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**MAIN WASTEWATER TREATMENT PLANT
OXYGEN PLANT REHABILITATION
(SD-428)**

◆

CONTRACT DOCUMENTS

VOLUME I-B OF IV

APPENDICES

JUNE 2024

SPECIFICATION SD-428



EAST BAY MUNICIPAL UTILITY DISTRICT
SPECIAL DISTRICT NO. 1
OAKLAND, CALIFORNIA

Bids will be opened at 1:30 pm, Wednesday, September 11, 2024 in the Board Room,
Second Floor of the District's Administration Building, 375 11th Street, Oakland, California

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**EAST BAY MUNICIPAL UTILITY DISTRICT
SPECIAL DISTRICT NO. 1
OAKLAND, CALIFORNIA**

SECTION 00 01 07

PROFESSIONAL SEALS AND CERTIFICATIONS

GENERAL

The following design professionals have signed and sealed the original specifications for this project in accordance with the List of Specification Sections.

<p>CIVIL ENGINEER</p>  <p>Dave Richardson (D. Richardson) Woodard & Curran California License: 37097</p>	<p>CIVIL ENGINEER</p>  <p>Thomas Scalese (T. Scalese) Woodard & Curran California License: 89977</p>
<p>ELECTRICAL ENGINEER</p>  <p>Donna Rammell (D. Rammell) Woodard & Curran California License: E16928</p>	<p>CONTROLS ENGINEER</p>  <p>Kyle Tracy (K. Tracy) Woodard & Curran California License: C7556</p>
<p>CIVIL ENGINEER</p>  <p>John Law (J. Law) East Bay Municipal Utility District California License: 95046</p>	<p>FIRE PROTECTION ENGINEER</p>  <p>Christian Ng (C. Ng) Fire & Risk Alliance, California License: 2132</p>

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SPECIFICATION SECTION AND TITLE	DESIGN PROFESSIONAL SEAL BY
DIVISION 00 – PROCURMENT AND CONTRACTING DOCUMENTS - ALL SECTIONS	D. Richardson
DIVISION 01 – GENERAL REQUIREMENTS – ALL SECTIONS	D. Richardson
DIVISION 02 - EXISTING CONDITIONS – ALL SECTIONS	D. Richardson
DIVISION 03 – CONCRETE – ALL SECTIONS	T. Scalese
DIVISION 05 – METALS – ALL SECTIONS	T. Scalese
DIVISION 07 – THERMAL AND MOISTURE INSULATION – ALL SECTIONS	D. Richardson
DIVISION 09 – FINISHES – ALL SECTIONS	J. Law
DIVISION 21 – FIRE SUPPRESSION – ALL SECTIONS	C. Ng
DIVISION 22 – PLUMBING	
22 05 00 Air Compressor Motors	D. Richardson
22 05 29 Hangers and Supports for Plumbing Piping and Equipment, 22 05 53.05 Pipe Identification, 22 11 16 Domestic Water Piping, 22 11 19 Domestic Water Piping Specialties	J. Law
DIVISION 26 – ELECTRICAL – ALL SECTIONS	D. Rammell
DIVISION 27 – COMMUNICATIONS – ALL SECTIONS	K. Tracy
DIVISION 28 – ELECTRONIC SAFETY AND SECURITY – ALL SECTIONS	C. Ng
DIVISION 40 – PROCESS INTEGRATION – ALL SECTIONS	K. Tracy

END OF SECTION

SPECIFICATION SD-428

MAIN WASTEWATER TREATMENT PLANT OXYGEN PLANT REHABILITATION

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SUBMITTAL TRANSMITTAL FORM

<p>To: _____ (Construction Manager's Name)</p> <p>EBMUD Wastewater Department P.O. Box 24055 Oakland, CA 94623 <i>SD-</i> _____ (SD No.) (Project Name)</p> <p>Date: _____</p>	<p>To: _____</p> <p style="text-align: right;">Date Returned to Contractor: _____</p>
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Submittal No.: _____ Subject: _____ Spec. Section No. : _____ Drawing No.: Detail: _____ Submitted by: _____	ACTION TAKEN																																																																								
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Comments:

Variations from Contract Documents: No _____ Yes _____ (Attach description)	Remarks: _____
_____ Contractor's Representative	

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REQUEST FOR INFORMATION (RFI)

