: Round all values to nearest dollar.		Burdened Labor (Raw Labor + Fringe)				\$ -
		Overhead				\$ -
		Subtotal (Burdened labor + OH)		\$ -		
		Profit (% of Subtotal)	10.00%	\$ -		
		Total Direct Costs, not to exceed				
TOTAL - "Consultant" Not to Exceed				\$ -		

Major Subconsultant A Name:						
Raw Labor						
Fringe Costs		\$ -				
Note: Round all values to nearest dollar.		Burdened Labor (Raw Labor + Fringe)				\$ -
		Overhead				\$ -
		Subtotal (Burdened labor + OH)		\$ -		
		Profit (% of Subtotal)	10.00%	\$ -		
		Total Direct Costs, not to exceed				
TOTAL - Major Subconsultant A Not to Exceed				\$ -		

ATTACHMENT "E" FEE PROPOSAL

Submitted by: _____
(Name of Firm)

Major Subconsultant B Name:						
Raw Labor						
Fringe Costs		\$ -				
Note: Round all values to nearest dollar.		Burdened Labor (Raw Labor + Fringe)				\$ -
		Overhead				\$ -
		Subtotal (Burdened labor + OH)		\$ -		
		Profit (% of Subtotal)	10.00%	\$ -		
		Total Direct Costs, not to exceed				
		TOTAL - Major Subconsultant B Not to Exceed		\$ -		

Major Subconsultant C Name:						
Raw Labor						
Fringe Costs		\$ -				
Note: Round all values to nearest dollar.		Burdened Labor (Raw Labor + Fringe)				\$ -
		Overhead				\$ -
		Subtotal (Burdened labor + OH)		\$ -		
		Profit (% of Subtotal)	10.00%	\$ -		
		Total Direct Costs, not to exceed				
		TOTAL - Major Subconsultant C Not to Exceed		\$ -		

ATTACHMENT "E"
FEE PROPOSAL

Submitted by: _____
(Name of Firm)

Subconsultants Under \$100,000		
Subconsultant 1		
Subconsultant 2		
Subconsultant 3		
Subconsultant 4		
Subconsultant 5		
TOTAL - Subconsultants Under \$100,000		\$ -

SUMMARY		
Consultant	\$	-
Major Subconsultant A	\$	-
Major Subconsultant B	\$	-
Major Subconsultant C	\$	-
Subconsultants Under \$100,000	\$	-
GRAND TOTAL - Not to Exceed	\$	-

Instructions for Attachment E - Fee Proposal

- 1 Input Values in Yellow Cells. Remaining cells are labels or calculations.
- 2 Round input values to nearest dollar.
- 3 Insert or delete subconsultants as required.
- 4 Do not list subconsultants with total costs for burdened labor plus overhead of less than \$100,000 as Major subconsultants.

ATTACHMENT “F”

SAMPLE PROFESSIONAL SERVICES AGREEMENT

PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT, (hereinafter referred to as "Agreement"), is made and entered into to be effective the «EffectiveDate» day of «EffectiveMonth», «Year», by and between the ORANGE COUNTY SANITATION DISTRICT, (hereinafter referred to as "OC SAN"), and «Company», (hereinafter referred to as "CONSULTANT"). OC SAN and CONSULTANT are referred to herein collectively as the "Parties" or individually as a "Party."

WITNESSETH:

WHEREAS, OC SAN desires to engage CONSULTANT for **Cost Estimating Services, PSA2026-002**, to provide qualified staff as described in Attachment "A," Scope of Work; Attachment "A1," Rules of Engagement; and Attachment "A2," Roles and Responsibilities; and

WHEREAS, CONSULTANT is qualified to provide the necessary services in connection with these requirements and has agreed to provide the the requisite personnel and experience, and is capable of performing such services; and

WHEREAS, OC SAN has adopted procedures for the selection of professional services and has proceeded in accordance with said procedures to select CONSULTANT to perform this work; and

WHEREAS, OC SAN shall manage selection of a Consultant for Task Order(s) when requested after award of this Agreement based on the most appropriate qualifications and fit; and

WHEREAS, at its regular meeting on «BoardMeetingDate» the Board of Directors, by Minute Order, accepted the recommendation of the Operations Committee to approve this Agreement.

NOW, THEREFORE, in consideration of the promises and mutual benefits, which will result to the parties in carrying out the terms of this Agreement, it is mutually agreed as follows:

1. SCOPE OF WORK

CONSULTANT agrees to furnish necessary professional services to accomplish the Scope of Work attached hereto as Attachment "A", and is hereby incorporated into this Agreement. In the event of a conflict between the Scope of Work and this Agreement, the terms of this Agreement shall prevail.

2. COMPENSATION

Total compensation shall be paid to CONSULTANT for the services in accordance with the following provisions:

A. Time and Material: Not to Exceed Aggregate Amount

OC SAN shall compensate CONSULTANT for services performed under this Agreement on a time and materials basis, not to exceed a maximum aggregate

amount of «Grand Total Written Amount» Dollars (\$«Grand Total Amount»)
("Total Compensation") during the term of the Agreement.

B. Hourly Rates

As a portion of the total compensation to be paid to CONSULTANT, OC SAN shall pay to CONSULTANT a sum equal to the burdened salaries (salaries plus benefits, overhead, and profit) actually paid by CONSULTANT charged on an hourly-rate basis to this project and paid to the personnel of CONSULTANT as set forth in Attachment "E" (attached hereto and incorporated herein by reference). OC SAN shall also pay to CONSULTANT a sum equal to the premium costs for overtime, charged on an hourly-rate basis, actually paid by CONSULTANT to the non-exempt personnel of CONSULTANT plus profit. Premium costs for overtime will not include fringe and overhead. Upon request of OC SAN, CONSULTANT shall provide OC SAN with certified payroll records of all employees' work that is charged to this Agreement.

C. Overhead

- i. "Field Office Staff" are defined as project-assigned staff by CONSULTANT, working at OC SAN's facilities for a project-assigned period exceeding ninety (90) continuous calendar days. The overhead rates for Field Office Staff are included in **Attachment "E"**.
- ii. "Home Office Staff" are defined as staff assigned by CONSULTANT, supporting the project-assigned work, either by working at CONSULTANT's or Subconsultant's offices or at OC SAN's site for periods less than ninety (90) continuous calendar days. The overhead rates for Home Office Staff are included in **Attachment "E"**.

D. Profit

Profit for CONSULTANT and Subconsultants shall be five percent (5%). Addenda shall be governed by the same maximum Profit percentage. As a portion of the total compensation to be paid to CONSULTANT and Subconsultants, OC SAN shall pay profit for all services rendered by CONSULTANT and Subconsultants for this Agreement.

E. Subconsultants

For all Subconsultants, CONSULTANT may pay to Subconsultants total compensation on an hourly-rate basis per Attachment "E" - Fee Proposal and as specified in the Scope of Work. OC SAN shall pay to CONSULTANT the actual costs of Subconsultants, without markup.

F. Reimbursable Direct Costs

OC SAN will reimburse the CONSULTANT for reasonable travel and business expenses as described in this section and further described in Attachment "D" - Allowable Direct Costs to this Agreement (attached hereto and incorporated

herein by reference). The reimbursement of the above-mentioned expenses will be based on an "accountable plan" as considered by Internal Revenue Service (IRS). The plan includes a combination of reimbursements based upon receipts and a "per diem" component approved by IRS. The most recent schedule of the per diem rates utilized by OC SAN can be found on the U.S. General Service Administration website at <https://www.gsa.gov/travel/plan-book/per-diem-rates>.

Reimbursement. The CONSULTANT shall be responsible for the most economical and practical means or management of reimbursable costs inclusive but not limited to travel, lodging and meals arrangements. OC SAN shall apply the most economic and practical method of reimbursement which may include reimbursements based upon receipts and/or "per diem" as deemed the most practical.

Returns. CONSULTANT shall be responsible for returning to OC SAN any excess reimbursements after the reimbursement has been paid by OC SAN.

Travel and travel arrangements. Any travel involving airfare, overnight stays or multiple day attendance must be approved by OC SAN in advance.

Local Travel. Local Travel is considered travel by the CONSULTANT within OC SAN geographical area which includes Orange, Los Angeles, Ventura, San Bernardino, Riverside, San Diego, Imperial, and Kern Counties. Automobile mileage is reimbursable if CONSULTANT is required to utilize personal vehicle for local travel.

Lodging. Overnight stays will not be approved by OC SAN for local travel. However, under certain circumstances overnight stay may be allowed at the discretion of OC SAN based on reasonableness of meeting schedules and the amount of time required for travel by the CONSULTANT. Such determination will be made on a case-by-case basis and at the discretion of OC SAN.

Travel Meals. Per-diem rates as approved by IRS shall be utilized for travel meals reimbursements. Per diem rates shall be applied to meals that are appropriate for travel times. Receipts are not required for the approved meals.

Additional details related to the reimbursement of the allowable direct costs are provided in the Attachment "D" - Allowable Direct Costs of this Agreement.

Actual Costs. OC SAN shall also pay to CONSULTANT actual costs for equipment rentals, leases or purchases with prior approval of OC SAN.

OC SAN will not pay per diem for Field Office Staff nor will it pay for any relocation of staff to be assigned under this Agreement.

G. Limitation of Costs

If, at any time, CONSULTANT estimates the cost of performing the services described in CONSULTANT's Task Authorizations will exceed seventy-five percent (75%) of the not-to-exceed amount of the Task Authorization,

CONSULTANT shall notify OC SAN immediately, and in writing. This written notice shall indicate the additional amount necessary to complete the services. Any cost incurred in excess of the approved not-to-exceed amount, without the express written consent of OC SAN's authorized representative shall be at CONSULTANT's own risk. This written notice shall be provided separately from, and in addition to any notification requirements contained in the CONSULTANT's invoice and monthly progress report. Failure to notify OC SAN that the services cannot be completed within the authorized not-to-exceed amount is a material breach of this Agreement.

3. REALLOCATION OF TOTAL COMPENSATION

OC SAN shall have the right to approve a reallocation of the incremental amounts constituting the Total Compensation, provided that the Total Compensation is not increased.

4. PAYMENT

- A. Monthly Invoice: CONSULTANT shall include in its monthly invoice, a detailed breakdown of costs associated with the performance of any corrections or revisions of the work for that invoicing period, in a format acceptable to OC SAN. CONSULTANT shall warrant and certify the accuracy of these costs and provide all support documentation required by OC SAN. CONSULTANT understands that submitted costs are subject to Section 16 Audit Provisions.
- B. Upon receipt of a properly prepared invoice, as described above, payment shall be made by OC SAN to CONSULTANT within sixty (60) calendar days.
- C. Upon satisfactory completion of the work performed hereunder and prior to final payment under this Agreement for such work, or prior settlement upon termination of this Agreement, and as a condition precedent thereto, CONSULTANT shall execute and deliver to OC SAN a release of all claims against OC SAN arising under or by virtue of this Agreement other than such claims, if any, as may be specifically exempted by CONSULTANT from the operation of the release in stated amounts to be set forth therein.
- D. Pursuant to the California False Claims Act (Government Code sections 12650-12655), any CONSULTANT that knowingly submits a false claim to OC SAN for compensation under the terms of this Agreement may be held liable for treble damages and up to a \$10,000 civil penalty for each false claim submitted. This section shall also be binding on all Subconsultants.

A CONSULTANT or Subconsultant shall be deemed to have submitted a false claim when the CONSULTANT or Subconsultant: (a) knowingly presents or causes to be presented to an officer or employee of OC SAN a false claim or request for payment or approval; (b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by OC SAN; (c) conspires to defraud OC SAN by getting a false claim allowed or paid by OC SAN; (d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to OC SAN;

or (e) is a beneficiary of an inadvertent submission of a false claim to OC SAN, and fails to disclose the false claim to OC SAN within a reasonable time after discovery of the false claim.

5. TERM

This Agreement shall commence upon the effective date first written above, and shall continue in full force and effect through «Date», (Initial Term) unless earlier terminated or extended as provided in the Agreement.

OC SAN, at its sole discretion, may elect to extend the term of this Agreement up to an additional twelve (12) months, commencing «Date», and continuing through «Date», (Option Term 1), and thereupon require CONSULTANT to continue to provide services, and otherwise perform, in accordance with **Attachment “A”, Attachment “A1”, and Attachment “A2”**.

OC SAN, at its sole discretion, may elect to extend the term of this Agreement up to an additional twelve (12) months, commencing «Date», and continuing through «Date», (Option Term 2), and thereupon require CONSULTANT to continue to provide services, and otherwise perform, in accordance with **Attachment “A”, Attachment “A1” and Attachment “A2”**.

OC SAN's election to extend the Agreement beyond the Initial Term shall not diminish its right to terminate the Agreement for OC SAN's convenience or CONSULTANT's default as provided elsewhere in this Agreement. The “maximum term” of this Agreement shall be from the effective date first written above through «Date», which period encompasses the Initial Term and two (2) Option Terms.

6. PREVAILING WAGES

- A. To the extent CONSULTANT intends to utilize employees who will perform work during the Agreement, as more specifically defined under Labor Code Section 1720, CONSULTANT shall be subject to prevailing wage requirements with respect to such employees.

7. CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION AND RECORD OF WAGES

- A. To the extent CONSULTANT's employees and/or Subconsultants who will perform work during the design and preconstruction phases of a construction contract for which Prevailing Wage Determinations have been issued by the DIR and as more specifically defined under Labor Code Section 1720 et seq, CONSULTANT and Subconsultants shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the work is subject to compliance monitoring and enforcement by the DIR.
- B. The CONSULTANT and Subconsultants shall maintain accurate payroll records and shall comply with all the provisions of Labor Code Section 1776, and shall submit payroll records to the Labor Commissioner pursuant to Labor Code

Section 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.

- C. Pursuant to Labor Code Section 1776, the CONSULTANT and Subconsultants shall furnish a copy of all certified payroll records to OC SAN and/or general public upon request, provided the public request is made through OC SAN, the Division of Apprenticeship Standards or the Division of Labor Enforcement of the Department of Industrial Relations.
- D. The CONSULTANT and Subconsultants shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulations Section 16461(e).

8. CONFLICT OF INTEREST CODE

OC SAN may designate some or all of the individuals performing services under the Agreement as “designated positions” subject to OC SAN’s Conflict of Interest Code. CONSULTANT employees or Subconsultants acting in these designated positions must comply with certain requirements under the Political Reform Act. CONSULTANT employees or Subconsultants acting in these designated positions must file an annual report identifying some or all of their financial interests such as sources of income, sources of gifts received from special sources of income and sources of gifts. Currently the limit is \$630 per year from any one source. CONSULTANT and all its employees, staff, or personnel assigned to an OC SAN designated position shall comply with the Political Reform Act and related reporting requirements and gift limitation.

In addition to compliance with the Political Reform Act and OC SAN’s Conflict of Interest Code, CONSULTANT shall ensure that neither it nor its employees, agents, Subconsultants, or personnel assigned to perform services under this Agreement engage in any activity, relationship, or conduct that creates an actual conflict of interest, a potential conflict of interest, or the appearance of a conflict of interest with respect to the performance of services under this Agreement. Such conflicts may include, but are not limited to, significant personal, familial, domestic, romantic, supervisory, or financial relationships involving OC SAN personnel, decision-makers, or other individuals connected to the administration or oversight of this Agreement.

CONSULTANT shall promptly disclose in writing to OC SAN any actual, potential, or perceived conflict of interest of which CONSULTANT becomes aware. OC SAN reserves the right to determine whether a conflict exists and to require appropriate mitigation measures, including reassignment or removal of personnel from work performed under this Agreement.

9. INDEPENDENT CONTRACTOR

The CONSULTANT and Subconsultants shall be independent contractors and not agents or employees of OC SAN. Any provisions of this Agreement that may appear to give OC SAN the right to direct the CONSULTANT concerning the details of performing the professional services, or to exercise any control over such performance, shall mean only that the CONSULTANT shall follow the direction of OC SAN concerning the end results of the performance.

10. DOCUMENT OWNERSHIP – CONSULTANT PERFORMANCE

A. Ownership of Documents for the professional services performed.

All documents in all forms (electronic, paper, etc.), including, but not limited to, studies, sketches, drawings, computer printouts, disk files, and electronic copies prepared in connection with or related to the Scope of Work or professional services, shall be the property of OC SAN. OC SAN's ownership of these documents includes use of, reproduction or reuse of and all incidental rights, whether or not the work for which they were prepared has been performed. OC SAN ownership entitlement arises upon payment or any partial payment for work performed and includes ownership of any and all work product completed prior to that payment. This Section shall apply whether the CONSULTANT's professional services are terminated: a) by the completion of the Agreement, or b) in accordance with other provisions of this Agreement. Notwithstanding any other provision of this paragraph or Agreement, the CONSULTANT shall have the right to make copies of all such plans, studies, sketches, drawings, computer printouts and disk files, and specifications. OC SAN acknowledges that documents prepared through professional services must be revised and sealed by a professional engineer prior to their reuse on another project. OC SAN acknowledges that it assumes all risk associated with reuse of such documents, which are not undertaken by CONSULTANT.

B. CONSULTANT shall not be responsible for damage caused by subsequent changes to or uses of the study or deliverable where the subsequent changes or uses are not authorized or approved by CONSULTANT, provided that the service rendered by CONSULTANT was not a proximate cause of the damage.

11. INSURANCE

A. General

- i. Insurance shall be issued and underwritten by insurance companies acceptable to OC SAN.
- ii. Insurers must have an "A-" Policyholder's Rating, or better, and Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best's Guide Rating. However, OC SAN will accept State Compensation Insurance Fund, for the required policy of Workers' Compensation Insurance subject to OC SAN's option to require a change in insurer in the event the State Fund financial rating is decreased below "B". Further, OC SAN will require CONSULTANT to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within twenty (20) days of written notice to CONSULTANT, by OC SAN or its agent.
- iii. Coverage shall be in effect prior to the commencement of any work under this Agreement.

B. General Liability

The CONSULTANT shall maintain during the life of this Agreement, including the period of warranty, commercial general liability insurance written on an occurrence basis providing the following minimum limits of liability coverage: Two Million Dollars (2,000,000) per occurrence with Four Million Dollars (\$4,000,000) aggregate. If aggregate limits apply separately to this Agreement (as evidenced by submission of ISO form CG 25 03 or 25 04), then the aggregate limit may be equivalent to the per occurrence limit. Said insurance shall include coverage for the following hazards: premises-operations, blanket contractual liability (for this Agreement), products liability/completed operations (including any product manufactured or assembled), broad form property damage, blanket contractual liability, independent contractors liability, personal and advertising injury, mobile equipment, owners and contractors protective liability, and cross liability and severability of interest clauses. A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement(s). If requested by OC SAN and applicable, XCU coverage (Explosion, Collapse and Underground) and Riggers/On Hook Liability must be included in the general liability policy and coverage must be reflected on the submitted certificate of insurance. Where permitted by law, CONSULTANT hereby waives all rights of recovery by subrogation because of deductible clauses, inadequacy of limits of any insurance policy, limitations or exclusions of coverage, or any other reason against OC SAN, its or their officers, agents, or employees, and any other consultant, contractor, or subcontractor performing work or rendering services on behalf of OC SAN in connection with the planning, development, and construction of the project. In all its insurance coverages related to the work, CONSULTANT shall include clauses providing that each insurer shall waive all of its rights of recovery by subrogation against OC SAN, its or their officers, agents, or employees, or any other consultant, contractor, or subcontractor performing work or rendering services at the project. Where permitted by law, CONSULTANT shall require similar written express waivers and insurance clauses from each of its Subconsultants of every tier. A waiver of subrogation shall be effective as to any individual or entity, even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium, directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.

C. Automobile/Vehicle Liability Insurance

The CONSULTANT shall maintain a policy of automobile liability insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limit of liability coverage: combined single limit of One Million Dollars (\$1,000,000). A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement.

D. Umbrella Excess Liability

The minimum limits of general liability and automobile liability insurance required,

as set forth herein, shall be provided for through either a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Umbrella excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automobile liability.

E. Workers' Compensation Insurance

The CONSULTANT shall provide such workers' compensation insurance as required by the Labor Code of the State of California in the amount of the statutory limit, including employer's liability insurance with a minimum limit of One Million Dollars (\$1,000,000) per occurrence. Such workers' compensation insurance shall be endorsed to provide for a waiver of subrogation in favor of OC SAN. A statement on an insurance certificate will not be accepted in lieu of the actual endorsements unless the insurance carrier is State of California Insurance Fund and the identifier "SCIF" and endorsement numbers 2570 and 2065 are referenced on the certificate of insurance. If an exposure to Jones Act liability may exist, the insurance required herein shall include coverage for Jones Act claims.

F. Errors and Omissions/Professional Liability

CONSULTANT shall maintain in full force and effect, throughout the term of this Agreement, standard industry form professional liability / errors and omissions insurance coverage with coverage limits of not less than Two Million Dollars (\$2,000,000) in accordance with the provisions of this paragraph. If the policy of insurance is written on a "claims made" basis, said policy shall be continued in full force and effect at all times during the term of this Agreement, and for a period of five (5) years from the date of the completion of the services hereunder.

In the event of termination of said policy during this period, CONSULTANT shall obtain continuing insurance coverage for the prior acts or omissions of CONSULTANT during the course of performing services under the terms of this Agreement. Said coverage shall be evidenced by either a new policy evidencing no gap in coverage or by separate extended "tail" coverage with the present or new carrier.

In the event the present policy of insurance is written on an "occurrence" basis, said policy shall be continued in full force and effect during the term of this Agreement or until completion of the services provided for in this Agreement, whichever is later. In the event of termination of said policy during this period, new coverage shall be obtained for the required period to insure for the prior acts or omissions of CONSULTANT during the course of performing services under the terms of this Agreement.

CONSULTANT shall provide to OC SAN a certificate of insurance in a form acceptable to OC SAN indicating the deductible or self-retention amounts and the expiration date of said policy and shall provide renewal certificates not less than ten (10) days prior to the expiration of each policy term.

G. Drone Liability Insurance

If a drone will be used, drone liability insurance must be maintained by CONSULTANT in the amount of One Million Dollars (\$1,000,000) in a form acceptable by OC SAN.

H. Proof of Coverage

The CONSULTANT shall furnish OC SAN with original certificates and amendatory endorsements effecting coverage. Said policies and endorsements shall conform to the requirements herein stated. All certificates and endorsements are to be received and approved by OC SAN before work commences. OC SAN reserves the right to require, at any time, complete, certified copies of all required insurance policies, including endorsements, effecting the coverage required. The following are approved forms that must be submitted as proof of coverage:

- Certificate of Insurance ACORD Form 25 or other equivalent certificate of insurance form
- Additional Insured (General Liability) The combination of (ISO Forms) CG 20 10 and CG 20 37

All other additional insured endorsements must be submitted for approval by OC SAN, and OC SAN may reject alternatives that provide different or less coverage to OC SAN.
- Additional Insured (Automobile Liability) Submit endorsement provided by carrier for OC SAN approval.
- Waiver of Subrogation Submit workers' compensation waiver of subrogation endorsement provided by carrier for OC SAN approval.
- Cancellation Notice No endorsement is required. However, CONSULTANT is responsible for notifying OC SAN of any pending or actual insurance policy cancellation, as described in Article I. Cancellation and Policy Change Notice, below.

I. Cancellation and Policy Change Notice

The CONSULTANT is required to notify OC SAN in writing of any insurance cancellation notice it receives or other knowledge of pending or actual insurance policy cancellation within two (2) working days of receipt of such notice or acquisition of such knowledge. Additionally, the CONSULTANT is required to notify OC SAN in writing of any change in the terms of insurance, including

reduction in coverage or increase in deductible/SIR, within two (2) working days of receipt of such notice or knowledge of same.

Said notices shall be mailed to OC SAN at:

ORANGE COUNTY SANITATION DISTRICT
18480 Bandilier Circle
Fountain Valley, CA 92708
Attention: Contracts, Purchasing & Materials Management Division

J. Primary Insurance

The general and automobile liability policies shall contain a "Primary and Non Contributory" clause. Any other insurance maintained by OC SAN shall be excess and not contributing with the insurance provided by CONSULTANT.

K. Separation of Insured

The general and automobile liability policies shall contain a "Separation of Insureds" clause.

L. Non-Limiting (if applicable)

Nothing in this document shall be construed as limiting in any way, nor shall it limit the indemnification provision contained in this Agreement, or the extent to which CONSULTANT may be held responsible for payment of damages to persons or property.

M. Deductibles and Self-Insured Retentions

Any deductible and/or self-insured retention must be declared to OC SAN on the certificate of insurance. All deductibles and/or self-insured retentions require approval by OC SAN. At the option of OC SAN, either: the insurer shall reduce or eliminate such deductible or self-insured retention as respects OC SAN; or the CONSULTANT shall provide a financial guarantee satisfactory to OC SAN guaranteeing payment of losses and related investigations, claim administration and defense expenses.

N. Defense Costs

The general and automobile liability policies shall have a provision that defense costs for all insureds and additional insureds are paid in addition to and do not deplete any policy limits.

O. Subconsultants

The CONSULTANT shall be responsible to establish insurance requirements for any Subconsultant hired by the CONSULTANT. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subconsultant's operations and work.

- P. Limits Are Minimums
If the CONSULTANT maintains higher limits than any minimums shown above, then OC SAN requires and shall be entitled to coverage for the higher limits maintained by CONSULTANT.

12. KEY POSITIONS

CONSULTANT shall notify OC SAN in advance changes to any key CONSULTANT employees or Subconsultants performing services under this Agreement. Positions considered to be Key Positions are Point of Contact, and any field office staff working under the Agreement. Should a CONSULTANT employee or Subconsultant within one of these categories become no longer available to OC SAN, CONSULTANT shall submit the resume and qualifications of the proposed replacement to OC SAN for approval as soon as possible, but in no event later than seven (7) calendar days prior to the departure of the incumbent Key Position unless CONSULTANT is not provided with such notice by the departing staff.

13. SCOPE CHANGES

In the event of a change in the Scope of Work or a change in Key Personnel or change in hourly rates as requested by OC SAN, the Parties hereto shall execute an Amendment to this Agreement setting forth with particularity all terms of the new Agreement. CONSULTANT's compensation for additional services authorized and performed in accordance with this Agreement shall be agreed to by the Parties in writing prior to the time that the additional services are authorized. CONSULTANT hereby agrees to use any and all procedures, programs, and systems required by OC SAN to process and execute such Amendment(s), including, but not limited to, computer programs and systems.

14. PROJECT TEAM AND SUBCONSULTANTS

Neither this Agreement nor any interest herein nor claim hereunder may be assigned by CONSULTANT either voluntarily or by operation of law, nor may all or any part of the Agreement be subcontracted by CONSULTANT, without the prior written consent of OC SAN. Consent by OC SAN shall not be deemed to relieve CONSULTANT of its obligation to comply fully with all terms and conditions of this Agreement.

CONSULTANT shall provide to OC SAN, prior to execution of this Agreement, the names and full description of all Subconsultants and CONSULTANT's project team members anticipated to be used under this Agreement by CONSULTANT. CONSULTANT shall include a description of the work and services to be done by each Subconsultant and each of CONSULTANT's team member. CONSULTANT shall include the respective compensation amounts for CONSULTANT and each Subconsultant, broken down as indicated in Section 2- COMPENSATION.

There shall be no substitution of the listed Subconsultants and CONSULTANT's team members without prior written approval by OC SAN.

15. ENGINEERING REGISTRATION

The CONSULTANT's personnel and Subconsultants are comprised of registered engineers and a staff of specialists and draftsmen in each department. The firm itself is not a registered engineer but represents and agrees that wherever, in the performance of this Agreement, the services of a registered engineer is required, such services hereunder will be performed under the direct supervision of registered engineers who are registered in California.

16. AUDIT PROVISIONS

- A. OC SAN retains the reasonable right to access, review, examine, and audit, any and all books, records, documents, and any other evidence of procedures and practices that OC SAN determines are necessary to discover and verify that the CONSULTANT is in compliance with all requirements under this Agreement. The CONSULTANT shall include OC SAN's right as described above, in any and all of their subcontracts, and shall ensure that these rights are binding upon all Subconsultants.
- B. OC SAN retains the right to examine CONSULTANT's books, records, documents and any other evidence of procedures and practices that OC SAN determines are necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred or to ensure CONSULTANT's compliance with all requirements under this Agreement during the term of this Agreement and for a period of three (3) years after its termination.
- C. CONSULTANT shall maintain complete and accurate records in accordance with generally accepted industry standard practices and OC SAN's policy. The CONSULTANT shall make available to OC SAN for review and audit, all project related accounting records and documents, and any other financial data within fifteen (15) days after receipt of notice from OC SAN. Upon OC SAN's request, the CONSULTANT shall submit exact duplicates of originals of all requested records to OC SAN. If an audit is performed, CONSULTANT shall ensure that a qualified employee of the CONSULTANT will be available to assist OC SAN's auditor in obtaining all Project related accounting records and documents, and any other financial data related to this agreement.

17. LEGAL RELATIONSHIP BETWEEN PARTIES

The legal relationship between the parties hereto is that of an independent contractor and nothing herein shall be deemed to transform CONSULTANT, its staff, independent contractors, or Subconsultants into employees of OC SAN. CONSULTANT'S staff performing services under the Agreement shall at all times be employees and/or independent contractors of CONSULTANT. CONSULTANT shall monitor and control its staff and pay wages, salaries, and other amounts due directly to its staff in connection with the Agreement. CONSULTANT shall be responsible for hiring, review, and termination of its staff and shall be accountable for all reports and obligations respecting them, such as social security, income tax withholding, unemployment compensation, workers' compensation and similar matters.

18. NOTICES

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, return receipt requested, postage prepaid.

Notices shall be mailed to OC SAN at:

ORANGE COUNTY SANITATION DISTRICT
18480 Bandilier Circle
Fountain Valley, CA 92708
Attention: Jenny H. Holliday, Senior Contracts Administrator
Copy: XXXXX, Engineering Manager

Notices shall be mailed to CONSULTANT at:

«CONSULTANT COMPANY»
«Street Address»
«City, State Zip»
Attention: «CONSULTANT's Representative»

All communication regarding the Scope of Work, will be addressed to the Engineering Manager. Direction from other OC SAN staff must be approved in writing by OC SAN's Engineering Manager prior to action from the CONSULTANT.

19. TERMINATION

OC SAN may terminate this Agreement at any time, without cause, upon giving thirty (30) days written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be entitled to compensation for work performed on a prorated basis through and including the effective date of termination.

CONSULTANT shall be permitted to terminate this Agreement upon thirty (30) days written notice only if CONSULTANT is not compensated for billed amounts in accordance with the provisions of this Agreement, when the same are due.

Notice of termination shall be mailed to OC SAN at the address listed in Section 18 - NOTICES.

20. DOCUMENTS AND STUDY MATERIALS

The documents and study materials for this Project shall become the property of OC SAN upon the termination or completion of the work. CONSULTANT agrees to furnish to OC SAN copies of all memoranda, correspondence, electronic materials, computation and study materials in its files pertaining to the work described in this Agreement, which is requested in writing by OC SAN.

21. COMPLIANCE

A. Labor

CONSULTANT certifies by the execution of this Agreement that it pays employees not less than the minimum wage as defined by law, and that it does not discriminate in its employment with regard to race, color, religion, sex or national origin; that it is in compliance with all federal, state and local directives and executive orders regarding non-discrimination in employment; and that it agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

B. Air Pollution

CONSULTANT and its subconsultants and subcontractors shall comply with all applicable federal, state and local air pollution control laws and regulations.

C. Iran Contracting Act

CONSULTANT and its subconsultants and subcontractors shall comply with the Iran Contracting Act of 2010 (Public Contract Code sections 2200-2208).

D. California Air Resources Board Mobile Source Regulations

CONSULTANT and its subconsultants and subcontractors shall comply with the following California Air Resources Board Mobile Source Regulations:

- Advanced Clean Fleet (ACF): 13 CCR 2013-2013.4; 13 CCR 2015-2015.6
- Truck & Bus Regulation (T&B): 13 CCR 2025
- Clean Truck Check (CTC): 13 CCR 2195-2199.1
- Off-Road Diesel Amendments (ORD): 13 CCR 2449-2449.2

E. California Voluntary Protection Program Annual Reporting Requirement

If CONSULTANT will potentially work 1,000 combined hours in a quarter, for the term of the Agreement, CONSULTANT shall provide an annual report detailing its safety and health information, including, but not limited to, its total number of employees, work hours, number of injuries and illnesses, and number of injury and illness cases involving days away from work, restricted work activity and/or job transfer. CONSULTANT shall furnish this report to OC SAN no later than January 20th each calendar year.

Failure to provide this data by the required due date may result in suspension of CONSULTANT's services with OC SAN. Any delay arising out of or resulting from such suspension shall be CONSULTANT's sole responsibility and considered CONSULTANT caused delay, which shall not be compensable by OC SAN.

22. AGREEMENT EXECUTION AUTHORIZATION

Both Parties do covenant that each individual executing this document by and on behalf of each Party is a person duly authorized to execute this Agreement for that Party.

23. DISPUTE RESOLUTION

In the event of a dispute arising between the Parties regarding performance or interpretation of this Agreement, the dispute shall be resolved by binding arbitration under the auspices of the Judicial Arbitration and Mediation Service ("JAMS"), or similar organization or entity conducting alternate dispute resolution services.

24. ATTORNEY'S FEES, COSTS AND NECESSARY DISBURSEMENTS

If any action at law or in equity or if any proceeding in the form of an Alternative Dispute Resolution (ADR) is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which he may be entitled.

25. INDEMNIFICATION

To the fullest extent permitted by law, CONSULTANT shall indemnify, defend (at CONSULTANT's sole cost and expense and with legal counsel approved by OC SAN, which approval shall not be unreasonably withheld), protect and hold harmless OC SAN and all of OC SAN's officers, directors, employees, consultants, and agents (collectively the "Indemnified Parties"), from and against any and all claims, damages, liabilities, causes of action, suits, arbitration awards, losses, judgments, fines, penalties, costs and expenses (including, without limitation, attorneys' fees, disbursements and court costs, and all other professional, expert or CONSULTANT's fees and costs and OC SAN's general and administrative expenses; individually, a "Claim"; collectively, "Claims") which may arise from or are in any manner related, directly or indirectly, to any work performed, or any operations, activities, or services provided by CONSULTANT in carrying out its obligations under this Agreement to the extent of the negligent, recklessness and/or willful misconduct of CONSULTANT, its principals, officers, agents, employees, CONSULTANT's suppliers, consultants, Subconsultants, subcontractors, and/or anyone employed directly or indirectly by any of them, regardless of any contributing negligence or strict liability of an Indemnified Party. Notwithstanding the foregoing, nothing herein shall be construed to require CONSULTANT to indemnify the Indemnified Parties from any Claim arising solely from:

(A) the active negligence or willful misconduct of the Indemnified Parties; or

(B) a natural disaster or other act of God, such as an earthquake; or

(C) the independent action of a third party who is neither one of the Indemnified Parties nor the CONSULTANT, nor its principal, officer, agent, employee, nor CONSULTANT's supplier, CONSULTANT, Subconsultant, subcontractor, nor anyone employed directly or indirectly by any of them.

CONSULTANT shall, to the fullest extent permitted by law, indemnify the Indemnified

Parties, from Claims arising from more than one cause if any such cause taken alone would otherwise result in the obligation to indemnify hereunder.

CONSULTANT's liability for indemnification hereunder is in addition to any liability CONSULTANT may have to OC SAN for a breach by CONSULTANT of any of the provisions of this Agreement. Under no circumstances shall the insurance requirements and limits set forth in this Agreement be construed to limit CONSULTANT's indemnification obligation or other liability hereunder. The terms of this Agreement are contractual and the result of negotiation between the parties hereto. Accordingly, any rule of construction of contracts (including, without limitation, California Civil Code Section 1654) that ambiguities are to be construed against the drafting party, shall not be employed in the interpretation of this Agreement.

CONSULTANT is indemnified in OC SAN's standard construction contracts. This indemnification is in the General Conditions which are attached to OC SAN's standard construction contracts when these contracts are issued.

26. DUTY TO DEFEND

The duty to defend hereunder is wholly independent of and separate from the duty to indemnify and such duty to defend shall exist regardless of any ultimate liability of CONSULTANT and shall be consistent with Civil Code section 2782.8. Such defense obligation shall arise immediately upon presentation of a Claim by any person if, without regard to the merit of the Claim, such Claim could potentially result in an obligation to indemnify one or more Indemnified Parties, and upon written notice of such Claim being provided to CONSULTANT. Payment to CONSULTANT by any Indemnified Party or the payment or advance of defense costs by any Indemnified Party shall not be a condition precedent to enforcing such Indemnified Party's rights to indemnification hereunder. In the event a final judgment, arbitration, award, order, settlement, or other final resolution expressly determines that the claim did not arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONSULTANT, to any extent, then OC SAN will reimburse CONSULTANT for the reasonable costs of defending the Indemnified Parties against such claims.

CONSULTANT's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until such time as action against the Indemnified Parties for such matter indemnified hereunder is fully and finally barred by the applicable statute of limitations.

27. COMPLIANCE WITH OC SAN POLICIES AND PROCEDURES

CONSULTANT shall comply with all OC SAN policies and procedures, including, but not limited to, the Contractor Safety Standards, as applicable, and Human Resources Policies, all as may be amended from time to time.

28. CLOSEOUT

When OC SAN determines that all work authorized under the Agreement is fully complete and that OC SAN requires no further work from CONSULTANT, or the Agreement is otherwise terminated or expires in accordance with the terms of the

Agreement, OC SAN shall give the CONSULTANT written notice that the Agreement will be closed out. CONSULTANT shall submit all outstanding billings, work submittals, deliverables, reports or similarly related documents as required under the Agreement within thirty (30) days of receipt of notice of Agreement closeout.

Upon receipt of CONSULTANT's submittals, OC SAN shall commence a closeout audit of the Agreement and will either:

- i. Give the CONSULTANT a final Agreement Acceptance: or
- ii. Advise the CONSULTANT in writing of any outstanding item or items which must be furnished, completed, or corrected at the CONSULTANT's cost.

CONSULTANT shall be required to provide adequate resources to fully support any administrative closeout efforts identified in the Agreement. Such support must be provided within the timeframe requested by OC SAN.

Notwithstanding the final Agreement acceptance, the CONSULTANT will not be relieved of its obligations hereunder, nor will the CONSULTANT be relieved of its obligations to complete any portions of the work, the non-completion of which were not disclosed to OC SAN (regardless of whether such nondisclosures were fraudulent, negligent, or otherwise), and the CONSULTANT shall remain obligated under all those provisions of the Agreement which expressly or by their nature extend beyond and survive final Agreement Acceptance.

Any failure by OC SAN to reject the work or to reject the CONSULTANT's request for final Agreement Acceptance as set forth above shall not be deemed to be acceptance of the work by OC SAN for any purpose nor imply acceptance of, or Agreement with, the CONSULTANT's request for final Agreement Acceptance.