Re: _____	RFI # _____
-----------	-------------

DATE: _____

Subject: _____

Drawing No(s): _____

Detail _____

Spec. Section(s)/Paragraph(s) _____

INFORMATION REQUIRED:

INFORMATION REQUESTED BY:

Contractor's Project Manager

Attachments _____

Sheet 1/ _____

File Series _____

DIST.: CM _____ RE _____ INSP _____ LLS _____

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RFI RESPONSE

Re:	RFI #

DATE:

Subject:
Drawing No(s).
Detail

Spec. Section(s)/Paragraph(s)

Response

Signed:

EBMUD Construction Manager

Attachments

Sheet 1/

File Series

cc: DIST.: CM _____, RE _____, INSP. _____, LS _____

SYSTEM OUTAGE REQUEST

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File No.:

ATTACH THIS REQUEST TO A SAFE WORK NOTICE

DATE PREPARED	PROJECT TITLE	REQUEST NO.															
REQUESTED BY:	CONTRACTOR	CC:															
DESCRIPTION OF WORK TO BE PERFORMED:																	
WORK BY OTHERS:																	
SYSTEMS TO BE SHUT DOWN:																	
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">ANTICIPATED SHUT DOWN</td> <td style="width: 30%;"></td> <td style="width: 40%;">COMMENTS</td> </tr> <tr> <td style="text-align: center;">Requested</td> <td style="text-align: center;">Revised</td> <td></td> </tr> <tr> <td>Date</td> <td style="text-align: center;">_____</td> <td></td> </tr> <tr> <td>Time</td> <td style="text-align: center;">_____</td> <td></td> </tr> <tr> <td>Duration</td> <td style="text-align: center;">_____</td> <td></td> </tr> </table>		ANTICIPATED SHUT DOWN		COMMENTS	Requested	Revised		Date	_____		Time	_____		Duration	_____		
ANTICIPATED SHUT DOWN		COMMENTS															
Requested	Revised																
Date	_____																
Time	_____																
Duration	_____																
CONTACT PERSON(S)	Name/Phone/Pager	<input type="checkbox"/> Work is on Critical Path <input type="checkbox"/> Regulatory Agency Notification Required															
WED		<input checked="" type="checkbox"/> "Dry Run" Mandatory <input type="checkbox"/> Maintenance Approval of Start-Up Required															
Contractor		APPROVAL															
Operations		Signature _____ Date/Time _____															
Maintenance		WED (outage procedure attached)															

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SYSTEM SHUTDOWN - FINAL APPROVAL

Status	Initial	Date/Time	The Described System(s) are Shutdown and LOTO Secured	Signature	Date/Time
Contractor is Prepared to Begin Work					
"Dry Run" Has Been Satisfactorily Completed					
Regulatory Agency Has Been Notified			Approval to Start Construction Given	Inspector	
WTD Has Confirmed that All systems Are "Go"			I Certify that System(s) are Shutdown and LOTO Secured	Contractor	

Remarks:

SYSTEM STARTUP - APPROVAL

Construction is complete and the system(s) are ready to be started up. LOTO removed.		Signature	Date/Time
	Contractor		
	Inspector		
	Operations		
	Maintenance		

Remarks:

CHANGE ORDER REQUEST

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Project Name) _____

COR# _____

(SD-___)

DESCRIPTION _____

Issued by _____

Date _____

COR JUSTIFICATION (If Contractor initiated only, to be completed by Contractor):

DESCRIPTION OF WORK TO BE PERFORMED

Contractor shall provide all labor, materials, equipment and other items necessary to install/complete the following work, to include all direct and indirect impacts. All work to be in compliance with contract documents.

IMPACTS

The following include all direct and indirect impacts due to the work specified heretofore.

Contract Time _____ Calendar Days

Cost \$ _____

By _____
Contractor

Date _____

Attachments: Cost Breakdown _____

CPM Subnetwork _____

NOTE: CONTRACTOR IS NOT AUTHORIZED TO PROCEED WITH THIS CHANGE.