29. PROHIBITION

During the term of this Agreement, CONSULTANT and its Subconsultants may not propose on any engineering or construction-related projects advertised by or on behalf of OC SAN if such work presents actual or perceived conflict of interest with CONSULTANT's assignments with OC SAN.

CONSULTANT and its Subconsultants shall promptly disclose to OC SAN when such conflict exists prior to participating in any work as advertised by OC SAN or on its behalf.

CONSULTANT and its Subconsultants acknowledge and agree that OC SAN's determination regarding such conflicts that may impact CONSULTANT's and its Subconsultants' ability to propose on the work as described herein shall be final and cannot be appealed.

30. ENTIRE AGREEMENT

This Agreement constitutes the entire understanding and agreement between the Parties and supersedes all previous negotiations between them pertaining to the subject matter thereof.

IN WITNESS WHEREOF, this Agreement has been executed in the name of OC SAN and CONSULTANT by their respective duly authorized officers as of the day and year first written above.

CONSULTANT: COMPANY NAME

By _____ Date _____

Printed Name & Title

ORANGE COUNTY SANITATION DISTRICT

By _____ Date _____
Christine Marick
Board Chairman

By _____ Date _____
Kelly A. Lore
Clerk of the Board

By _____ Date _____
Kevin Work
Purchasing & Contracts Manager

Attachments: Attachment "A" – Scope of Work
Attachment "A1" – Rules of Engagement
Attachment "A2" – Roles and Responsibilities
Attachment "B" – Not Used
Attachment "C" – Not Attached
Attachment "D" – Allowable Direct Costs
Attachment "E" – Fee Proposal
Attachment "F" – Not Used
Attachment "G" – Not Attached
Attachment "H" – Not Used
Attachment "I" – Not Used
Attachment "J" – Not Attached

Attachment "K" – Not Used
Attachment "L" – Contractor Safety Standards
Attachment "M" – Not Attached
Attachment "N" – Not Attached
Attachment "O" – Not Attached
Attachment "P" – Human Resources Policies

JH:ms

SAMPLE

ATTACHMENT “G”
ACKNOWLEDGEMENT OF PSA

ATTACHMENT "G"
ACKNOWLEDGEMENT OF PSA

(Submit with Proposal)

Submitted By: _____
(Name of Firm)

ACKNOWLEDGEMENT OF CONSULTANT'S ACCEPTANCE OF THE TERMS AND
CONDITIONS DESCRIBED IN THE PROFESSIONAL SERVICES AGREEMENT (PSA)
AND CERTIFICATION OF ABILITY TO MEET OBLIGATIONS
AND PROMPTLY EXECUTE THE AGREEMENT

I, _____, the _____
(President, Secretary, Manager, Owner or Representative)

of _____, certify that the requirements set forth in the PSA

have been read and understood and that CONSULTANT is able to meet the specified requirements.

- ☐ Exceptions and deviations to the Agreement and/or Scope of Work are attached.
- ☐ Affirms that there are no exceptions or deviations to the Agreement and/or Scope of Work.

CONSULTANT agrees to promptly execute the PSA and provide the required insurance upon award.

Signature of President, Secretary, Manager,
Owner or Representative

Date

ATTACHMENT "G"
ACKNOWLEDGEMENT OF PSA

EXCEPTIONS AND DEVIATIONS

(Submit with Proposal if the box Exceptions and deviations is checked)

Submitted By: _____

(Name of Firm)

[illegible]

ATTACHMENT “J”

ACKNOWLEDGEMENT OF ADDENDA RECEIPT

ATTACHMENT “J”
ACKNOWLEDGEMENT OF ADDENDA RECEIPT

(Submit with Proposal)

Submitted By: _____
(Name of Firm)

OC SAN may deem non-responsive any Proposal which fails to acknowledge any addenda issued by OC SAN prior to Proposal submittal.

Addenda number(s) received: _____
(list by number each addendum)

I, _____, the _____
(President, Secretary, Manager, Owner or Representative)

of _____, hereby acknowledges receipt of all addenda (if any).

Signature of President, Secretary, Manager,
Owner or Representative

Date

ATTACHMENT “L”

CONTRACTOR SAFETY STANDARDS

CONTRACTOR SAFETY STANDARDS

November 5, 2024 (Revision 11)



Table of Contents

1. INTRODUCTION.....	1
1.1. SAFETY PHILOSOPHY	1
1.2. PROGRAM OBJECTIVES.....	1
1.3. HARASSMENT AND DISCRIMINATION	3
1.4. RETALIATION AND WHISTLEBLOWING.....	3
1.5. EMPLOYEE CONDUCT	3
1.6. WORKPLACE VIOLENCE AND WEAPONS.....	4
1.7. NEWS MEDIA.....	4
1.8. CONFLICT BETWEEN REGULATIONS	4
2. EMERGENCY RESPONSE PROCEDURES	5
2.1. REPORTING AND NOTIFICATION	5
2.2. MEDICAL EMERGENCY	6
2.3. FIRES	6
2.4. EARTHQUAKES.....	6
2.5. TSUNAMI.....	6
2.6. PANDEMICS	7
3. ROLES AND RESPONSIBILITIES	7
3.1. GENERAL.....	7
3.2. CONTRACTOR SAFETY MANAGER (CSM).....	9
3.3. CONTRACTOR SAFETY REPRESENTATIVE(S)	10
4. PROGRAM ELEMENTS	11
4.1. INJURY AND ILLNESS PREVENTION PROGRAM	11
4.2. SITE-SPECIFIC SAFETY PROGRAM	12
4.3. PRE-SHIFT CREW MEETINGS.....	14

4.4.	PROJECT PLANNING AND PROJECT MEETINGS.....	15
4.5.	INCIDENT REVIEW MEETINGS.....	16
4.6.	CONTRACTOR SAFETY ORIENTATION.....	17
4.7.	JOB HAZARD ANALYSIS	17
4.8.	CONTRACTOR / SUBCONTRACTOR SAFETY NON-COMPLIANCE.....	19
4.9.	SUBSTANCE ABUSE PREVENTION POLICY	20
5.	GENERAL SAFETY REQUIREMENTS	22
5.1.	ATMOSPHERIC MONITORING EQUIPMENT	22
5.2.	ASBESTOS	23
5.3.	HAZARDOUS (CLASSIFIED) LOCATIONS	23
5.4.	BARRICADES	24
5.5.	FENCING.....	24
5.6.	HOT WORK	24
5.7.	CELL PHONES.....	26
5.8.	COMPRESSED GAS CYLINDERS.....	26
5.9.	CONCRETE AND MASONRY CONSTRUCTION.....	27
5.10.	POURING AND PUMPING OPERATIONS.....	27
5.11.	MASONRY CONSTRUCTION.....	27
5.12.	CUTTING, GRINDING AND PROFILING.....	28
5.13.	CONFINED SPACE ENTRY	28
5.14.	UTILITY CONNECTIONS	32
5.15.	CONSTRUCTION AND PERSONAL VEHICLES	32
5.16.	ASSIGNED WORK AREA.....	32
5.17.	CRANES, BOOM TRUCKS AND HOISTS	32
5.18.	OC SAN OWNED OVERHEAD CRANES	35
5.19.	RIGGING, SLINGS AND HOOKS	35
5.20.	CRITICAL LIFTS	36

5.21. DEMOLITION	36
5.22. ELECTRICAL.....	38
5.23. ELEVATING WORK PLATFORM AND AERIAL DEVICES	42
5.24. EMERGENCY ACTION AND EVACUATION PLAN.....	44
5.25. ENVIRONMENTAL CONTROLS	45
5.26. EQUIPMENT AND TOOLS	45
5.27. MACHINE GUARDING	46
5.28. EXCAVATION AND TRENCHING	46
5.29. UTILITY LOCATION	47
5.30. FALL PROTECTION.....	48
5.31. FIRE PROTECTION AND PREVENTION.....	59
5.32. FIRST AID.....	62
5.33. FLAMMABLE AND COMBUSTIBLE MATERIALS	62
5.34. FORKLIFT (INDUSTRIAL TRUCKS AND TRACTORS).....	63
5.35. HAZARD COMMUNICATION.....	64
5.36. HEAVY EQUIPMENT AND MATERIAL HANDLING	65
5.37. HORIZONTAL BORING / PIPE JACKING.....	67
5.38. HOUSEKEEPING	67
5.39. PORTABLE HEATERS.....	68
5.40. LADDERS.....	68
5.41. LEAD-BASED PAINT	70
5.42. CORROSIVE MATERIALS	71
5.43. CONTROL OF HAZARDOUS ENERGY	71
5.44. MOTOR VEHICLES.....	75
5.45. OVERHEAD UTILITIES	76
5.46. PERMITS.....	77
5.47. PERSONAL PROTECTIVE EQUIPMENT	77

5.48. POSTING REQUIREMENTS	79
5.49. POWDER-ACTUATED TOOLS	80
5.50. PUBLIC PROTECTION PLAN.....	80
5.51. SANITATION	81
5.52. SCAFFOLDS	81
5.53. ERECTION	83
5.54. TAR AND MELTING POTS.....	84
5.55. WARNING SIGNS	84
5.56. WORK ZONE TRAFFIC CONTROL.....	84
5.57. FLAGGING OPERATIONS.....	85
5.58. PLATE BRIDGING.....	86
5.59. WORKING AROUND WATER	86
5.60. USE OF X-RAY	86
6. DEFINITIONS	87
7. ACRONYMS	89

1. INTRODUCTION

1.1. SAFETY PHILOSOPHY

- A. The Orange County Sanitation District (OC SAN) is dedicated to the principle that a safe project is a successful and profitable project for OC SAN, contractors, and members of the public.
- B. OC SAN is committed to the safety of the Project employees, the surrounding community, and the environment.
- C. Safety is viewed as an integral component of the construction process, the other key components being production and quality. However, safety is a primary component of the success of this Project.
- D. The CONTRACTOR shall be responsible for initiating, maintaining, supervising, and enforcing all safety precautions and programs relating to the performance of the Contract. Their employees share in that responsibility as well. All employees are expected to work safely and to contribute to the safety of others.
- E. Incident prevention contributes to the CONTRACTOR's well-being by avoiding injury or illness to the CONTRACTOR, its Subcontractors, OC SAN, and all their employees, improving productivity, contributing to quality, and reducing costs. The community also benefits directly from incident prevention efforts when the environment or members of the community are protected from potential harm.
- F. Injury-causing errors people make can be significantly reduced efficiently and cost effectively by eliminating sources of hazards and unsafe acts and by incorporating safety controls such as, proper training, safe operating procedures, and personal protective equipment.
- G. For the CONTRACTOR to understand this safety philosophy and to meet its expectations, both general and specific training is required. Safety training and the prevention of incidents are logical and appropriate parts of how OC SAN expects the operations of the CONTRACTOR and Subcontractors to be conducted.

1.2. PROGRAM OBJECTIVES

- A. The Contractor Safety Standards have been designed to establish the minimum standards in which the CONTRACTOR's Site-Specific Safety Program (SSSP) must meet or exceed. The CONTRACTOR shall develop and operate an effective safety and health management system.
- B. The Contractor Safety Standards contained in this document were developed to establish the minimum standards for assisting the CONTRACTOR in the elimination or reduction of hazards and risk associated with the Project.
- C. The Contractor Safety Standards also assist the CONTRACTOR's efforts to prevent incidents, ensure the safety of the public, reduce employee injuries, prevent damage to property, promote efficiency, and effect savings by reduction of unplanned business interruption.
- D. No attempt has been made to restate applicable local, State, or Federal regulations or the consensus standards of the American National Standards Institute (ANSI) and the National Fire Protection Agency (NFPA).
- E. Contractors are reminded of their responsibility to have at least one copy of applicable State of California Occupational Safety and Health Administration (Cal/OSHA) regulations, as well as other consensus standards incorporated by reference at the Project for use and review.

- F. Contractors are required to meet or exceed these Contractor Safety Standards, Title 8 CCR Subchapter 4 Construction Safety Orders, and Title 8 CCR Subchapter 7 General Industry Safety Orders.
- G. OC SAN and its authorized representatives will neither assume nor relieve any contractor or service provider of their direct responsibility for the safety and health of their employees, the protection of visitors and the public, or the protection of equipment and property.
- H. OC SAN will advise the CONTRACTOR of known hazards associated with OC SAN processes; however, the CONTRACTOR is ultimately responsible for the identification of hazards and ensuring they are controlled or eliminated.
- I. OC SAN reserves the right to remove from the Project any employee of the CONTRACTOR and/or its Subcontractors for a violation of the Contractor Safety Standards.
- J. OC SAN reserves the right to stop work of the Contractors as a result of a hazardous condition, near miss, or incident. Following an investigation with corrective actions satisfied, the Contractors or visitor may return to the Work site. If OC SAN determines that an incident could have resulted in or did result in a major injury or fatality because of the negligence of any Contractor or its employees, then OC SAN reserves the right to permanently remove individuals from the Work site. Examples of unsafe observations that would warrant removal include:
 - 1. Failing to join an active LOTO while performing craft.
 - 2. Failing to secure permits for high-risk craft.
 - 3. Fall protection deviations.
 - 4. Unauthorized entry into confined spaces.
 - 5. Other Cal/OSHA violations that can be determined to be life critical if not followed properly. OC SAN's Risk Management Division (Risk Management) has discretion in determination of life critical safety.
- K. Contractors may reduce incidents, injuries, and illnesses through completion of the following:
 - 1. Performing or attending new hire safety orientations.
 - 2. Conducting daily toolbox/tailgate safety meetings.
 - 3. Receiving safety training (i.e., hazard communication, confined space, excavation and trenching, shoring, fall protection, lockout/tagout, personal protective equipment including respiratory protection, hot work, incident reporting, equipment specific training).
 - 4. Implementing mandatory personal protective equipment (PPE) programs.
 - 5. Injury reporting, incident investigation, root cause analysis, corrective action, and recordkeeping.
 - 6. Implementing appropriate and effective safety management systems that includes the timely identification, correction, and tracking of uncontrolled hazards in Contractor work areas.
 - 7. Using safety planning tools such as Job Safety Analysis (JSA) and Pre-Use Inspections to eliminate workplace injuries and property damage.
 - 8. Conducting safety audits and inspections to identify, prioritize, and correct non-compliance conditions.

9. Protecting public and private property adjacent to all construction site work zones.
10. Informing Risk Management and the ENGINEER of any visit from a regulatory agency such as Cal/OSHA, EPA or SCAQMD.
11. Educating and training employees by implementing their respective safety programs.
12. Maintaining a positive and proactive safety culture. A proactive safety culture may mitigate the first incident or accident. A reactive safety culture may prevent the second.

1.3. HARASSMENT AND DISCRIMINATION

- A. OC SAN does not tolerate any form of harassment or discrimination and is committed to providing a work environment that is free of harassment and discrimination.
- B. Contractors are expected to support and comply with OC SAN's harassment and discrimination policies. Contractor's supervision or management observing or knowing of a harassing situation shall take immediate action to stop it and report the matter to the ENGINEER.
- C. No employee shall be subjected to any form of retaliation for reporting any violation of this policy when it is reported truthfully and in good faith. A report is made in good faith when the complainant reasonably believes there is a violation of policy.

1.4. RETALIATION AND WHISTLEBLOWING

- A. It is OC SAN policy to prohibit retaliation or reprisals toward employees or contractors who engage in the following:
 1. Disclosing information to a government or law enforcement agency or internally to OC SAN, where there is reasonable cause to believe that the information discloses a violation of state or federal statute or is not in compliance with state or federal regulation.
 2. Disclosing the filing of a false claim for money, goods, or services to OC SAN.
 3. Filing a written complaint, under penalty of perjury, of gross mismanagement, a significant waste of funds, an abuse of authority or a substantial and specific danger to public health or safety.
 4. Complaints of discrimination or harassment or any other prohibited conduct or violation of federal law.
 5. Complaints about unfair labor practice.
 6. Participating in an administrative investigation either as the complainant, a witness, or the accused, or conducting an administrative investigation.
 7. Contractors are expected to maintain similar policies for its own employees regarding the prevention of retaliation or reprisal.

1.5. EMPLOYEE CONDUCT

- A. All project employees must always maintain professional behavior.
- B. Horseplay, fighting, harassment, hostile work environments, possession, or use of alcohol and/or illegal drugs, possession of firearms, and gambling are not allowed and shall result in disciplinary action, up to and including immediate removal of the Contractor and/or its employee(s) from the site.

1.6. WORKPLACE VIOLENCE AND WEAPONS

- A. Contractors shall adopt and enforce their written workplace violence policy that covers harassment, intimidation, threats, violence, and weapons.
- B. Before the on-site Work commences, the CONTRACTOR shall submit the CONTRACTOR's and its Subcontractors' workplace violence prevention plan per Section 01701 Project Control Management System (PCMS).
- C. OC SAN reserves the right to remove from the Project any Contractor or its employees for violation of the respective policies adopted by the CONTRACTOR and its Subcontractors.
- D. OC SAN strictly prohibits persons, excluding armed security services, from possessing weapons including, but not limited to, firearms, explosives, knives, clubs, and incendiary devices on OC SAN premises, in vehicles, or in possession of the person.
- E. Persons who engage in prohibited conduct are subject to leave action by law enforcement authorities. Examples, while not all-inclusive, are considered prohibited conduct:
 - 1. Causing physical injury to another person.
 - 2. Making threatening remarks, whether with intent to harm or in jest.
 - 3. Aggressive, hostile, or harassing behavior that creates a reasonable fear of injury to another person or subjects another individual to emotional distress.
 - 4. Intentionally damaging property.
 - 5. Possession of a weapon while on OC SAN property.
 - 6. Committing actions motivated by, or related to, sexual harassment or domestic violence.
 - 7. Other acts or threats of violence as determined by OC SAN.
- F. Contractor's labor force terminations should not occur on OC SAN property. Contractors shall make every attempt to have terminations occur on Contractor's property. Notification of terminations or layoffs shall be made to OC SAN so badging can be terminated, and security can be informed.

1.7. NEWS MEDIA

- A. Contractors shall refer questions from news media personnel (e.g., social media, radio, television, newspaper) to the ENGINEER.
- B. Project accidents/incidents resulting in news media coverage (radio, television, newspaper) shall be immediately reported to the ENGINEER.
- C. Contractors must obtain written approval from OC SAN prior to taking photos or videos of OC SAN projects and/or property if such photos or videos are not related to normal business.

1.8. CONFLICT BETWEEN REGULATIONS

- A. In the case of conflict between regulations, codes, consensus standards (regulatory supported), and the Contract Documents (includes Contractor Safety Standards and Specifications), the most stringent requirements shall govern.
- B. Conflicts shall be brought to the attention of the ENGINEER. OC SAN reserves the right to issue a final determination for conflicts.

- C. The CONTRACTOR shall bid for the most stringent regulatory supported and applicable reference standards.

2. EMERGENCY RESPONSE PROCEDURES

2.1. REPORTING AND NOTIFICATION

- A. Reporting and notification times vary depending on the type of incident or emergency. Contractors shall notify the ENGINEER and/or Risk Management in accordance with the following:
 - 1. First aid, work-related injuries, property or equipment damage, vehicle accidents, minor utility strikes, minor spills (5 gallon or less), and near miss events must be immediately reported to the INSPECTOR, the ENGINEER, and/or Construction Safety Inspector. A written preliminary report documenting the event must be emailed to the ENGINEER and Construction Safety Inspector within 24 hours. A written incident report documenting root cause analysis with appropriate corrective actions must be emailed to the ENGINEER and Construction Safety Inspector within 5 business days.
 - 2. Fatalities, severe or catastrophic injuries, hospitalizations, significant property or equipment damage, fires, significant utility strikes, and medium to large spills must be immediately reported to the ENGINEER, the INSPECTOR, and/or Construction Safety Inspector. A written preliminary report documenting the event must be emailed to the ENGINEER and Construction Safety Inspector within 8 hours. A written incident report documenting root cause analysis with appropriate corrective actions must be emailed to the ENGINEER and Construction Safety Inspector within 5 business days.
- B. Immediately following a near miss or incident, Contractors shall stop Work until it is determined that it is safe to resume. If a person sustains a major injury, or if the incident is classified as a significant near miss, the Work must be stopped, and the investigation initiated immediately. First Aid and CPR trained individuals shall begin treatment on injured employees.
- C. When working at Plant 1 or Plant 2, Contractors shall contact OC SAN Operations Control Center for medical emergencies requiring off-site emergency medical services, fires, large spills or chemical releases, and workplace violence by dialing the following:
 - 1. Plant 1 Emergencies
 - a. Dial 2222 from OC SAN Landline, or
 - b. Dial 714-593-7133 from mobile phone.
 - 2. Plant 2 Emergencies
 - a. Dial 2222 from OC SAN Landline, or
 - b. Dial 714-593-7677 from mobile phone.
- D. When working off site at OC SAN's wastewater lifting stations, sewer lines, or other facility, Contractors shall contact emergency medical services, and report fires, chemical spills or releases, and workplace violence by dialing 911. Immediately after 911 has been contacted, Contractors shall contact the ENGINEER, the INSPECTOR, and/or Risk Management.
- E. For wastewater releases, Contractors shall contact OC SAN Operations Control Center by dialing 714-593-7025 from a mobile phone.

- F. Emergency telephone numbers listed above shall be posted at the job site or made readily available for employee use.
- G. The CONTRACTOR shall prepare maps clearly identifying the Project area, active entrances, location of first aid stations and other emergency supplies, as well as location of the nearest hospital.

2.2. MEDICAL EMERGENCY

- A. Assess the scene to make sure it is safe and that hazards are not present that could result in injury to medical responders.
- B. Render first aid or cardiopulmonary resuscitation (CPR) promptly to the injured employee(s). Only employees trained in first aid and CPR shall render medical treatment. One or more employees shall be trained in first aid and CPR and be available at the job site always.
- C. Follow reporting and notification procedures outlined in Section 2.1 Reporting and Notification.
- D. If outside emergency medical services are required, the CONTRACTOR shall escort emergency medical personnel to the location of the injured person(s).
- E. The CONTRACTOR shall notify OC SAN of injuries that require outside medical services.
- F. Injured persons shall not drive themselves to the hospital or clinic. The CONTRACTOR shall have supervisor or designee drive the person.

2.3. FIRES

- A. Only fires that are in the incipient stage (initial or beginning) shall be extinguished by portable fire extinguishers or small hose systems. Only individuals that have been trained to use a fire extinguisher shall use one.
- B. Contractors shall provide fire extinguishers for their own craft work and hot work, and not rely on the nearest OC SAN plant fire extinguishers designated for plant process fires.
- C. For fires beyond the incipient stage, evacuate the immediate area and activate the fire alarm system (if available).
- D. Contractors shall follow reporting and notification procedures outlined in Section 2.1 Reporting and Notification.
- E. Contractors shall not block, cover, or restrict exit routes, exit doors, fire extinguishers, fire alarm panels, or fire suppression systems without prior written acceptance by the ENGINEER. The CONTRACTOR shall submit using OC SAN's PCMS appropriate plans for approval to block, cover, or render these systems inoperable.

2.4. EARTHQUAKES

- A. Contractors are expected to be prepared to respond in the event of an earthquake by training their employees to "duck, cover, and hold".
- B. Once the shaking has stopped, report to an assembly area agreed upon with OC SAN so that all employees may be accounted for.

2.5. TSUNAMI

- A. Contractors will be notified by OC SAN using the PA system and word of mouth. OC SAN relies on Tsunami Watch or Warning issued by the National Tsunami Warning Center. Immediately after a strong earthquake is felt at Plant 2 or one of

the pumping plants located along the coast, Contractors must take action to move to a safe location.

- B. OC SAN will direct Contractors to either retreat to Plant 1 or shelter in place at a designated Tsunami evacuation site at Plant 2. Tsunami inundation areas and evacuation sites are provided in the Contractor Safety Orientation. Contractors are expected to have a communication system in place to account for all its employees and to notify OC SAN of their condition.

2.6. PANDEMICS

- A. Contractors shall adhere to all recommendations made by public health officials to keep their employees safe. This may include physical distancing, face coverings, hygiene practices, training, symptom screening, cleaning and disinfection, and implementation of other engineering and administrative controls.
- B. Contractors are responsible for implementing their own controls and training for their employees in compliance with public health recommendations. OC SAN is not responsible for implementation.

3. ROLES AND RESPONSIBILITIES

3.1. GENERAL

- A. The CONTRACTOR shall be responsible for initiating, maintaining, supervising, and enforcing all safety precautions and programs regarding the performance of the Contract for the on-site safety of its employees and Subcontractors performing Work for the benefit of this Project. This includes responsibilities for the public, OC SAN staff, OC SAN representatives, vendors, delivery and transportation services, and service providers at the Project location.
- B. The CONTRACTOR shall comply with all applicable provisions of Federal, State, and local laws, ordinances, codes, and regulations affecting safety and health.
- C. Contractors shall comply with the most stringent of the following:
 - 1. California OSHA Safety Orders.
 - 2. Federal OSHA Safety Orders.
 - 3. The Contractor's Site-Specific Safety Program.
 - 4. Applicable consensus standards, including ANSI, NFPA, etc., if specified before or during Work by Risk Management.
 - 5. Contractor Safety Standards.
 - 6. Contract Documents.
- D. The CONTRACTOR shall designate in its SSSP, a responsible, competent, and qualified member of its organization at the work site who has the following:
 - 1. Authority to enforce the Contractor's Safety and Substance Abuse programs.
 - 2. Responsibility to assure compliance with the OSHA Act.
 - 3. Responsibility to identify and obtain correction of hazards.
- E. In addition to requirements described elsewhere in this document, the CONTRACTOR's Safety Manager, Safety Representative, Project Manager, Superintendent, and Foremen shall have at minimum:
 - 1. Authority to stop Work when a serious safety hazard or imminent danger is identified.

2. Authority to implement corrective actions.
3. Relevant construction safety experience in the type of Work the CONTRACTOR is performing under the Contract.
4. Evidence of completion of either the OSHA 30 Hour Construction Training, OSHA 30 Hour General Industry Training, Certified Health and Safety Technician, or Certified Safety Professional as applicable to the hazards expected to be encountered in the Work.
5. Current First Aid training from a provider recognized by OSHA.
6. Current CPR training from a provider recognized by OSHA.
- F. The CONTRACTOR shall prepare and maintain an Injury and Illness Prevention Program (IIPP) and SSSP.
- G. The CONTRACTOR shall ensure that its Subcontractors develop, maintain, and implement effective IIPPs and SSSPs. Upon request by OC SAN, the CONTRACTOR shall submit to OC SAN its Subcontractors IIPP and SSSP for review.
- H. The CONTRACTOR shall enforce that the Subcontractors are responsible for initiating, maintaining, supervising, and enforcing the safety requirements outlined by the Contractor Safety Standards and the CONTRACTOR's Site-Specific Safety Program, even though the requirements may be above and beyond the Subcontractor's own safety policies, and Federal and State OSHA requirements.
- I. The CONTRACTOR shall provide additional safety resources to address poor safety performance and demonstrated inability to manage safety in accordance with the Contract Documents. At the ENGINEER's request or where required by the Contract Documents, the CONTRACTOR shall be required to employ a full-time Contractor Safety Manager for projects that do not meet the criteria for a CONTRACTOR dedicated safety professional. The CONTRACTOR may require its Subcontractors to provide their own Safety Managers and Safety Representatives to fulfill the requirements of this Section for the Subcontractor's work.
- J. Any Contractor who place, installs, erects, or connects any electrical wires, fixtures, appliances, apparatus, raceways, conduits, solar photovoltaic cells, or any part thereof, which generate, transmit, transform, or utilize electrical energy in any form or for any purpose shall be an electrician certified by the State of California or a C-10 Electrical Contractor Licensed in the State of California. The Contractor shall submit C-10 credentials to the ENGINEER for review via OC SAN's PCMS prior to mobilization.
- K. Any Contractor who installs, services, and maintains all types of communication and low voltage systems which are energy limited and do not exceed 91 volts shall be a C-7 Low Voltage Systems Contractor. These systems include, but are not limited to telephone systems, sound systems, cable television systems, closed-circuit video systems, satellite dish antennas, instrumentation and temperature controls, and low voltage landscape lighting. Low voltage fire alarm systems are specifically not included in this section.
- L. Any Contractor who lays out, fabricates, and installs all types of fire protection systems, including equipment associated with the systems (excluding alarm systems) shall be a C-16 Fire Protection Contractor.

3.2. CONTRACTOR SAFETY MANAGER (CSM)

- A. The Special Provisions of the Contract Documents dictate whether or not this position is required to be onsite daily when the Contractors are at the Project site. The CSM's sole responsibility shall be safety. The ENGINEER and Risk Management reserve the right to waive the requirement for a CSM. The request to waive the CSM shall be made in writing and will be determined on a case-by-case basis.
 - 1. Where not required by the Special Provisions, the CSM shall be available by phone, text, or email as a technical reference to the CSR.
 - 2. When required by the Special Provisions, the CSM shall be onsite daily when the Contractors are present at the Project site.
- B. The CSM shall be identified in writing to the ENGINEER prior to the commencement of the Work. The CONTRACTOR shall submit the resume of the CSM candidate to the ENGINEER and Risk Management for review, prior to the start of on-site Work. The resume shall be submitted using OC SAN's PCMS. OC SAN reserves the right to direct the removal and replacement of the CSM as necessary. Failure to replace the CSM within ten (10) working days will result in a shutdown of all field work.
- C. The CSM shall have a minimum of five years of qualified construction safety (primary project duty) experience, from similar type construction projects. A Certified Safety Professional (CSP), Associate Safety Professional (ASP), Safety Trained Supervisor Construction (STSC), or Construction Health and Safety Technician (CHST) is preferred.
- D. If the CONTRACTOR has multiple distinct projects with OC SAN, the CSM can assign a CSR for each of the projects. The CSR(s) shall report directly to the CSM.
- E. Alternate CSM meeting the same qualifications as the CSM shall be provided when the designated CSM is not available, unless agreed upon by the ENGINEER and Risk Management. The Alternate CSM shall hold the same responsibilities as the CSM.
- F. Specific responsibilities of the CSM include, but are not limited to, completing, or overseeing the completion of the following:
 - 1. Conduct Project-specific safety orientation sessions for employees who are new to the site, prior to their beginning work.
 - 2. Conduct, participate in, or assist Field Supervisors with daily toolbox safety meetings.
 - 3. Instruct and inform supervisors and management on safety rules and regulations.
 - 4. Instruct supervisors and employees in the proper use and care of PPE.
 - 5. Instruct supervisors and employees concerning special procedures (e.g., confined space entry, trench shoring, lockout/tagout, etc.).
 - 6. Complete incident investigation reports in accordance with the Contractor Safety Standards. Records are to be maintained at the site and distributed as described in these Contractor Safety Standards.
 - 7. Conduct and document weekly Project safety inspections. Inspections shall be documented and include date of inspection, description of finding, corrective

actions, and date the corrective action was taken. Records of inspections are to be submitted using OC SAN's PCMS.

8. Maintain training documentation. Records are to be maintained at the site available for review upon request.
9. Implement, update, and maintain the SSSP including safe work procedures and practices.
10. Demonstrate, by example, proper safety behavior and a proactive safety culture.
11. Ensure that required emergency medical supplies are adequate, clean, and stocked.
12. Coordinate transportation of employees with minor injuries to the designated Medical Clinic.
13. Inform CONTRACTOR employees and Subcontractors, the ENGINEER, and Risk Management of any safety related problems that have either developed or be reasonably be expected to develop.
14. Maintain records in accordance with Cal/OSHA Recordkeeping requirements.
15. The OSHA 300 Log for the CONTRACTOR is to be available for review upon request by the ENGINEER or Risk Management.
16. Support the CSR at their designated work locations.
17. Develop and/or review confined space entry procedures, ventilation plans, rescue plans, hot work procedures, lift plans, and other safety submittals for Project Work.

3.3. CONTRACTOR SAFETY REPRESENTATIVE(S)

- A. A CSR shall be provided where the CSM is not required to be onsite per the Special Provisions of the Contract Documents. CSRs shall always be provided when the CONTRACTOR has multiple Project sites at OC San.
- B. The CSR shall be identified in writing to the ENGINEER prior to the commencement of the Work. The CONTRACTOR shall submit the resume of the CSR candidate to the ENGINEER and Risk Management for review, prior to the start of on-site Work. The resume shall be submitted using OC SAN's PCMS. OC SAN reserves the right to direct the removal and replacement of the CSR if necessary.
- C. The CSR shall be employed in a supervisory position, empowered by their employer to take corrective action, be present on the Project while Work is being performed, and spend the amount of time necessary to ensure the Contractors' compliance with these Contractor Safety Standards.
- D. The CSR shall be present at the Project site while Work is being performed by the CONTRACTOR and its Subcontractors.
- E. Alternate CSR meeting the same qualifications as the CSR shall be provided when the CSR is not available. The Alternate CSR shall hold the same responsibilities as the CSR. Alternate CSR duties may be assumed by a similarly qualified project Supervisor.

- F. Specific responsibilities of the CSR include, but are not limited to, completing, or overseeing the completion of the following:
1. Conduct Project-specific safety orientation sessions for employees who are new to the site, prior to their beginning work.
 2. Conduct, participate in, or assist Field Supervisors with daily toolbox safety meetings.
 3. Instruct and inform supervisors and management on safety rules and regulations.
 4. Instruct supervisors and employees in the proper use and care of PPE.
 5. Instruct supervisors and employees concerning special procedures (e.g., confined space entry, trench shoring, lockout/tagout, etc.).
 6. Complete incident investigation reports in accordance with the Contractor Safety Standards. Records are to be maintained at the site and distributed as described in these Contractor Safety Standards.
 7. Conduct and document weekly Project safety inspections. Inspections shall be documented and include date of inspection, description of finding, corrective actions, and date the corrective action was taken. Records of inspections are to be submitted using OC SAN's PCMS. Forward copies of inspection and corrective action records to the ENGINEER and Risk Management.
 8. Maintain training documentation. Records are to be maintained at the site available for review upon request.
 9. Implement, update, and maintain the SSSP including safe work procedures and practices.
 10. Demonstrate, by example, proper safety behavior and a proactive safety culture.
 11. Ensure that required emergency medical supplies are adequate, clean, and stocked.
 12. Coordinate transportation of employees with minor injuries to the designated medical clinic.
 13. Inform CONTRACTOR employees and Subcontractors, the ENGINEER, and Risk Management of any safety related problems that have either developed or be reasonably be expected to develop.
 14. Maintain records in accordance with OSHA Recordkeeping requirements.
 15. Consult with the CSM regarding Contractor safety.
 16. Develop and/or review confined space entry procedures, ventilation plans, rescue plans, hot work procedures, lift plans, and other safety submittals for Project Work.

4. PROGRAM ELEMENTS

4.1. INJURY AND ILLNESS PREVENTION PROGRAM

- A. The CONTRACTOR shall establish, implement, and maintain an effective, written IIPP in accordance with Title 8 of the California Code of Regulations Section 1509 and Section 3203.
- B. The IIPP shall identify persons responsible for the safety program, system for ensuring employees comply with the safety and health practices, communication,

procedures for identifying and controlling hazards, safety incentive, disciplinary action programs, procedures for investigating incidents and injuries, and training.

- C. The CONTRACTOR shall submit a copy of their IIPP to OC SAN for review and retention through OC SAN's PCMS.
- D. The CONTRACTOR shall review the contents of the IIPP with their employees.
- E. The CONTRACTOR shall maintain a copy of the IIPP onsite. The CONTRACTOR shall make available a copy of the IIPP when requested by OC SAN or Cal/OSHA. The CONTRACTOR's IIPP will be audited by OC SAN at least annually.

4.2. SITE-SPECIFIC SAFETY PROGRAM

- A. The CONTRACTOR and its Subcontractors shall establish, implement, and maintain an effective, written SSSP in accordance with OC SAN requirements.
- B. The SSSP shall be developed and submitted prior to the start of the Work. The SSSP will be submitted for review and acceptance using OC SAN's PCMS. The SSSP shall be updated as Project hazards change. The SSSP shall be made available to OC SAN upon request. The CONTRACTOR's SSSP will be audited by OC SAN at least annually.
- C. The SSSP must be endorsed by OC SAN prior to mobilization and start of field Work. The CONTRACTOR may conduct field walks without an endorsed SSSP with the ENGINEER's acceptance.
- D. The SSSP shall be specific to the Work performed by the CONTRACTOR and Subcontractors. The SSSP shall include the following at a minimum (not necessarily in this order):
 - 1. Assignment of accountability and responsibilities for key personnel responsible for implementation of the SSSP and safety performance on the
 - 2. Project responsibilities listed shall have a focus on safety, and may include Project Managers, Superintendents, Forman, CSMs, or CSRs.
 - 3. Emergency Contact List (Contact information for key personnel, including local police, fire department, hospital, and poison control).
 - 4. Emergency Action Plan (detail and describe potential emergency situations arising from the Work and the procedures that will be followed to manage them, include map to hospital).
 - 5. Brief Description of Project Work (high-level overview of the Work to be performed).
 - 6. Hazard Assessment and Risk Analysis (identify high-level hazards associated with the Work, assign a risk level to each).
 - 7. Control Measures (identify appropriate engineering controls, administrative controls, work practices and PPE to address the hazards identified that are associated with the Work).
 - 8. Job Safety Analysis (also referred to as activity hazard analysis, task hazard analysis, job hazard analysis). The CONTRACTOR shall either submit prepared JSAs as part of the SSSP or have a process in place to develop them in the field prior to the start of each Work task. JSAs prepared in the field prior to start of Work shall be submitted to Risk Management for review.
 - 9. Personal Protective Equipment (detail the types and levels of PPE to be used onsite by employees for high-level tasks; must comply with OC SAN minimum requirements).

10. Personal and Environmental Monitoring (describe and detail equipment, action levels, exposure limits, frequency, or as otherwise required by regulations to monitor for various hazards agents (dust, asbestos, vapors, etc.)).
11. Hazard Identification, Corrective Action, and Inspection (describe how hazards will be identified and corrected; describe how weekly inspections will be completed and to what criteria).
12. Safety Training Program (describe/list required training to be completed by employees for the hazards they are likely to encounter in the scope of their Work; maintain and provide table with trainings completed and due for each employee. The CONTRACTOR shall ensure that all personnel are properly trained and instructed for all jobs that require specific training and/or competency to meet all applicable Cal/OSHA regulations, Federal, State, and local law, and the requirements herein. The CONTRACTOR shall submit a copy of its employees and Contractors' employees training records to OC SAN for review using OC SAN's PCMS.
13. Project-Specific Safety Orientation Program (requirement to orientate employees to the Project hazards and controls, emergency action procedures, and OC SAN requirements). Copies of the CONTRACTOR's orientation program and a roster of those that have completed the orientation shall be submitted using OC SAN's PCMS.
14. Recordkeeping and Retention Requirements (provisions for maintaining orientation, training, inspections, corrective action, and investigation records).
15. Hazard Communication (how will chemicals be managed onsite, stored, handled, and hazards communicated to employees; safety data sheets shall be available onsite for all chemicals brought and/or used onsite; attach safety data sheets to SSSP or maintain in separate binder).
16. Identify and properly label all waste handling bins according to the Global Harmonized System (GHS).
17. Identification of Competent Persons and Qualified Persons (if performing excavation and trenching, shoring, cranes, rigging, fall protection, confined space, rescue, lockout tagout, forklift operation, electrical work, etc.).
18. Fire Prevention (describe how fires will be prevented and equipment to be used, etc.).
19. Housekeeping (describe how housekeeping will be maintained on the Project).
20. Drug, Alcohol and Substance Abuse Prevention Program (can reference to IIPP as needed).
21. Near Miss and Incident Investigation Program (process for investigating incidents and near misses, including reporting; can reference to IIPP as needed).
22. Heat Illness Prevention Program (compliance with 8 CCR 3395; can reference to IIPP as needed).
23. The CONTRACTOR's Policy on Whistleblower Rights and Anti-Retaliation Protection for their employees (can reference to IIPP as needed).

24. Cal/OSHA Required Safety Programs or Plans (attach where applicable based on the Work):
 - a. Fall Prevention Plans and Program (training, inspections, identification, and rescue plan requirements shall be addressed in the program).
 - b. Scaffold Plans (shall include inspection, erection, dismantling, training)
 - c. Respiratory Protection Program
 - d. Confined Space Entry Plans and Program (training, entry procedure, and rescue plans shall be addressed in the program)
 - e. Control of Hazardous Energy Program (Lockout/Tagout)
 - f. Hearing Conservation Program
 - g. Excavation and Trenching Safety Plans and Program
 - h. Hot Work and Fire Prevention Program
 - i. Other programs as required by Cal/OSHA
- E. The CONTRACTOR shall submit its IIPP, SSSP, and list of proposed Safety Manager and Representatives no later than 15 days from the effective date of the Notice to Proceed for review by OC SAN. The SSSP must be accepted by OC SAN prior to mobilization and start of field Work. The CONTRACTOR may conduct field walks without an endorsed SSSP with acceptance by the ENGINEER. These documents must be submitted using OC SAN's PCMS.
 1. The acceptance of the IIPP and SSSP will be based solely on the content of those programs relative to conformance with these Contractor Safety Standards and the Specifications. Receipt of program by OC SAN does not constitute OC SAN acceptance of the program.
 2. Failure to attain acceptance of the IIPP and SSSP prior to the scheduled commencement of Contract Work is not grounds for a time extension.
 3. The CONTRACTOR and Subcontractor Project Superintendents and General Foreman(s), and all on-site trade foremen shall complete either the OSHA 30-hour General Industry or the Construction Safety Course as applicable to the Work. OSHA 30-hour certifications shall be submitted using OC SAN's PCMS.
- F. Contractors' employees shall receive a Project specific safety orientation, that at a minimum review the Project safety rules, OC SAN general safety rules, Project hazards and controls, emergency notification and reporting procedures, and PPE requirements.
 1. Service vendors and visitors shall be provided with an orientation that is appropriate for their exposures during their time on site.
 2. The CONTRACTOR is to provide this orientation to its employees and Subcontractors.

4.3. PRE-SHIFT CREW MEETINGS

- A. Contractors shall conduct daily tailgate/toolbox safety meetings with its employees. The meeting should be 10-15 minutes and held to keep employees alert to Work-related hazards and prevent injuries.
- B. The meeting should address the specific hazards and safe work practices for the Work tasks that employees are performing, to include the following:
 1. Tasks for the shift, including review of applicable Job Safety Analysis.

2. Tools and equipment needed for those tasks.
 3. Materials needed for those tasks.
 4. Proper material handling techniques.
 5. Safe work procedures to perform those tasks.
 6. PPE needed to safely perform those tasks.
 7. Lessons learned from prior shifts.
 8. Questions from the crew.
- C. Employees shall be encouraged to actively participate by asking questions, having discussions, and having employees describe personal experiences.
- D. The toolbox meeting shall be documented with daily attendance roster and maintained by the Contractors throughout the duration of the Project.
- E. The daily toolbox safety meeting form shall be made available for review by the ENGINEER or Risk Management, upon request.

4.4. PROJECT PLANNING AND PROJECT MEETINGS

- A. Safety and loss control activities are key elements in the success of any project.
- B. Safety and loss control activities are to be integrated into the Work plan such that safety is an integral component of the construction process, rather than treated as a separate activity.
- C. There are five main elements to the planning and meeting component of the Contractor Safety Standards.
1. Project Survey: Prior to the start of the Work, the CONTRACTOR shall conduct a physical survey of the job site. The CONTRACTOR shall also review the Plans and Specifications.
 2. Construction Process Plan: From the Project Survey, the CONTRACTOR shall develop a written Construction Process Plan. The Construction Process Plan shall identify tasks and activities under four main categories:
 - a. Construction Sequence and Procedures
 - b. Temporary Structures / Shoring / Reshoring / Bracing / Retention Systems Required
 - c. Critical Structures or Processes
 - d. Description of Required Tests and Approvals
 3. Job Safety Analysis: JSA needs may be pre- determined in part by reviewing the Construction Process Plan and Construction Schedule. The JSA should be prepared far enough in advance of the task or activity to ensure that changes or revisions will not affect the scheduled execution of the task or activity.
 4. Construction Progress Meetings: These meetings are typically held on a weekly or bi-weekly basis and are typically chaired by the ENGINEER.
 5. Pre-Phase Planning Meetings: Pre-phase meeting needs may be identified from the Construction Process Plan.
 - a. The CONTRACTOR shall schedule the Pre-Phase Planning Meeting far enough in advance of the start of the relevant phase to ensure that changes or revisions to JSA's and coordination efforts will not affect the scheduled execution of the relevant phase of the Work.

- b. The Pre-Phase Meeting shall include the ENGINEER and Risk Management, as well as the CONTRACTOR and Subcontractors involved in that phase of the Work. This meeting shall identify and address the safety and coordination issues of the relevant phase of the Work.
- c. Pre-Phase Safety Analysis' shall be prepared using the JSA form (or an acceptable equivalent); specific JSAs are to be prepared using the Pre-Phase Hazard Analysis as a guide.
- d. Subsequent meetings may be required throughout the phase of the Work to maintain safety and coordination efforts.

4.5. INCIDENT REVIEW MEETINGS

- A. The CONTRACTOR's Safety Manager or Safety Representative shall schedule an Incident Review Meeting within 48 hours of the occurrence of an incident with the ENGINEER and Risk Management.
- B. The intent and purpose of the incident review meeting is to interactively and cooperatively identify causal factors that had, or may have had, a role in the incident, and to identify corrective action(s) and practice(s) to implement to avoid potential reoccurrence of the incident. It is NOT a faultfinding or blame-finding event. Attendees should include:
 - 1. The ENGINEER
 - 2. The CONTRACTOR Project Manager
 - 3. CSM / CSR
 - 4. Risk Management
 - 5. The CONTRACTOR / Subcontractors (Assistant) Superintendent(s) accountable via functional structure of the Project for the incident
 - 6. The CONTRACTOR / Subcontractors (General) Foreman / Foremen accountable via functional structure of the Project for the incident
 - 7. Craftsperson(s) involved with the incident (if available).
- C. The CONTRACTOR shall submit a written report detailing the root cause analysis and corrective actions to OC SAN via email within five business days of the occurrence of the incident.
- D. The CONTRACTOR shall work with Risk Management if additional corrective actions are required to satisfy OC SAN safe worksite mandate.
- E. For the purposes of this section, "Incident" may be defined as any or all the following: (as determined by owners authorized representatives.)
 - 1. Near-Miss
 - 2. First-Aid
 - 3. Recordable Injury
 - 4. Vehicular Incident
 - 5. General Liability / Third-Party Incident
 - 6. Property Damage
 - 7. Other, as determined by OC SAN

4.6. CONTRACTOR SAFETY ORIENTATION

- A. The CONTRACTOR shall attend a Contractor Safety Orientation (CSO), administrated by Risk Management, prior to start of the Work.
- B. The CSO is designed to orient the Contractors to general hazards at the work location; identifying OC SAN expectations for safety performance; reviewing emergency notification capabilities; and discussing Contractor activities that may pose a hazard to OC SAN employees, visitors, and other contractors.
- C. Contractors are expected to don the CSO helmet sticker for the same year they are working for OC SAN.
- D. The CONTRACTOR is responsible for communication of the CSO to its Subcontractors and its employees.
- E. The CONTRACTOR shall develop and maintain its own safety orientation (see section 4.2.D.13), which is to be provided to its employees and Subcontractors. The CONTRACTOR's safety orientation is to include overview of the Work, hazards, and controls to be taken, location of first aid kit and other emergency supplies, PPE requirements, emergency assembly process and location, etc.
- F. The CONTRACTOR's safety orientation is expected to be distributed to every Contractor prior to Work being performed. The CONTRACTOR's safety orientation is also required to be updated at least annually.

4.7. JOB HAZARD ANALYSIS

- A. Certain activities that are part of the Project shall trigger additional safety evaluation and review by OC SAN. The CONTRACTOR is required to participate in the completion of this document prior to the start of the Work. The CONTRACTOR is required to notify the ENGINEER at least two weeks prior to initiation of the tasks below and when the Work activities or environment changes, unless otherwise stated elsewhere. Evaluations are as follows:
 - 1. Confined Space Entry Job Hazard Analysis (JHA)
 - 2. Use of OC SAN Equipment – In the event Contractors are permitted to use OC SAN-owned equipment, Contractors shall be required to demonstrate proficiency on the specific equipment, as well as knowledge of the applicable regulatory requirement(s), and to complete a specific hold harmless agreement prior to such use.
 - 3. Hot Work Permit
 - 4. Energized Electrical Work Permit
 - 5. Hazardous Materials Usage – All hazardous materials identified by Cal/OSHA as a carcinogen or reproductive hazard are subject to use restriction and/or prohibition from use on OC SAN facilities. In addition, the CONTRACTOR shall provide a written plan of how the CONTRACTOR and OC SAN employees will be protected from exposure to these materials. A JHA will be conducted by OC SAN with mandatory participation by the CONTRACTOR for operations involving these materials.
 - 6. Cement Deep Soil Mixing (CDSM) - Develop a hazard mitigation plan for controlling exposures to hazardous substances to air, water, and soil.
 - 7. Aboveground Fuel Storage Tank Permit.
 - 8. Concurrent Work/Dual Employer Work Activities – If concurrent Work activities within the same general area are to be performed at the same time by more

than one contractor, a permit shall be obtained by the Contractor at least one week before the Work is scheduled to begin.

9. Respiratory hazards - Whenever harmful dust, fumes, mists, vapors, or gases exist or are produced by construction activities in quantities giving rise to harmful exposure to employees, such hazards shall be controlled. Engineering controls are the preferred means of controlling respiratory hazards. If the engineering controls have not reduced the exposure for the employees below the Permissible Exposure Limit (PEL), the CONTRACTOR shall implement administrative controls and provide PPE for their employees if needed.
10. The CONTRACTOR must provide industrial hygiene data showing that employees are not being exposed over the PEL for the PPE they have selected. As new data is collected, it shall be submitted to Risk Management for review.
11. Spray Painting, Blast Cleaning, or Hydro Blasting – Contractors shall not conduct any spray painting, blast cleaning, or hydro blasting without written authorization from OC SAN. Authorization will only be provided after receipt and review of an acceptable detailed plan that addresses, as a minimum, the following:
 - a. All spray application of coatings, blast cleaning, or hydro blasting at the Project site which is performed outside of a totally enclosed booth shall be kept to a minimum. Alternative application methods (brushing, rolling, etc.) or off-hour Work shall be considered and may be required to minimize potential overspray damage.
 - b. If spray painting, blast cleaning, or hydro blasting is required, the CONTRACTOR shall submit a work plan for review by the ENGINEER in advance outlining specific areas where the Work will take place. The work plan shall be submitted using OC SAN's PCMS. The work plan must include a schedule and the preventative measures utilized to eliminate the possibility of overspray damage to facilities and vehicles.
 - c. Tenting or other means of containment shall be utilized for spray coating applications. A minimum of 3 test panels, 2 feet by 3 feet, with a contrasting background to the material being sprayed, shall be placed 10 feet outside of the local work area at elevations to be determined by the INSPECTOR. Spraying shall be stopped if the test panels exhibit overspray.
 - d. Tenting and/or wet blasting shall be considered when grit blasting. Under no circumstances shall dust or coating particulates be permitted to leave the immediate work area.
 - e. Spraying/Blasting operations shall be stopped if winds exceed 5 mph.
 - f. A minimum 14-day notice shall be required prior to painting and blasting to provide adequate notification prior to the scheduled start date.
 - g. For Work within Treatment Plant Sites, the CONTRACTOR shall provide and install signs at Plant entrances, work areas, and roadways to direct traffic as needed to alternate parking areas to prevent overspray damage to vehicles. Parking areas immediately downwind or otherwise in high- risk areas shall be delineated to prevent vehicles from parking in these areas.
 - h. Any damage incurred by OC SAN or its employees due to paint, solvent or sandblasting materials from blasting or coating operations shall be promptly

repaired by the CONTRACTOR to the satisfaction of OC SAN and its employees at no cost to OC SAN.

B. Regulatory Requirements

1. Scaffold Erection and Use – OC SAN requires a copy of the CONTRACTOR's competent person evaluation and sign off on all scaffolding erected. Signed copies of the CONTRACTOR's competent person evaluation shall be forwarded to OC SAN no later than the day the scaffolding is completed and prior to scaffolding use. Scaffolding shall be inspected daily prior to use.
2. Cranes/Hoists – A copy of the operator's training certification shall be submitted to OC SAN prior to any crane use. Certifications shall be submitted using OC SAN's PCMS. The CONTRACTOR shall obtain a permit from OC SAN for any crane lift over a building/structure at least one week prior to the scheduled crane lift.
3. Excavation and Trenching – The CONTRACTOR is required to provide a copy of the applicable Cal/OSHA permit, the name of the designated CONTRACTOR's competent person and stamped engineering designs as applicable. Documentation shall be provided prior to the start of the excavation.
4. Fall Protection – The CONTRACTOR shall submit a fall protection plan for all Work exceeding 6 feet in elevation. The plan shall be submitted using OC SAN's PCMS. The plan shall include a licensed (California) engineer's approval for the use of all lifelines and specify how an employee will be rescued in the event of a fall. Documentation shall be provided prior to the start of the Work. All Service Vendors shall submit a fall protection plan for all Work exceeding 4 feet in elevation.
5. Demolition – Demolition Work on OC SAN facilities may contain regulated quantities of asbestos or lead. The CONTRACTOR shall be licensed by the California Department of Industrial Relations for demolition involving these materials. The CONTRACTOR shall submit copies of appropriate licenses, work plans, SCAQMD notifications as applicable, copies of worker training certificates and third-party monitoring registrations as applicable. OC SAN will be responsible for the disposal of all hazardous waste generated from these operations. Notifications shall be in accordance with applicable Federal, State, and local requirements. Specifications Section 01900 Hazardous Materials Mitigation and Controls contains additional guidance for asbestos, lead, and other regulated wastes.

4.8. CONTRACTOR / SUBCONTRACTOR SAFETY NON-COMPLIANCE

- A. OC SAN has the right to stop any Work activity deemed unsafe. Work may resume once the unsafe condition or behavior is corrected.
- B. Non-compliance with these Contractor Safety Standards by Contractors' employees will result in a notification to the CONTRACTOR's supervisory personnel when observed by Risk Management or OC SAN staff.
- C. Willful or repeat non-compliance with these Contractor Safety Standards may result in the ENGINEER or Risk Management requiring the Contractors' employee(s) to be excluded from the site for a period designated by OC SAN.
- D. Failure of the CONTRACTOR's onsite project management to enforce the Progressive Disciplinary Action Program included in the SSSP may result in the CONTRACTOR's onsite project manager's removal from the Project.

- E. The removal procedure may be accelerated and/or expanded to include removal of the Contractor's entire workforce by the ENGINEER or Risk Management where the violation of these Contractor Safety Standards is widespread, or where the Contractor does not demonstrate good faith effort.
- F. The CONTRACTOR and Contractors that are unresponsive to safety issues or that have an unsatisfactory safety evaluation may be deemed ineligible to bid additional contracts for a period designated by OC SAN.
- G. Contractors may report legitimate unsafe actions/activities of any other Contractor to the ENGINEER or Risk Management.
- H. The CONTRACTOR and Contractors (through the CONTRACTOR) shall submit to the ENGINEER a list of (a) Competent Persons and Qualified Persons as applicable to the Work, and (b) First Aid / CPR trained personnel prior to starting the Work. Each list shall be clearly dated and updated as required throughout the Contract duration. Each time the list is updated, a copy shall be provided to Risk Management and the ENGINEER. The list shall be submitted using OC SAN's PCMS.
- I. Contractors are responsible for handling, daily, rubbish and debris generated by their Work. The CONTRACTOR must keep the workplace clean.
- J. The CONTRACTOR will cooperate in inspections by OC SAN, Cal/OSHA, and other regulatory agencies.
- K. The CONTRACTOR will abate all safety violations or findings made by those agencies and report their corrections to the ENGINEER and Risk Management.
- L. The cited Employer(s) shall submit copies of all regulatory agency citation notices to the CONTRACTOR (if applicable), the ENGINEER or Risk Management immediately upon receipt. The CONTRACTOR shall ensure that it posts copies of all citations as required by Cal/OSHA or the applicable regulatory agency. Citations shall be submitted using OC SAN's PCMS.

4.9. SUBSTANCE ABUSE PREVENTION POLICY

- A. Purpose
 - 1. To maintain a safe, healthful, and efficient work environment, and to minimize absenteeism and tardiness, Contractors shall implement a Substance Abuse Prevention Policy that, at minimum, includes screening and testing as prescribed by this section.
 - 2. Contractors' employees who will be on site, drug testing shall be completed at least 30 days prior to the effective date of the Notice to Proceed. Contractors must only provide a list of those employees who have successfully passed their drug screening. OC SAN does not want and cannot accept the actual results. The section requirement for submission of testing results does not apply to consultants working under an OC SAN's professional services agreement.
 - 3. Contractors' programs shall utilize a testing procedure and protocol that mirrors or exceeds US DOT parameters and protocols with the exception that the testing results will adhere to "zero tolerance" for the presence of alcohol detected in the system. This testing protocol will be required for all post-incident and for reasonable suspicion assessments of individuals.
 - 4. An industry-accepted, commercially available, drug screening protocol can be used for pre-project assessments for workers, providing all positive result cases are referred for participation in the formal testing program. The screening

method shall be capable of detecting, at a minimum, nanogram per milliliter (ng/ml) quantities of methamphetamine, MDMA (Ecstasy), THC (marijuana), cocaine, amphetamines, opiates, phencyclidine (PCP), and benzodiazepines in human body fluids.

5. This drug screening protocol can be utilized to obtain preliminary results only and would be unacceptable for obtaining any results which could have a legal impact, such as post-incident and for suspicion assessments. The drug screening method must be scientifically derived with supporting studies confirming the detection capabilities and sensitivities.

B. Requirements

1. The CONTRACTOR shall implement and enforce a policy that prohibits the possession, distribution, promotion, manufacture, sale, use or abuse of illegal and unauthorized drugs, drug paraphernalia, controlled substances and alcoholic beverages by its employees, agents, or any person otherwise under the control of the CONTRACTOR, including employees and agents of Contractors while on the work site while working on the Project. Further, employees shall be prohibited from reporting to the premises under the influence of drugs or alcohol.
2. The Policy must apply to all personnel, including but not limited to regular, part-time, probationary, casual and contract employees of the CONTRACTOR, as well as to employees and agents of Subcontractors. The CONTRACTOR shall take whatever legally permissible steps are necessary or appropriate to enforce compliance with this policy.
3. Workers governed by this policy may possess a prescription medication in its original container and prescribed for current use of the person in possession by an authorized medical practitioner; provided that the Contractor provides a mechanism to ensure that employees taking prescription medicine inform the Contractor about potential side effects of medication which may affect the employee's work ability (particularly their alertness and coordination), safety and the safety of others.
4. At a minimum, any worker shall be subjected to a pre-project drug screening protocol for drug use in accordance with the provisions of the Contractor's program. A negative assessment result must be obtained prior to commencement of employment on this Project.

C. Drug Screening. Any worker shall be subject to a drug screening protocol prior to commencing Work on the Project in accordance with the Contractor's program:

1. At the time of the Project safety orientation training. No person showing preliminary positive screening results will be permitted to work on the Project.
2. All preliminary screening results will be managed as medical records that protect the employee's confidentiality.

D. Drug and Alcohol Testing. Any worker shall be drug and alcohol tested in accordance with the provisions of the Contractor's program:

1. When preliminary drug screening results are positive indicating potential substance abuse and effected worker elects to have validated testing results. Prescription medication and potential test interferences will be considered during the collection and analysis process.
2. When involved in any type of incident, whether injury or property damage was incurred or not.

3. For reasonable suspicion of impairment which has been validated by a third party.
- E. Any employee who fails or refuses to take a drug screen or drug and alcohol test in accordance with the terms of the Contract Documents shall be removed from the Project.

5. GENERAL SAFETY REQUIREMENTS

5.1. ATMOSPHERIC MONITORING EQUIPMENT

- A. Wastewater facilities are commonly associated with a potential for hazardous atmospheres because of gasses present in the wastewater or inherent to the treatment process. Contractors who enter wastewater process areas (including confined spaces such as vaults, pits, tanks, basins, digesters, and excavations greater than 5 feet in depth) are to have on their person an atmospheric monitor that measures for Hydrogen Sulfide, Oxygen, Carbon Monoxide, and flammable gasses (Lower Explosive Limit (LEL)). When it is reasonable to suspect that other atmospheric hazards may be present, those hazards must be monitored as well.
- B. Contractors entering these spaces are responsible for the provision and safe use of said equipment. All air monitoring equipment must be fully functional, maintained, tested, and calibrated as required by the manufacturer's instructions before each use. Air testing equipment shall be UL classified for use in Class I, Division 1, Groups A, B, C, and D hazardous locations as defined by the National Electrical Code.
- C. Prior to use, employees must be trained per manufacturer requirements on the use, limitations, and alarm modes of each air-testing device that they use.
- D. Employees must immediately leave a work area whenever an equipment alarm sounds due to any of the following alarms:
 1. Low or high oxygen level (acceptable range is 19.5% to 23% oxygen).
 2. Combustible gas detected above 10% LEL.
 3. Set point for a toxic gas level is reached (e.g., 10 ppm hydrogen sulfide)
 4. Sensor failure
 5. Low battery alarm.
- E. Equipment must be carried with the employee or placed immediately adjacent to the work area and set to operate in a continuous monitor mode. If working in a group and not mobile, at least one employee in the group shall have an atmospheric monitor that is properly calibrated and on. The monitor can provide coverage for a 10-foot radius. If the group is working over an area greater than 10 feet, then more monitors will be needed to provide coverage.
- F. Air Contaminant Exposure
 1. Contractors are responsible for determining if their employees are being exposed to harmful air contaminants or chemicals with recognized standard industrial hygiene analytical methods.
 2. If Contractors determine that their employees are being exposed over the PEL then they must implement protective measures for their employees following Cal/OSHA Construction Standards Section 1528.
 3. If the area is new construction, and where approved by the ENGINEER and Risk Management, the use of personal air monitors can be waived temporarily.

5.2. ASBESTOS

- A. Asbestos is to be handled only by a trained and licensed abatement contractor. Abatement contractor must be approved in accordance with applicable Federal, State, and local requirements to perform removal of asbestos containing materials (ACM).
- B. OC SAN will make known building materials known to contain or suspected to contain asbestos to the CONTRACTOR. The CONTRACTOR shall identify the materials within the structure or system prior to any construction, remodeling, or demolition activities. The CONTRACTOR shall properly protect in place or abate materials identified in the Contract Documents.
- C. Upon discovery of any ACM or presumed asbestos containing materials (PACM), Contractors shall stop Work in such areas and notify the ENGINEER and Risk Management.
- D. All asbestos abatement activities must follow Cal/OSHA, National Emission Standards for Hazardous Air Pollutants (NESHAP), Asbestos Hazard Emergency Response Act (AHERA), and South Coast Air Quality Management District rules and regulations.
- E. The abatement contractor shall prepare an Asbestos Abatement Plan in accordance with Specifications Section 01900 Hazardous Materials Mitigation and Controls.

5.3. HAZARDOUS (CLASSIFIED) LOCATIONS

- A. Electrical equipment and wiring that is used in these areas must meet specific electrical code requirements for hazardous areas.
- B. Before considering the installation of equipment in any process area, the area classification of that location should be determined by reviewing its area class map and/or checking with Risk Management and the ENGINEER.
- C. Work that may produce a spark or other source of ignition, or the opening of enclosures with energized electrical systems in Class I, Division 1 or Class I, Division 2 locations will require Hot Work Permits and may require specialized tools, equipment, and training.
- D. Requirements for Activities in Classified Areas
 - 1. No vehicle parking will be permitted in classified areas.
 - 2. Personal electronic devices are not permitted in classified areas. This includes cell phones, personal digital assistants, laptops, cameras, etc. The only exceptions to this policy are those devices specifically approved by the Risk Management. All non-approved devices shall be kept out of the classified area. Powering down a device is not sufficient to comply with this requirement.
 - 3. In cases where use of unapproved devices is unavoidable, continuous atmospheric monitoring for combustible gases shall be provided at the location where the device is being used. If the monitor alarms at any time, personnel are to cease use of the unapproved device, de-energize any potential ignition sources, and evacuate the classified area until such time that the atmosphere has been tested as clear and management approves entry back to the work area.
 - 4. Any activity in a classified area that could provide a source of ignition must be reviewed and approved in a Hot Work permit process prior to the start of such activity.

5.4. BARRICADES

- A. Barricades or fencing is required around excavations, holes or openings in floor or roof areas, edges of roofs and elevated platforms, around certain types of overhead work, and wherever necessary to warn, protect people, or vehicles against falling in, through or off.
- B. Barricades used around an opening in the floor or roof, at the edge of a roof or along an elevated platform shall meet the Cal/OSHA requirements of a standard guardrail.
- C. Barricades may also be used to isolate people (such as employees of other crews or employers, other project, OC SAN personnel, and the public) from Work activities as required by the activity, potential hazards created by the activity, or the location of the activity.
- D. Barricades must be of suitable construction and selected for the area of use (i.e., blinker type barricade for high vehicle traffic areas).
- E. To ensure the safety of the public, the CONTRACTOR shall provide and maintain adequate protection, such as chain link fences, gates, and barricades, to separate work areas from areas outside job site limits.
- F. A fall protection system accepted by the ENGINEER and Risk Management in writing shall be provided around excavation and trench leading edges.
 - 1. If the trench or excavation depth is greater than 6 feet: barricades, guardrails, or chain link fencing shall be provided around all open sides. Any person working along the unprotected edge of the trench or excavation shall be protected by an approved fall restraint system.
 - 2. If the trench depth is less than 6 feet, a warning line system accepted by the ENGINEER and Risk Management in writing, placed at least 6 feet from the leading edge, may be used in lieu of barricades, guardrails, or chain-link fence.
- G. Portable fencing shall be installed around construction work areas, the CONTRACTOR storage areas, and the CONTRACTOR's heavy equipment if they are not otherwise protected within the confines of the Project's perimeter barricade.

5.5. FENCING

- A. Chain link fencing shall be free from barbs, icicles (excess galvanizing material that may form sharp projections) or other projections that may cause injury.
- B. Fencing must be in good repair and installed to ensure stability of the fencing from being knocked over by employees or the public.
- C. Portable fencing shall be installed/braced to prevent being blown over during windy conditions.
- D. Base supports of portable fencing shall be installed/ placed to eliminate tripping hazards when fencing is placed adjacent to sidewalks and walkways.
- E. OC SAN reserves the right to prohibit use of temporary fence panel systems that require the use of a tubular or pedestal base support system that presents a potential trip hazard to pedestrians or obstruction for vehicles. Nuisance screening shall not be used in traffic areas unless approved by the traffic control engineer and accepted by the ENGINEER.

5.6. HOT WORK

- A. This section covers the provisions to prevent injury, loss of life, and loss of property from fire or explosion because of hot work.

- B. Hot work includes, but is not limited to, grinding, cutting, welding, brazing, soldering, heating, heat treating, thawing pipe, powder-driven fasteners, hot riveting, fusion welding, torch-applied roofing, torch cutting, sawing, concrete chipping, heat guns, or other operations that generate heat, flames, arcs, sparks, or other sources of ignition.
- C. Contractors shall only conduct hot work under a permit issued by OC SAN. Risk Management will issue a hot work permit for all hot work activities conducted at an OC SAN facility. The hot work permit is only valid for one day, except where approval for longer duration hot work permits has been provided by Risk Management.
- D. Contractors shall notify Risk Management at least 24 hours in advance of Work that requires a hot work permit.
- E. The Contractor's Permit Authorizing Individual (PAI) will initiate the hot work permit. Risk Management will review the proposed hot work permit. If acceptable, Risk Management will endorse the hot work permit with a signature.
- F. The Contractor's Person Performing Hot Work (PPHW) shall verify all hot work equipment is in good working condition and sign the hot work permit.
- G. Where required, the Contractor's fire watch will close out the permit by providing the time that fire watch duties were completed and provide their initials.
- H. The Contractor's PAI, PPHW, and fire watch shall review the hot work permit, inspect the work site, implement required controls, and add additional controls as identified by the CONTRACTOR.
- I. Hot work permits are only good for one day.
- J. Hot work permits shall be returned (hand delivered or emailed) to Risk Management for retention.
- K. Contractors have sole responsibility for provision of fire monitoring, fire protection system, fire watch, and site preparation required by the hot work permit, including, but not limited to, atmospheric monitoring, ventilation, personal protective equipment, firefighting equipment, fire watch, relocation of flammable and combustible materials, or covering flammable and combustible materials with approved fire blankets, curtains, or pads, where required by the permit.
- L. The hot work permit shall be conspicuously posted at the job site or work area.
- M. A fire watch shall be designated by name on the hot work permit. The designated fire watch shall remain present at the hot work location throughout the duration of the hot work activities and at least 30 minutes beyond completion of those hot work activities. OC SAN reserves the right to waive the 30-minute fire watch rule, depending on the hot work scope, and this can be authorized on the permit by the PAI and Risk Management. The fire watch shall observe the hot work operator, conduct atmospheric monitoring, and inspect the area for flammable and combustible hazards. The fire watch is permitted to perform additional tasks; however, those tasks shall not distract him or her from their fire watch duties. These tasks may include moving partitions relating to hot work, sweeping in the immediate area, and minimal assistance to the operator.
- N. Contractors shall have a Hot Work Program for fire prevention during hot work activities. This Program shall meet or exceed the requirements of NFPA 51B, "Standard for Fire Prevention during Welding, Cutting and Other Hot Work".

- O. An approved fire extinguisher and/or other fire protection equipment are to be provided by the Contractors for each hot work operation in accordance with Cal/OSHA and local Fire Marshal / Fire Code requirements. This equipment shall be located on the same elevation and within 5 feet of the hot work activity.
- P. In areas where it is reasonable to expect that enriched oxygen or flammable combustible gases, vapors, dusts, or liquids may be present in sufficient concentrations to cause a fire or explosion, continuous air monitoring is required. When atmospheric monitoring is required, the Lower Explosive Limit must be non-detectable (0% LEL) and oxygen concentrations must be within acceptable limits of 19.5 and 23.5 percent oxygen, prior to any type of burning, welding, or hot work being conducted by the Contractor. Air monitoring will be required around or near any areas that may pose a potential fire or explosion threat from flammable or combustible vapors.
- Q. Welding fumes and particulates must be ventilated to protect hot work operators, fire watch, and personnel working adjacent to the hot work. Respirators approved by the National Institute of Occupational Safety and Health (NIOSH) must be worn for protection against welding fumes, hexavalent chromium, etc., as required.

5.7. CELL PHONES

- A. Cell phones can be a distraction in the workplace and contribute to serious injuries or fatalities. Consideration is to be given as to when and where a person uses their cell phone so as to avoid injury.
- B. Contractors shall not operate heavy equipment or vehicles when using cell phones.
- C. Cell phones shall not be used in classified locations where there is a potential explosive atmosphere, unless if the individual has on them a properly calibrated 4-gas meter.
- D. It is recommended that Contractors not walk and talk while on the phone. Phone calls or responding to text messages and/or emails, should be completed from a safe place on the job site.

5.8. COMPRESSED GAS CYLINDERS

- A. All cylinders must be secured and transported in a vertical upright position.
- B. Oxygen and fuel gas cylinders must be separated at least 20 feet or by a 5-foot-high barrier with a 1/2-hour fire rating when in storage. The cylinders shall be placed away from equipment with potential to contact the cylinders resulting in vessel rupture.
- C. Cylinder valves shall be turned to the off position if left inactive for 30 minutes or longer.
- D. Cylinders designed for valve protection caps must have the valve protection caps installed when in storage or when being transported. Cylinder storage areas shall have appropriate warning signage posted. Appropriate fire-fighting equipment must be provided for each cylinder storage area.
- E. Cylinders, hoses, and fittings shall be checked for leaks and damage on prior to use.
- F. Cylinders must be labeled as to the nature of their contents per NFPA requirements and the Cal/OSHA Hazard Communication Standard.
- G. Cylinders shall not be taken into confined spaces.
- H. Torches and hoses shall not be left connected to cylinders overnight.

- I. Torches and hoses shall not be stored in unventilated gang boxes or storage containers.
- J. Flashback arrestors and check valves shall be installed in accordance with manufacturer's instruction on all oxygen-fuel torch sets.

5.9. CONCRETE AND MASONRY CONSTRUCTION

- A. Contractors must guard all protruding reinforcing steel, form stakes, or other members to eliminate impalement hazards.
- B. Contractors must create and follow a safe work procedure to remove concrete falsework. The procedure must be reviewed by employees removing the falsework and saved with the Project files.
- C. Contractors must not remove any forms or shoring until a determination has been made by the testing lab and structural authorized representative that the concrete has gained sufficient strength to support its own weight and that of superimposed loads.
- D. Contractors must not place loads on any concrete structure until concrete has reached a compressive strength predetermined by the ENGINEER.
- E. Where concrete shoring/reshoring is employed, a shoring/reshoring plan specific to the Project shall be available for review at the job site.
- F. Deviations from the shoring/reshoring plan will require the issuance of a new shoring/reshoring plan that has been stamped by a California licensed Professional Engineer.
- G. The addition of superimposed loads on the floor (such as equipment and/or materials) not considered in the reshoring plan shall be construed as a deviation from the plan.

5.10. POURING AND PUMPING OPERATIONS

- A. Permanent and temporary power lines shall be identified prior to the start of a concrete pour. Appropriate safeguards shall be implemented for the pumping, pouring, and finishing operations.
- B. A site traffic control plan shall be established for concrete truck traffic. Trained spotters and flaggers shall be used as necessary for worker and public safety.
- C. Employees involved in pouring and finishing activities shall have appropriate personal protection equipment, including gloves, mud boots, and eye protection. Concrete or cementitious products shall not contact skin or clothing.
- D. Concrete truck washout areas shall be in an area acceptable to the ENGINEER and located out of vehicular and pedestrian travel areas.
- E. Absorbent pads or the equivalent shall be provided for the pump and concrete trucks when the truck to pump transfer occurs in a public street or other public area.
- F. A site logistics plan shall be prepared for each pump location and shall include provisions for concrete truck traffic routing and control, as well as pedestrian traffic routing and control (if applicable).

5.11. MASONRY CONSTRUCTION

- A. Masonry walls shall be braced and/or supported as required by Cal/OSHA and/or local requirements. A clear buffer area shall be maintained during construction and work areas shall be maintained in a workmanlike manner.
- B. Clear Zone, unauthorized personnel shall be prohibited from entering the work area.

5.12. CUTTING, GRINDING AND PROFILING

- A. Dry cutting, grinding, and profiling of concrete or masonry shall be prohibited except in instances where it is determined in a manner consistent with applicable safety and health standards that the use of water in the cutting, grinding, or profiling is not feasible.
- B. If it is determined that the use of water is infeasible:
 - 1. Contractors shall use work practice controls to control the dust, such as a vacuum with a high efficiency particulate air filter (HEPA), or other dust control system.
 - 2. Any dry cutting which occurs shall be done in a designated area away from other employees if possible; and
 - 3. Contractors shall provide affected employees with appropriate respiratory protection as part of a respiratory protection program in accordance with applicable Cal/OSHA standards.

5.13. CONFINED SPACE ENTRY

- A. Contractors shall have a written confined space program in accordance with Cal/OSHA safety orders. Contractors' confined space programs shall not conflict with and may be used to supplement OC SAN's confined space program, whichever is more stringent.
- B. Contractors shall not perform any Work in a confined space until a Confined Space JHA is completed by Risk Management with mandatory participation by the Contractor for both non-permit required and permit-required confined spaces. A separate JHA will be completed for each confined space entry location unless Risk Management deems that one JHA is sufficient to cover related confined spaces. Completion of the Confined Space JHA requires the Contractor to submit the following to Risk Management for review five days prior to the start of the job:
 - 1. Proof of training for entrants, attendants, supervisors, and rescue personnel
 - 2. A copy of the Contractor's written confined space program
 - 3. Site-specific entry procedures
 - 4. Fall protection plan
 - 5. Rescue procedure
 - 6. Ventilation plan
 - 7. Purge plan (required for gas and chemical systems)
 - 8. Hot work permit (if applicable to the Work)
 - 9. Scaffolding plan (if applicable to the Work)
 - 10. Respiratory protection program, including fit testing and PFT results (if required for the Work)
 - 11. Daily entry permit
 - 12. Copies of the energy control procedures (LOTO) prepared by OC SAN Operations and Maintenance Department (O&M)
 - 13. Safety data sheets for chemicals brought or used in the confined space
 - 14. Other required documentation for confined space entry

- C. The Confined Space JHA will address:
1. OC SAN experience with the space, known and potential hazards that could be encountered during the confined space entry.
 2. Any special precautions that must be taken by the Contractor employees who are working in or around the confined space.
 3. Compliance with regulatory requirements and Contractor Safety Standards.
 4. Method of coordination for entry operations if more than one General Contractor is entering the space or if OC SAN employees will be entering the space.
- D. Contractors shall identify and designate those individuals who are educated, trained, competent and/or qualified to perform specific confined space- related duties, including but not limited to, Entry Supervisors, Attendants, Entrants, hazard identification and controls, entering confined spaces, conducting atmospheric monitoring, providing for rescue, and ventilation. Confined space responsibilities shall be listed on the entry procedure and/or permit.
- E. Contractors shall provide required equipment for entry and rescue and ensure that it is properly inspected, tested, maintained, and used in accordance with manufacturer's instructions and applicable safety programs.
- F. Ventilation plans for live sewer entry shall be prepared by a CSP, Certified Industrial Hygienist (CIH), or Professional Engineer (PE).
- G. Contractors shall identify, evaluate, and qualify assigned Rescuers or outside emergency services, and develop and implement procedures for summoning rescue.
- H. The CONTRACTOR is responsible to inform all Subcontractors of the terms discussed at all pre-job meetings.
- I. After a confined space entry, the Contractor shall conduct a debriefing meeting with the entry team to discuss any hazards encountered during the confined space entry. If the Contractor encounters a hazard(s) that was not noted on OC SAN Job Hazard Analysis, then the Contractor must alert Risk Management or the INSPECTOR to those hazards in writing
- J. Contractors must abide by the applicable Cal/OSHA and any other recognized standards for all confined space entry operations and furnish all appropriate personnel, equipment, and support.
- K. Contractors' personnel must be trained and certified in the hazards of confined space work, including rescue procedures and provisions, the use of respiratory equipment, and instructions as to the hazards they may encounter. Contractors shall submit all certifications and training documents prior to any confined space entry.
- L. Contractors shall develop a written, understandable, and detailed confined space operating and rescue procedure as part of their entry permit. This procedure must be made available to all affected employees.
- M. Contractors are required to provide all necessary entry and rescue equipment required for all entries into confined spaces (tripod, full body harness, and lifeline or equivalent, etc.) as required by the applicable regulatory Standards. Fire Department shall not be considered first responders for rescue.