DIST.CM _____ RE _____ LLS _____ FILE _____



CONTRACT CHANGE ORDER - SD 1

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TITLE			CHANGE ORDER NO.	
			DATE	
SPECIFICATION NO.	PURCHASE ORDER NO.	CONTRACT DATE	REQUESTED BY	<input type="checkbox"/> CONTRACTOR <input checked="" type="checkbox"/> DISTRICT

CHANGE ORDER TO INCLUDE APPLICABLE ITEMS	1. DESCRIPTION OF WORK TO BE DONE OR CHANGE TO BE MADE.	2. PAYMENT TO BE MADE OR CREDIT TO BE TAKEN:	3. TIME/ EXTENSION(S) GRANTED:
		a. Adjustment (agreed price or specified reimbursement) b. Force account work	a. Indicate what time extension applies to. b. Calendar or work days.

This Change Order is a product of negotiation. Contractor shall provide all labor, materials, equipment, and other items necessary to install/complete the following work, including all direct and indirect impacts. All work to be in compliance with contract documents.

1. **Description:**

2. **Payment:**

3. **Time extension:**

4. **Reference:**

NOTE: The payment or credit includes any and all costs associated with the work, including all impact to contract work. For the valuable consideration itemized in this change order, the Contractor releases EBMUD from all claims whether known or not, for delay, disruption, acceleration, re-sequencing, overhead, or other impacts, arising out of or resulting from the work or change described in this change order.

ESTIMATED CHANGE	ORIGINAL CONTRACT AMOUNT	EST. PERCENT CHANGE
Increase \$ _____ 0 _____ Decrease \$ _____ 0 _____	\$ _____	_____ 0 _____ %

RECOMMENDED BY	TITLE	DATE	CHECK SIGNATURES REQUIRED
	Construction Manager		<input type="checkbox"/> Div. Mgr. DATE
	Project Manager		<input type="checkbox"/> Dept. Dir. DATE

CONTRACTOR		You are hereby directed to make the above described changes from the plans and specifications, or to do the above described work not included in the plans and specifications on your contract.
ADDRESS, CITY STATE, ZIP		
ACCEPTED BY		
CONTRACTOR'S SIGNATURE	PRINTED NAME	TITLE
		DATE



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Date:
To:

Attn:

From:

Contract No.
Project:

DEFICIENCY NOTICE

DN-
Subject:
Reference Drawing No(s). _____ **Spec. Section(s)** _____

You are hereby placed on notice that the work, as described below, is not in conformance with the Contract Documents:

Please note that this is a deficiency notice, not a directive to stop work. Continuation of the deficient work is at the contractor's option and risk. Correction of deficient work shall be done by the contractor at no additional cost to the District.

CC:



PUBLIC WORKS PAYROLL REPORTING FORM

NAME OF CONTRACTOR: OR SUBCONTRACTOR:	CONTRACTOR'S LICENSE NO.:	ADDRESS:
	SPECIALITY LICENSE NO.:	

PAYROLL NO.:	FOR WEEK ENDING:	SELF-INSURED CERTIFICATE NO.:	PROJECT OR CONTRACT NO.:
		WORKERS' COMPENSATION POLICY NO.:	PROJECT AND LOCATION:

(1) NAME, ADDRESS AND SOCIAL SECURITY NUMBER OF EMPLOYEE	(2) NO. OF WITH- HOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	(4) DAY							(5) TOTAL HOURS	(6) HOURLY RATE OF PAY	(7) GROSS AMOUNT EARNED		(8) DEDUCTIONS, CONTRIBUTIONS AND PAYMENTS							(9) NET WGS PAID FOR WEEK		CHECK NO.							
			M	T	W	TH	F	S	S			DATE		THIS PROJECT	ALL PROJECTS	FED. TAX	FICA (SOC. SEC.)	STATE TAX	SDI	VAC/ HOLIDAY	HEALTH & WELF.	PENSION		TRAING.	FUND ADMIN	DUES	TRAV/ SUBS.	SAVINGS	OTHER*	TOTAL DEDUC- TIONS
			HOURS WORKED EACH DAY																											

NOTICE TO PUBLIC ENTITY

For Privacy Considerations

Fold back along dotted line prior to copying for release to general public (private persons).

(Paper Size then 8-1/2 x 11 inches)

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I, _____, the undersigned, am the
(Name – print)

_____ with the authority to act for and on behalf of
(Position in business)

_____, certify under penalty of perjury
(Name of business and/or contractor)

that the records or copies thereof submitted and consisting of _____
(Description, number of pages)

are the originals or true, full, and correct copies of the originals which depict the payroll record(s) of the actual disbursements by way of cash, check, or whatever form to the individual or individuals named.

Date: _____

Signature: _____

A public entity may require a stricter and/or more extensive form of certification.

ATTACHMENT A WASTEWATER DEPARTMENT HOT WORK PERMIT (POST AT ACTIVE WORK SITE)

A Hot Work Permit is required for any welding, burning, or brazing work at Wastewater Department facilities outside of the Mechanical Shop. A Hot Work Permit is also required for grinding, chipping, or other work-producing heat or flying sparks in confined spaces, designated Explosion Proof areas, and within 35 feet of digester gas or oxygen piping and systems. This Permit is valid on the specified date(s) and listed period.

Date:	Time issued:	Permit Expires:
Location (be specific):		
Description of work being performed:		
Contractor/Work Order #:		
Contractor/Mechanic(s) performing work:		
Supervisor/Inspector/Engineer authorizing work:		
Person(s) performing fire watch:		
<p>Initial prior to performing Hot Work:</p> <p>_____ Notify area operator</p> <p>_____ Air monitoring performed within 35 feet of digester gas or oxygen piping and other areas with a potential hazardous atmosphere; survey the work area with a gas meter checking for LEL <10% and oxygen <22.5%. Record gas readings on the hot work permit air monitoring log. Repeat readings frequently to assure absence of hazardous gases.</p> <p>_____ Cutting and welding equipment is in good repair. Replace if defective</p> <p>_____ The Fire Watch must remain in place for at least 60 minutes after Hot Work is completed.</p>		

PRECAUTIONS CHECKLIST

Y N/A

Requirements within 35 ft of work.

- Flammable liquids, combustible materials, oily deposits removed/covered with fire resistive covering
- Explosive atmosphere in area is eliminated
- Floors and area kept clean
- All wall, floor or machinery openings covered
- Fire-resistive tarpaulins suspended beneath work
- Electrical cable trays and switch gear protected with fire-resistive tarpaulins or metal shields
- Ducts and conveyors systems cleaned, protected/ shut off

Work on enclosed equipment:

- Enclosed equipment cleaned of all combustibles
- Container purged of all flammable liquids/vapors
- Pressurized vessels, piping and equipment removed from service, isolated, and vented

Work on walls or ceilings:

- Construction is non-combustible and without combustible covering or insulation
- Combustibles on other side of walls moved away or fire watch provided on the opposite side of wall from the work

Fire watch/Hot work area monitoring

- Fire watch will be provided during and for 60 minutes after hot work is complete
- The hot work area will be periodically inspected during the 3 hours after the fire watch leaves the high hazard area
- Fire extinguisher accessible within 10 feet
- Fire watch is trained in their duties
- Fire watch is required for adjoining areas above and below where applicable.

Approval: Initiating Supervisor Name (Print) and sign _____

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HOT WORK PERMIT - AIR MONITORING LOG

Location: _____

Meter Model/Equipment #: _____

Date/Time	Reading	Initial	Comment
	O2		
	LEL		
	O2		
	LEL		
	O2		
	LEL		
	O2		
	LEL		
	O2		
	LEL		
	O2		
	LEL		
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	O2		
	LEL		
	O2		
	LEL		
	O2		
	LEL		



This permit shall be completed when non-treatment facility staff such as Maintenance/Contractor/visitor perform work that:

- May disrupt routine plant or process system operations.
- Includes the listed activities below. These activities can create hazards to employees and visitors.

Maintenance, Engineering, or Contractors/Visitors (when approved) are responsible for completing this form with Water Treatment staff assistance.