- N. Prior to entry into a confined space, Contractors shall ensure all lines that may convey flammable, injurious, or incapacitating substances into the space are disconnected, blinded, or blocked off by other positive means in accordance with Cal/OSHA Lockout/Tagout regulations and Section 5.43 for Control of Hazardous Energy (LOTO).
- O. Prior to and continuously throughout entry into confined space, the Contractor shall test the air with an active (pump model) atmospheric monitor for: (1) oxygen content, (2) flammable gases and vapors, and (3) potential toxic air contaminants (CO; H₂S, other as required). A written record shall be made and kept at the confined space entry point. Readings shall be recorded on an atmospheric log every 15 minutes. Contractors can seek a variance from Risk Management for logging readings at a different interval.
- P. Contractors shall conduct stratified testing of each confined space before entering if there is the potential of gas to have stratified. Stratified sampling will include lowering the sampling hose at approximately 4-foot intervals and waiting sufficient time for the sampling pump to pull the air to the monitor sensors.
- Q. All entries into active, ponded, or live sewer systems shall ensure compliance with Title 8 CCR 5157 Appendix E Sewer System Entry.
 - 1. Contractors entering OC SAN active sewer systems who elect to use ventilation, in lieu of atmosphere-supplying respirators, must submit a Ventilation Plan. This plan shall be a component of the Confined Space Entry Procedures and be reviewed and signed by a PE qualified to practice in the state of California, CSP, or a CIH prior to Risk Management review.
 - 2. The plan must include, but is not limited to:
 - a. Determination of the internal size (volume) and configuration of the permit space.
 - b. How have the physical properties (molecular weight, vapor pressure, etc.) of the atmospheric hazards been considered in the design of the Ventilation Plan.
 - c. The capacity of each piece of equipment being used, and does the capacity match the requirements of the space?
 - d. The air exchange rate required to maintain acceptable entry conditions.
 - e. Assessment of whether the Work or activities being performed within the sewer will contribute to the atmospheric hazard.
 - f. Description of mitigation measures
 - g. Calculations demonstrating how identified hazards are mitigated.
 - h. A consideration of how the atmosphere will be affected by any hazards brought into the confined space such as hot work, hazardous vapors from industrial coatings, etc.
 - 3. The Contractor's Ventilation Plan must be submitted and accepted by the ENGINEER and Risk Management prior to placing workers or equipment into an active sewer.
 - 4. In absence of an accepted Ventilation Plan, the Contractor shall make entry into the active, ponded, or live sewer system under supplied air. The Contractor shall refer to respiratory protection section for additional requirements.

- R. The confined space will be emptied to extent possible by OC SAN or as detailed in Contract Documents. The Contractor is responsible for flushing, cleaning, and purging of flammable or injurious substances to the extent feasible. The Contractor shall provide the proper ventilation equipment.
- S. Whenever a hazardous atmosphere and/or oxygen deficiency cannot be ensured through ventilation, the Contractor shall provide NIOSH approved respirators to affected employees. Employees using respiratory protection shall be involved in a comprehensive respiratory protection program in accordance with applicable Cal/OSHA standards. The level of respiratory protection shall be adequate to safeguard persons against the hazardous atmosphere.
- T. Where a Standby Rescue Employee is required, the Standby Rescue Employee must have a valid certificate in First Aid and CPR training from the American Red Cross, or equivalent training verified by documentary evidence.
- U. Visual contact or two-way radio communication must be available always.
- V. If radios are selected for communication, the Contractors shall provide the radios.
- W. When the CONTRACTOR arranges to have employees of a Subcontractor perform Work that involves a confined space entry, the CONTRACTOR shall:
 - 1. Inform the Subcontractor that the workplace contains confined spaces and entry into them is allowed only through compliance with a confined space program that meets the requirements of the CCR Title 8 Sections 1950 through 1961.
 - 2. Inform the Subcontractor of the elements including the hazards identified and the host employer's experience with the spaces that may classify it as permit required.
 - 3. Inform the Subcontractor no Work is to be performed in a confined space until a Confined Space JHA is completed by Risk Management with mandatory participation by the Subcontractor for both non-permit required and permit-required confined spaces. The Subcontractor shall follow the submittal requirements outlined in Section 5.13.B.
 - 4. Coordinate entry operations with the Subcontractor when both the CONTRACTOR and Subcontractor will be working in or near the permit required confined space.
 - 5. Debrief the Subcontractor after the permit required confined space operation; ensure that the following questions are asked:
 - a. Was the permit required confined space program followed?
 - b. Were unpredicted hazards confronted or created in the permit required confined space during the entry operations?
 - c. Were all the tools and equipment needed for the confined space entry and rescue on site and in good operating order?
- X. Contractors must establish a means of communication with outside emergency services. Outside emergency services can only be used to provide medical services. Contractors are responsible for rescuing their employees from the confined space.

5.14. UTILITY CONNECTIONS

- A. The CONTRACTOR shall not, or allow any Subcontractor to, make any temporary service connections to electrical, water, air, steam, or other utilities without the written acceptance of the ENGINEER.
- B. Temporary connections shall comply with all applicable Federal, State, and local regulations.
- C. Temporary connections shall be inspected on a regular basis.
- D. Contractors shall not operate any valves or equipment owned by OC SAN or other agency/municipality without authorization.

5.15. CONSTRUCTION AND PERSONAL VEHICLES

- A. Contractors' vehicles must be in authorized areas only. Do not block or obstruct intersections, fire lanes, fire hydrants, traffic lanes, driveways, or parking lot entrances. Offending vehicles may be towed or ticketed without notice at the vehicle owner's expense.
- B. Personal vehicles are not permitted within the treatment plants, except where authorized by the Contract Documents or the ENGINEER and Risk Management.
- C. Company and personal vehicles parked within the treatment plants shall conduct a 360-degree vehicle walk around prior to operation to ensure OC SAN structures or assets are not struck.
- D. Contractors' fleet vehicles entering and/or working at the site must have the company name/identification clearly displayed on the vehicle with door magnets or sticker labels. Window tint decals are not acceptable.

5.16. ASSIGNED WORK AREA

- A. Contractors are confined to their assigned work areas.
- B. Contractors are responsible for enforcing the PPE standards inside the work area.
- C. Wandering throughout the treatment plant and project sites is strictly prohibited.
- D. Contractors are responsible for establishing effective access control to their site.
- E. Contractors shall only travel on permitted roadways or pathways as provided by the ENGINEER or Contract Documents.

5.17. CRANES, BOOM TRUCKS AND HOISTS

- A. The term "crane" as used in this section shall include boom trucks, hoists, and similar truck-mounted cranes.
- B. Prior to commencing any lifting over buildings/structures, the CONTRACTOR shall request a permit at least one week prior to the scheduled lift.
- C. Cranes exceeding three tons rated capacity shall not be used in lifting service until an approved certifying agent has certified the equipment.
 - 1. Cranes that do not have such evidence of inspection shall not be permitted to operate on the Project.
 - 2. A qualified person shall inspect the crane, rigging, and operating mechanism prior to first operation on any work shift. Inspection shall be documented and maintained on the crane. Results of inspections shall be made available to OC SAN upon request.

3. Periodic inspections shall be made at least four times per year. The inspection shall be documented with the latest inspection maintained on the crane. Inspection results shall be provided to OC SAN's PCMS.
 4. Annual and quadrennial (where required) certifications shall be made for each crane. Annual or quadrennial certifications can satisfy one of the periodic inspections. Crane certifications shall be maintained on the crane and submitted using OC SAN's PCMS.
- D. Only qualified persons or service providers shall re-inspect any crane that is involved in any incident or is damaged during set-up or operation, and a new certificate of inspection issued prior to being returned to service.
 - E. Only employees authorized by the CONTRACTOR and trained, or known to be qualified, in the safe operation of cranes shall be permitted to operate such equipment.
 1. Operators shall have valid evidence of current licensing or certification in accordance with State and local requirements. Operators shall not use cell phones or radios while operating unless the cell phone or radio is required for the lift.
 2. Operators not having such evidence where required shall not be permitted to operate applicable machinery (except under terms and conditions prescribed for trainees by applicable regulations).
 - F. All mobile cranes having either a maximum rated boom length exceeding 200 feet or a maximum rated capacity exceeding 50 tons shall be equipped with a load indicating device or a load movement device.
 - G. Cranes shall be equipped with a boom angle or a boom radius indicator and clearly legible load chart in clear view from the operator's position.
 - H. An effective, audible warning and operating signal device (such as a horn) shall be provided on the outside of the crane. The controls shall be in easy reach of the operator.
 - I. When required by the manufacturers or certifying agent's instructions, outriggers shall be set so that wheels or crawler tracks within the boundary of the outriggers shall be relieved of all weight by the outrigger jacks or blocking.
 - J. Plates, pads, or mats shall be used under the outriggers or crawlers of all cranes when a lift exceeds 75% of the capacity of the crane as it is configured for that lift. The plates, pads, or mats shall be of suitable material and size to support the crane on the surface that it is set up on.
 - K. The CONTRACTOR shall ensure that a qualified person visually inspects the crane, controls, rigging and operating mechanism prior to the first operation of any work shift. Records of daily inspections by the operator or other qualified person shall be maintained on the crane and must be available for review upon request.
 - L. Adjustments and repairs to the crane shall only be made by a qualified person.
 - M. An industrial cartridge style fire extinguisher of not less than 10-B: C rating shall be kept in serviceable condition and readily accessible to the operator.
 - N. Lifting operations shall be performed in a controlled manner to prevent loads from being passed directly over workers, occupied workspaces, or occupied passageways.

- O. A qualified signal person shall be provided when the point of operation is not in full and direct view of the operator unless a signaling or control device is provided. Only one person shall be permitted to give signals to the operator. Any employee involved in the operation may give a "stop" signal if such a signal is warranted.
- P. A legible chart depicting and explaining the system of crane signals used shall be conspicuously posted near the hoisting operation.
- Q. All loads shall be rigged by an identified, qualified, and authorized rigger.
- R. No Employee shall be permitted to ride on loads, hooks, or slings of any derrick, hoist, or crane.
- S. Swing radius protection shall be provided where a rotating crane is positioned to operate in areas where persons may be caught between rotating parts and fixed objects or non-rotating crane components.
- T. Tag lines, restraint lines, or guide ropes shall be used on all loads except where their use presents a greater hazard. Such lines or ropes should be insulated to prevent shock and shall not contain knots or splices that may snag on an object.
- U. Cranes shall not be left unattended while the load is suspended unless the load is over water, a barricaded area, or is blocked up or otherwise supported.
- V. Before leaving the crane unattended, which means leaving the controls of the crane, the operator shall:
 - 1. Land or properly secure any attached load
 - 2. Disengage clutch (if applicable)
 - 3. Set travel, swing, boom brakes, and other locking devices unless otherwise specified by the certifying agents
 - 4. Put controls in the "off" position
 - 5. Stop the engine
 - 6. Secure the crane against accidental travel
- W. In all operations where the weight of the load being handled is unknown and may approach the rated capacity, a qualified person shall determine the magnitude of the load unless the crane is equipped with a load-indicating device.
- X. The CONTRACTOR shall provide a qualified person to direct the lift. The qualified person shall see that:
 - 1. The crane is properly leveled for the work being performed and blocked where necessary.
 - 2. The load is well secured and properly balanced in the sling or lifting device before it is lifted more than a few inches.
- Y. A designated person shall monitor the clearance between crane booms, load lines, and loads, and power lines and alert the operator when necessary.
- Z. For power lines rated 50kV, or less, minimum clearance between the lines and any part of the crane or load is 10 feet. For power lines rated over 50kV, minimum clearance between the lines and any part of the crane or load shall be 10 feet plus 0.4 inch for every 1kV over 50kV.
- AA. Magnetic lifting devices are not allowed to lift material or equipment.

5.18. OC SAN OWNED OVERHEAD CRANES

- A. Prior to use of an OC SAN owned overhead crane, the Contractor must complete and sign OC SAN's Hold-Harmless Agreement. A copy of the Hold-Harmless Agreement can be obtained from Risk Management.
- B. The Contractor shall submit a signed training verification letter stating the names of the individual(s) who are trained, competent, and qualified to operate the overhead crane.
- C. The Hold-Harmless Agreement and training verification letter shall be submitted prior to use of the crane using OC SAN's PCMS.
- D. The Contractor is responsible for pre-use inspection of the crane for which authorization has been granted. Inspections must be documented. The Contractor shall not overload the crane and must immediately report any damage to OC SAN.

5.19. RIGGING, SLINGS AND HOOKS

- A. Hoisting hooks shall be of the safety latch-type.
- B. Crane hooks with cracks or with deformation of throat opening more than 15% more than normal opening or more than 10-degree twist from plane of unbent hook shall be removed from service.
- C. Ropes shall be inspected for proper lubrication, excessive wear, broken strands, and proper weaving.
- D. To determine proper time for replacement, a continuing inspection record shall be maintained for hoisting ropes. Conditions such as the following shall be reason for replacement:
 - 1. In running ropes, 6 randomly distributed broken wires in one rope lay, or three broken wires in one strand in one lay.
 - 2. Wear of 1/3 the diameter of outside individual wires.
 - 3. Kinking, crushing, bird caging, or other damage resulting in distortion of the rope structure.
 - 4. In stranding ropes, more than two broken wires in one lay in sections beyond end connections or more than one broken wire at an end connection.
 - 5. Reduction of rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires.
- E. Fixtures are usually attached to wire rope using wire rope clips. The clips must be attached with the inside curve of the U-bolt against the dead, or short end of the wire rope, and flat clip (saddle) against the live, or long end of the wire rope.
- F. Each day before being used, wire rope slings, metal mesh slings, and natural and synthetic fiber rope slings, and all fastenings and attachments shall be inspected for damage or defects by a qualified person.
- G. Slings shall have permanently affixed tags stating the following:
 - 1. Manufacturer's name or trademark
 - 2. Rated capacity
- H. Chains shall not be used for rigging.

5.20. CRITICAL LIFTS

- A. A Critical Lift Plan shall be prepared and submitted to Risk Management for all lifts that:
 - 1. exceed 75% of the lifting device's capacity as configured for that lift,
 - 2. is deemed a critical lift by the ENGINEER, the INSPECTOR or Risk Management due to potential negative consequences to safety, structure, or schedule,
 - 3. over a building that normally has occupants, or
 - 4. Involves two or more cranes or lifting devices.
- B. A qualified person shall prepare the Critical Lift Plan. The qualified person preparing the plan may be the crane operator, lift supervisor, or rigger. The crane operator, lift supervisor, and rigger shall participate in the preparation of the plan. The plan shall be documented, and a copy provided to the CONTRACTOR and the ENGINEER. The plan shall be reviewed by, and signed by, all personnel involved with the lift.
 - 1. The plan shall specify the exact size and weight of the load to be lifted and all crane and rigging components that add to the weight. The manufacturer's maximum load limits for the entire range of the lift as listed in the load charts shall also be specified.
 - 2. The plan shall specify the lift geometry and procedures, including the crane position, height of the lift, the load radius, and the boom length and angle, for the entire range of the lift.
 - 3. The plan shall designate the crane operator, lift supervisor, and rigger, and state their qualifications.
 - 4. The plan will include a rigging plan that shows the lift points and describes rigging procedures and hardware requirements.
 - 5. The plan will describe the ground conditions, outrigger, or crawler track requirements, and, if necessary, the design of mats, necessary to achieve a level, stable foundation of sufficient bearing capacity for the lift.
 - 6. For floating cranes or derricks, the plan shall describe the operating base (platform) condition and any potential list.
- C. The plan will list environmental conditions under which lift operations are to be stopped.
- D. The plan will specify coordination and communication requirements for the lift operation.
- E. For tandem or tailing crane lifts, the plan will specify the make and model of the cranes, the line, boom and swing speeds, and requirements for an equalizer beam.
- F. This plan shall be submitted to OC SAN at least two weeks prior to the lift.
- G. The Critical Lift Plan shall be reviewed by Risk Management prior to start of the lifting operation.

5.21. DEMOLITION

- A. The CONTRACTOR shall prepare a demolition plan that contains the following:
 - 1. Describe scope of demolition.

2. List construction equipment or materials intended to be used for demolition work and how they will be used.
 3. Identify/describe utilities to be shut off, capped, or otherwise controlled.
 4. Prepare/describe evacuation plan for work area.
 5. Describe processes and controls for preventing unauthorized access to demolition work area.
 6. Describe processes and controls for how access will be maintained for OC SAN O&M or inspectors (if needed).
 7. Describe how construction debris will be loaded out and where. Identify controls for this area.
 8. Provide high level hazard assessment and describe controls to control each hazard.
 9. Describe dust control measures to be employed.
 10. Prepare/describe fire prevention measures to be employed.
 11. Describe hazard warning devices to be used.
 12. Identify personal protective equipment required for the protection of the head, eyes, ears, respiratory system, hands, feet, and other parts of the body.
 13. Identify competent persons who will be performing inspections during demolition to detect hazards resulting from weakened or deteriorated floors, walls, or loosened material.
 14. Submit shoring drawings and scaffolding drawings where applicable.
 15. Utility companies shall be notified, and all utility service shut off, capped, or otherwise controlled, at the building or curb line before starting demolition. The CONTRACTOR is responsible to verify that these actions have been taken.
 16. The CONTRACTOR shall develop an Emergency Call List for all known utility owners prior to the start of demolition activities.
 17. A site plan shall be marked up to show the locations of known utilities, and the nearest identified shut-off valves/controls. This plan shall be available in the CONTRACTOR's site office. The ENGINEER and Risk Management shall be provided with a copy.
 18. The CONTRACTOR shall research available documents to identify all utilities prior to digging or boring. The CONTRACTOR shall pothole to locate critical utilities prior to digging or boring.
- B. Existing alarm systems shall be identified and taken out of service prior to commencing demolition operations. Alarm services shall be notified that the alarm will be taken out of service before taking the system out of service.
- C. The CONTRACTOR shall determine if any type of hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in any pipes, tanks, or other equipment on the property.
- D. When the presence of hazardous substances is apparent or suspected, testing and purging shall be performed, and the hazard eliminated prior to demolition.
- E. Pipe-covering insulation, steel beam and column fire protection, and HVAC duct shall be surveyed for asbestos.

- F. During demolition, continuing inspections shall be made as the Work progresses to detect hazards resulting from weakened, load burdened, or deteriorated floors or walls or loosened materials.
 - 1. The CONTRACTOR shall ensure that floor load limits are not exceeded during demolition operations.
 - 2. Disperse demolition equipment throughout the structure and remove demolished materials to prevent excessive loads on supporting walls, floors, or framing.
- G. Adequate dust control measures shall be provided during demolition, stockpiling, and loading operations with potable water sources only. The CONTRACTOR shall inspect for accumulated dust and clean regularly.
- H. Walking across exposed floor joists, steel beams, or girders is prohibited.
- I. Standing on pipes, conduits, or other structures (i.e., cable trays, motors) used for the treatment process is prohibited.
- J. The CONTRACTOR shall ensure safe passage of persons around the area of demolition. Conduct operations to prevent damage to adjacent buildings, structures, other facilities, and people.
- K. Provide interior and exterior shoring, bracing, or supports to prevent movement, settlement, or collapse of structures to be demolished, and to adjacent facilities.
- L. Demolish concrete and masonry in sections. Use bracing and shoring to prevent collapse.
- M. Indoor concrete demolition shall have a dust control plan in place that is effective and accepted by the ENGINEER. Continuous inspection of indoor dust and the efficacy of the plan must be conducted.

5.22. ELECTRICAL

- A. General
 - 1. Contractors and all their employees must follow the NFPA 70 and 70E standards to determine work practices with appropriate arc-resistant personal protective equipment.
 - 2. The Contractor who places, installs, erects, or connects any electrical wires, fixtures, appliances, apparatus, raceways, conduits, solar photovoltaic cells, or any part thereof, which generate, transmit, transform, or utilize electrical energy in any form or for any purpose shall be an electrician certified by the State of California or a C-10 Electrical Contractor Licensed in the State of California.
 - 3. The Contractor who installs, services, and maintains all types of communication and low voltage systems which are energy limited and do not exceed 91 volts shall be a C-7 Low Voltage Systems Contractor. These systems include, but are not limited to telephone systems, sound systems, cable television systems, closed-circuit video systems, satellite dish antennas, instrumentation and temperature controls, and low voltage landscape lighting. Low voltage fire alarm systems are specifically not included in this section.
 - 4. During the commissioning phase of a project, a state certified electrician shall be available to make any changes or adjustments to electrical installations that the commissioning coordinator requires. This would include testing equipment, checking voltage, and installing wire jumpers.

5. All temporary power panels must have covers installed always. All circuits must be clearly labeled.
6. Contractors are to supply ground fault circuit interrupters (GFCI) for all temporary electrical wiring cords and equipment. Ground Fault Circuit Interrupters shall be tested in accordance with manufacturer's requirements. Logs shall be maintained of all such testing. GFCI with automatic reset feature are not permitted for use at OC SAN.
7. Temporary lighting shall not be suspended by its extension/power cord and must be equipped with guards to prevent contact with the bulb.
8. Extension cords must be at minimum 12-gauges, three-wire cords. Extension cords shall be used only in continuous lengths without splice or tap. The terminals and insulation shall be free of defects such as cracked, split, or nicked insulation; exposed wires; knots; burn marks; loose connectors; or other damage that may present a fire or an electrocution hazard. The ground prong shall not be removed.
9. Power tools must be double insulated or grounded properly. Power tools shall be inspected before each use. Damaged or defective tools and cords shall be removed from service.
10. To protect all employees on the Work site, Contractors shall use either or both a ground-fault circuit interrupters or an assured equipment ground conductor program as required by 8 CCR section 2405.4.
11. Contractors must properly tagout and lockout any equipment within their responsibility. Control of the lock and tag is also the Contractor's responsibility. The CONTRACTOR shall coordinate instances that require multi-employer lockout/tagout activities.
12. The CONTRACTOR shall ensure that all electricians are trained on NFPA- 70E (Electrical Safety in the Workplace) to identify electrical hazards. Contractors shall provide all PPE as required by NFPA 70E. The CONTRACTOR shall request the latest arc flash hazard study from OC SAN 45 days prior to performing any Work on existing live systems and/or equipment. Contractors shall use care when working around energized parts so as not to contact live parts, causing an electrical outage and/or injury.

B. Electrically Safe Work Condition

1. Energized electrical conductors and circuit parts operating at voltages equal to or greater than 50 volts shall be locked out and tagged out before an employee performs Work within the limited approach boundary or the employee interacts with equipment where conductors or circuit parts are not exposed but an increased likelihood of being burnt from an exposure to an arc flash hazard exists.
2. Energized electrical Work or exposure to open energized panels shall be prohibited without authorization from the ENGINEER, unless required in the Contract Documents or as listed below.
3. Contractors may Work in the following equipment and locations while energized:
 - a. Contractors may perform Work inside existing electrical cable trays or 480V manholes and pull boxes while existing cables are energized and in operation. Contractors shall wear appropriate personal protective equipment per NFPA 70E.
 - b. Contractors may perform Work inside PLC and Remote I/O Panels while the

panel are energized and in operation. Contractors shall wear appropriate personal protective equipment per NFPA 70E.

- c. T Contractors may perform testing, troubleshooting and voltage measuring of control circuits while energized. Contractors shall wear appropriate personal protective equipment per NFPA 70E.
4. De-energizing electrical conductors and circuit parts to which an employee may be exposed shall be performed by de-energizing and locking out the sources of electrical energy in accordance with the LOTO section. Electrically safe working conditions shall be established by qualified persons only.
5. When the possibility of induced voltages or stored electrical energy exists, the phase conductors or circuit parts shall be temporarily grounded in accordance with NFPA 70E before touching them.
6. Documentation, including facility drawings, shall be reviewed to ensure that no electrical circuit interlock operation can result in reenergizing the circuit being worked on.
7. Locks and tags shall only be installed on circuit disconnecting means. Control devices such as pushbuttons or selector switches shall not be used as the primary isolating device.

C. Energized Work

1. If Work on or near energized electrical systems is required, the Contractors shall be trained in NFPA-70E and shall obtain the ENGINEER's written acceptance of and adhere to a plan for such energized Work that includes the following:
 - a. Description of energized Work to be performed, estimated duration of energized Work, arc flash hazard category and the required PPE.
 - b. Safety Plan and Procedures.
 - c. Performance of energized Work by the Contractor's qualified, experienced electrician who is NFPA-70E trained and licensed in the State of California.
 - d. Installation of barriers, if possible, to isolate the energized parts and/or devices that may cause a shutdown of a process.
 - e. Obtaining the ENGINEER's acceptance of the plan prior to the notification of OC SAN.
 - f. Written Notification shall be provided to OC SAN as required per Contract Documents.
2. Shutdown requests shall be submitted as specified in the General Requirements section entitled "Advance Notification for Plant Shutdown".
3. Working on energized equipment shall be performed by qualified persons, where authorized by the ENGINEER, or where it can be demonstrated that de-energizing equipment introduces additional hazards or increased risk. The authorization will be in the form an Energized Electrical Work Permit.
4. Energized Work is permitted where the task is infeasible in a de-energized state due to equipment design or operational limitations, or for equipment operating at less than 50 volts.
5. Contractors shall implement safety-related work practices consistent with the electrical hazard and associated risk. The safety-related work practices shall be determined before any person is exposed to the energized equipment using

shock and arc flash risk assessments. The shock risk assessment will determine the limited approach boundary and the restricted approach boundary. The arc flash risk assessment will determine the arc flash boundary, including the level of personal protective equipment to protect against arc flash hazards.

6. Employees are prohibited from blindly reaching into areas that might contain exposed energized electrical conductors or circuit parts.
7. Conductive articles of jewelry and clothing (watches, bracelets, rings, key chains, necklaces, metal framed glasses) shall not be worn within restricted approach boundaries or where they present an electrical contact hazard. Additionally, any conductive materials and equipment that are in contact with any part of an employee's body shall be handled in a manner that will prevent contact with exposed energized conductors or circuit parts.
8. When working within a confined or enclosed space that contains exposed energized electrical conductors or circuit parts operating at 50 volts or more, protective shields, protective barriers or insulating materials shall be used to avoid inadvertent contact with these parts.

D. Limited Approach Boundary

1. The limited approach boundary is the established safe distance for unqualified persons. The limited approach boundary is a calculated distance from an exposed live part where a shock hazard may exist. Only qualified persons are permitted to cross this boundary, if needed.
2. Where there is a need for unqualified persons to cross the limited approach boundary, qualified persons shall advise the unqualified person of the hazards and continuously escort the unqualified person while inside the boundary limit. Unqualified persons shall never cross the restricted approach boundary.

E. Restricted Approach Boundary

1. The restricted approach boundary is closer to live parts and may only be crossed by qualified persons. The restricted approach boundary is a calculated distance from an exposed live part where there is an increased risk of shock due to electrical arc combined with inadvertent movement for personnel working near the live part. Energized electrical permits are required when crossing this boundary to perform Work on the energized conductor or circuit.
2. No qualified person shall approach or take any conductive object closer to exposed energized electrical parts within the restricted approach boundary, except where authorized by the ENGINEER in writing.
3. Unqualified persons are prohibited from working within the restricted approach boundary.

F. Arc Flash Boundary

1. The arc flash boundary is the calculated distance at which the incident energy equals 1.2 calories per square centimeter (energy capable of causing a curable second-degree burn). In theory, persons working outside of the arc flash boundary would only sustain a curable second degree burn or less should an arc flash occur. Work performed inside of the arc flash boundary requires a level of PPE to reduce the incident energy on the human body to quantities lower than 1.2 calories per square centimeter.

2. The incident energy analysis is based on the working distance of the employee's face and chest from a prospective arc source for the specific tasks to be performed. The analysis is performed as part of the arc flash risk assessment, which considers overcurrent protective devices, fault clearing time, and condition of maintenance.
3. The incident energy analysis shall be evaluated when changes occur in the electrical system or every five years, whichever occurs first.

G. Demolition

1. Demolition of the following equipment and systems shall be performed by an electrician certified by the State of California, or a C-10 Electrical Contractor licensed in the State of California. The individual(s) shall also be deemed to be a Qualified Person(s), as defined by Cal/OSHA and NFPA 70E.
 - a. Electrical systems, equipment, and connections that have a potential of 50 volts or greater.
 - b. Electrical conductors, cables, cable bus, cable trays, and bus ducts.
 - c. Conduits terminating at equipment that is to remain in operation after demolition Work is performed.
2. Prior to performing any electrical demolition Work, the following activities at a minimum, shall be completed by a Qualified Person(s) who is an electrician certified by the State of California or a C-10 Electrical Contractor licensed in the State of California, to ensure the system or equipment have been made safe for demolition Work:
 - a. Review applicable drawings
 - b. Locate source, destination, and routing (end to end) of the conductors, cables, cable bus, cable trays, bus ducts, and conduits to be demolished.
 - c. Identify voltage levels and other hazards
 - d. Walk through the entire length of the demolition route from the power source to the termination point at end device. Ensure all conductors, cables, cable bus, cable trays, bus ducts, and conduits have been adequately identified (end to end wire checks) for demolition.
 - e. Mark all the equipment to be demolished from the power source to the end device destination using a contrasting means that cannot be easily removed (paint, tape, adhesive wire ID tags, etc.) as acceptable to the ENGINEER. The equipment shall be marked at five feet intervals. The equipment shall also be tagged where the conductors, cables, cable bus, cable trays, bus ducts, and conduits enter an underground installation and/or penetrate a wall.
 - f. Unless accepted by the ENGINEER, the demolition of the conductors, cables, cable bus, cable trays, bus ducts, and conduits shall never start in the middle of the route. It shall always start from one end and work toward the other end.

5.23. ELEVATING WORK PLATFORM AND AERIAL DEVICES

A. General

1. Only authorized and trained personnel shall operate an aerial device or elevating work platform.

2. Boom, basket, platform load limits specified by the manufacturer shall not be exceeded.
3. Employees shall not sit or climb on the edge of the basket or platform or use planks, ladders, guardrails, or other devices to gain greater height.
4. Employees shall not work from elevated work platforms or aerial devices when exposed to high winds. OSHA defines “high winds” as any wind condition above 40 mph.

B. Aerial Devices

1. An aerial device is any vehicle-mounted or self-propelled device, telescoping extensible or articulating, or both, which is primarily designed to position personnel.
2. Belting off to an adjacent pole, structure, or equipment while working from an aerial device is not permitted.
3. Lift controls shall be tested in accordance with the manufacturer’s recommendations or instructions prior to use to determine that such controls are in safe working condition.
4. Aerial baskets or platforms shall not be supported by adjacent structures when workers are on the platform or in the baskets while in an elevated position.
5. An employee, while in an elevated aerial device shall be secured to the identified anchorage point using a full body harness and lanyard for fall protection.
6. An employee shall not exit the aerial device to gain access to an elevated work area (i.e., use it as an “elevator”).
7. The total load shall not exceed the weight allowed by the manufacturer.

C. Elevating Work Platforms

1. An elevating work platform is a device designed to elevate a platform in a substantially vertical axis. (Vertical Tower, Scissor-Lift)
2. Scissor lifts and vertical tower lifts equipped with a personal tie off anchor point, as designed by the equipment manufacturer, personal fall arrest system for aerial lifts shall be used. Contractors shall refer to equipment manufacturer instructions for safe use of the anchor point. If the scissor lift or vertical tower is not equipped with a personal tie off anchor point, then personal fall arrest systems are not required. At no time shall the employee tie off to a guardrail system or other unapproved system or structure.
3. The platform guardrail shall be 42 inches high, plus, or minus 3 inches, with a middle railing. Where the guardrail is less than 39 inches high, a personal fall protection system accepted by the ENGINEER and Risk Management in writing shall be used.
4. Powered elevating work platforms shall have both upper and lower control devices. Controls shall be plainly marked as to their function and guarded to prevent accidental operation.
5. An emergency stopping device shall be provided at the upper controls of elevating work platforms.
6. Ladders or other objects shall not be placed on top of units to gain greater height.

7. An employee shall not exit the elevating work platform to gain access to an elevated work area (i.e., use it as an “elevator”), unless a manufacturer approved procedure is available.
8. The work platform shall be operated according to manufacturer instructions.

D. Rescue Plan

1. Before Work begins, necessary rescue equipment should be determined and made available at the work area.
2. Appropriate emergency rescue procedures shall be in place for an emergency rescue of a person using a fall-arrest system or aerial lift device, as follows:
3. Rescue shall be provided in less than six minutes to prevent suspension trauma. For most Work, this shall necessitate a full-time safety watch.
4. If a rescue cannot be performed in less than six minutes, the fall-arrest system shall have a device that automatically lowers the person to the ground safely.
5. If compliance with the above cannot be achieved, a safe and alternative working procedure shall be used.
6. Emergency rescue procedures shall consider the immediate rescue of a person after an arrested fall without the need to rely on emergency services or appropriately trained and competent standby rescue teams.

5.24. EMERGENCY ACTION AND EVACUATION PLAN

- A. The CONTRACTOR is responsible for the development of a Project-specific emergency action plan that shall consider probable and possible emergency situations. This plan shall be included in the SSSP.
- B. The plan shall be revised throughout the course of the Project to reflect changed conditions. The plan shall be maintained at the site, and available for review upon request. The plan shall contain the following at a minimum:
 1. Project site map
 2. Street map of immediate area showing Project location that clearly identifies one-way and dead-end streets.
 3. Building plan, including a plan for each floor
 4. Emergency notification list
 5. Emergency notification procedures
 6. Evacuation procedures
 7. Evacuation route
 8. Evacuation refuge area
 9. How employees will be trained on the contents of this plan
 10. Intervals for refresher training
- C. The plan shall contain an Emergency Contact List. The list shall include 24-hour contact information for key Project personnel that will respond to emergencies. The CONTRACTOR shall maintain this list throughout the duration of the Contract and provide a revised copy to all parties when made necessary by changes to personnel or their contact information.

5.25. ENVIRONMENTAL CONTROLS

- A. Spills of hazardous materials (including cutting oil, fuel, solvents, antifreeze, sewage, etc.) must be reported immediately to the appropriate regulatory agencies and to OC SAN. The party responsible for the spill is responsible for cleanup costs.
- B. Cutting equipment must have secondary containment (drip pans, sandboxes).
- C. Drums, jugs, and other containers must have secondary containment.
- D. All containers must be maintained in good condition and must be appropriate for the materials to be stored in them.
- E. All containers must be labeled with their contents and precautions for use.
- F. Containers containing hazardous waste must be labeled "Hazardous Waste" in addition to listing their contents on the label.
- G. Weekly inspections of the Project must be performed by the CONTRACTOR to assure compliance with this section.
- H. Hazardous waste owned by OC SAN prior to the notice to proceed will be considered OC SAN-generated hazardous waste, which requires Risk Management personnel to sign and receive copies of manifested paperwork.
 - 1. The CONTRACTOR shall coordinate with the ENGINEER on the storage of hazardous waste before remediation begins. The CONTRACTOR shall request each storage container from OC SAN a minimum of ten workdays in advance of remediation of hazardous materials.
 - 2. Risk Management will contact an OC SAN approved hazardous waste transportation and waste disposal vendor to transport OC SAN-generated hazardous waste offsite and dispose of in compliance with applicable Federal and State regulations. The CONTRACTOR is responsible for all other construction generated waste.

5.26. EQUIPMENT AND TOOLS

- A. Contractors' equipment and tools must be in proper working condition and routinely (i.e., daily or prior to use) inspected for defects.
- B. Any equipment or tool found to be damaged or defective must be removed from service and repaired before it can be returned to service.
- C. Manufacturer's instructions shall be followed with respect to equipment/tool operation and training requirements.
- D. Equipment is not to be used with loads that exceed the recommended rated capacity.
- E. Contractors are to use only their own equipment and tools, and not those of others, unless employees are properly trained and authorized.
- F. Tools and equipment are to be used for their designated purpose.
- G. Tools and equipment are to be used only by trained and authorized employees.
- H. Proper guards or shields must be installed on all power tools before use. All guards must be manufactured by and/or approved by the manufacturer for that piece of equipment.
- I. The practice of "wedging or pegging" guards on circular saws or other equipment, rendering them non-functional, is not permitted.

- J. No internal combustion vehicle or machinery is to be operated inside structures, confined spaces, or excavations unless proper engineering controls have been implemented to minimize carbon monoxide levels. In such cases where vehicles or machinery are operated inside structures, carbon monoxide levels shall be monitored continuously to ensure a safe work environment.
- K. All material handling equipment must have an audible backup alarm unless a designated spotter is used.
- L. Tools and equipment must be properly stored, secured, and located away from unauthorized access.
- M. For pneumatic power tools, all air hoses exceeding ½ inch inside diameter shall have a safety device (commonly known as an “OSHA valve” or “safety check valve”) at the source of air supply or branch line origin (such as a manifold) to reduce pressure in case of hose failure.

5.27. MACHINE GUARDING

- A. Contractors shall use tools with manufacturer provided guards. Guards and safety devices shall not be defeated or manipulated.
- B. Contractors shall secure any fixed tool or equipment to prevent shaking or jumping.