Work Location:	Work Order or Specification #:		
Description of Work:			
Will work disrupt Plant/Facility Operations? <input type="checkbox"/> Yes <input type="checkbox"/> No			
SAFETY CONDITION	Yes	No	Note additional information or restrictions
1. Lock-Out / Tag-Out	<input type="checkbox"/>	<input type="checkbox"/>	
2. Confined Space Entries	<input type="checkbox"/>	<input type="checkbox"/>	
3. Use of Hazardous Materials	<input type="checkbox"/>	<input type="checkbox"/>	
4. Hot Work	<input type="checkbox"/>	<input type="checkbox"/>	
5. Trenching / Excavation	<input type="checkbox"/>	<input type="checkbox"/>	
a. USA Notified	<input type="checkbox"/>	<input type="checkbox"/>	
b. Electric shop notified	<input type="checkbox"/>	<input type="checkbox"/>	
6. Fall or Elevation Hazard	<input type="checkbox"/>	<input type="checkbox"/>	
7. Dust, Fume, Mist, Aerosol	<input type="checkbox"/>	<input type="checkbox"/>	
a. Lead	<input type="checkbox"/>	<input type="checkbox"/>	
b. Asbestos	<input type="checkbox"/>	<input type="checkbox"/>	
c. Silica	<input type="checkbox"/>	<input type="checkbox"/>	
d. PCB	<input type="checkbox"/>	<input type="checkbox"/>	
8. Live Electrical Work	<input type="checkbox"/>	<input type="checkbox"/>	
9. Work Zone Specific PPE	<input type="checkbox"/>	<input type="checkbox"/>	
10. Environmental Controls + Plans	<input type="checkbox"/>	<input type="checkbox"/>	
11. Special Circumstances	<input type="checkbox"/>	<input type="checkbox"/>	
AUTHORIZED WORK STARTED		Date:	Time:
Maintenance, Engineering, Contractor:		Facility Representative:	
(Print Name)		(Print Name)	
(Signature)		(Signature)	
WORK SATISFACTORILY COMPLETED		Date:	Time:
Maintenance, Engineering, Contractor:		Facility Representative:	
(Print Name)		(Print Name)	
(Signature)		(Signature)	



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SAFE WORK PERMIT

COMMENTS

A large, empty rectangular box intended for entering comments or additional information.

RELEASE

FOR AND IN CONSIDERATION of the sum of _____,
(\$ _____), (Contractor Name), on behalf of itself and its subcontractors, material suppliers, officers, directors, shareholders, employees, representatives, partners, subsidiaries, affiliates, agents, insurers, sureties, successors and assigns (collectively "Contractor") hereby releases and discharges the East Bay Municipal Utility District and its officers, directors, employees, representatives, agents, insurers, sureties, successors and assigns from any and all claims, demands, actions, causes of action and obligations, including but not limited to all claims for direct expense, indirect expense and schedule impact of whatever nature, known or unknown, existing, claimed to exist or which can hereafter ever arise out of or result out of or result from or in connection with any event, transaction or occurrence which has occurred with respect to the _____ (Title) _____ Project under SD- _____ from the beginning of time to and including the date of execution of this Release, excepting only the following claims:

[List claims or state "none"]

To the extent of the release provided for herein, Contractor waives any and all rights or benefits it may have under the terms of Section 1542 of the California Civil Code which provides as follows:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtors."

IN WITNESS WHEREOF, said Contractor has executed this Release this _____ day of _____, 2012.

(CORPORATE SEAL)

(Company Name)

Contractor

By: _____

Title: _____

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between **East Bay Municipal Utility District** whose address is **375 Eleventh Street, Oakland, California 94607** hereinafter called “**Owner,**” _____ whose address is _____ hereinafter called “**Contractor**” and _____ whose address is _____ hereinafter called “**Escrow Agent.**”

For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

- (1) Pursuant to Section 22300 of the Public Contract Code of the State of California, the Contractor has the option to deposit securities with the Escrow Agent as a substitute for retention earnings required to be withheld by the Owner pursuant to the construction contract entered into between the Owner and Contractor for _____ in the amount of _____ dated _____ (hereinafter referred to at the “**Contract**”). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When the Contractor deposits the securities as a substitute for the contract earnings, the Escrow Agent shall notify the Owner within ten days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the contract between the Owner and Contractor. Securities shall be held in the name of the East Bay Municipal Utility District, and shall designate the Contractor as the beneficial owner.
- (2) The Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the contract provision, provided that the Escrow Agent holds securities in the form and amount specified above.
- (3) When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.
- (4) The Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor and Escrow Agent.

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

- (5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.
- (6) The Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to the Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that the Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.
- (7) The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the Owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.
- (8) Upon receipt of written notification from the Owner certifying that the contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the contract, the Escrow Agent shall release to the Contractor all securities and interest on deposit less escrow fees and charges of the escrow account. The escrow shall be closed immediately upon disbursements of all monies and securities on deposit and payments of fees and charges.
- (9) The Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this agreement and the Owner and Contractor shall hold the Escrow Agent harmless from the Escrow Agent's release, and disbursement of the securities and interest as set forth above.
- (10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of the Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

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On behalf of the OWNER:

East Bay Municipal Utility District

Treasury Manager
Title

Wanda Hendrix-Talley
Name

Signature

Address:

**375 Eleventh Street
Oakland, CA 94607**

Telephone: **(510) 287-0231**
Fax: **(510) 298-0293**

On behalf of the ESCROW AGENT:

Company Name

Title

Name

Signature

Address: _____

Telephone: () _____
Fax: () _____

On behalf of the CONTRACTOR:

Company Name

Title

Name

Signature

Address:

Telephone: () _____
Fax: () _____

**ESCROW AGREEMENT FOR SECURITY
DEPOSITS IN LIEU OF RETENTION**

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At the time the escrow account is opened, the **OWNER** and **CONTRACTOR** shall deliver to the **ESCROW AGENT** a fully executed counterpart of this Agreement. IN WITNESS THEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

OWNER:

CONTRACTOR:

East Bay Municipal Utility District

Company Name

Wanda Hendrix-Talley

Name

Name

Treasury Manager

Title

Title

Signature

Signature

SUBCONTRACTOR PAYMENT REPORT (P-047)

This information reference data from the Contract Equity Program Summary (P-035)

Project Name: _____
 Construction Spec. No.: _____
 Agreement Date: _____
 Notice To Proceed Date: _____

Project Completion Date: _____
 Original Contract Amount: _____
 Revised Contract Amount: _____
 Submission Date: _____

BUSINESS NAME	VENDOR ID NUMBER	CONTACT NAME	STREET ADDRESS	CITY	STATE	ZIP CODE	BUSINESS PHONE NO.	WORK PERFORMED	WM WW EMM EMW	ORIGINAL DOLLAR AMOUNT	REVISED DOLLAR AMOUNT*	TOTAL PAYMENTS TO DATE	PROJECTED TOTAL PAYMENTS
PRIME:													
SUB:													

PAGE 1 SUB-TOTALS & PERCENTAGES

*If revised \$ amount is less than original \$ amount by 10% or more, include statement justifying reason(s) for change.

White Male (WM)	\$0	\$0	\$0	\$0
WM %	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
White Women (WW)	\$0	\$0	\$0	\$0
WW%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Ethnic Minority (EM)	\$0	\$0	\$0	\$0
EM%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

BUSINESS NAME	VENDOR ID NUMBER	CONTACT NAME	STREET ADDRESS	CITY	STATE	ZIP CODE	BUSINESS PHONE NO.	WORK PERFORMED	WM WW EMM EMW	ORIGINAL DOLLAR AMOUNT	REVISED DOLLAR AMOUNT*	TOTAL PAYMENTS TO DATE	PROJECTED TOTAL PAYMENTS

TOTAL PAYMENTS & TOTAL PERCENTAGES

White Male (WM)	\$0	\$0	\$0	\$0
WM %	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
White Women (WW)	\$0	\$0	\$0	\$0
WW%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Ethnic Minority (EM)	\$0	\$0	\$0	\$0
EM%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

The undersigned verifies that the information provided is corrected.

Date Signature

Print Name

INSTRUCTIONS

The numbers on the left refer to the corresponding number on the sample form to the right. Submit the Excel file **electronically** to the Contract Equity (CE) Office. For questions, please call the CE Office at (510) 287-0152. **COMPLETE ALL FIELDS.** Each file contains 25 Subcontractor Payment sheets.

- 1 Enter Project Name (For Construction Projects, **DO NOT** include specification number).
- 2 For Construction Projects **ONLY** - Enter Specification Number.
- 3 Enter Contract Agreement Date.
- 4 Enter Notice To Proceed Date.
- 5 Enter Project Completion Date.
- 6 Enter the Original Board Approved Contract Amount.
- 7 Enter Revised Contract Amount.
- 8 Enter Date Form P-047 Was Completed.
- 9 Enter Prime Contractor/Consultant's Business Name.
- 10 Leave Blank - For District Use Only.
- 11 Enter Prime's Contact/Project Manager Name.
- 12 - 16 Enter Prime's Street Address, City, State, Zip Code, and Phone Number.
- 17 Enter Description of Prime's Work to be Performed.
- 18 Enter Prime's Composition of Ownership (WM - White Male, WW - White Women, EMM - Ethnic Minority Male, and EMW - Ethnic Minority Women).
- 19 Enter Prime's Original Dollar Amount.
- 20 Enter Prime's Revised Dollar Amount.
- 21 Enter Prime's Total Payments-to-Date.