5.28. EXCAVATION AND TRENCHING

- A. The Contract Documents require that all excavations be performed, protected, and supported as required for safety and in a manner set forth in the operational rules, orders, and regulations prescribed by the Cal/OSHA Construction Safety Orders.
- B. The CONTRACTOR shall submit to the ENGINEER for acceptance, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches 5 feet or more in depth. The plan shall be submitted using OC SAN’s PCMS. The plan shall be prepared and signed by a Civil or Structural Engineer registered in the State of California as required by all applicable laws including Cal/OSHA construction safety orders. As a part of the plan, a note shall be included stating that the registered Civil or Structural Engineer certifies that the plan complies with the Cal/OSHA Construction Safety Orders, or that the registered Civil or Structural Engineer certifies that the plan is not less effective than the shoring, bracing, sloping, or other provisions of the Safety Orders.
- C. The detailed plans showing the design of shoring, etc., shall include surcharge loads for nearby embankments and structures, for spoil banks, and for construction equipment and other construction loading. The plans shall indicate, for all trench conditions, the minimum horizontal distances from the side of the trench at its top to the near side of the surcharge loads.
- D. Nothing contained in this section shall be construed as relieving the CONTRACTOR of the full responsibility for providing shoring, bracing, sloping, or other preventive measures which are necessary for worker protection, nor for the liability resulting from the failure to do so.
- E. The CONTRACTOR shall obtain an excavation permit for excavations when required by the ENGINEER or local or State law.
- F. Trenching or excavating activities must be under the supervision of a trained Competent Person.

- G. Contractors' materials for the protection of personnel (i.e., bracing, shoring, shielding, and trench boxes) must be in good condition and of proper dimensions/materials.
- H. The CONTRACTOR's Competent Person must inspect excavations daily and whenever conditions change. The CONTRACTOR's Competent Person shall perform daily inspections of each trench and excavation for possible cave-ins, failure of protective systems, hazardous atmospheres, or other hazardous conditions. Results of such inspections shall be made available to those working within the trench or excavation.
- I. The CONTRACTOR's Competent Person must determine the soil classification (Type A, B, or C) to determine the appropriate type of protective system required for the excavation.
- J. Excavated soils, materials or equipment are to be kept at least 2 feet from the edge of the excavation.
- K. The CONTRACTOR must provide appropriate barriers to protect people and vehicles from falling into the trench. Lighted barricades must be provided at night. Danger and/or caution tape is not an acceptable barrier.
- L. Ladders or other means of egress must be provided by the CONTRACTOR for access and spaced within 25 feet of any worker inside the excavation when the depth of the excavation exceeds 4 feet (48-inches).
- M. Walkways are to be provided over any excavation or trench point that an employee may need to cross. Walkway must have handrails, midrails, and toeboards.
 - 1. Where pedestrian traffic must be accommodated over excavations, suitable non-skid plates, or other suitable material capable of withstanding at least twice the maximum intended load must be provided to serve as a pedestrian runway for safe passage.
 - 2. The edges of the runway shall be tapered (or chamfered) to minimize trip hazards. In the alternative, the approach to the runway shall be tampered with a suitable and durable material or the runway set into the surface to minimize trip hazards.
- N. Rescue equipment must be provided by the CONTRACTOR (full body harness and lifeline, breathing apparatus, basket stretcher, etc.) when hazardous atmospheric conditions or engulfment hazards are expected to exist.

5.29. UTILITY LOCATION

- A. The CONTRACTOR must locate buried utilities before digging in accordance with the law.
- B. Prior to excavation, all known owners of underground facilities in the area shall be notified by calling the regional One Call Notification System at 811.
- C. The nearest shut off valve or control point for known utilities shall be identified on the CONTRACTOR developed and maintained site plan.
- D. The CONTRACTOR shall check the entire job site for visual signs of substructures. This includes such items as manhole covers, water meter boxes, ditch lines, pavement patches, previous location marks, pole risers, and the obvious absence of overhead utilities.

- E. Most utilities inside of treatment plants are not within USA jurisdiction and are not required to be marked. The CONTRACTOR shall meet with the ENGINEER to view the excavation plans and all utility information resources prior to potholing.
- F. Contractors must expose substructures utilizing hand and/or soft digging methods, such as air-knifing, hydro-excavation, or hand shovel after locations are determined.
- G. Utilities within 24 inches of the proposed location of excavation, drilling or other intrusive Work activities shall be exposed and identified using hand and/or soft digging methods identified above.
- H. Contractors shall be careful not to damage the utility substructure by scraping, hammering, or other forms of excavation or locating efforts.
- I. Contractors shall be aware of the possibility of joint use of an excavation/trench for power, telephone, gas, fiber optics, cable, etc.
- J. The subsurface utilities shall be marked during excavation, drilling, and other intrusive activities. The markings shall be visible and maintained throughout the intrusive activities.

5.30. FALL PROTECTION

A. General

- 1. Contractors shall have a written fall protection program if Work is required to be performed at elevated locations. The fall program shall be developed by a competent person and in accordance with applicable governmental regulations and this procedure. The program may be part of the Injury and Illness Prevention Program or maintained as a separate program.
- 2. Contractors shall conform to all applicable Federal and Cal/OSHA regulations.
- 3. The CONTRACTOR shall submit a fall protection plan as part of the SSSP for all Work exceeding 6 feet in elevation. The plan shall include a California licensed Professional Engineer's approval for the use of all lifelines. Documentation shall be provided to OC SAN prior to the start of the Work. The plan shall be submitted using OC SAN's PCMS.
- 4. Personal fall restraint, fall arrest, work positioning, horizontal lifelines, and vertical lifeline systems shall be designed and installed under the supervision of a California licensed Professional Engineer.
- 5. The CONTRACTOR shall meet with Risk Management prior to the start of the job and complete a CSO that addresses where fall protection may be required and how fall protection is to be achieved.
- 6. Contractors shall verify the use, inspection, storage, and maintenance of fall protection equipment with the requirements outlined in this document and all other applicable regulations.

B. Hierarchy of Fall Protection Controls

- 1. The hierarchy of controls listed below shall be utilized to eliminate or reduce fall hazards. When elimination is not feasible, various engineering and administrative controls will be evaluated to determine appropriate personal protection against the fall hazard. Fall hazards and existing controls shall be periodically reassessed to determine if a greater level of protection can be applied or if the hazard can be eliminated.

2. Elimination - Eliminating the fall hazard or preventing exposure to a fall hazard is the most effective control measure and should be considered for existing hazards or during new construction. This can be achieved by modifying a structure, isolating the authorized person from the hazard, changing a process, substituting equipment, or using work procedures so that the authorized person is not exposed to the fall hazard.
3. Passive Fall Protection - If it is not possible to eliminate the risk of a fall, reduce the risk using passive fall protection equipment. Passive fall protection offers a greater level of protection than active fall protection systems since there is no reliance on the authorized person. Passive systems include guardrails, covers capable of supporting weight, scaffolds, and aerial lift devices. Note: Aerial lift devices require the use of a personal fall restraint system.
4. Personal Fall Restraint System – These systems allow the authorized person access to conduct their work but prevent them from reaching a point of where a fall could occur. The system is generally suited if the authorized person needs to work at the edge of a hazard, such as a roof's edge or at a hatchway in a process area. The fall hazard shall be positioned a greater distance away as compared to the fixed length of lanyard.
5. Personal Fall Arrest System - If it is not possible to use the above options, the use of a personal fall arrest system (PFAS) to arrest a fall after it occurs shall be used. This system provides the maximum freedom of movement for workers to conduct Work. In the event of a fall, the fall will be arrested requiring the person to be self-rescued or be rescued.
6. Work Positioning System - These systems are different from a PFAS in that the length of the lanyard is shorter and rigged in such a way that will both restrict the range of movement of the authorized person and prevent falls of more than 2 feet. These systems secure the worker in place, allowing the authorized person to perform tasks with both hands. This requires the use of special harnesses and lanyards.
7. Administrative Controls - If none of the above measures are feasible or the risk of a fall remains, the risk shall be further reduced using administrative controls to reduce the risk of falling. These controls may include erection of a controlled access zone, warning line system, warning signs, training, or a safety monitoring system. The use of controlled access zones, warning line systems and safety monitoring systems shall be accepted by the ENGINEER and Risk Management before they are implemented. These controls attempt to increase worker awareness of fall hazard and alone should not be relied upon.

C. Passive Fall Protection Systems

1. Guardrails
 - a. Guardrails shall consist of a top rail, midrail and vertical posts. Mid-rails shall be installed at a height midway between the top edge of the guardrail system and the walking/working level. Guardrails shall be installed within 42 inches to 45 inches from the upper surface of the top rail to the working level.
 - b. Guardrails used around floor openings will be erected on all unprotected edges of the hole, except on the side with a cover that can be locked in a vertical position and can provide equivalent fall protection. Note: cover must be at least 42 inches in height.

- c. Guardrails may be temporary or permanent. Temporary guardrails may be relocatable or job-made, and typically used while more permanent systems are being installed or when Work is of short duration or at a space not intended as a permanent work area.
 - d. Access and egress openings in guardrails shall be equipped with a swinging, self-closing gate or shall be offset so that a person cannot walk directly into the opening. As a minimum, guardrails shall be able to withstand 200 pounds of force in any direction, except upwards, at the midpoint between posts without exceeding 1 ½ inches of deflection.
 - e. Mid-rails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the mid-rail or other member.
 - f. All guardrail posts shall not exceed a separation distance of 8-foot on center.
2. Toe-Boards
- a. When used as falling object protection, shall be erected along the edge of the overhead walking/working surface for a distance sufficient to protect employees below.
 - b. Toe-boards shall be capable of withstanding, a force of 50 pounds applied in any downward or outward direction at any point along the toe- board without failure.
 - c. Toe-boards shall be a minimum of 3 ½ inches in vertical height from their top edge to the level of the walking/working surface. They shall have not more than ¼-inch clearance above the walking/working surface. They shall be solid or have openings not over 1 inch in greatest dimension.
3. Covers
- a. Shall be designed by a qualified person and capable of supporting at least 400 pounds or twice the weight of the employee, equipment and materials imposed on 1 square foot.
 - b. Shall be secured to prevent accidental displacement.
 - c. Covers in the process areas shall only be opened by authorized persons.
 - d. Covers used in temporary construction shall bear painted or stenciled sign stating: "Opening – Do Not Remove".
 - e. Shall not project more than 1 inch above the surface.
 - f. When covers are not in place, the opening shall be constantly attended by an authorized person or protected by guardrails.
4. Personal Fall Prevention Equipment
- a. Body Harness
 - 1) Only ANSI-approved full body harnesses shall be used for personal fall protection systems.
 - 2) The full body harness shall be equipped with self-retracting lanyards.
 - 3) The weight limit of the harness and other system components shall be determined and not exceeded. Weight limit is determined by calculating

the body weight of the user and weight of any tools and materials being carried.

- 4) All full body harnesses must come equipped with both a back and front "D-ring".
- 5) Body or safety belts are not permitted for use as part of a personal fall protection system.
- 6) Harnesses should be equipped with suspension trauma safety straps.

b. Lanyards

- 1) Only ANSI-approved lanyards shall be used for personal fall protection.
- 2) The length of fixed length lanyards used for fall protection shall be determined by the competent person shall be less than the distance that allows its user to impact the level below in the event of a fall.
- 3) Lanyards shall be connected to secure anchor points in such a manner that will limit an employee free fall distance to 6 feet or less.
- 4) Lanyards shall be protected from abrasions, cuts, or deterioration caused by ultra-violet light, dirt, adverse weather conditions and chemicals.
- 5) Synthetic rope lanyards shall be rated to support at a minimum 900 pounds.
- 6) Lanyards with a shock absorbing device shall be used with the lanyard to reduce fall arresting forces to 500-600 pounds.
- 7) Lanyards shall be free from knots.
- 8) Lanyards shall not be tied back to themselves, except where designed to do so and approved by a qualified person.
- 9) Self-retracting lanyards shall only be attached using rated shackles or carabineers.
- 10) Lanyards shall only be connected to the "D" ring on a harness.

c. Self-Retracting Devices (Lanyards)

- 1) Only ANSI-approved self-retracting devices shall be used for personal fall protection.
- 2) Self-retracting devices that automatically limit free fall distance to 2 feet or less shall be capable of sustaining a minimum tensile load of 3,000 pounds applied to the device, with the line in the fully extended position.
- 3) Self-retracting devices that do not limit free fall distance to 2 feet or less shall be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device, with the line or lanyard in the fully extended position.
- 4) Self-retracting devices shall not be used on horizontal or vertical lifeline systems unless the length of the lanyard on the drum of the device will not permit the worker to reach the hazard even when fully deployed.
- 5) Each employee shall be attached to a separate self-retracting device.
- 6) Self-retracting devices shall be protected against being cut or abraded. Self-retracting lanyards and fixed-length lanyards shall be leading edge certified.

d. Anchorages

- 1) All anchorages shall be designed and certified by a California licensed Professional Engineer regarding strength, location, and compatibility with fall protection equipment.
- 2) Anchorage points for personal fall arrest systems shall be capable of supporting 5,000 pounds per employee attached.
- 3) Anchorage systems for personal fall restraint systems shall be capable of supporting 4 times the intended load.
- 4) Anchorage systems for horizontal lifeline systems shall be capable of supporting two times the maximum tension developed in the lifeline during a fall. The number of persons attached to a horizontal system shall be used in determining the maximum tension in the lifeline. The system shall be designed, installed, and used, under the supervision of a qualified person.
- 5) Vertical lifelines shall have a minimum breaking strength of at least 5,000 pounds.
- 6) The anchorage systems are to be inspected for physical damage by the user prior to each use and a documented inspection by the competent person at a minimum frequency of two times per year and more frequently if environmental conditions warrant.
- 7) The correct placement of anchorage systems for personal fall arrest should be installed at or above shoulder height to reduce the fall distance. The anchor point should be located to minimize swinging, should not be affected by the environment or contamination, and should prevent contact with lower level or an object.
- 8) The following may never be used as an anchor point:
 - a) Top rails, midrails or vertical posts associated with a guardrail system
 - b) Handrails or stair rails
 - c) Ladders, except approved ladder safety systems
 - d) C-Clamps
 - e) Piping or conduit
 - f) Wood structures
 - g) Unistrut support systems
 - h) Motors or mechanical objects

e. D-Rings and Snap Hooks

- 1) D-rings and snap hooks shall have a minimum tensile strength of 5,000 pounds.
- 2) D-rings and snap hooks shall be proof-tested to a minimum tensile strength of 3,600 pounds without cracking, breaking, or taking permanent deformation.
- 3) Snap hooks shall be of locking-type designed and used to prevent disengagement.

- 4) Snap hooks shall not be used unless they are a locking type and designed for the following connections:
 - 5) Directly to webbing, rope, or wire rope.
 - 6) To other snap hooks.
 - 7) To a D-ring to which another snap hook or other connector is attached.
 - 8) To a horizontal lifeline.
 - 9) To any object that is incompatibly shaped in relation to the snap hook.
 - 10) D-rings and snap hooks shall have a minimum tensile strength of 5,000 pounds.
 - 11) Lanyard snap hooks shall not be wrapped around anchor points and connected back to the lanyard, except where designed for such use.

5. Personal Fall Restraint

- a. A Personal Fall Restraint System shall not allow the employee to fall. Fall restraint and horizontal/vertical lifeline systems shall be designed and installed under the supervision of a California licensed Professional Engineer who has been trained in fall protection and is a Qualified Person.
- b. Fall restraint systems shall be limited to flat or low sloped working surfaces.
- c. The fall restraint system shall include anchorage, connecting devices (lanyard/lifeline) and full body harnesses. Equipment shall be approved by ANSI.
- d. The connecting device shall be of sufficient length to allow movement of the authorized person only as far as the sides of the working level or working area. The authorized person shall not be capable of reaching the fall hazard.
- e. The connecting device may only be connected to the back D-ring of the fully body harness.
- f. Non-certified anchorages are not permitted for horizontal or vertical lifeline systems.

6. Personal Fall Arrest Systems

- a. Fall arrest systems shall be designed and installed under the supervision of a California licensed Professional Engineer who has been trained in fall protection and is a Qualified Person.
- b. The fall arrest system shall be designed such that the authorized person subjected to a fall shall not strike an obstruction or encounter a lower level or object.
- c. The fall arrest system shall include anchorage, connecting devices (lanyard), deceleration device and full body harnesses. Safety belts are not permitted for fall arrest or fall restraint.
- d. The connecting device may only be connected to the back D-ring of the body harness.
- e. Personal Fall Arrest Systems shall limit the fall distance to a maximum of 6 feet and prohibit the employee from contacting a lower level or structural element.

- 1) Where practicable, the anchor end of the lanyard shall be secured at a level that is higher than the D-ring of the employee's fall protection harness.
 - f. When using a lifeline, Contractors shall submit a fall protection plan for all Work exceeding 6 feet in elevation and the plan shall include a California licensed Professional Engineer's stamp of approval.
 - g. Self-retracting devices that automatically limit free fall distance to 2 feet or less shall be capable of sustaining a minimum tensile load of 3,000 pounds applied to the device, with the line in the fully extended position.
 - h. Self-retracting devices that do not limit free fall distance to 2 feet or less shall be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device, with the line or lanyard in the fully extended position.
 - i. Anchorages used for attachment of personal fall arrest equipment:
 - 1) shall be independent of any anchorage being used to support or suspend platforms, and
 - 2) capable of supporting at least 5,000 pounds per employee, or
 - 3) Part of a complete personal fall protection system used under the supervision of a qualified person that maintains a safety factor of at least two.
 - j. The system shall be designed to bring an employee to a complete stop and limit the maximum deceleration distance an employee travels to 3.5 feet (shock-absorbing lanyards).
 - k. The system shall limit the maximum arresting force on an employee to 1,800 pounds and withstand twice the potential impact energy of an employee free-falling 6 feet or the free fall distance permitted by the system, whichever is less.
 - l. Personal fall arrest systems and components subjected to impact loading will be immediately removed from service and will not be used again for employee protection until inspected by a competent person and determined to be undamaged and suitable for re-use according to the manufacturers' specifications.
 - m. Personal fall arrest systems shall be inspected at least two times per year by a competent person. The date of the inspection shall be documented.
 - n. Personnel shall avoid carrying tools or sharp objects in their front or back pockets. Should a fall occur, these objects may become a puncture hazard.
 - o. The use of non-locking snap hooks is prohibited.
 - p. Body belts shall not be used for fall protection, fall restraint nor fall arrest.
7. Positioning Device Systems
- a. Work positioning systems shall be designed and installed under the supervision of a California licensed Professional Engineer.
 - b. Positioning devices shall be rigged such that an employee cannot free fall more than 2 feet.
 - c. Positioning device systems shall be inspected prior to each use.
 - d. Anchorage points for positioning device systems shall be capable of supporting 2 times the intended load or 3,000 pounds, whichever is greater.

8. Permanent Platforms

- a. Walking/working surfaces 6 feet and above shall be guarded by standard railing and toe board.
- b. No fall arresting equipment is required when working on a platform with fall protection (handrails, mid-rails, and toe boards) designed to regulatory specifications.
- c. When employees perform Work outside of the guarded area, they shall have on a full body harness and lanyard. The lanyard must be secured to the back- D ring of the harness and to a suitable anchor point.
- d. Cal/OSHA requires gates on ladders on work platforms. For this reason, all fixed ladders on work platforms should have gates at the top. Chains are not an acceptable substitute for ladder gates. Spring loaded double bar gates should be installed at the top of ladders on work platforms.

9. Elevated Work Surfaces

- a. Standard guardrails shall be provided on all open sides of unenclosed elevated work locations, such as: roof openings, landings, balconies or porches, platforms, runways, ramps or working levels more than 30 inches above the floor, ground, or other working areas.
- b. Fall protection systems, or other measures will be required whenever employees who are exposed to fall hazards from work/walking surfaces which are 6 feet or more above the adjacent ground, floor, or other work surface, or when elevated Work involves a potential hazard for falling outside existing railing that surrounds the platform below.
- c. Elevated platforms shall be maintained as to eliminate hazards from slips and trips.
- d. Guardrails used around holes will be erected on all unprotected edges of the hole. If the hole is used for the passage of materials, no more than two sides may have removable guardrail sections.

10. Floor Holes

- a. Holes in the floor that are greater than 2 inches in its least dimension shall be covered.
- b. Holes through which materials or tools may fall and create a hazard or through which parts of a person's body may contact dangerous moving parts, shall be completely covered except when in use.

11. Roof Fall Protection

- a. Guardrail systems shall be provided for Work within 15 feet of the roofs edge. When temporary or leading-edge Work is being performed, a fall restraint/arrest system accepted by the ENGINEER and Risk Management in writing may be implemented. Toeboards shall be installed at guardrail locations. Guardrails may be permanent or temporary. Routine walkways should be identified on the roofs. Parapet walls meeting the height and strength requirements of a guardrail are an acceptable form of fall protection.
- b. Guardrails shall extend at least 6 feet beyond the areas occupied by employees accessing, servicing, or repairing permanently mounted rooftop equipment.

- c. When roof access is provided along the roof edge, guardrails shall extend 15 feet on both sides along the roof edge. When roof access is provided through a roof hatch, guardrails shall be provided around the access hatch, except along the side with the hatch cover. A swinging gate shall be provided.
- d. Personnel who need to travel beyond the protection of the guardrails must be protected by a personal fall arrest or restraint system.
- e. Roof work shall be prohibited during lightning storms, heavy rain, high winds, or dense fog conditions. Roof work shall be prohibited after dusk, except during emergency repairs or planned Work where all appropriate safety precautions have been implemented in advance (i.e., portable lighting). Use of a personal flashlight is acceptable as a back-up only.
- f. If personal fall protection is utilized, provisions need to be made to protect people below from falling object hazards. This may include delineating surfaces below the elevation location or positively securing equipment/tools on the roof.
- g. Skylights shall be protected using skylight screens, approved covers or guardrails.

12. Ramps, Walkways and Sloped Surfaces.

- a. Employees on ramps, runways, and other walkways shall be protected from falling 6 feet or more to lower levels by guardrail systems.
- b. Ramps or Sloped Surfaces with an incline greater than 40 degrees will require an employee to use fall protection while on the ramp or sloped surface.

13. Leading Edge

- a. All personnel working within 15 feet from a leading edge that could cause a fall of 6 feet or more (including diagonal falls of 40 degrees or more) shall be protected from falling by guardrails systems, personal fall arrest systems, body positioning device, warning line system including a Safety Monitor/ Attendant.
- b. Personnel working within 15 feet of the roof edge will be required to use personal fall arrest or fall restraint devices that will not allow them access to the roof edge. Self-Retractable Lanyards (SRL) cannot be used as part of a personal fall protection or fall restraint system unless the full length of the lanyard is less than the distance to the roof edge.
- c. When a fall protection plan utilizes a warning line system in lieu of railing, fall arrest or fall restraint systems, warning lines constructed of ropes, wires or chain, and support stanchions shall be erected as follows:
 - 1) Warning line shall be installed no less than 15 feet from the roof edge.
 - 2) Warning line shall be rigged and supported in such a way that its lowest point including sag is no less than 34 inches from the walking surface and its highest point is no more than 39 inches from the walking surface.
 - 3) The warning line shall be flagged at not more than 6-foot intervals with high visibility material.

- 4) After being erected, warning line stanchions shall be capable of resisting without tip over a force of at least 16 pounds.
- 5) Warning line shall have a minimum tensile strength of 500 pounds and after being attached to the stanchion, shall be capable of supporting 16 pounds without breaking.
- 6) No Work or Work-related activity is to take place in the area between the warning line and the edge.
- 7) The use of warning lines closer than 6 feet from the edge is not permitted as substitute for conventional fall protection for Work other than roof construction/repair.

14. Excavations

- a. Excavations 6 feet or more in depth shall be protected from falling by wooden sawhorse style barriers, K-rails, fences, or similar appropriate devices. The authorized individual shall determine the degree of hazard and implement an effective method of control.
- b. Personnel shall travel directly to the point of entry of the excavation.
- c. The Contractor who created the hole or opening is responsible for implementing the preventative measure(s).

15. Wells, Service Pits, Shafts, Manholes, and Sumps

- a. Each person at the edge of a service pit, shaft, manhole, sump 6 feet or more in depth (or 4 feet if an OC SAN employee is exposed to the fall hazard) shall be protected from falling by guardrails systems, fences, rigid barricades, or covers.
- b. When performing Work activities near the edge of an open manhole or vault, the opening shall be guarded with a temporary cover or portable guardrail system.
- c. During the performance of any task where a manhole or vault will be open without a temporary cover, barricade, or protective hand-railing. A crew member shall be assigned the responsibility of a Safety Monitor, whose sole duty is to warn co-workers and bystanders when they exceed the 6-foot safety perimeter around the hole or opening.
- d. All floor holes and floor openings located in shut down or abandoned structures must be covered or guarded.

16. Confined Spaces

- a. Confined Spaces that are 5 feet or more in depth shall require the use of a mechanical retrieval device for both fall arrest and rescue. Exception – the required use of a mechanical retrieval device can be circumvented, only if the Entry Supervisor can justify that its use poses a greater hazard to the entrant(s). All exceptions must be documented on OC SAN's JHA form.
- b. Contractors shall develop fall protection and rescue plans and provide the equipment and personnel needed to implement their plans.
- c. One hundred percent (100%) fall protection shall be implemented by all trades for all fall exposures of 6 feet or more.
- d. Rescue shall be addressed in the Contractor's Confined Space Rescue Program and Confined Space Rescue Plan. The Contractor may be

required to submit a site-specific fall protection and rescue plan, as well as training documentation for review by persons with authorized oversight.

- e. Calling 911 and depending on local fire department shall not be allowed in lieu of the Contractor preparing and utilizing its own site-specific fall protection and rescue plan.

17. Training

- a. Contractors are required to provide training for any employee who might be exposed to a fall hazard prior to the exposure or upon hiring. Documentation shall be maintained and available for review upon request.
- b. Training must include an explanation of the company's fall protection policies and safe work practices with general instructions and precautions; specific instruction where required; hazard identification and correction; selection and proper use of protective devices; and maintenance of equipment. Instruction will also include correct procedures for donning and doffing fall harnesses, inspecting, erecting, disassembling, and maintaining fall protection systems used, and the employee's role in fall prevention and protection.
- c. Retraining. When the Contractor or OC SAN has reason to believe that any affected employee who has already been trained does not have the understanding and skill required, the Contractor shall retrain each such employee. Circumstances where retraining is required include, but are not limited to, situations where:
 - 1) Changes in the workplace render previous training obsolete; or
 - 2) Changes in the types of fall protection systems or equipment to be used render previous training obsolete; or
 - 3) Inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill.

18. Inspection, Maintenance and Storage

- a. Fall protection equipment shall be inspected by the authorized person before each use to verify that it has not sustained any wear or damage that would require removal from service. These inspections are visual only, and not required to be documented.
- b. Fall protection equipment (including rescue equipment) shall be inspected twice annually by a competent person to verify the equipment is safe for use. The inspections shall be documented and copies to be submitted using OC SAN's PCMS.
- c. Horizontal and vertical lifelines shall be inspected prior to each use, and at least annually for any signs of degradation. Damaged or worn parts must be replaced. Check torque on any bolts against specification.
- d. Inspections shall look for illegible or missing tags, elements affecting fit or function, defects or damage to hardware including cracks, sharp edges, corrosion, chemicals, elongation, alteration, heat, or excessive wear. Records of inspections shall be maintained throughout the service life of the equipment and be submitted using OC SAN's PCMS.

- e. If inspections reveal damage or determined to be inadequate for service shall be tagged so equipment will not be returned to service. The competent person shall destroy the equipment.
- f. The competent person shall verify that the equipment is maintained according to the manufacturer's instructions.
- g. Equipment shall be stored in a manner that protects it from exposure to any conditions that could result in damage.
- h. Anchorage systems shall be inspected by the authorized person prior to each use and by a qualified person or competent person at least annually or in accordance with the manufacturer's instructions. Inspections by qualified or competent persons shall be documented.
- i. Damaged anchorages shall be repaired or replaced and recertified by a qualified person.
- j. Anchorage inspections shall look for cracks, deformation or bending in the structure around the anchorage or if the connection is unstable or loose.
 - 1) Equipment involved in a fall arrest incident must be taken out of service immediately and handled according to the manufacturer's instructions. Out of service equipment shall not remain on the job site.
 - 2) Retractable lifelines/lanyards must be sent back to the manufacturer for repair and re-certification.
- k. The service life of harnesses and lanyards is determined by the manufacturer and shall be discarded upon expiration. This information is found on a tag located on the device itself.
- l. Fall protection equipment must be used in accordance with manufacturer instructions, including weight and size limitations, and must not be altered in any way without written manufacturer authorization.

5.31. FIRE PROTECTION AND PREVENTION

- A. Contractors shall be especially careful to avoid fire hazards in all welding, cutting, and equipment fueling. Contractors shall attain an OC SAN-issued hot work permit before any hotwork begins.
- B. Many areas of the treatment plant, pump stations and collection system are electrically classified as Class 1, Division 1 or Class 1, Division 2 environments. Contractors shall ensure that equipment used in these locations is approved for use by a Nationally Recognized Testing Laboratory (NRTL) for use in these locations.
- C. Many areas of the treatment plant and pump stations have flammable gas warning systems. Contractors shall stop Work and evacuate the area if an alarm is activated.
- D. Contractors shall stop Work and evacuate the area if a fire alarm is activated, or a public-address announcement indicates a fire is possible or another emergency exists.
- E. Sprinkler systems shall always be maintained in an operable condition by the Contractor while the building is occupied.
- F. Contractors shall furnish all safety devices, fire extinguishers, fire blankets, and fire watch personnel required to protect the Work and provide for worksite and public safety.

- G. The CONTRACTOR must develop a fire protection program to be followed throughout all phases of construction. The fire protection program shall be included in the SSSP.
- H. The program shall include the most stringent of Cal/OSHA, local Fire Marshal, and/or local Fire Code requirements and comply with the following OC SAN fire prevention procedures and controls:
 - 1. Housekeeping is essential to fire prevention and to a well-run operation. The following general housekeeping rules will be followed:
 - a. Prevention of accumulation of loose debris, waste, and trash.
 - b. Control of combustible waste and refuse in covered metal cans with at least shift-end removal from the building.
 - c. Storage racks and stacks of materials on pallets are in a neat and orderly manner and in their designated stock locations.
 - d. Immediate clean-up of stock or chemical spills.
 - e. Aisles and exit ways clear and free of obstructions.
 - f. Prohibition of any storage in exit ways, stairwells, and inside or outside fire exits doors.
 - g. Clear 36-inch access to all fire protection and emergency equipment and electrical panels.
 - 2. Smoking is a recognized hazard and should be prohibited or prevented wherever possible.
 - a. The State of California prohibits smoking within 20 feet of the entrance to a building.
 - b. Smoking will be restricted to designated areas.
 - c. Such areas will be provided with appropriate non-combustible ashtrays and will be emptied daily into metal trash containers not containing combustible waste.
 - d. It is important to inform all visitors, truck drivers, etc. of OC SAN's smoking restrictions and insist on their compliance.
 - 3. Electrical Maintenance
 - a. Only qualified and trained personnel will be permitted to repair or work on electrical installations and equipment.
 - b. Any defective wiring or electrical equipment should be reported immediately to the ENGINEER. Such equipment will be immediately taken out of use, tagged as defective, and a work order issued for its repair or evaluation.
 - c. Strict attention should be paid to cleanliness. Combustible materials should be prohibited from accumulating in substations, electrical rooms, control rooms, cable trays, around motors and other electrical installations.
 - d. Extension cords will be permitted only for emergency or truly temporary situations (less than 90 days) and shall be properly sized for the equipment to be operated. Care should be taken to assure such temporary wiring is visible and protected from fraying or pinching.
 - e. All electrical installations will meet appropriate electrical codes and listings.

- f. Access clearances will be maintained to all electrical panel boxes and switchgear.
4. Flammable Liquids
- a. Flammable liquid containers shall be stored in NFPA compliant flammable cabinets, storage rooms, or outbuildings.
 - b. Only manufacturer's original containers or FM or UL approved flammable liquid containers shall be used.
 - c. Proper handling and dispensing procedures shall include grounding, quantity limits, pressure relief, and required personal protective equipment needed for use.
 - d. Spills shall be controlled and reported.
 - e. Potential ignition sources such as faulty electrical equipment, open lights and flames shall be controlled and reported.
5. Flammable Gasses
- a. All storage and handling procedures for specific flammable gases and operations will be strictly observed.
 - b. Flammable gases will be stored separately from oxygen or other oxidizers. Only exception will be one oxygen cylinder in use on an acetylene welding cart.
 - c. Unless the cylinder valve is protected by a recess in the head, keep the metal cap in place to protect the valve when the cylinder is not connected for use.
 - d. Do not use a cylinder of compressed gas without a pressure reducing regulator attached to the cylinder valve, except where cylinders are attached to a manifold, in which case the regulator will be attached to the manifold header.
6. Follow proper welding and cutting procedures as listed in this document.
7. Firefighting equipment must be conspicuously located or conspicuously marked.
8. A fire extinguisher, rated not less than 2A, shall be provided for each 3,000 square feet of floor and fraction thereof. Where the floor is less than 3,000 square feet, at least one fire extinguisher is required.
9. The clear and unobstructed travel distance from any point of the protected area to the nearest fire extinguisher shall not exceed 75 feet.
10. In multi-story buildings, at least one fire extinguisher shall be provided on each floor and located adjacent to the stairway.
11. A fire extinguisher, rated not less than 10B, shall be provided within 50 feet of wherever more than 5 gallons of flammable or combustible liquids are stored.
12. Portable fire extinguishers shall be fully charged, inspected monthly, and serviced annually.
13. Storage of more than 25 gallons of flammable liquids shall be in a NFPA approved storage cabinet. Not more than 120 gallons of Class I, II, or IIIA liquids may be stored in a storage cabinet.

14. A fire extinguisher, rated not less than 20-B, shall be located outside of, but not more than 10 feet from the door opening of storage rooms.
15. A portable fire extinguisher rated at least 10B: C shall be kept near operations where fuel gas cylinders/bottles are being used.
16. Portable fire extinguisher shall be readily available for use where temporary heating devices are used.
17. "No Smoking" signs shall be posted as required by operations or material exposures.
18. OC SAN reserves the right to designate no smoking areas on the Project.
19. Fire extinguisher must be at least a 20-pound ABC and provided within 5 feet of any hot work activity.

5.32. FIRST AID

- A. Contractors shall ensure the availability of at least one or more employees to render first aid and CPR. The individual shall have received training in CPR and first aid and be available at the job site always.
- B. Field Supervisors and Safety Representatives must be trained in First Aid and CPR and identified on the Project. Evidence of training shall be available for review upon request.
- C. Contractors shall provide at least one appropriately sized and stocked first-aid kit in a weatherproof container. The first aid shall be inspected regularly to ensure that the expended items are promptly replaced. The first aid kit shall be readily accessible to the job site. The CONTRACTOR shall prepare a map indicating its location.
- D. Eye wash capabilities shall be provided by the CONTRACTOR as required by the Safety Data Sheet (SDS) for products used at the job site.
- E. The CONTRACTOR and Subcontractors shall submit (through the CONTRACTOR) to the ENGINEER a list of First Aid / CPR trained personnel prior to starting Work. Each list shall be clearly dated and updated as required throughout the Contract Duration. Each time the list is updated, a copy shall be provided to the ENGINEER using OC SAN's PCMS.

5.33. FLAMMABLE AND COMBUSTIBLE MATERIALS

- A. Contractors are required to supply extinguishers, fire blankets, and other sufficient fire protection devices for the immediate work area where flammable and combustible material is stored or used. All fire extinguishers must be rated at a minimum of 2A, 20BC.
- B. Fire extinguishers shall be checked to verify that they are fully charged.
- C. All flammable liquids supplied by Contractors must be stored in NFPA compliant safety containers.
- D. All containers must be properly labeled and stored when not in use.
- E. Only FM or UL compliant metal safety cans will be allowed for flammable storage.
- F. Contractors shall identify non-compatible materials in advance and provide for separate storage as required.
- G. Storage of more than 25 gallons of flammable liquids or 60 gallons of combustible liquids shall be within cabinets constructed to the requirements of NFPA 30.

- H. All outside flammable and combustible storage areas must be at least 20 feet from any building.
- I. For roof Work:
 - 1. No more than a one-day supply of flammables may be placed on the roof during working hours.
 - 2. All flammables must be removed from the roof at the end of each workday by the Contractors.
 - 3. At least two extinguishers appropriate for the type and quality of flammable materials present must be provided if flammables are present.
- J. All flammable and combustible materials supplied by the Contractors must be kept away from sparks, heat, or ignition sources.

5.34. FORKLIFT (INDUSTRIAL TRUCKS AND TRACTORS)

- A. Only drivers authorized by the CONTRACTOR and trained in the safe operations of industrial trucks shall be permitted to operate forklifts.
- B. Operator training and posting of information regarding forklift operations shall be in accordance with applicable Cal/OSHA Standards.
- C. The CONTRACTOR shall certify that each operator has been trained and evaluated as competent for each type of equipment used.
- D. All forklifts and industrial trucks and tractors shall be equipped with an audible back-up alarm which can be normally clearly heard from 200 feet. In congested areas or areas with high ambient noise which obscures the audible alarm, a signal person in clear view of the operator shall direct the backing operation.
- E. The rated capacity of all industrial trucks and industrial tractors and the manufacturers manual shall be displayed on the vehicle in such a manner that it is readily visible to the operator.
- F. Every industrial truck and tractor shall be equipped with operable brakes, a parking brake, and a horn.
- G. Seat belts shall be provided on industrial trucks and tractors where rollover protection is installed. Employees shall be instructed in their use.
- H. No riders shall be permitted on vehicles unless the vehicles are equipped with adequate riding facilities and specifically designed for riders.
- I. Employees shall not ride on or be elevated on the forks of lift trucks.
- J. Industrial trucks may be used to elevate employees in accordance with applicable Cal/OSHA Standards and manufacturer's recommendations using appropriate personnel platforms.
- K. Employees shall not be allowed to stand, pass, or work under the elevated portion of an industrial truck, loaded or empty.
- L. Drivers shall inspect the forklift at least once per shift. Attention shall be given to tires, horn, lights, battery, controller, brakes, steering mechanism, cooling system, and the lift system (forks, cable, and limit switches). The inspection shall be documented and maintained on the forklift.
- M. Vehicles shall not exceed the authorized or safe speed, always maintaining a safe distance from other vehicles, and keeping the truck under positive control.

- N. The driver shall slow down and sound the horn at cross aisles and other locations where vision is obstructed.
- O. Grades shall be ascended or descended slowly.
- P. Turns shall be restricted to flat even surfaces to prevent tip over.
- Q. The forks shall always be carried as low as possible, consistent with safe operation. When traveling forward with an obstructed view due to the load, the operator must travel in reverse or utilize a flagger.
- R. When leaving a vehicle unattended, the power shall be shut off, brakes set, the mast brought to the vertical position, and forks left in the down position.
- S. Forklifts (Industrial Trucks and Tractors) shall not be loaded more than their rated capacity.
- T. Any vehicle attachments must be manufacturer approved or stamped by a California licensed Professional Engineer.

5.35. HAZARD COMMUNICATION

- A. The CONTRACTOR shall maintain a copy of all SDS, and a chemical inventory list, for all hazardous substances used at the jobsite by their firm, as well as for all hazardous substances used at the jobsite by all Subcontractors regardless of tier.
 - 1. The location of the Project's Safety Data Sheets and chemical inventory list shall be communicated to the ENGINEER and Risk Management.
 - 2. All hazardous materials identified by Cal/OSHA as a carcinogen or reproductive hazard is subject to use restriction and/or prohibition from use on OC SAN facilities. In addition, the CONTRACTOR shall provide a written plan of how their own employees and OC SAN employees will be protected from exposure of these materials. A permit shall be issued by OC SAN; notification shall be made, and a permit issued one week before the material is brought on site.
- B. In accordance with the provisions of the Hazard Communication Standard, Contractors must have a comprehensive written Hazard Communication Program which includes:
 - 1. A list of hazardous substances known to be on site.
 - 2. Methods the Contractor will use to inform employees of the hazards of non-routine tasks.
 - 3. On Multi-Contractor job sites, the program shall include the methods the CONTRACTOR will use to inform its Subcontractors of any precautionary measures to protect their employees.
 - 4. The methods used to provide Contractors with access to Safety Data Sheets.
 - 5. The methods the CONTRACTOR will use to inform the Contractors of the labeling system in use.
- C. The CONTRACTOR must submit a copy of its Hazard Communication Program to the ENGINEER and Risk Management using OC SAN's PCMS.
- D. Contractors must have a job site binder which contains the following items:
 - 1. A comprehensive written Hazard Communication Policy.
 - 2. A chemical inventory listing all hazardous materials brought onto or used on the Project site by the Contractors.

3. SDS for all hazardous materials used on the Project site.
- E. The CONTRACTOR shall ensure that all employees have received training in the safe use of hazardous materials; and those employees are able to read and understand the information on the SDS. The training shall include at least:
 1. Methods and observations that may be used to detect the presence or release of a hazardous chemical.
 2. The physical and health hazards of the chemicals used in the work area.
 3. Measures employees can take to protect themselves from the hazards.
 4. Details of the hazard communication program, including the labeling systems and the use of SDS.
- F. Contractors shall ensure that all containers used on the construction site are properly labeled as to their contents, including gas and diesel containers.
- G. Contractors shall ensure that all storage silos, tanks, drums, etc. on the construction site are properly labeled as to their contents.
- H. Contractors shall provide a SDS for any hazardous substance that will be used on the job site to OC SAN prior to its use.
- I. Pipelines or process areas must be barricaded and/or signed to inform employees of potential dangers during testing.

5.36. HEAVY EQUIPMENT AND MATERIAL HANDLING

- A. Equipment shall be maintained in good working order. All vital parts such as motors, chassis, blades, blade holders, tracks, drives, hydraulic and pneumatic mechanisms, and transmissions must be inspected each day.
- B. Whenever visibility conditions warrant additional light, all vehicles, or combinations of vehicles, in use shall be equipped with at least two headlights and two taillights in operable condition.
- C. All vehicles, or combination of vehicles, shall have brake lights in operable condition.
- D. All vehicles shall be equipped with an adequate audible warning device (horn) at the operator's station.
- E. All vehicles must have a back-up alarm that is normally audible for 200 feet. In congested areas or areas with high ambient noise which obscures the audible alarm, a signal person in clear view of the operator shall direct the backing operation.
- F. Where equipped, windshields on heavy equipment shall be maintained in good condition free of dirt/debris that would hinder visibility.
- G. Vehicles operating in areas or conditions that causes fogging or frosting of windshields shall be equipped with operable defogging or defrosting devices.
- H. Cracked or broken windshields shall be promptly replaced.
- I. Windshields and mirrors shall be kept clean such that vision is not compromised or obstructed.
- J. Seat belts with approved proper anchorage points shall be installed in all haulage, earth moving, and material handling heavy equipment.
- K. Contractors shall ensure employee use of seat belts on motor vehicles.

- L. Trucks with dump bodies shall be equipped with positive means of support, permanently attached, to prevent accidental lowering of the body while maintenance or inspection work is being done.
- M. Operating levers controlling hoisting or dumping devices on haulage bodies shall be equipped with a latch or other device that will prevent accidental starting or tripping of the mechanism.
- N. Trip handles for tailgates of dump trucks shall be so arranged that, in dumping, the Operator will be in the clear.
- O. All rubber-tired motor vehicle equipment shall be equipped with fenders.
- P. All vehicles in use shall be checked at the beginning of each shift for defects in:
 - 1. Service brakes, trailer brake connections, parking brake system, and emergency stopping system (brakes).
 - 2. Tires, horn, steering mechanism, seat belts, operating controls, and safety devices.
 - 3. Lights, reflectors, windshield wipers, defrosters, and fire extinguishers.
- Q. Before starting a job, the operator shall be given instructions regarding the Work to be done.
- R. Before starting the motor, the operator shall check to make sure that all operating controls are in the neutral position.
- S. Before starting the equipment, or moving the equipment after re-entering the cab, the operator shall walk entirely around the equipment to make sure no other personnel, equipment or material will be struck.
- T. Contractors shall ensure that operators of heavy equipment wear appropriate hearing protection devices.
- U. At no time shall a piece of equipment be left unattended while the motor is running, especially if the machine is on an inclined surface or on loose material.
- V. Wheels must be blocked or chocked when parking on inclines.
- W. Machines shall be operated at speeds and in a manner consistent with conditions on the Project.
- X. No employee other than the operator shall ride on equipment.
- Y. During refueling operations, equipment motors shall be turned off. Smoking and nearby hot work are prohibited during refueling.
- Z. If possible, equipment shall be driven entirely off the roadway at night.
- AA. Unattended equipment must be left in a secure area not accessible to members of the public or unauthorized third parties.
- BB. Keys shall be removed from unattended equipment.
- CC. Spotters and/or Flaggers must be used when equipment Operator's view is obstructed whether moving forward or backward.
- DD. Equipment maintenance must be performed within a containment area where spilled fluids will not contaminate the ground and can be readily cleaned up.

5.37. HORIZONTAL BORING / PIPE JACKING

- A. Prior to boring/jacking operations, the CONTRACTOR must contact the regional One Call Notification System (811) to ensure all owners of underground facilities are notified to mark their utility locations.
- B. The Contractor shall locate all buried utilities before commencing boring/jacking operations.
- C. The Contractor shall open a guide hole (bore slot) over any existing utility that is in line with the bore shot.
- D. The Contractor shall excavate bore slots, bell holes and guide holes, as necessary.
- E. If resistance is encountered during the boring/jacking operation, cease the boring operation immediately and excavate at the point of resistance to determine necessary action.
- F. The operator must be trained in the use of the boring/jacking machine.
- G. At least two crewmembers must operate the bore motor always.
- H. Stay clear of rotating bore pipe and the rotating head of boring machine. Loose clothing, long hair, or gloves can cause injury if caught in rotating bore pipe.
- I. Only one crewmember shall transmit signals to the operator.
- J. Do not hold rotating bore pipe with hands or feet.
- K. Operate the boring machine only at slow RPM when used to connect or disconnect bore pipe.

5.38. HOUSEKEEPING

- A. Contractors shall perform daily housekeeping in Contractor work areas and laydown areas.
- B. All construction materials must be stored in an orderly manner and barricade taped off.
- C. All exits and access ways must be kept unobstructed.
- D. Puncture hazards (nails, staples, fasteners, etc.) created by stripped formwork, scrap lumber, pallets, shipping materials, etc. shall be eliminated or controlled by Contractors.
- E. Metal containers with covers must be provided for disposal of oily and paint-soaked rags.
- F. Maintain all exits.
- G. Emergency exits must be available.
- H. Panic hardware, where present, must remain unobstructed.
- I. Walkways and sidewalks must be kept free of construction materials, debris, dirt, tools, and extension cords.
- J. Where steel plates are used to bridge excavations or other similar type construction activities in roadways, walkways or sidewalks, the leading edges of the steel plates must be recessed or tapered with temporary asphalt or other suitable materials to prevent trip hazards and obtain the acceptance of the ENGINEER.
- K. Contractors shall maintain their Work site and laydown areas free of weeds, trash, and debris.

5.39. PORTABLE HEATERS

- A. All heaters must be Factory Mutual and/or Underwriters Laboratory approved.
- B. Contractors must notify the INSPECTOR to review and accept all liquid/gas fueled heaters brought onto the site prior to use.
- C. The use of liquid/gas fueled heaters inside of buildings requires OC SAN acceptance.
- D. Tent Heater use requirements are as follows:
 - 1. Use only in tents made of fire-resistant material.
 - 2. Avoid contact with heating elements or other hot parts.
 - 3. Keep flammable materials and clothing away from hot equipment.
 - 4. Never use heaters in a utility vault or in a tent that covers a utility hole.
 - 5. Ensure adequate ventilation is provided when using a tent.
 - 6. Secure a fire extinguisher within the tent in an accessible location.
- E. All portable heaters shall be protected from moisture.

5.40. LADDERS

- A. General
 - 1. Type II (225lb. limit) and Type III (200lb. limit) ladders are prohibited.
 - 2. Ladders must be at least Type I (250lb. limit), Type IA (300lb. limit) or Type IAA (375lb. limit) as appropriate to the weight of the user.
 - 3. Contractors shall provide a training program for each employee using ladders and stairways, as necessary. The program shall enable each employee to recognize hazards related to ladders and stairways and shall train each employee in the procedures to be followed to minimize these hazards.
 - 4. Contractors shall conduct portable ladder inspections in accordance with California Code of Regulations section 3276. Ladders shall be inspected by a qualified person for visible defects frequently and after any occurrence that could affect their safe use. Cal/OSHA defines frequently as greater than 12 times per year. Ladder inspections shall be documented by a label on the ladder, an inspection log, or equally effective method. Inspection logs are to be made available to Risk Management upon request.
 - 5. Tools, equipment, and other materials shall never be carried when ascending or descending a ladder, but rather hoisted using a rope and bucket system or provided by mechanical means (hoist, forklift, etc.).
 - 6. Ladders shall always be faced when ascending or descending.
 - 7. All ladders shall be maintained in a safe condition. All ladders shall be inspected prior to use. Any ladders identified with unsafe conditions shall be tagged out of service until repairs can be made.
 - 8. Ladders shall be maintained free of oil, grease, or slippery materials.
 - 9. Ladders shall not be painted, sanded, or otherwise altered.
 - 10. Retraining shall be provided for each employee as necessary so that the employee maintains the understanding and knowledge acquired through compliance with this section.

11. Employees must maintain a 3-point contact while climbing ladders.
12. Job-Made ladders shall be constructed in accordance with Cal/OSHA provisions.
13. All types of ladders must be inspected at least daily for:
 - a. Cracks, splits, splinters, and decay.
 - b. Protruding nails and loose rivets.
 - c. Loose, bent, or broken braces, tie rods, guide irons, locks, pulleys, and strand hooks.
 - d. Broken, worn or defective spurs and pads.

B. Extension Ladders

1. Portable ladder feet shall be placed on a substantial base.
2. Straight and extension ladders must be tied off or secured to prevent displacement.
3. Metal ladders must not be used near energized equipment.
4. No more than one employee is allowed on a ladder.
5. Ladders are not to be used for skids, braces, workbenches, or any other purpose other than climbing.
6. Ladders shall be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is about one-quarter of the working length of the ladder.
7. Extension ladders shall be selected to meet the requirements of the person, task, and environment. Consideration shall be given to the length or height required, working load, duty rating, worker position to the task and frequency in which the ladder will be used.
8. The ladder shall be positioned so that the distance from the vertical wall is equal to one-fourth the working length of the ladder or a 4:1 slope. The ladder shall be placed on a firm level surface.
9. The ladder shall be placed to prevent slipping, or shall be tied, blocked, held, or secured to prevent slipping. If the ladder cannot be secured, the ladder may be held by a coworker.
10. Ladders shall not be used in the horizontal position as a platform, runway, or scaffold unless designed for such use.
11. The ladder shall extend no less than 36 inches above the landing surface to which the ladder is used to gain access.
12. Ladders shall have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized electrical equipment.
13. Employees shall climb or work from the ladder with the body positioned near the middle of the step or rung. Overextending or reaching where the belt buckle extends beyond the side rails is not permitted, except where the user is protected by a personal fall arrest system.
14. Ladders used in aisle ways or placed in doorways shall be protected from incidental contact. Doorways shall be secured in an open position, locked, attended, or barricaded.

15. Additional height should not be gained by the addition of any type of extension, or an object being placed on the unit. Ladders shall not be tied or fastened together to provide longer sections, except where designed for such purpose.

C. Step Ladders

1. Stepladders must be fully open, and the spreader set in the open and locked position.
2. Step ladders shall be selected to meet the requirements of the person, task and environment. Consideration shall be given to the length or height required, working load, duty rating, worker position to the task and frequency in which the ladder will be used.
3. Step ladders shall be restricted to the purpose for which was the ladder was designed. For example, a step ladder should not be used as a straight ladder.
4. The top three steps of the ladder shall not be stood on or worked from. No personnel may stand or climb on the back side (non-working side) of a ladder, except where the ladder was designed for such purpose.
5. Step ladders shall only be used by one person, except where designed for use by more than one person.
6. Ladders shall be placed on a secure and level footing. When necessary, ladder levelers shall be used to achieve equal rail support on uneven surfaces. Ladders shall never be placed on boxes, barrels, or other unstable surfaces.
7. Ladders are not to be moved or shifted while occupied.
8. Ladders shall have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized electrical equipment.
9. Ladders used in doorways, aisle ways or roadways shall be protected from incidental contact.
10. Employees shall climb or work from the ladder with the body positioned near the middle of the step or rung. Overextending or reaching where the belt buckle extends beyond the side rails is not permitted, except where the user is protected by a personal fall arrest system.
11. Do not lean a stepladder against a wall in the unopened position.
12. Always ascend and descend facing the ladder.
13. Do not exceed the designated weight capacity.

5.41. LEAD-BASED PAINT

- A. The CONTRACTOR shall identify any Lead-Based Paint (LBP) or products within the Work PRIOR to any construction, remodeling, or demolition activities.
- B. The CONTRACTOR shall identify any sheet lead, such as in laboratories or x-ray facilities prior to commencing demolition or construction activities.
- C. The CONTRACTOR shall arrange for disposal of the hazardous waste stream (e.g., paint chips), through OC SAN.
- D. All employees and supervisors who perform lead abatement Work shall have a current training certificate by a California Department of Public Health approved trainer.
- E. The Contractor stabilizing loose and flaky LBP shall utilize industry standard lead safe work practices and controls.

5.42. CORROSIVE MATERIALS

- A. Contractors shall not store, handle, apply or use acids or caustics until a proper procedure has been developed.
- B. Never add water to acid - if dilution is needed, add acid to water.
- C. Emergency eyewash and/or shower facilities must be immediately available to any person working with acids and caustics.
- D. Proper personal protection must include a face shield, goggles, apron, chemical resistant gloves, and sleeve lets as well as any other equipment deemed necessary by the SDS or manufacturer's usage instructions. Gloves shall be equipped with rolled cuffs.

5.43. CONTROL OF HAZARDOUS ENERGY**A. General**

- 1. Contractors must have a written LOTO program that meets or exceeds Cal/OSHA regulations, including requirements of this section.
- 2. OC SAN will administer LOTO, including the development of energy control procedures, for OC SAN owned or operated equipment or facilities.
 - a. Contractors are responsible for verification and shall apply personal locks and tags to OC SAN Group Lockbox.
 - b. OC SAN shall not release energized equipment to the Contractors, with exception to the following:
 - 1) Equipment that is cord and plug may be unplugged by a Contractor if it is the only source of hazardous energy and maintained under exclusive control by the Contractor.
 - 2) Equipment that will be tested by a Contractor as part of the routine servicing of the equipment may be energized provided that the Contractor's authorized employee is made aware that the equipment is energized. Contractors shall implement necessary engineering and administrative controls to render the equipment safe.
 - c. OC SAN will isolate equipment using OC SAN provided lockout devices. Contractors are not required to provide lockout devices. Contractors' employees will apply personal locks and tags to the Group Lockbox.
 - d. OC SAN PAE (Primary Authorized Employee) must be the first to lock on and the last to lock off the Group Lockbox.
- 3. Contractors are responsible for LOTO on the Contractor rented or owned equipment. Contractors shall develop written energy control procedures for the Contractor rented or owned equipment. Contractors are responsible for provision and retention of such procedures. LOTO on such equipment shall be performed in accordance with Cal/OSHA regulations. Contractors must submit written energy control procedures to the ENGINEER for lockout of the Contractor rented or owned equipment that may affect OC SAN employees or facilities. The Contractor shall provide records of the energy control procedures to OC SAN PAE.
- 4. The Contractor's personnel performing or directly supervising construction-related activities that contain or store hazardous energy must be trained as a LOTO Authorized Employee. Contractors are responsible for this training.

5. The CONTRACTOR shall coordinate shutdown requests with the designated INSPECTOR, who in turn will coordinate with OC SAN PAE. LOTO on OC SAN owned or operated equipment or facilities will be performed under the direction of an OC SAN PAE utilizing Group LOTO.
6. The CONTRACTOR shall verify isolation of hazardous energy with OC SAN PAE and the INSPECTOR. The CONTRACTOR is responsible for communicating the LOTO to its employees and Contractors, including verification.
7. Contractors shall supply unique and personally identifiable keyed locks for lockout to each Authorized Employee. Locks issued to an Authorized Employee can only contain one key, which remains in the possession of the Authorized Employee in which the locks were issued. This personal key cannot be left in the lock for convenience.
8. Contractors shall apply lockout device(s) only under the direction of an OC SAN PAE when OC SAN is operating energy isolating devices.
9. Contractor's personnel shall not manipulate energy isolation devices or lockout devices on machinery, equipment, or facilities.
10. It is the responsibility of the Contractor's employee to verify that all hazardous energy has been isolated and released prior to the start of the Work.
11. Contractor's employees shall remove all personal locks and tags once they have completed the Work.

B. Energy Control Procedures

1. Equipment to be de-energized and released to a Contractor for repair, servicing, maintenance, or construction shall have a written energy control procedure that includes the steps to follow to ensure that equipment will be de-energized and to verify that hazardous energy has been released. The procedure shall be developed by OC SAN. A hard copy of the energy control procedure shall be provided in the field.
2. Moveable parts shall be mechanically blocked or locked out prior to cleaning, servicing, or adjusting operations. Residual energy may exist in the system. Contractors shall always assume that hazardous energy remains in the system when line breaking and working on electrical systems. Contractors are responsible for their own verification.
3. Equipment that has lockable controls or that is readily adaptable to lockable controls shall be locked out or positively sealed in the off position.
4. Isolating and de-energizing of equipment may begin prior to Contractor's arrival on site. The CONTRACTOR PAE in the presence of an OC SAN PAE and the INSPECTOR shall verify that all hazardous energy has been de-energized and controlled before the Contractor commence the Work. It will be the responsibility of the CONTRACTOR PAE to inform each Contractor's employee working on the equipment regarding the LOTO procedures implemented and verification steps used to control all identified hazardous energy before commencing the Work. The CONTRACTOR PAE shall ensure that each employee who could be injured by the inadvertent re-energization of the equipment place their individual employee lock on the group lock out box.

C. Electrical LOTO

1. LOTO points of disconnect shall be established between the Contractor, the INSPECTOR and OC SAN staff. The point of disconnect shall be modified as the Work progresses through the Project and equipment is turned over to OC SAN through Beneficial Occupancy.
2. The opening and closing of all existing OC SAN circuits shall be performed by OC SAN staff.
3. OC SAN staff will open and close all OC SAN and the Contractor's medium-voltage circuits, including the Contractor 12kV switchgear breakers and 12kV load interrupter switches. All medium-voltage circuits shall be jointly locked out and tagged out by OC SAN and the Contractor.
4. The Contractor shall open and close their 480V switchgear breakers and perform LOTO prior the Beneficial Occupancy of any load on the 480V switchgear. Once a 480V load on the Contractor's 480V switchgear achieves Beneficial Occupancy, OC SAN will control the opening and closing of all 480V switchgear breakers with lock out and tag out jointly performed by OC SAN and the Contractor.
5. The Contractor shall open and close the 480V motor control center main, feeder breakers and motor starters and perform LOTO prior to the
6. Beneficial Occupancy of any load on the motor control center. Once a load on the motor control center achieves Beneficial Occupancy, OC SAN will control the opening and closing of the motor control center main breaker and the feeder breakers and motor starters associated with the loads being beneficially occupied.
7. The Contractor shall open and close 480V, 120/208Y, and 120/240 panelboard circuits breakers and perform LOTO prior to Beneficial Occupancy of a load. Once a load on the panelboard achieves Beneficial Occupancy, OC SAN will control the opening and closing of the panelboard main breaker and the feeder breakers associated with the loads being beneficially occupied.

D. Duties of the Contractor's personnel

1. Do not manipulate isolation devices on process equipment.
2. Apply locks and tags only under the direction of an OC SAN PAE.
3. Apply lock to isolation devices that are lockable.
4. Once the authorized person completes or leaves the work task indefinitely or for the day, they must remove their personal locks and tags. Authorized persons joining the Work task, must place their locks and tags on the isolation devices prior to any potential exposure to hazardous energy.
5. Each Authorized Employee working on the equipment shall review the energy control procedure, verify release of residual and stored energy, verify isolation, and verify that the equipment cannot be inadvertently re-energized.
6. Each employee working on the equipment shall be responsible for attaching their personal locks without exception. No employee shall perform Work under another Authorized Employee's lockout or tagout devices. Employees shall maintain possession of their own key.
7. Authorized employees who arrive later to the work site shall not work on the isolated equipment until they have reviewed the control procedure, conducted a

visual and physical verification of all isolation points, and attached their personal lock and tag on the group lockbox.

E. Shift/Personnel Change

1. Transfer of control will occur between authorized personnel only. The PAE shall be responsible for transferring LOTO authority to the next shifts PAE.
2. The PAE shall not remove their personal lock(s) from any of the lockout devices or group lockbox until the arriving PAE has applied their personal lock and tags.
3. During transfer of LOTO authority between arriving and outgoing PAEs, the following must be performed:
 - a. Ensure that all Authorized Employees who are leaving the work site have removed their personal locks.
 - b. All oncoming shift Authorized Employees shall review the control procedure and verify that all the isolated machinery, equipment, or systems are in the proper positions and secured by group locks and
 - c. tags. Each time an Authorized Employee attaches their personal lock, they must physically and visually verify that the equipment is still isolated, per the energy control procedure.
 - d. Once the verification is completed, all oncoming shift Authorized Employees shall attach their personal lock and tag to the group lock box, and then they may resume the Work.
 - e. All Affected Employees in the job site area shall be notified that the Work is in progress.
 - f. The control procedure shall remain attached to the Group Lockbox to allow the oncoming Authorized Employees an opportunity to review and verify the LOTO conducted.

F. Lockout and Tagout Device Removal

1. Lockout and tagout devices shall only be removed by the Contractor Authorized Employee that applied the lockout and tagout device. Each employee must apply their own lock and maintain possession of their own key.
2. The Contractor shall not re-energize any equipment unless in the presence of OC SAN Authorized Employee.
3. The Contractor must follow Cal/OSHA requirements for cutting off locks of any OC SAN employee or the Contractor employee whose lock or tag remains on equipment that needs to be demolished or energized.
 - a. If an OC SAN lock and tag remain on equipment, the Contractor shall notify OC SAN for the lock and/or tag to be removed. The Contractor shall never remove equipment that contains OC SAN locks or tags. OC SAN will coordinate with the Contractor to account for the whereabouts of its employees and remove OC SAN locks and tags.
 - b. The Contractor shall account for the whereabouts of its own employees.
4. The INSPECTOR is responsible for notifying OC SAN PAE when the Contractor Work is complete, and all the Contractor locks and tags have been removed.

G. Locks

1. Contractors shall supply unique and personally identifiable keyed locks to each Authorized Employee.
2. Locks issued to an Authorized Employee may only contain one key, which remains in possession of the Authorized Employee in which the locks were issued. Note: OC SAN will not provide locks for Contractor's use.
3. Locks shall only be used for energy isolation of machinery, equipment, and/or facilities and not to be used for another purpose.

H. Tags

1. Tags shall be of sufficient material that is capable of enduring adverse conditions (weather, wet locations, corrosive materials, etc.) that will not cause the tag to deteriorate or message on tag to become illegible.
2. Tags must offer clean instructions such as: "Do Not Start", "Do Not Open", "Do Not Close", "Do Not Energize" or "Do Not Operate". Tags must include standard language of "Danger". The tags must be black, red, and white.
3. OC SAN will not provide tags for Contractor's use.
4. Tags shall contain at a minimum the following legible information:
 - a. Name of person placing tag
 - b. Phone number of persons placing tag
 - c. Date of installation
 - d. Reason for application
5. Tags installed as a tagout device shall be installed to prevent inadvertent or accidental removal. The securing means shall be of sufficient strength to prevent removal without destroying the securing means (such as a zip or cable tie) or require the use of a tool to remove it.
6. Tags installed on a lock shall be affixed to the lock through the manufactured eyelet.

I. OC SAN Oversight

1. OC SAN shall designate staff to ensure that Contractors follow these Contractor Safety Standards.
2. OC SAN personnel shall be the first persons to place a lock and tag before Contractor starts the Work and the last to remove the lock and tag when the Contractor complete the Work.
3. Group lockboxes shall be implemented by the designated OC SAN PAE when the total staff affected is greater than three.
4. Under no circumstance shall Contractors' employees locks and tags be on equipment without being accompanied by either an OC SAN lock unless it is a newly constructed piece of equipment still under the CONTRACTOR's control.

5.44. MOTOR VEHICLES

- A. All employees driving job site motor vehicles shall have a valid driver's license for the state in which the employee resides and for the class of vehicle driven. Vehicles need to be registered with the Department of Motor Vehicles.

- B. Drivers of vehicles over 26,000 pounds gross vehicle weight (GVW) are required by Federal and State Departments of Transportation regulations to possess a Commercial Driver's License (CDL).
- C. Drivers on the Project site shall obey all street and highway speed and traffic laws.
- D. Posted speed for the plants is 15 mph but shall not drive any faster than is safe.
- E. Drivers are to limit their speed to 10 mph in construction zones.
- F. Drivers shall check the mechanical condition of their vehicles at least daily.
- G. Drivers are required to observe the "right of way" rule. Yield to other drivers whose driving actions demand the right-of-way or have obscured visibility.
- H. Drive defensively. Anticipate what the other driver may do. Leave yourself an out.
- I. Drivers shall keep a distance of AT LEAST one vehicle length for each 10 miles of speed between their vehicle and the vehicle in front of them.
- J. Employees driving and riding in the Contractors' vehicles must wear seat belts.
- K. Block or chock vehicle wheels when parking on inclines.
- L. All passengers in motor vehicles must be seated and within the confines of the vehicle.
- M. All vehicles must be shut off when unoccupied.
- N. Pedestrians and cyclists have the right of way.
- O. Parking shall be in specified areas only. Do not block entrances and do not park in reserved spaces or in fire lanes marked by a red curb.
- P. Contractors are responsible for the stability of any material being hauled.
- Q. Employees are not allowed to ride in the open bed of a pickup truck.
- R. Unauthorized passengers shall not be transported in any vehicle or on any equipment at any time.

5.45. OVERHEAD UTILITIES

- A. The CONTRACTOR shall identify all overhead utilities prior to the start of any Work.
- B. The CONTRACTOR shall identify the voltage carried by each power line and identify the minimum required clearances prior to commencing Work near the line.
 - 1. Identifications of all lines and minimum clearances shall be documented on a site plan that is made available to all employees and Contractors.
 - 2. This site plan shall include identification of all lines that are within 42 feet of the perimeter of the site.
 - 3. Temporary utilities shall be added to the site plan as required by the CONTRACTOR.
- C. Proper distances must be maintained from all overhead power lines as described in the following table:

Power line voltage Phase to phase (kV)	Minimum Safe Clearance (ft)
50 or below	10
Above 200 to 350	20
Above 350 to 500	25
Above 500 to 750	35
Above 750 to 1,000	45

- D. When working less than 10 feet from a power line, power lines shall be locked out and visually grounded.
- E. Guy wires shall be delineated and protected.

5.46. PERMITS

- A. Unless otherwise stated in the Contract Documents, Contractors shall obtain relevant permits pertinent to the safety of employees and operations.
- B. Permits shall be available for review at the job site upon request of the ENGINEER or Risk Management.
- C. If a bulk fuel storage tank will be used on the Project, then the CONTRACTOR must obtain a Bulk Fuel permit from the local Fire Department having jurisdiction. The tank permit shall be submitted to the ENGINEER and Risk Management using OC SAN's PCMS.
- D. The CONTRACTOR shall obtain, and post Cal/OSHA Activity Permits for the following construction activities:
 - 1. Construction of trenches or excavations which are 5 feet or deeper and into which a person is required to descend.
 - 2. Constructions of any building, structure, scaffolding, or false work more than 3 stories high, or the equivalent height (36 feet).
 - 3. Demolitions of any building structure or dismantling of scaffolding or false work more than 3 stories high, or the equivalent height (36 feet).
 - 4. Erection or dismantling of vertical shoring systems more than 3 stories high, or the equivalent height (36 feet).
 - 5. Use of fixed or mobile tower cranes.
- E. OC SAN also requires permits for Work it considers to be high hazard; the Work that requires OC SAN acceptance includes Confined Space Entry, Use of OC SAN equipment, and Hot work, LTV for Energized Systems, Hazardous Materials usage, Concurrent/Dual Employer Work Activities, and Spray Painting.

5.47. PERSONAL PROTECTIVE EQUIPMENT

- A. General
 - 1. Contractors shall ensure that employees are trained in the proper use, care, sanitation, and limitations of PPE in accordance with applicable OSHA Standards and manufacturer's instructions and recommendations.
 - 2. Contractors shall assess the workplace to determine if hazards that require the use of personal protective equipment are present or are likely to be present.
 - 3. Contractors shall provide personal 4-gas meters to all effected staff, including subcontractors.

4. PPE must be properly fitted.
5. Employee dress should be neat in appearance and consistent with good dressing attire, no large holes, obscenities, or inappropriate images.
6. Shirts and long pants must be worn always on the site. Sleeveless shirts, tank tops, and shorts are not permitted. Clothing should not be torn or frayed.
7. Clothing contaminated by oily, flammable, toxic or caustic materials should not be worn until properly cleaned.
8. Certain tasks may require the wearing of fire-resistant materials, such as Nomex[®] or leather. In such circumstances, extremely flammable clothing material such as nylon should be discouraged.
9. In multi-employer worksites, Contractors must comply with whichever Contractor requirements are the most stringent.
10. Contractors are responsible to supply required personal protective equipment to their employees.
11. Gloves shall be worn and based on the hazards present.
12. Hearing protection shall be worn in high noise areas and/or where required by job safety analysis.

B. Head/Face Protection

1. Employees must wear hard hats complying with or exceeding the requirements of ANSI Z89.1-2014 while on the job site. "Cowboy" and similar novelty hard hats are not permitted.
2. Safety eye protection shall be worn at all times.
3. All safety glasses, goggles, and face shields must meet or exceed the requirements of ANSI Z87.1-2015.
4. The addition of side shields to prescription safety glasses is not permitted unless the side shields meet the ANSI standards.
5. Face shields must be worn in conjunction with safety glasses when grinding, chipping, jack hammering, and power sawing, or conducting other tasks that involve serious face/eye hazards.

C. Respiratory Protection

1. Employees who are required to wear respiratory protection must receive a medical assessment of their physical ability to wear the equipment, be properly fit tested, and trained in the use, care, storage, maintenance, and limitations of the respiratory device.
2. Contractors must be able to show how respiratory protection was determined to provide adequate protection to employees by either industrial hygiene data or representative data from a previous project.

D. High-Visibility Safety Apparel

1. At a minimum, Contractors' employees shall wear ANSI Class 2 safety vest while working within the following areas:
 - a. Plant 1 and Plant 2 treatment areas
 - b. Pump station electrical rooms, pump rooms, and exterior spaces within OC SAN property fencing.

- c. Where the potential exists for exposure to vehicular traffic.
 - d. When working in vicinity of operating mobile equipment.
 - e. OC SAN construction sites.
 - 2. Contractors' employees shall wear ANSI Class 3 safety vest while working in the following area:
 - a. Public right of way where vehicle traffic exceeds 50 miles per hour.
 - b. Off plant when working adjacent to public right of way and not protected by OC SAN property fencing.
 - c. OC SAN construction sites outside of Plant 1 and Plant 2.
 - d. During nighttime work, and/or when working along a federal aid highway during daytime or nighttime hours.
- E. Safety Footwear
- 1. Tennis shoes, sneakers, open-toed shoes, and sandals are prohibited in construction areas.
 - 2. Safety footwear meeting the requirements of ASTM F2413, "Standard Specification for Performance Requirements for Foot Protection", is required in construction and process areas. ASTM numbers must be legible on the tongue or insides of shoes.
 - 3. Protective footwear shall be selected based on hazards associated with work tasks/activities (i.e., electrical hazards, puncture hazards, crush hazards, heat).
 - 4. Soles should be made of slip-resistant materials, and not worn to the point where slip resistance is compromised.
 - 5. Footwear shall have protective toecaps (i.e., composite, steel).

5.48. POSTING REQUIREMENTS

- A. The CONTRACTOR shall be required to construct a weatherproof job site bulletin board. Federal and State regulations require the CONTRACTOR to conspicuously display all required posters at locations where employees report or normally congregate each day.
- B. At minimum, the following items shall be posted:
 - 1. Industrial Welfare Commission's Order Regulating Wages, Hours, and Working Conditions
 - a. Pay Day Notice
 - b. OSHA "Job Safety and Health Protection"
 - c. Employer's "Code of Safe Practices" / Safety Rules
 - d. Discrimination in Employment is Prohibited by Law
 - e. Sexual Harassment Poster
 - f. Americans with Disabilities Act (ADA)
 - g. Notice of Compensation Carrier
 - h. Notice to Employees of Unemployment Insurance and Disability Insurance
 - i. Cal/OSHA Operating Rules for Industrial Trucks
 - j. Emergency Telephone Numbers

5.49. POWDER-ACTUATED TOOLS

- A. Powder-actuated tools must meet or exceed the requirements of ANSI A10-3.1977.
- B. Only trained workers holding a valid operator's card can use a powder-actuated tool.
- C. Containers for powder-actuated tools must be lockable and bear the label POWDER-ACTUATED TOOL on the outside. The container must be kept under lock and key storage. The following must be provided with each tool:
 - 1. Operating and service manuals.
 - 2. Power load chart.
 - 3. Inspection-Service record.
 - 4. Repair and servicing tools.
- D. Eye or face protection is required for operators and assistants.
- E. Tools must be inspected prior to use. Defective tools must not be used.
- F. Powder-actuated tools must not be left unattended.
- G. Powder-actuated tools must be unloaded if work is interrupted. Tools must not be loaded until ready for use.
- H. On misfire, the tool must be held in place for 30 seconds.
- I. Misfires shall be placed in a can of water.
- J. Different power loads must be kept in separate compartments.
- K. Warning signs must be posted bearing the words: "POWDER-ACTUATED TOOLS IN USE" within 50 feet of the point of use.
- L. The Work must be evaluated to determine if a hot work permit is required when using powder-actuated tools.

5.50. PUBLIC PROTECTION PLAN

- A. The CONTRACTOR shall develop a Public Protection Plan prior to the commencement of the Work. The Public Protection Plan shall be reviewed and revised as necessary throughout the Project.
 - 1. The plan shall be in writing and available at the job site for review upon request.
 - 2. For the purposes of this section, "Public" refers to parties not involved in the execution of the Work related to this Project.
- B. The Public Protection Plan shall include following components:
 - 1. Policy statement
 - 2. Assignment of responsibilities
 - 3. Identification of existing and predictable public concerns
 - 4. Provisions to monitor and inspect the implementation of the Public Protection Plan
 - 5. Provisions for incident investigation
 - 6. Hazard abatement procedures

- C. The Public Protection Plan shall consider at minimum the following items as they apply to the Project:
1. Noise
 2. Dust, Fumes, Mists, Smoke, Vapors, Gasses, Odors
 3. Traffic Hazards
 4. Pedestrian and Bicyclist Hazards
 5. Radiation (including lasers, x-rays, and welding rays)
 6. Machinery and Vehicles
 7. Falling Objects
 8. Wind-Borne Objects
 9. Security
 10. Utilities
 11. Hazardous Materials and Hazardous Substances (including use and storage)
 12. Response to Incidents Involving the Public
 13. Public Demonstrations or Protests

5.51. SANITATION

- A. The CONTRACTOR must provide in a clean and sanitary condition:
1. All potable water for drinking
 2. Adequate toilet facilities and wash facilities
 3. Hand wash facilities as required by the Safety Data Sheet or state standards.
 4. Appropriate containers for disposal of garbage
- B. A minimum of one separate toilet facility shall be provided for each twenty employees or fraction thereof of each sex.
- C. Toilet facilities shall be kept clean, maintained in good working order, designed, and maintained in a manner that will assure privacy, and provided with an adequate supply of toilet paper.
- D. Employees shall not drink the plant water or other liquids involved with the treatment process.

5.52. SCAFFOLDS

- A. Scaffolds shall be erected, moved, dismantled, or altered only under the supervision and direction of a Competent Person qualified in scaffold erection, moving, dismantling or alteration.
- B. The CONTRACTOR and Subcontractors (through the CONTRACTOR) shall provide a copy of the competent person evaluation and the Competent Person will sign off on scaffolds that are erected prior to use.
- C. The CONTRACTOR shall have a Competent Person determine the feasibility and safety of providing fall protection for employees erecting or dismantling supported scaffolds. Fall protection is required for employees erecting or dismantling supported scaffolds where the installation and use of such protection is feasible and does not create a greater hazard. During erection and dismantling, 100% fall protection shall be always utilized.

- D. Contractors shall have each employee who performs Work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. The training shall include the following topics, as applicable:
 - 1. The nature of any electrical hazards, fall hazards, and falling object hazards in the work area.
 - 2. The correct procedures for dealing with electrical hazards.
 - 3. The correct procedures for erecting, maintaining, and dismantling the fall protection and falling object protection systems being used.
 - 4. The proper use of the scaffold, including the proper handling of materials on the scaffold.
 - 5. The maximum intended load and the load-carrying capacities of the scaffold
 - 6. Any other pertinent procedures or safety requirements
- E. Contractors shall have each employee who is involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold trained by a Competent Person to recognize any hazards associated with the Work in question. The training shall include the following topics, as applicable:
 - 1. The nature of scaffold hazards
 - 2. The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question.
 - 3. The design criteria, maximum intended load-carrying capacity, and intended use of the scaffold.
 - 4. Any other pertinent procedures or safety requirements
- F. When Contractors have reason to believe that an employee lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, the Contractor shall retrain each such employee so that the requisite proficiency is regained.
- G. Handrails, midrails, and toeboards are required on all scaffolds over 6 feet high.
- H. If the guardrail system is incomplete or missing, personal fall protection is required.
- I. A ladder or other acceptable means for access must be provided.
- J. Wheels must be locked on rolling scaffolds before use.
- K. There is no riding of manually propelled scaffolds.
- L. All connections, including casters, on rolling scaffolds shall be pinned.
- M. Contractors shall keep the platform load within the safe platform workload limit.
- N. Scaffolds must be erected level on a firm base. When the scaffold is resting on earth or other such material, the uprights shall rest on and be secured to the equivalent of a 2-inch by 10-inch by 10-inch wood base.
- O. Suspended scaffolds must have adequate anchorage points. Occupants shall have a full body harness, lifeline and deceleration device that must be attached to a separate anchorage point than that of the scaffold prior to stepping out onto any suspended scaffold over 10 feet per OSHA.

- P. Scaffold planks must be laid tight and secured to prevent movement. Planks must overlap between 6 and 12 inches over the scaffold supports.
- Q. A stair tower or built-in stair/ladder system shall be provided for access to all scaffolds four frames or more in height.
- R. All scaffolds shall be inspected and tagged to identify that they meet the requirements for use by a Competent Person prior to initial use, before each work shift, and after any event that could affect the structural integrity or safety of the scaffold. Scaffolds that are not tagged shall not be used.

5.53.ERECTION

- A. No building, structure, or part thereof, or any temporary support shall be loaded more than its designed capacity.
- B. Trusses and beams shall be braced laterally and progressively during construction to prevent buckling or overturning.
- C. During placing of structural members, the load shall not be released from the hoisting line until the members are secured with not less than two bolts drawn up wrench tight.
- D. Where skeleton steel is being erected, a tightly planked and substantial floor shall be maintained within two stories or 30 feet, whichever is less, below, and directly under that portion of each tier of beams on which any Work is being performed.
- E. When connecting beams at the periphery or interior of a building or structure where the fall distance is greater than 6 feet, the connector shall be provided with and use appropriate personal fall protection equipment in accordance with Cal/OSHA requirements.
 - 1. Connector means an employee who, working with hoisting equipment, is placing, and connecting beams or other structural members.
 - 2. When performing Work other than connecting, employees shall be provided and use personal fall protection equipment in accordance with Cal/OSHA requirements where the fall distance is greater than 6 feet.
- F. Open web steel joists shall not be placed on any structural steel framework unless such framework is safely bolted or welded.
- G. Containers shall be provided for storing or carrying rivets, bolts, and drift pins, and secured against accidental displacement when aloft.
- H. When bolts or drift pins are being knocked out, means shall be provided to keep them from falling.
- I. Impact wrenches shall be provided with a locking device for retaining the socket.
- J. Connections of equipment used in plumbing-up shall be properly secured.
- K. Turnbuckles shall be secured to prevent unwinding while under stress.
- L. Plumbing-up guys shall be removed only under the supervision of a Competent Person.
- M. Employees working above grade or any surface and exposed to protruding reinforcing steel or other similar projections shall be protected against the hazard of impalement using guardrails, or approved fall protection systems, or protective covers.
- N. Exposed edges of all temporary planked or temporary metal decked floors at the periphery of the building, or at interior openings, such as stairways and elevator

shafts shall be protected by a single 3/8-inch minimum diameter wire rope located between 42 and 45 inches above design finish floor height. Midrail protection shall be installed at the completion of the installation of decking.

- O. Employees shall be trained in accordance with applicable Cal/OSHA standards and Project-specific requirements.

5.54. TAR AND MELTING POTS

- A. Any melting chamber must be vented and must have a working thermometer.
- B. No melting pots or tar kettles may be located on roof surfaces. All melting pots must be on the ground outside, and at least 25 feet from any building.
- C. Pipelines shall be adequately braced or supported to prevent collapse.
- D. Barricades must be provided when hot liquids are present overhead on a roof or upper floor.
- E. Buckets containing hot asphalt or pitch shall not be carried on ladders.
- F. A fire extinguisher shall be kept near each kettle in use. Extinguisher capacity shall be at least:
 - 1. Less than 150-gallon kettle – 8: B.C.
 - 2. 150 to 350-gallon kettle – 16: B.C.
 - 3. Larger than 350-gallon kettle – 20: B.C.
- G. At a minimum, an 8: BC fire extinguisher shall be kept near each kettle in use.
- H. Kettle and tanker pumps shall be provided with a means of stopping the flow of hot asphalt or pitch manually from the rooftop in emergencies.
- I. Pumper pipelines shall be securely fastened at the rooftop and shall not be supported by ladders used for access.

5.55. WARNING SIGNS

- A. The CONTRACTOR shall post site access and warning signage, including emergency contact information, in accordance with applicable requirements.
- B. Project employees shall obey all warning signs.
- C. Signage shall be maintained in legible condition and cleaned or replaced as necessary to maintain legibility.
- D. All warning signs, signals, and barricades installed by the Contractors must be removed when the hazard no longer exists.
- E. The CONTRACTOR shall monitor conditions to ensure timely and accurate removal of these devices.
- F. Danger tape, caution tape, barricades, rope, and any other warning lines shall have signage to explain the nature of the hazard.

5.56. WORK ZONE TRAFFIC CONTROL

- A. The CONTRACTOR shall establish work area protection zones necessary to protect employees and the public when Work is performed in areas where pedestrians or vehicles have access.
- B. All employees in work zones shall wear Class II or Class III reflectorized garments in accordance with the requirements of the U.S. Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD).

- C. Traffic control shall be established in compliance with the MUTCD, State and local traffic control regulations, the WATCH Handbook (where referenced by contract), or other contract-referenced documents/standards and approved by the agency having jurisdiction.
- D. The CONTRACTOR shall establish Work Area Protection in consideration of the location of the worksite, pedestrian and traffic conditions, and the time of day (daylight or dark).
- E. The CONTRACTOR shall ensure adequate protection to passing vehicles on a roadway by providing a Flagger when barricades, signs and signals may be insufficient.
- F. When placing or removing Work Area Protection, the employee shall:
 - 1. Be consistently alert to traffic conditions.
 - 2. Face oncoming traffic.
 - 3. Wear proper personal protection (e.g., traffic warning vest, hard hat, eye protection).
- G. Place the initial warning sign (e.g., Construction Ahead) first and remove last.
- H. Work zone sites must be made safe for pedestrians by using:
 - 1. Rope or vinyl warning tape.
 - 2. Fencing or other barricades.
 - 3. Cones and signs.
 - 4. Pedestrian crossings (designated and painted).
 - 5. Other appropriate means, methods, and devices.
- I. All night Work requires adequate illumination to light the work area and warn public vehicular traffic.
- J. For night Work, the illumination used to light the work area shall be aimed such that it does not create glare for, or blind, the public driving through the work zone.
- K. The CONTRACTOR shall ensure adequate protection to passing vehicles on a roadway by providing a Flagger when barricades, signs and signals may be insufficient.

5.57. FLAGGING OPERATIONS

- A. Flagging Operations shall be conducted in accordance with the following unless a more specific standard applies.
- B. Flaggers shall be trained in the proper fundamentals of flagging (signaling) traffic before being assigned as Flaggers.
- C. The Flagger must be protected, and the motorist forewarned by use of warning signs and cones.
- D. Use cones before the Flaggers position to mark the traffic lane.
- E. The use of high visibility orange or Class III yellow vests shall be required to all Flaggers.
- F. During the hours of darkness, the Flaggers shall be outfitted with a reflectorized garment, and the Flagger's position shall be illuminated.

- G. To Stop Traffic - The Flagger shall face traffic and hold the stop paddle in a vertical position at arm's length.
- H. When It Is Safe for Traffic to Proceed - The Flagger shall stand parallel to the traffic movement, and with the slow paddle held in a vertical position at arm's length.
- I. Flags shall be a minimum of 18-inches x 18-inches in size, and orange in color.

5.58. PLATE BRIDGING

- A. Trenches, excavations, or other surface openings or significant depressions must be covered with a bridge plate to permit safe and unobstructed flow of traffic.
- B. Bridging plates must be secured from movement by a holding device(s) such as cleats, angles, bolts, tack welding, etc., regardless of the elevation below.
- C. Bridging plates must be installed to produce a minimum amount of noise and be recessed or have appropriate asphalt tapers at edges, per OC SAN or city requirements.
- D. Bridging plates must extend a minimum of one foot beyond the edges, with pavement materials feathering the edges for a reasonably smooth transition and installed in accordance with manufacturer/engineer instructions.
- E. Warning signs shall be posted when steel plates are used in a travel path.
- F. Refer to the WATCH Manual (where applicable) for specific requirements.

5.59. WORKING AROUND WATER

- A. Where Contractor's employees are not protected from falling into water by railing, netting, or body positioning devices the following safety devices shall be provided for and used by employees at those locations where the danger of drowning exists.
- B. Personal Flotation Devices (PFD). Any employee who has the potential for falling into water shall be required to wear U. S. Coast Guard approved personal flotation devices that are marked or labeled Type I PFD, Type II PFD, or Type III PFD, or a U.S. Coast Guard approved Type V PFD that is marked or labeled for use as a work vest for commercial use or for use on vessels.
- C. Ring Buoys. U. S. Coast Guard approved 30-inch ring buoys with at least 150 feet of 600-pound capacity line shall be readily available for emergency rescue operations. Distance between ring buoys shall not exceed 200 feet.
- D. Lifesaving Boats. One or more lifesaving boats, either manually or power-operated, shall be provided and readily accessible always. Lifesaving boats shall be properly maintained, ready for emergency use and equipped with oars and oarlocks attached to the gunwales, boathook, anchor, ring buoy with 50 feet of 600-pound capacity line and two life preservers. Oars are not required on boats that are powered by an inboard motor.
- E. Where, because of swift current, lifeboats cannot be used, a line shall be stretched across the stream with tag lines or floating planks trailing in the water at intervals not to exceed 6 feet. If this is impracticable, some other arrangement for providing effective lifelines near the water surface shall be provided.

5.60. USE OF X-RAY

- A. If X-Ray is utilized for any part of the Project, OC SAN must be notified at least two weeks prior to the use of X-Ray. The area in question shall be isolated prior to any X-Ray use.

- B. OC SAN may require all X-Ray work to occur during afterhours to minimize exposure of OC SAN employees. Proper warning signs and delineation will be required.
- C. Contractors performing non-destructive testing (NDT) shall notify the ENGINEER and Risk Management regarding hazards associated with such testing. Contractors performing NDT shall establish administrative controls to protect Contractor's employees and OC SAN before examination. Controls shall be approved by the ENGINEER and Risk Management.

6. DEFINITIONS

The following definitions may not reflect the actual titles and definitions in use by all entities on this Project and do not have any force or effect beyond their use in the Contractor Safety Standards. Due to such differences in nomenclature among owners and contractors, the following are used throughout the Contractor Safety Standards to establish the functional framework for the Safety Program.

Alternate Contractor Safety Manager (ACSM). Individual meeting the same requirements of the CSM that assumes the role of the CSM on a temporary basis.

Alternate Contractor Safety Representative (ACSR). Individual meeting the same requirements of the CSR that assumes the role of the CSR on a temporary basis.

Authorized Representative. The Orange County Sanitation District's Authorized Representative to act on behalf of OC SAN on a project.

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

CONTRACTOR. The individual, partnership, joint venture, corporation, or other combination thereof, identified as such in the Contract, and referred to throughout the Contract Documents as if singular in number and who directly contracts with OC SAN. The term "CONTRACTOR" means the CONTRACTOR or its authorized representative. For applicability of these Standards, the term "CONTRACTOR" also includes Service Vendor, Consultant, and any other entity that directly contracts with OC SAN.

Contractor. Unless otherwise specified, in these Contractor Safety Standards, Contractor includes CONTRACTOR and all its agents, Subcontractors, Service Vendors, suppliers, consultants, and vendors.

Contractor Project Manager (CPM). The senior on-site management person for the CONTRACTOR with responsibility for execution of the contract, including compliance with the Contractor Safety Standards. In some cases, the actual on-site representative may be a Superintendent or a Foreman. In such cases, this is the applicable person when the CPM is referenced. The CPM is responsible for the ongoing implementation and enforcement of the CONTRACTOR's Site-Specific Safety Program.

Contractor Project Superintendent (CPS). The senior on-site Superintendent for the CONTRACTOR with responsibility for execution of the contract, including compliance with the Contractor Safety Standards. In some cases, the actual on-site representative may be an Assistant Superintendent or a Foreman. In such cases, this is the applicable person when the CPS is referenced. The CPS is responsible for and accountable for the ongoing implementation and enforcement of the CONTRACTOR's Site-Specific Safety Program.

Contractor Safety Manager (CSM). If the Project will have and the CONTRACTOR will have the responsibility to manage 40 or more construction workers, the CONTRACTOR shall have a full-time Contractor Safety Manager assigned to the Project, to carry out the

duties as described in this document. The Contractor Safety Manager shall have no other duties other than safety (dedicated), regardless of the number of employees on site. In the absence of a Contractor Safety Manager, at a minimum, the CONTRACTOR will be responsible for having a CSR assigned to the Project. In addition, OC SAN reserves the right to require the CONTRACTOR to supply a CSM if the CONTRACTOR demonstrates the inability to manage safety in accordance with Cal/OSHA and OC SAN Contractor Safety Standards.

Contractor Safety Representative (CSR). The CONTRACTOR employee assigned safety responsibilities of implementing the CONTRACTOR's Safety program and Injury and Illness Prevention Program, including ongoing identification and correction of hazards for shift work and distinct work locations as required. The CSR reports to the CSM. Additional Subcontractor Safety Representative (SSR) personnel shall cover shift work and OC SAN work locations as required. The CONTRACTOR can delegate the CSR duties to an on-site Field Supervisor. CSR responsibilities cannot be delegated to an office or staff employee.

Control of Hazardous Energy (LOTO). The process of isolating energy sources (thermal, electrical, pneumatic, gravity, chemical, and hydraulic) to prevent employees from being exposed to unexpected release of energy by using a lock and tag to prevent the energy releases. Also referred to as Lockout Tagout (LOTO).

Contractor Safety Orientation (CSO). A briefing to orient the CONTRACTOR to general hazards at the work location, identify OC SAN expectations for safety performance, review emergency notification capabilities, and discuss the CONTRACTOR activities that may pose a hazard to OC SAN employees, visitors, and other Contractors.

ENGINEER. OC SAN's Director of Engineering or designee.

Foreman. The Contractor's first line of supervision or lead of a crew

Hazardous Area Classification. A method of evaluating a location or process for any risks (hazards) of explosion or fire that substances located there may be present and determining how best to minimize those risks for all probable circumstances that may be encountered. The location is divided up (that is, classified) into areas by risk level. Each area is assigned specific ventilation and electrical installation requirements. Areas with the highest risk level will have the most specialized requirements.

Injury and Illness Prevention Plan (IIPP). The IIPP is a basic written workplace safety program. Title 8 of the California Code of Regulations (T8CCR) section 3203 requires every employer to develop and employ an effective IIPP.

INSPECTOR. The individual(s) designated by the ENGINEER as the field Project representative with delegated authority to enforce the requirements of the Contract Documents, subject to the approval of the General Manager.

Job Hazard Analysis (JHA). An activity specific analysis that is completed for tasks such as confined space entry, hot-work, hazardous materials usage, and other activities required by the Contract Documents.

Non-Compliance. Is any violation, failure to comply, non-conformance, or infraction of the standards specified in these Contractor Safety Standards, or of any regulations to include State and Federal OSHA, DOT, NFPA, Building Codes, Fire Codes, and local ordinances.

OSHA. OSHA as used in the context of these Contractor Safety Standards refers to the State or Federal agency with jurisdiction over workplace occupational safety and health at the project site.

Owner. Orange County Sanitation District, the entity for which this project is being performed.

Owner Authorized Representative. The Owner's Employee or agent with overall responsibility for the project.

Qualified Person, Attendant or Operator. A person designated by the employer who by possession of a recognized degree, certificate, or professional standing, or who, by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work, or the project.

Risk Management. The Owner's Employee or agent with overall responsibility for the implementation of the Owner's Safety Program, including OC SAN Contractor Safety Standards.

Service Vendor. Any group, company or supplier providing non-construction related goods and services to OC SAN. All Service Vendors will be required to adhere to these Standards and the OSHA and Cal/OSHA General Industry Safety Orders.

Site-Specific Safety Program (SSSP). The Employer's Site-Specific Safety Program prepared in accordance with the requirements of this document and the Contract.

Subcontractor. One who is licensed pursuant to California Business and Professions Code, Section 7000 et. seq., and who contracts directly with the CONTRACTOR or with another Subcontractor to perform some part of the Work. A Subcontractor does not have any direct contract with OC SAN related to the Work.

Subcontractor Project Manager (SPM). The senior on-site management person for the Subcontractor with responsibility for execution of the contract, including compliance with OC SAN Contractor Safety Standards. In some cases, the actual on-site representative may be a Superintendent or a Foreman. In such cases, this is the applicable person when the SPM is referenced. The SPM is responsible for and accountable for the ongoing implementation and enforcement of the Subcontractor's Site-Specific Safety Program.

Subcontractor Project Superintendent (SPS). The senior on-site management person for the Subcontractor with responsibility for execution of the contract, including compliance with OC SAN Contractor Safety Standards. In some cases, the actual on-site representative may be an Assistant Superintendent or a Foreman. In such cases, this is the applicable person when the SPS is referenced. The SPS is responsible for and accountable for the ongoing implementation and enforcement of the Subcontractor's Site-Specific Safety Program.

Subcontractor Safety Manager (SSM). A dedicated full-time Subcontractor Employee assigned safety responsibilities for the project for Subcontractors having 40 or more employees. The SSM has the same responsibilities for safety of the Subcontractors that the CSM has for the CONTRACTOR.

Subcontractor Safety Representative (SSR). Subcontractor Employee assigned safety responsibilities of implementing the Subcontractor's Injury and Illness Prevention Program, including ongoing identification and correction of hazards for shift work and distinct work locations as required. The SSR reports to the SPM. Additional SSR personnel shall cover shift work and distinct work locations as required. The Subcontractor can delegate the SSR duties to an on-site Field Supervisor. SSR responsibilities cannot be delegated to an office or staff employee.

Superintendent. A management representative for the CONTRACTOR who oversees the Project.

7. ACRONYMS

The following acronyms may not reflect the actual acronyms in use by all entities on this Project and do not have any force or effect beyond their use in the Contractor Safety Standards. Due to such differences in nomenclature among owners and contractors, the

following are used throughout the Contractor Safety Standards to establish the functional framework for the Safety Program.

ACM	Asbestos-Containing Material
ACSM	Alternate Contractor Safety Manager
ACSR	Alternate Contractor Safety Representative
ANSI	American National Standards Institute
CDL	Commercial Driver License
CSO	Contractor Safety Orientation
CPM	Contractor Project Manager
CPR	Cardiopulmonary Resuscitation
CPS	Contractor Project Superintendent
CSM	Contractor Safety Manager
CSR	Contractor Safety Representative
EPA	Environmental Protection Agency
GVW	Gross Vehicle Weight
HEPA	High Efficiency Particulate Air
JHA	Job Hazard Analysis
LBP	Lead-Based Paint
LEL	Lower Explosive Limit
LTV	Lock-Tag-Verify
MUTCD	Manual on Uniform Traffic Control Devices
NFPA	National Fire Protection Association
OC SAN	Orange County Sanitation District
OSHA	Cal/OSHA and/or Federal OSHA (refer to context)
PAE	Primary Authorized Employee
PACM	Presumed Asbestos Containing Materials
PPE	Personal Protective Equipment
RPM	Revolutions Per Minute
SCAQMD	South Coast Air Quality Management District
SDS	Safety Data Sheet
SPM	Subcontractor Project Manager
SPS	Subcontractor Project Superintendent
SSM	Subcontractor Safety Manager
SSR	Subcontractor Safety Representative
SSSP	Site Specific Safety Program
USDOT	United States Department of Transportation
WATCH	Work Area Traffic Control Handbook

ATTACHMENT “M”

IRAN CONTRACTING ACT VERIFICATION

ATTACHMENT “M”
IRAN CONTRACTING ACT VERIFICATION
Public Contract Code sections 2200-2208

This form must be submitted with all proposals of \$1,000,000 or more.

To comply with the Iran Contracting Act of 2010 requirement, complete **one** of the options below.

Option 1 – Certification

I, the official named below, certify I am duly authorized to execute this certification on behalf of the entity identified below and (a) the entity identified below is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (DGS) and (b) is **not** a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/contractor/consultant, for 45 days or more, if that other person/contractor/consultant will use the credit to provide goods or services in the energy sector in Iran and is identified on the current DGS list of persons engaged in investment activities in Iran.

Consultant/Contractor/Financial Institution (Printed)

Federal ID Number

By (Authorized Signature)

Date

Printed Name and Title of Person Signing

Option 2 – Exemption

Pursuant to Public Contract Code sections 2203(c) and (d), a public entity may permit a contractor/consultant/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enter into or renew a contract for goods and services.

If the entity listed below has obtained an exemption from the certification requirement under the Iran Contracting Act of 2010, complete the information below and attach documentation demonstrating the exemption approval.

Consultant/Contractor/Financial Institution (Printed)

Federal ID Number

By (Authorized Signature)

Date

Printed Name and Title of Person Signing

ATTACHMENT “N”

CALIFORNIA AIR RESOURCES BOARD MOBILE SOURCE CERTIFICATIONS

ATTACHMENT “N”

CALIFORNIA AIR RESOURCES BOARD MOBILE SOURCE CERTIFICATIONS

To comply with the requirements of the California Air Resources Board Mobile Source Regulations, complete the applicable certifications below.

Advanced Clean Fleet (ACF): 13 CCR 2013-2013.4; 13 CCR 2015-2015.6

Disclosure: Vehicles with a GVWR greater than 8,500 lbs. and light-duty package delivery vehicles operated in California may be subject to the California Air Resources Board Advanced Clean Fleets regulations. Such vehicles may therefore be subject to requirements to reduce emissions of air pollutants. For more information, please visit the CARB Advanced Clean Fleets webpage at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>

Will the Project require CONSULTANT, Subconsultant, or Subcontractor vehicles of > 8,500 lbs GVWR (gross vehicle weight rating)?

If Yes, provide one of the following:

1. Current Certificate of Reported Compliance; or
2. A signed statement explaining why your entity is not subject to the terms of Title 13, California Code of Regulations, Sections 2013 through 2013.4 and 2015 through 2015.6.

If No, date and sign under the following statement:

This Project will not require the use of CONSULTANT, Subconsultant, or Subcontractor vehicles of > 8,500 lbs GVWR.

Name: _____ Date: _____

Signature: _____

Truck & Bus Regulation (T&B): 13 CCR 2025

Will the Project require CONSULTANT, Subconsultant, or Subcontractor vehicles that consist of diesel vehicle(s) > 14,000 lbs GVWR (gross vehicle weight rating) for purposes other than to transport material to OC SAN?

If Yes, provide one of the following:

1. Current Truck & Bus Certificate of Compliance; or
2. A signed statement explaining why your entity is not subject to the terms of Title 13, California Code of Regulations, Section 2025.

If No, date and sign under the following statement:

This Project will not require the use of CONSULTANT, Subconsultant, or Subcontractor vehicles of > 14,000 lbs GVWR for purposes other than to transport material to OC SAN.

Name: _____ Date: _____

Signature: _____

Clean Truck Check (CTC): 13 CCR 2195-2199.1

Will the Project require CONSULTANT, Subconsultant, or Subcontractor vehicles that consist of non-gasoline vehicles > 14,000 lbs GVWR (gross vehicle weight rating)?

If Yes, provide one of the following:

1. Affirmation of Fleet Wide Compliance for Clean Truck Check; or
(*Must be dated within 12 months of that vehicle(s) operation*)
2. A signed statement explaining why your entity is not subject to the terms of Title 13, California Code of Regulations, Section 2195-2199.1.

If No, date and sign under the following statement:

This Project will not require the use of CONSULTANT or Subconsultant and Subcontractor vehicles of > 14,000 lbs GVWR.

Name: _____ Date: _____

Signature: _____

Off-Road Diesel Amendments (ORD): 13 CCR 2449-2449.2

Will the Project require CONSULTANT, Subconsultant, or Subcontractor use of off-road diesel equipment (construction equipment)?

If Yes, provide one of the following:

1. Current Certificate of Reported Compliance for ALL fleets on the Project; or
2. A signed statement explaining why your entity is not subject to the terms of Title 13, California Code of Regulations, Section 2449-2449.2.

If No, date and sign under the following statement:

This Project will not require CONSULTANT, Subconsultant, or Subcontractor use of off-road diesel equipment.

Name: _____ Date: _____

Signature: _____

ATTACHMENT “O”

ACKNOWLEDGEMENT OF CALIFORNIA VOLUNTARY PROTECTION PROGRAM ANNUAL REPORTING REQUIREMENT

ATTACHMENT "O"

ACKNOWLEDGEMENT OF CALIFORNIA VOLUNTARY PROTECTION PROGRAM ANNUAL REPORTING REQUIREMENT

(Submit with Proposal)

Submitted By: _____
(Name of Firm)

I _____, the _____
President, Secretary, Manager, Owner or
Representative

of _____, certify that if awarded
Name of Company or Corporation or Owner

the Agreement and if CONSULTANT will potentially work 1,000 combined hours in a quarter, for the term of the Agreement, CONSULTANT shall provide an annual report detailing the CONSULTANT's safety and health information, including, but not limited to, CONSULTANT's total number of employees, work hours, number of injuries and illnesses, and number of injury and illness cases involving days away from work, restricted work activity and/or job transfer by January 20th each calendar year.

Failure to provide the data by the required due date may result in suspension of CONSULTANT's services with OC SAN. Any delay arising out of or resulting from such suspension shall be CONSULTANT's sole responsibility and considered CONSULTANT caused delay, which shall not be compensable by OC SAN.

Signature of President, Secretary, Manager, Owner, or Representative

Date

ATTACHMENT “P”


HUMAN RESOURCES POLICIES

HUMAN RESOURCES POLICIES

Table of Contents:

Harassment & Discrimination	Policy No. 1.1
Retaliation & Whistleblowing	Policy No. 1.2
Workplace Violence & Weapons	Policy No. 1.3
Nepotism	Policy No. 1.6
Substance Abuse	Policy No. 5.20
Smoking	Policy No. 5.21
Diversity, Equity, and Inclusion	Policy No. 6.6

**Harassment & Discrimination
Policy No. 1.1**

 Orange County Sanitation District Personnel Policies	Policy Number: 1.1
	Effective Date: March 22, 2023
Subject: Harassment & Discrimination	Supersedes: September 26, 2018
	Approved by: General Manager

1.0 PURPOSE

- 1.1 The purpose of this policy is to provide a working environment for all employees, contractors, interns, volunteers, and temporary workers that is free of harassment and discriminatory behavior, whether based on race, color, religion, sex (including pregnancy, childbirth, and breastfeeding), sexual orientation, age, national origin, ancestry, actual or perceived disability, medical condition, genetic information, military and veteran status, marital status, gender, gender identity, gender expression, exercise of rights relating to any legally-provided leave of absence, or any other legally protected basis.

2.0 ORGANIZATIONAL UNITS AFFECTED

- 2.1 This policy applies to all Orange County Sanitation District (OC San) employees, applicants, and all persons who perform services for the OC San, including interns, volunteers, and persons working under contract.

3.0 DEFINITIONS

- 3.1 Discrimination is the unfavorable or unfair treatment of a person in the work environment, based on a legally protected class.
- 3.2 Harassment includes premising the granting or denial of employment benefits on the acceptance of unwanted verbal or physical conduct or verbal, physical or visual conduct based on a legally protected class that is so severe and/or pervasive that it creates a hostile or abusive working environment, and interferes with an employee's ability to do his or her job.
- 3.3 Legally Protected Class includes race, religious creed, color, national origin, ancestry, physical or mental disability, medical condition, genetic information, marital status, sex (including pregnancy, childbirth, and breastfeeding), gender, gender identity, gender expression, age (40 years or older), sexual orientation, military and veteran status, and exercise of rights relating to any legally-provided leave of absence.
- 3.4 Sex includes, but is not limited to, pregnancy or medical conditions related to pregnancy, childbirth or medical conditions related to childbirth, breastfeeding or medical conditions related to breastfeeding. "Sex" also includes, but is not limited to, a person's gender.
- 3.5 Sexual Harassment may involve the behavior of a person of either sex against a person of the opposite or same sex, and occurs when such behavior constitutes unwelcome sexual advances, unwelcome requests for sexual favors, and other unwelcome verbal, physical, or visual behavior of a sexual nature where:

- 3.5.1 Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's current or future employment;
- 3.5.2 Submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting the individual's welfare; or
- 3.5.3 Such conduct has the purpose or effect of substantially interfering with an individual's welfare or work performance, or creates an intimidating, hostile, offensive, and/or demeaning work environment.
- 3.5.4 Prohibited acts that constitute sexual harassment may take a variety of forms.

4.0 POLICY

- 4.2 OC San does not tolerate any form of harassment or discrimination and is committed to providing a work environment that is free of harassment and discrimination.
- 4.3 OC San is an Equal Opportunity Employer, and does not discriminate against any person in matters of employment, application for employment, participation in programs and benefits, or in the application of rules and regulations with regard to any legally protected class.
- 4.4 All OC San employees, contractors, interns, volunteers, and temporary workers are expected to support and comply with this policy. Any supervisor or manager observing or knowing of a harassing situation shall take immediate action to stop it and report the matter.
- 4.5 Supervisory and management personnel who receive reports of harassment or discrimination are expected to take all such complaints seriously, report the complaint to the Director of Human Resources, and take immediate steps to implement this policy in accordance with the provisions contained herein.
- 4.5 OC San will also take reasonable steps to prevent or eliminate reported discrimination or harassment by non-employees, including vendors and contractors, who are likely to have workplace interactions with employees.
- 4.6 No employee shall be subjected to any form of retaliation for reporting any violation of this policy when it is reported truthfully and in good faith. A report is made in good faith when the complainant reasonably believes there is a violation of policy.
- 4.7 Hostile Work Environment An environment may be hostile if unwelcome behaviors, sexual or other, are directed specifically at an individual or if an individual witnesses unlawful harassment in his/her immediate surroundings.
- 4.8 **Examples of Prohibited Behavior**
 - 4.8.1 Examples of the kinds of conduct that may constitute harassment when based on a legally protected class as defined in this policy include but are not limited to:
 - 4.8.1.1 Verbal conduct such as racial epithets, demeaning comments of a personal nature, derogatory jokes, slurs, yelling, screaming, intimidation, threats or stereotypical statements.

- 4.8.1.2 Patronizing or ridiculing statements that convey derogatory attitudes about a particular gender.
- 4.8.1.3 Displaying or distributing posters, cartoons, computer graphics or electronic media transmissions containing material that could be viewed as offensive.
- 4.8.1.4 Physical contact such as assault, unwanted touching, blocking normal movement, pushing or interfering with work because of sex, race or any other protected basis.
- 4.8.1.5 Retaliation for having reported or threatened to report harassment.
- 4.8.2 Examples of the kinds of conduct that may constitute sexual harassment include, but are not limited to:
 - 4.8.2.1 Unwelcome sexual propositions, invitations, solicitations, flirtations and gestures.
 - 4.8.2.2 Threats or insinuations that a person's employment, wages, promotional opportunities, or other conditions of employment may be adversely affected by not submitting to sexual advances.
 - 4.8.2.3 Unwelcome verbal expressions of a sexual nature, including graphic sexual commentaries about a person's body, dress, appearance or sexual activities; the unwelcome use of sexually degrading language, jokes or innuendoes; unwelcome suggestive or insulting sounds or whistles; leering.
 - 4.8.2.4 Sexually suggestive objects, pictures, videotapes, audio recordings or literature placed in the work area which may embarrass or offend individuals.
 - 4.8.2.5 Unwelcome touching, patting, or pinching.
 - 4.8.2.6 Romantic or sexual relationships between supervisors and subordinate employees are discouraged. There is an inherent imbalance of power and potential for exploitation in such relationships. The relationship may create an appearance of impropriety and lead to charges of favoritism by other employees. A welcome sexual relationship may change with the result that sexual conduct which was once welcome becomes unwelcome and harassing.

5.0 PROCEDURE

- 5.1 Any employee who believes that he or she has been the victim of conduct prohibited by this policy must immediately report the matter, verbally or in writing, to his or her supervisor or manager, or to any other supervisor or manager, including the General Manager or Assistant General Manager, or to the Human Resources Department.
- 5.2 All reported incidents of harassment, discrimination and/or retaliation will be fairly, timely and thoroughly investigated, and appropriate corrective action will be taken based on the findings of the investigation.

- 5.3 OC San will document and track the complaint's progress and inform the complainant that the investigation has concluded, each issue was thoroughly investigated, and the outcome (sustained, or not sustained).
- 5.4 Investigations will be conducted in such a way as to maintain confidentiality to the extent practicable under the circumstances and permissible under the law.
- 5.5 It is important to be aware that under the California Fair Employment and Housing Act ("FEHA"), employees may be held personally liable for any acts of unlawful harassment.

6.0 EXCEPTIONS


- 6.1 Any employee who knowingly files a false and malicious report of harassment, as opposed to a complaint which, even if erroneous, is made in good faith; or anyone who fails to report an actual or perceived form of harassment or discrimination as outlined in this policy, may be subject to appropriate disciplinary action, up to and including termination.

7.0 PROVISIONS AND CONDITIONS

8.0 RELATED DOCUMENTS

- 8.2 U.S. and California State Constitutions
- 8.3 Title VII of the Civil Rights Act of 1964
- 8.4 California Fair Employment and Housing Act (FEHA)
- 8.5 Policy 1.2, Retaliation & Whistleblowing
- 8.6 Policy 1.3, Workplace Violence & Weapons
- 8.7 Policy 5.1, Rules of Conduct

**Retaliation & Whistleblowing
Policy No. 1.2**

 Orange County Sanitation District Personnel Policies	Policy Number: 1.2
	Effective Date: March 22, 2023
Subject: Retaliation & Whistleblowing	Supersedes: September 26, 2018
	Approved by: General Manager

1.0 PURPOSE

- 1.1 The purpose of this policy is to establish uniform guidelines and procedures prohibiting retaliation against individuals who report or participate in the investigation of a report of discrimination, harassment, or individuals who engage in whistleblowing, or a protected activity as defined herein.

2.0 ORGANIZATIONAL UNITS AFFECTED

- 2.1 This policy applies to all Orange County Sanitation District (OC San) employees, potential employees, volunteers, interns, and all persons who perform services for OC San, including persons working under contract.

3.0 DEFINITIONS

- 3.1 Retaliation means that a supervisor or manager has taken action(s) toward an individual for engaging in protected activity described within this policy, wherein the action(s) have a substantial and material impact on an employee's terms and conditions of employment. Depending on the facts, it may be retaliatory if action, is taken because of the following, but not limited to, unfounded discipline, failure to promote, failure to hire, termination of a contract, inaccurate poor performance evaluations, arbitrarily changing work assignments, or arbitrarily changing work locations.
- 3.2 Whistleblowing refers to the act of an employee who discloses information to a government or law enforcement authority or to a supervisor or other person responsible for investigating, discovering, or correcting such matters, where the employee has reasonable cause to believe that the information reveals (1) violations or non-compliance with state or federal statutes; (2) unfair labor practices; (3) billing for services not performed or for goods not delivered; (4) gross mismanagement, significant waste of funds, and abuse of authority; and/or (5) a substantial and specific danger to the public health, safety or unsafe working conditions.

4.0 POLICY

- 4.1 It is OC San's policy to prohibit retaliation or reprisals towards employees, prospective employees and outside contractors who engage in, the following protected activities:
 - 4.1.1 Disclosing information to a government or law enforcement agency or internally to OC San, where there is reasonable cause to believe that the information discloses a violation of state or federal statute or non-compliance with a state or federal regulation.
 - 4.1.2 Disclosing the filing of a false claim for money, goods, or services to OC San.

- 4.1.3 Filing a written complaint, under penalty of perjury, of gross mismanagement, a significant waste of funds, an abuse of authority or a substantial and specific danger to public health or safety.
 - 4.1.4 Complaints of discrimination or harassment or any other conduct prohibited by the Fair Employment and Housing Act (FEHA) or related federal laws.
 - 4.1.5 Complaints about an unfair labor practice.
 - 4.1.6 Participating in an administrative investigation either as the complainant, a witness or the accused, or conducting an administrative investigation.
- 4.2 Any employee who, in good faith, reports an alleged incident involving the protected activities described in this policy, under no circumstances, shall be subjected to reprisal or retaliation of any kind. A report is made in good faith when the complainant has reasonable cause to believe there is a violation of policy.

5.0 PROCEDURE

- 5.1 OC San policy requires employees to report all perceived incidents of retaliation, or conditions justifying whistleblowing, regardless of the offender's identity or position.
- 5.2 Any employee who believes that he or she has been the victim of retaliation prohibited by this policy should report the matter to his or her supervisor or manager, or to any other supervisor or manager, including the General Manager or Assistant General Manager.
- 5.3 Reports of retaliation will be investigated fairly, timely, and thoroughly. The investigation may include individual interviews with the parties involved and, where, necessary, with individuals who may have observed the alleged conduct or may have other relevant knowledge.
- 5.4 Confidentiality will be maintained throughout the investigatory process to the extent permissible under the circumstances and consistent with applicable law.
- 5.5 No fixed report period has been established. However, prompt reporting of complaints or concerns have proven to be the most effective method in finding rapid and constructive action and resolution.

6.0 EXCEPTIONS


- 6.1 An employee who knowingly files a false and malicious report of retaliation, as opposed to a complaint which, even if erroneous, is made in good faith may be the subject of appropriate disciplinary action, up to and including termination.

7.0 PROVISIONS AND CONDITIONS

8.0 RELATED DOCUMENTS

- 8.1 Policy 1.1, Harassment & Discrimination
- 8.2 Policy 1.8, Conflict of Interest & Business Ethics
- 8.3 Policy 5.1, Rules of Conduct

**Workplace Violence & Weapons
Policy No. 1.3**

 Orange County Sanitation District Personnel Policies	Policy Number: 1.3
	Effective Date: March 22, 2023
Subject: Workplace Violence & Weapons	Supersedes: September 26, 2018
	Approved by: General Manager

1.0 PURPOSE

- 1.1 The purpose of this policy is to promote a safe work environment for all employees; establish and maintain a workplace that is free from violence, threats of violence, harassment, intimidation, and other disruptive behavior; and encourage and foster a workplace that is characterized by respect and the use of acceptable conflict resolution techniques.

2.0 ORGANIZATIONAL UNITS AFFECTED

- 2.1 This policy applies to all OC San employees, regardless of their organizational unit. Additionally, all persons who perform any services for OC San, regardless of their employment status, are subject to the provisions of this policy while on OC San property or while performing OC San business.

3.0 DEFINITIONS

- 3.1 Workplace Violence includes threats, violent behavior, harassment, intimidation and other disruptive behavior, direct, indirect, implied or actual from any person, and directed toward any person, occurring either at an OC San facility or in connection with the conduct of OC San business without regard to location.

4.0 POLICY

- 4.1 It is OC San policy to provide a safe work environment for its employees. OC San is committed to working with its employees to maintain a workplace free from violence, threats of violence, harassment, intimidation, and other disruptive behavior, and the commission of such acts are prohibited.
- 4.2 All employees are responsible for maintaining a safe work environment.
- 4.3 Violence, threats, harassment, intimidation, and other disruptive behavior in the OC San workplace will not be tolerated; furthermore, all reports of these types of incidents will be seriously reviewed and will be appropriately resolved.
- 4.4 This policy applies to all incidents involving OC San employees while they are on duty, on or off plant sites, and incidents involving non-employees perpetrating violence against OC San employees while they are on duty.
- 4.5 Available conflict resolution techniques, such as problem solving, grievance procedures and appeals processes, will be used to appropriately resolve conflicts that arise in the OC San workplace.

- 4.6 OC San strictly prohibits persons, excluding armed security services, from possessing weapons including, but not limited to, firearms, explosives, knives, clubs and incendiary devices on OC San premises, in OC San vehicles, in private vehicles parked on OC San property, and in the possession of OC San employees while on duty performing OC San related business assignments.
- 4.7 An employee who displays/exhibits prohibited conduct as set forth under this policy may be subject to disciplinary action, up to and including termination, regardless of the employee's past performance, prior discipline, length of service or work history.
- 4.8 Persons who engage in prohibited conduct may also be subject to legal action by law enforcement authorities.
- 4.9 The following examples, while not all-inclusive, are considered prohibited conduct and subject an employee to disciplinary action, up to and including termination, for even a first-time offense.

4.9.1 Prohibited Conduct

- 4.9.1.1 Causing physical injury to another person;
- 4.9.1.2 Making threatening remarks, whether with intent to harm or in jest;
- 4.9.1.3 Aggressive, hostile or harassing behavior that creates a reasonable fear of injury to another person or subjects another individual to emotional distress;
- 4.9.1.4 Intentionally damaging employer property or the property of another individual;
- 4.9.1.5 Possession of a weapon while on OC San property or while on OC San business; or,
- 4.9.1.6 Committing acts motivated by, or related to, sexual harassment or domestic violence,
- 4.9.1.7 Other acts or threats of violence as determined by OC San.

5.0 PROCEDURE

- 5.1 Reporting: If the incident involves an emergency and requires the direct intervention of public safety personnel (i.e., law enforcement or emergency medical services), immediately **CALL** extension **2222**.
 - 5.1.1 Control Center personnel will contact emergency services via **911** and will coordinate the response of public safety personnel and onsite security personnel.
- 5.2 Any situation involving the commission or threat of violence, harassment, intimidation, other disruptive behavior, possession of a weapon or any other potentially dangerous situation must be promptly reported to a supervisor, manager, or the Human Resources Department.

5.3 Risk Reduction Measures

- 5.3.1 Employees at Risk: Employees are expected to exercise good judgement and to notify their supervisor, manager, or the Human Resources Department if a co-worker, or other person on OC San property or place of business, exhibits behavior that could be a sign of potentially dangerous situations. Such behavior includes, but is not limited to, the following:
 - 5.3.1.1 Discussing the use of weapons as a means to perpetrate violence against another or bringing them to the workplace;
 - 5.3.1.2 Displaying overt signs of extreme stress, resentment, hostility or anger;
 - 5.3.1.3 Making threatening statements or remarks;
 - 5.3.1.4 Sudden or significant deterioration in work performance;
 - 5.3.1.5 Displaying irrational or inappropriate behavior.
- 5.3.2 Hiring: The Human Resources Department takes reasonable measures to conduct background investigations in order to review candidates' backgrounds and to reduce the risk of hiring individuals with a history of violent behavior.
- 5.3.3 Enforcement: Threats, threatening conduct, harassment, or any other act of aggression or violence within the OC San work environment will not be tolerated. All reports of these types of incidents will be fairly, timely, and thoroughly investigated and will be appropriately resolved.
 - 5.3.3.1 Any employee determined to have committed such acts will be subject to disciplinary action, up to and including termination.
 - 5.3.3.2 Non-employees engaged in violent acts on OC San premises will be immediately removed from OC San and promptly reported to the proper authorities.

6.0 EXCEPTIONS


- 6.1 Knives traditionally used as tools and having a blade length of three and one-half (3¹/₂) inches or less are only considered weapons when used or displayed in a threatening manner. Knives greater than three and one-half (3¹/₂) inches in blade length are considered weapons as a matter of policy, unless used with approval by OC San management.

7.0 PROVISIONS AND CONDITIONS

8.0 RELATED DOCUMENTS

- 8.1 Policy 1.1, Harassment & Discrimination
- 8.2 Policy 5.1, Rules of Conduct
- 8.3 Policy 5.2, Discipline

Nepotism
Policy No. 1.6

 Orange County Sanitation District Personnel Policies	Policy Number: 1.6
	Effective Date: March 22, 2023
Subject: Nepotism	Supersedes: September 26, 2018
	Approved by: General Manager

1.0 PURPOSE

- 1.1 The purpose of this policy is to avoid the possibility of nepotism in hiring, promoting, evaluating, awarding salary, and disciplining employees and to ensure that employment decisions are based on the individual's qualifications for the position, ability, and performance.
- 1.2 OC San does not tolerate favoritism, the appearance of favoritism, conflicts of interest or the appearance of conflicts of interest in employment and personnel decisions.

2.0 ORGANIZATIONAL UNITS AFFECTED

- 2.1 This policy applies to all Orange County Sanitation District (OC San) employees regardless of their organizational unit, and employment applicants. Additionally, all persons who perform any services for OC San including persons working under contract, regardless of their employment status, are covered by this policy.

3.0 DEFINITIONS

- 3.1 Near relative means a relative within the third degree by blood or marriage, including an individual's:

spouse	grandparent	nephew
fiancée	grandchild	cousin
domestic partner	great-grandparent	sister-in-law
parent/stepparent	great-grandchild	brother-in-law
sister/stepsister	aunt	son-in-law
brother/stepbrother	uncle	daughter-in-law
child/stepchild	niece	dependent

Near relatives shall also include persons who fall into the above categories by a previous marriage or adoption.

- 3.2 Supervisory Relationship means a supervisor-subordinate relationship between near relative employees, whether direct or indirect, that has the ability to impact the terms and conditions of employment, including, but not limited to, appointment, transfer, promotion, demotion, layoff, suspension, termination, recall, work assignments, performance evaluations, merit increases, training, or any other administrative action that may affect an employee; or near relatives reporting to the same immediate supervisor.

4.0 POLICY

- 4.1 It is the policy of OC San not to discriminate in its employment and personnel actions with respect to its employees and applicants on the basis of marital and familial status.
- 4.2 Notwithstanding the above statement, OC San retains the right to refuse to appoint a person to a position in the same department, division or facility, wherein his or her relationship to another employee has the potential for creating an adverse impact on supervision, safety, security, or morale, or involves a potential conflict of interest. The department head shall have the authority and responsibility for determining if such a potential for adverse impact exists or does not exist.
- 4.3 Near relatives of employees or of members of the Board of Directors shall not be hired, promoted or transferred into positions in which one near relative may supervise, directly or indirectly, any other relative, or work in a capacity which would allow an employee to evaluate or control the terms, conditions or performance circumstances of employment of a near relative.
- 4.4 Near relatives of members of the Board of Directors shall not be employed in any position where there is a potential for adversely impacting the safety, security, morale or efficiency of supervision of other employees, or in which there may be created a potential conflict of interest.
- 4.5 No person shall be appointed, promoted, demoted, flexibly placed, or transferred to any position, whether exempt, permanent, provisional, acting, part-time, or temporary, in any division of any department, where such person's near relative already holds a position which would create a supervisory relationship.
- 4.6 No employee shall interview, recommend, or in any way be involved in the selection or disciplinary process of his or her near relative.
- 4.7 All current employees of OC San on the effective date of this policy will not be allowed to remain in positions where they are in a supervisory relationship with a near relative, except in those situations where a direct level of supervision or the ability to impact the terms or conditions of employment of a relative does not occur.
- 4.8 There shall be no appointments to any position at OC San of a near relative of any member of the Board of Directors or Executive Management Team without the express written approval of the Chair of the Board of Directors and the General Manager.
- 4.9 Any individual having appointive power shall not appoint or promote any of their near relatives to any position at OC San.
- 4.10 Hiring, reinstatement, promotion or transfer which will result in near relatives of employees working in the same department may be permitted, but only in such cases where direct supervision or the ability to impact the terms or conditions of employment of the near relative does not exist.
- 4.11 In cases whereby persons who are near relatives are employed in the same department, action shall be taken by the Department Head, Division Manager, or Supervisor to protect against situations which:

- may interfere with response to public health emergencies;
 - may adversely impact working conditions;
 - may jeopardize confidentiality; and,
 - may suggest a conflict of interest.
- 4.12 Remedies to the cases referred to in Section 4.11 may include, but are not necessarily limited to, shift change, reassignment to another position or location, transfer, or a case-by-case basis, possible termination of one of the involved employees.
- 4.13 All appointments, transfers or promotions of near relatives under this policy will be evaluated under guidance of this policy and in terms of the extent to which the relationship could have an adverse effect on the operations of OC San. This policy does not necessarily preclude the near relative or an OC San employee applying for an OC San position or promotion. The policy provides that the General Manager, or designee, may withhold approval to appoint a relative if such an appointment is not in the best interest of OC San or does not follow this policy.
- 4.14 In those cases in which the aforementioned relationships exist, or in which employees marry or acquire a covered relationship, the Human Resources Department shall be responsible to ensure that work assignments are made or other steps taken so as to avoid conflicts of interest or violation of this policy. If no conflict of interest exists because employees have no working interrelationship, supervisory or evaluative control over one another, no action shall be necessary. If conflict exists, action may include reassignment to another position, work location, or work shift. If such reassignment or other alternative is not deemed appropriate by OC San, one of the conflicted individuals may have to resign or be terminated.
- 4.15 Employees are responsible for immediately notifying their supervisor or the Human Resources Department of an impending marriage or the establishment of a near relative relationship with another employee of OC San as specified in Section 3.1.
- 4.16 No persons who have a near relative working at OC San may be hired without the approval of the General Manager, or designee. No OC San employee who is related to any other OC San employee may be transferred or promoted within OC San without the approval of the General Manager, or designee.
- 4.17 The General Manager is responsible for enforcing this policy with the assistance of the Human Resources Department.
- 4.18 OC San reserves the right to take action when relationships or associations of employees impact its mission.
- 4.19 OC San retains the right to refuse to place a relative under the direct supervision of an OC San employee, or place relatives in the same department, division, or facility, where such has a potential for creating an adverse impact on supervision, safety, security or morale.
- 4.20 OC San will make reasonable efforts to assign job duties to eliminate any potential for an adverse impact on supervision, safety, security or morale, or potential conflicts of interest.

- 4.21 Except as otherwise provided by law or this policy, no employee, prospective employee or applicant shall be excluded from the competitive hiring and examination process or denied employment or benefits of employment solely on the basis of his or her familial relationship with an employee of the agency or a member of the Board of Directors.

5.0 PROCEDURE

- 5.1 OC San employees shall submit the Near Relative Notification form, which is attached to this policy, to the Human Resources Department within 30-days of the effective date of this policy, if they currently have near relatives working for OC San or within 30-days of becoming a near relative of another OC San employee. Failure by an employee to complete and submit the required Near Relative Notification to the Human Resources Department may be grounds for disciplinary action, up to and including termination of employment.
- 5.2 If the Human Resources Department determines that employment of near relatives in a supervisory relationship violates this policy, the Human Resources Department may transfer one of the employees to a vacant position in another division or department for which he or she is qualified. The determination of which employee will be transferred will be based upon the promotion of effective and efficient operations of OC San. Transfer must be to the same or equivalent position in another department without loss of classification, salary or benefits to the employee who is transferred.
- 5.3 Any employee, contractor, or member of the Board of Directors who knowingly violates this policy may be subject to disciplinary action, up to and including the cessation of the respective relationship with OC San.
- 5.4 In cases involving a near relative of a member of the Board of Directors, the matter will be referred to the Steering Committee, General Manager, and General Counsel for resolution.

6.0 EXCEPTIONS

- 6.1 The General Manager may authorize exceptions to this policy whenever he or she determines that the best interests of OC San so require. If an exception is granted, it shall be in writing and a copy placed in the employee's personnel file.

7.0 PROVISIONS AND CONDITIONS

8.0 RELATED DOCUMENTS

- 8.1 Near Relative Notification Form
- 8.2 Policy 1.4, Recruitment & Selection

Orange County Sanitation District

NEAR RELATIVE NOTIFICATION

EMPLOYEE INFORMATION	
Employee Name:	
Job Title:	Phone Number:
Department:	Division:


NEAR RELATIVE INFORMATION	
Near Relative Name:	
Job Title:	Relationship:
Department:	Division:
Check all that apply: 1. None: <input type="checkbox"/> 2. Supervisory Relationship: <input type="checkbox"/> Direct <input type="checkbox"/> Indirect <input type="checkbox"/> Same supervisor 3. Sharing of Duties: <input type="checkbox"/> On the same work assignment <input type="checkbox"/> Related work assignments 4. Other (<i>identify</i>):	

Note: Attach separate sheet for additional Near Relatives.

I hereby certify that this is a true and correct statement and that I have identified all of my near relatives who work for the Orange County Sanitation District in any and all capacities.

Signature: _____ Date: _____

**Substance Abuse
Policy No. 5.20**

 Orange County Sanitation District Personnel Policies	Policy Number: 5.20
	Effective Date: March 22, 2023
Subject: Substance Abuse	Supersedes: September 26, 2018
	Approved by: General Manager

1.0 PURPOSE

- 1.1 To establish and maintain a drug and alcohol-free workplace.
- 1.2 To reduce the incidences of accidental injury to person or property.
- 1.3 To reduce absenteeism, tardiness, and indifferent job performance.
- 1.4 To provide assistance towards rehabilitation for any employee who seeks Orange County Sanitation District (OC San) help in overcoming addiction to, dependence on or problems with alcohol or drugs.
- 1.5 To maintain a work environment free of alcohol and drug related performance problems, accidents, and injuries.

2.0 ORGANIZATIONAL UNITS AFFECTED

- 2.1 This policy applies to all OC San employees, regardless of their organizational unit. Additionally, all persons who perform any services for OC San, regardless of their employment status, are subject to the provisions of this policy while on OC San property or while performing OC San business.

3.0 DEFINITIONS

- 3.1 Criminal Drug Statute - Any state or federal criminal law involving the manufacture, distribution, dispensation, use, or possession of a controlled substance.
- 3.2 Illegal Drugs - Any drug (a) that is not legally obtainable or (b) that is legally obtainable but has not been legally obtained. The term includes, but is not limited to, cocaine, crystal methamphetamine, heroin, and PCP. It includes prescribed drugs not legally obtained and prescribed drugs not being used for prescribed purposes. It includes controlled substances as defined in the federal Controlled Substance Act. It also includes any substance, which a person holds out to another as an illegal drug, whether or not the substance itself is illegal.
- 3.3 Legal Drugs - Legal drugs include prescribed drugs and over-the-counter drugs, which have been legally obtained and are being used for the purpose for which they were prescribed and manufactured.
- 3.4 Need to Know - A term applied to persons who may reasonably be expected to base administrative managerial, or supervisory activity on a given piece of information to which they would not be otherwise entitled.
- 3.5 Paraphernalia - Drug paraphernalia may include pipes, hypodermic needles, bongs, rolling papers, and other items used in the ingestion, consumption, or the preparation for

consumption of illegal drugs.

- 3.6 Reasonable Suspicion - Is a belief, based on objective facts or specific personal observations sufficient to lead a reasonably prudent person to suspect that an employee is under the influence of drugs or alcohol.
- 3.7 Under the Influence - Having the presence of any detectable level of drugs in the body or an alcohol concentration level of .02% or greater.
- 3.8 Controlled Substance – a drug or chemical whose manufacture, possession, or use is regulated under state and/or federal law.

4.0 POLICY

- 4.1 It is the policy of OC San to maintain a safe workplace, which is free of alcohol, marijuana and illegal possession and/or use of drugs. OC San is firmly committed to achieving a drug free workplace and will continue making a good faith effort to achieve an alcohol and drug free workplace by consistently enforcing every element of this policy.

5.0 PROCEDURE

5.1 ILLEGAL DRUGS

- 5.1.1 The sale, purchase, offer to sell or purchase, use, manufacture, distribution, dispensation, or possession of, or being under the influence of, Illegal Drugs during OC San time, or while engaged in OC San business, or on, or in, OC San premises, or property, is prohibited.
- 5.1.2 No employee shall bring drug paraphernalia onto OC San premises or property or into OC San vehicles.

5.2 OTHER DRUGS

- 5.2.1 If an employee has any question or concern as to his or her ability to safely perform the duties of his or her job while taking a legal prescription drug, the employee has an affirmative obligation to report the use of that drug to his/her supervisor, division management, Risk Management or Human Resources staff.
- 5.2.2 Upon receiving such notification, the employee may be temporarily assigned to alternative work duties and/or asked to provide a release to OC San from the employee's physician for a determination of the employee's ability to work while using that drug.
- 5.2.3 An employee may continue to perform his or her regularly assigned job duties, while taking a legal prescription drug, if OC San has determined, on a case-by-case basis, after consulting with the employee's physician, that the employee does not pose a threat to the employee's own safety or to the safety of co-workers, and that the employee's job performance is not adversely affected by the legal prescription drug. Otherwise, the employee may be required to take a leave of absence or comply with other appropriate action determined by management, such as adhering to an employer initiated fitness for duty testing.

5.3 ALCOHOL AND MARIJUANA

- 5.3.1 No alcoholic beverages or recreational marijuana may be brought onto or

consumed on OC San time or property or while wearing an OC San identifiable uniform.

5.4 PROHIBITION AGAINST EMPLOYEES HAVING ILLEGAL DRUGS, MARIJUANA OR ALCOHOL IN THEIR BODIES DURING WORKING TIME

5.4.1 All employees of OC San are expected to report for work with no residue or metabolite of Illegal Drugs or marijuana in the body or alcohol concentration level of .02% or greater. Employees must not have any residue or metabolite of Illegal Drugs or marijuana in the body or alcohol concentration level of .02% or greater at any time while on the job. Compliance with these rules is considered an essential job qualification for all employees.

5.4.1.1 Employees still under the influence of a medication legally prescribed to them that cause a loss of motor skill, reaction time, or decision making must report the use to their supervisor.

5.4.2 When an alcohol screen test indicates an alcohol concentration level of .02% or greater, the employee will be prohibited from performing the duties of his or her job for twenty-four (24) hours. Employees may also face disciplinary action for being under the influence of alcohol if they test positive for alcohol concentration of .02% or greater, subject to the exceptions set forth in Section 14.0.

5.4.3 When a marijuana screen test indicates a marijuana concentration of any amount, the employee will be prohibited from performing the duties of his or her job for twenty-four (24) hours. Employees may also face disciplinary action for being under the influence of marijuana if they test positive for marijuana.

5.4.4 Employees may be subject to discipline up to and including termination for any marijuana test indicating any amount of marijuana or alcohol screen test that indicates an alcohol concentration level of .02% or greater. Refer to Section 14.3 for further information on alcohol screen tests.

5.5 ENFORCEMENT OF RULE PROHIBITING EMPLOYEES FROM HAVING ILLEGAL DRUGS OR ALCOHOL IN THEIR BODIES DURING WORK TIME

5.5.1 POST-EMPLOYMENT OFFER ALCOHOL/DRUG SCREENING

5.5.1.1 After OC San extends a conditional employment offer to a candidate selected through a recruitment process, it will require the prospective employee to pass an alcohol/drug screen test, for specific job classifications, administered by a medical facility designated by OC San.

5.5.1.2 Any prospective employee refusing to submit to such examination shall not be hired by OC San.

5.5.1.3 Any prospective employee failing the alcohol/drug screen test shall be rejected from further consideration from employment with OC San for at least six (6) months.

5.5 REASONABLE SUSPICION ALCOHOL/DRUG SCREENING

5.5.1 Reasonable suspicion shall be determined by a supervisor or manager and, where possible, corroborated by a trained Human Resources representative or other trained management representative.

- 5.5.2 Specific personal observations must be based on a supervisor, manager, or Human Resources representative's direct observations and not hearsay.
- 5.5.3 Objective facts and specific personal observations may be based upon, but are not limited to, the following:
 - 5.5.3.1 Direct observations of substance abuse or symptoms of being under the influence such as: an employee's manner, disposition, muscular movement, appearance, behavior, speech, or breath odor.
 - 5.5.3.2 An employee's possession or use of Illegal Drugs, recreational marijuana, alcohol, or Paraphernalia while on duty, in the workplace or on OC San property, including evidence that an employee has used, possessed, sold, solicited, or transferred drugs while on duty or while on OC San property or while operating an OC San vehicle, machinery, or equipment that is the property of or leased/rented by OC San.
- 5.5.4 The objective facts and specific personal observations upon which reasonable suspicion is based must be documented.
- 5.5.5 When OC San has a reasonable suspicion that an employee is under the influence of drugs or alcohol, the employee shall be required to undergo an alcohol/drug screen test as soon as reasonably achievable. Prior to being transported to the alcohol/drug screen test facility, employees will be given a copy of this policy and informed of their rights to contact an employee representative.
 - 5.5.5.1 An employee's refusal to submit to an alcohol/drug screen test may constitute insubordination and the employee may be subject to discipline up to and including termination.
 - 5.5.5.2 Any employee failing such a test, or who tampers with the test specimen, may be subject to discipline up to and including termination.
 - 5.5.5.3 The Human Resources Department shall arrange for the employee to be transported to the testing facility and then driven home. The employee shall not be permitted to drive while subject to reasonable suspicion testing.
- 5.5.6 Reasonable Suspicion Training
 - 5.5.6.1 OC San shall ensure that managers, supervisors, Human Resources and Risk Management representatives, and/or other designated staff receive training on reasonable suspicion. The training shall include, but will not be limited to, the physical, behavioral, speech, and performance indicators of probable alcohol misuse and use of controlled substances.

5.6 POST ACCIDENT TESTING

- 5.6.1 An employee who directly contributes to a job-related accident or an accident involving OC San property shall be subject to a drug/alcohol screen test as soon as practicable when the accident results in:
 - 5.6.1.1 A fatality;

- 5.6.1.2 The issuance of a citation under State or local law for a moving traffic violation and bodily injury that requires immediate medical treatment away from the scene; or
- 5.6.1.3 The issuance of a citation under State or local law for a moving traffic violation and disabling damage to any vehicle that requires tow away.
- 5.6.1.4 Property damage that occurs on OC San facilities and there is a direct observations of substance abuse or symptoms of being under the influence such as: an employee's manner, disposition, muscular movement, appearance, behavior, speech, or breath odor.

5.7 EMPLOYEE ASSISTANCE PROGRAM

- 5.7.1 OC San policy is to help employees with substance abuse problems who voluntarily seek assistance. Accordingly, OC San provides a method by which employees may come to management without fear of reprisal and seek assistance.
- 5.7.2 Any employee who feels that he or she has developed an addiction to, dependence upon or problem with the use of alcohol or drugs, is encouraged to seek assistance. Assistance may be sought by writing in confidence to, or asking for a personal appointment with the Director of Human Resources.
 - 5.7.2.1 Each request for assistance shall be treated as confidential. Only those persons with a need to know shall be made aware of such requests.
- 5.7.3 Human Resources shall refer employees seeking assistance to an appropriate treatment organization.
- 5.7.4 Rehabilitation is the responsibility of the employee, but any employee seeking medical attention for alcoholism or drug addiction shall be entitled to benefits available under OC San's group medical insurance plans with the restrictions and limits stated in the applicable plan summary. Employees on rehabilitation leave shall be subject to the extended Medical Leave and General Leave of Absence provisions in OC San's Personnel Policies and Procedures.
- 5.7.5 To be eligible for continued employment after rehabilitation, the employee must provide certification that he/she was continuously enrolled in a treatment program and actively participated in that program.
 - 5.7.5.1 Any employee suffering from an alcohol or drug problem who rejects treatment or who leaves a treatment program prior to being properly discharged therefrom shall be dismissed from employment with OC San.
- 5.7.6 Any employee returning to active employment from rehabilitation shall be required to sign a Return to Work Agreement providing:
 - 5.7.6.1 Unannounced testing for a minimum of twelve (12) months to ensure that the employee is free from the alcohol or drug problem.
 - 5.7.6.2 Notice that failure of, or refusal to take, such a test during this period shall constitute just cause for immediate dismissal of the employee.

5.7.6.3 Notice that the employee shall maintain an acceptable attendance and performance record and comply with all other OC San policies upon his/her return to work. Failure to maintain an acceptable attendance and performance record shall constitute just cause for immediate dismissal.

5.7.7 No disciplinary action shall be taken against any employee who, for the first occurrence, comes forward to OC San with his/her problem prior to 1) OC San becoming aware of a violation of the drug and alcohol policy, or 2) a request by OC San to undergo drug testing. However, once OC San learns of a violation of the drug and alcohol policy or the employee tests positive in a drug test, or if there is a reoccurring problem, OC San is not obligated to grant the employee General Leave for rehabilitation. All testing procedures shall be in conformance with National Institute on Drug Abuse standards, and shall be conducted at a reasonable time at OC San's expense.

5.8 INSPECTIONS

5.8.1 In order to ensure the safety of the workplace and the workforce, and to protect and preserve OC San's property, OC San may from time to time inspect OC San's vehicles, tool boxes, lockers, desks, file cabinets and other OC San property.

5.8.2 These inspections may not be announced and employees should have no expectation of privacy with respect to items brought onto OC San property and/or stored in such OC San facilities.

5.8.3 It is a condition of employment for employees to cooperate with these inspections. Refusal to consent to such an inspection amounts to insubordination and may constitute cause for termination.

5.8.4 A representative from Human Resources must be present during any inspection of OC San property due to a reasonable suspicion that the Substance Abuse policy has been violated.

5.9 DRUG CONVICTIONS

5.9.1 All OC San employees or persons performing services for OC San who are convicted under a criminal drug statute for a violation occurring in the workplace are required to notify the Human Resources Department in writing within five (5) calendar days after such conviction.

5.9.2 Pursuant to the Drug Free Workplace Act, the Human Resources Department shall notify the appropriate contracting authority within ten (10) calendar days after learning of an individual's drug conviction from either the individual or any other source. Within thirty (30) calendar days of learning of an individual's drug conviction, OC San shall take appropriate corrective action.

5.10 DEPARTMENT OF TRANSPORTATION (DOT) REGULATIONS

5.10.1 Every driver who operates a commercial motor vehicle in interstate or intrastate commerce, and is subject to the commercial driver's license requirements of the Department of Transportation (DOT), Federal Highway Administration CFR Part 382 is subject to OC San's Anti-Drug and Alcohol Program. OC San will ensure that all alcohol or controlled substances testing conducted under the Substance Abuse and Alcohol Misuse Plan complies with the procedures set forth in CFR

Part 40.

- 5.10.2 Any employee promoted, reassigned or transferred into a classification subject to the Department of Transportation requirements will be required to successfully complete alcohol and controlled substance testing prior to assuming the position.

5.11 **DRUG FREE AWARENESS PROGRAM**

- 5.11.1 OC San shall require all employees to attend biannual Reasonable Suspicion Training which shall include a module on Drug Free Awareness informing employees about the dangers of drug abuse in the workplace, OC San's Substance Abuse Policy, available counseling, rehabilitation, and employee assistance programs available through OC San, and the penalties for violating OC San's Substance Abuse Policy.

5.12 **POLICY DISTRIBUTION**

- 5.12.1 Copies of this policy shall be disseminated to current employees in biannual Prevention of Workplace Violence training and later hired employees in New Employee Orientation. Acknowledgement forms shall be included with the policy copy to be signed by employees and filed in personnel files. Temporary/contract workers shall receive a copy of this policy and an acknowledgment form through their employers. Signed temporary/contract worker acknowledgement forms shall be filed in the Human Resources Department.

5.13 **DISCIPLINARY ACTION**

- 5.13.1 Except as otherwise provided in Section 5.7, violation of the Substance Abuse Policy may result in disciplinary action, up to and including termination, even for a first offense.

6.0 **EXCEPTIONS**

- 6.1 If any portion of this policy is found to be at variance with the provisions of an approved Memorandum of Understanding (MOU), the MOU provisions shall prevail with respect to employees in the affected bargaining unit.
- 6.2 It will not be considered a violation of this policy for employees to store sealed alcoholic beverages in their personal vehicle as long as such storage is out of public view and does not remain in the vehicle for more than the period of one (1) consecutive work day. Further, sealed alcoholic beverages must remain in the employee's vehicle out of public view at all times while on OCSD property.
- 6.3 If an alcohol screen test indicates an alcohol concentration level of .02% or greater but less than .04%, the employee will not be subject to discipline if the following conditions apply:
 - 6.3.1 The employee holds a position that is not subject to DOT regulations; and
 - 6.3.2 It is the first time the employee has received an alcohol screen test indicating an alcohol concentration level of .02% or greater.

7.0 **PROVISIONS AND CONDITIONS**

- 7.1 No employee shall be eligible for rehabilitation under the employee assistance program


more than one time. The reoccurrence of an alcohol or drug problem shall be cause for dismissal.

- 7.2 Under no circumstances shall the testing process be delayed due to the unavailability of an employee representative.

8.0 RELATED DOCUMENTS

- 8.1 OC San's Substance Abuse and Alcohol Misuse Plan - DOT CFR Part 40
- 8.2 Drug Free Workplace Act
- 8.3 Substance Abuse Policy Acknowledgement Forms
- 8.4 Reasonable Suspicion Checklist
- 8.5 Policy 1.4, Recruitment & Selection
- 8.6 Policy 4.8, Employee Assistance Program
- 8.7 Policy 5.1, Rules of Conduct
- 8.8 Policy 5.2, Discipline
- 8.9 Policy 5.19, Vehicle Usage
- 8.10 Safety Policy 202 – (Accident Investigation and Reporting)
- 8.11 The Americans with Disabilities Act Amendments Act of 2008

**Smoking
Policy No. 5.21**

 Orange County Sanitation District Personnel Policies	Policy Number: 5.21
	Effective Date: March 22, 2023
Subject: Smoking	Supersedes: September 26, 2018
	Approved by: General Manager

1.0 PURPOSE

- 1.1 This policy has been developed to protect employees and the general public from the dangers of second-hand smoke and the potential hazards associated with ignition sources near plant process areas or pump stations.

2.0 ORGANIZATIONAL UNITS AFFECTED

- 2.1 This policy applies to all Orange County Sanitation District (OC San) employees, contractors, and the general public who are on OC San property.

3.0 DEFINITIONS

- 3.1 Plant Process Areas – An area, structure or pipe within OC San facilities where wastewater, biosolids, digester gas, or grit are collected, treated, stored, transported or discharge to include all OC San pump stations.
- 3.2 OC San Vehicles – All OC San owned or leased cars, trucks, carts, bicycles, and special motorized equipment.
- 3.3 Designated Smoking Areas – Locations where smoking is permitted.
- 3.4 Smoking – The inhaling, exhaling, burning, or carrying of any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, whether natural or synthetic, in any manner or in any form. This includes the use of an electronic smoking device that creates an aerosol or vapor, in any manner or in any form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking.

4.0 POLICY

4.2 GENERAL INFORMATION

- 4.2.1 OC San provides designated smoking areas that meet regulatory requirements and the operational needs of the organization. This policy defines employee, contractor, and general public conduct as it relates to smoking in or on all OC San property.

4.3 EMPLOYEE, CONTRACTOR AND PUBLIC CONDUCT

- 4.3.1 Smoking on or in all OC San property is only permitted in designated smoking areas.
- 4.3.2 OC San employee, contractor, or member of the general public shall not smoke in an OC San building or vehicle.

4.3.3 Failure to comply with this policy may result in to the following:

4.3.3.1 Progressive disciplinary action for OC San employees, which may result in termination for repeated violations.

4.3.3.2 Prohibition of offending contractor personnel from working in an OC San public building, facility or vehicle and/or termination of the contract.

4.3.3.3 Prohibition of an offending member of the general public from remaining in the affected OC San public building or vehicle.

4.3.3.4 Prohibition from coming on to OC San sites.

4.4 LOCATING DESIGNATED SMOKING AREAS

4.4.1 All designated smoking areas shall be clearly marked.

4.4.2 All designated smoking areas shall be located outdoors and at least 20 feet from any building entrance, exit, and/or operable window of an OC San building and within 20 feet of a building ventilation system intake.

4.4.3 Cigarette butt receptacles will be provided by and maintained by OC San.

5.0 PROCEDURE

5.2 Maps of designated smoking areas shall be maintained by the Risk Management Division and the information shall be posted on OC San's intranet.

5.3 Employees are required to contact their immediate supervisor or manager if there are any concerns regarding this policy.

6.0 EXCEPTIONS

7.0 PROVISIONS AND CONDITIONS

8.0 RELATED DOCUMENTS

8.2 California Health and Safety Code § 118885


8.3 California Code of Regulations § 5184

8.4 California Labor Code, Sections 6400-6413.5

8.5 Policy 5.2, Discipline

8.6 Policy 5.19, Vehicle Usage

**Diversity, Equity, and Inclusion
Policy No. 6.6**

 Orange County Sanitation District Personnel Policies	Policy Number: 6.6
	Effective Date: March 22, 2022
Subject: Diversity, Equity, and Inclusion	Supersedes: February 23, 2022
	Approved by: General Manager

1.0 PURPOSE

- 1.1 To ensure OC San maintains a diverse, equitable, and inclusive workplace through objective and consistent standards, rules, programs, procedures, and practices. This policy covers all aspects of employment including, but not limited to, recruitment, hiring, job assignment, promotion, employee benefits, conditions of employment, compensation, transfer, discipline, training, work environment, and termination of employment.

2.0 ORGANIZATIONAL UNITS AFFECTED

- 2.1 This policy applies to all OC San employees, job applicants, and all persons who perform services for OC San, including interns, volunteers, and persons working under contract.

3.0 DEFINITIONS

- 3.1 Discrimination is the unfavorable or unfair treatment of a person in the work environment, based on a legally protected class (as described below).
- 3.2 Diversity is the collective differences and similarities that include individual characteristics, values, beliefs, experiences, backgrounds, preferences, and behaviors that comprise the OC San workforce.
- 3.3 Equity refers to a state where rules, programs, procedures, and practices are applied uniformly regardless of race, color, religion, sex (including pregnancy, childbirth, and breastfeeding), sexual orientation, age, national origin, ancestry, actual or perceived disability, medical condition, genetic information, military and veteran status, marital status, gender, gender identity, gender expression, exercise of rights relating to any legally-provided leave of absence, or any other legally protected basis.
- 3.4 Harassment is defined as: (1) conditioning the granting or denial of employment benefits on the acceptance of unwanted verbal or physical conduct, or (2) creation of a hostile work environment through verbal, physical or visual conduct based on a legally protected class that is severe or pervasive and interferes with an employee's ability to do his or her job.
- 3.5 Inclusion is involving people from a range of different social and ethnic backgrounds, where individuals have equal access to opportunities and resources; where rules, policies, and procedures are applied uniformly; and where the OC San workforce can contribute fully to the organization's success regardless of race, color, religion, sex (including pregnancy, childbirth, and breastfeeding), sexual orientation, age, national origin, ancestry, actual or perceived disability, medical condition, genetic information, military and veteran status, marital status, gender, gender identity, gender expression,

exercise of rights relating to any legally-provided leave of absence, or any other legally protected basis.

- 3.6 Legally Protected Class includes race, religious creed, color, national origin, ancestry, physical or mental disability, medical condition, genetic information, marital status, sex (including pregnancy, childbirth, and breastfeeding), gender, gender identity, gender expression, age (40 years or older), sexual orientation, military and veteran status, and exercise of rights relating to any legally-provided leave of absence.
- 3.7 Sex includes, but is not limited to, pregnancy or medical conditions related to pregnancy, childbirth or medical conditions related to childbirth, breastfeeding or medical conditions related to breastfeeding. "Sex" also includes, but is not limited to, a person's gender.

4.0 POLICY

- 4.1 OC San is an Equal Opportunity Employer and maintains a diverse, equitable, and inclusive workplace through objective and consistent standards, rules, programs, procedures, practices, and established Core Values. Equal opportunity shall apply to all aspects of the employment relationship, including, but not limited to, hiring, promotions, training and development, working conditions, compensation, benefits, and discipline.
- 4.2 All OC San employees, contractors, interns, volunteers, and temporary workers are expected to comply with this policy and all procedures to maintain a diverse, equitable, and inclusive work environment.

5.0 PROCEDURE

- 5.1 All employees are required to interact in a professional, respectful, and courteous manner, in accordance with Core Values, and apply the standards, rules, programs, procedures, practices, in an objective and impartial manner regardless of race, color, religion, sex (including pregnancy, childbirth, and breastfeeding), sexual orientation, age, national origin, ancestry, actual or perceived disability, medical condition, genetic information, military and veteran status, marital status, gender, gender identity, gender expression, exercise of rights relating to any legally-provided leave of absence, or any other legally protected basis.
- 5.2 Managers and supervisors are required to monitor the workplace, recognize conduct potentially in violation of this policy, report any such observations, and take appropriate action to address unacceptable behavior.
- 5.3 Managers and supervisors who receive reports of policy violations from other employees must take all such complaints seriously and provide timely and appropriate follow-up to include reporting the complaint to the Human Resources Department.
- 5.4 Employees who believe they have been subjected to conduct or have observed conduct prohibited by this policy are expected to immediately report the matter, verbally or in writing, to his or her manager or supervisor, or to the Human Resources Department..

6.0 EXCEPTIONS

- 6.1 Any employee who knowingly files a false and malicious report or complaint, as opposed to a complaint which, even if erroneous, is made in good faith; or anyone who

fails to report an actual or perceived form of harassment or discrimination as outlined in this policy, may be subject to appropriate disciplinary action, up to and including termination.

7.0 PROVISIONS AND CONDITIONS

8.0 RELATED DOCUMENTS

- 8.1 U.S. and California State Constitutions
- 8.2 Title VII of the Civil Rights Act of 1964
- 8.3 California Fair Employment and Housing Act
- 8.4 OC San Core Values
- 8.5 Policy 1.1, Harassment & Discrimination
- 8.6 Policy 1.2, Retaliation & Whistleblowing
- 8.7 Policy 1.4, Recruitment & Selection
- 8.8 Policy 2.1, Classification & Compensation
- 8.9 Policy 4.1, Insurance
- 8.10 Policy 4.10, Employee Development
- 8.11 Policy 5.1, Rules of Conduct
- 8.12 Policy 5.2, Discipline
- 8.13 Policy 6.1, Appraisal of Performance
- 8.14 Policy 6.2, Open Communication
- 8.15 Policy 6.4, Problem Solving
- 8.16 Policy 6.5, Grievance Procedure