SUBCONTRACTOR PAYMENT REPORT (P-047)														
This information reference data from the Contract Equity Program Summary (P-035)														
Project Name: _____ 1										Project Completion Date: _____ 5				
Construction Spec. No.: _____ 2										Original Contract Amount: _____ 6				
Agreement Date: _____ 3										Revised Contract Amount: _____ 7				
Notice To Proceed Date: _____ 4										Submission Date: _____ 8				
BUSINESS NAME	VENDOR ID NUMBER	CONTACT NAME	STREET ADDRESS	CITY	STATE	ZIP CODE	BUSINESS PHONE NO.	WORK PERFORMED	WM WW EMM EMW	ORIGINAL DOLLAR AMOUNT	REVISED DOLLAR AMOUNT*	TOTAL PAYMENTS TO DATE	PROJECTED TOTAL PAYMENTS	
PRIME:	9	10	11	12	13	14	15	16	17	18	19	20	21	22
SUB:	23													
PAGE 1 SUB-TOTALS & PERCENTAGES														
*If revised \$ amount is less than original \$ amount by 10% or more, include statement justifying reason(s) for change.														
								White Male (WM)		\$0	\$0	\$0	\$0	\$0
								WM %		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
								White Women (WW)		\$0	\$0	\$0	\$0	\$0
								WW%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
								Ethnic Minority (EM)		\$0	\$0	\$0	\$0	\$0
								EM%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

- 22 Enter Prime's Projected Total Payments.
- 23 Repeat Steps 9 - 22 for Each Subcontractor/subconsultant.
- 24 Reason(s) for Change in

Subcontractor Payment Report Summary automatically rolls up the information from each Subcontractor Payment Report (P-047) spreadsheet. **DO NOT CHANGE THE FORMULAS ON THESE PAGES.**



NON-EMPLOYEE ACCESS CARD REQUEST

SECURITY / EMERGENCY PREPAREDNESS

Contract Documents. Bidders assume all risks associated with the use of all these unlocked pdf project specifications.

INSTRUCTIONS:

- 1. Hand carry or mail completed original to the Security Office, NAB, First Floor, MS #111.**
2. Access Cards must be picked up by the individual card is issued to.
3. Present ID upon request.

NOTE: SHADED AREA IS FOR SECURITY OFFICE USE ONLY

DATE OF REQUEST: _____

ACCESS CARD NUMBER	Name of Contractor/Vendor _____	Driver's License No. _____	
	Company Name _____	Phone Number () - _____	
	Dept. / Division Making Request _____	Org. No. _____	Phone Number () - _____

REASON FOR REQUEST

BEGIN DATE:

END DATE:

LIST AREAS TO BE ACCESSED:

NUMBER OF ACCESS CARDS ISSUED 1st 2nd 3rd 4th 5th

<p>REQUESTED BY CONTRACTOR</p> <p>_____ SUPERVISOR</p>	<p>APPROVED BY DISTRICT SPVSR / DEPT MGR</p> <p>_____ DEPARTMENT</p>
<p>RECEIVED BY</p> <p>_____ EMPLOYEE _____ DATE</p>	<p>ISSUED BY</p> <p>_____ SECURITY _____ DATE</p>
<p>NOTE</p> <p>REQUEST FOR GLOBAL ACCESS CARD MUST BE APPROVED BY MANAGER OF SECURITY & EMERGENCY PREPAREDNESS</p>	<p>AUTHORIZED BY</p> <p>_____ MANAGER OF SECURITY & EMERGENCY PREPAREDNESS</p>

ORIGINAL – Security Office

COPY – Department/Division

4. **ANALYSIS:** Identify and describe each part of the existing requirement which must be changed to implement this VECP, and recommend how to make such change.

5. **LIFE-CYCLE COST EFFECTS:** State the estimated effect of the proposed change on cost of operating and maintenance throughout the life-cycle of the item.

6. **DEADLINE DATE FOR IMPLEMENTATION OF THIS VECP:** State the latest time for acceptance of this VECP by the District in order to obtain maximum cost reduction during remainder of contract.

7. **TIME OF COMPLETION:** State the effect on contract time of completion if this VECP is accepted.

8. **COST ANALYSIS:**

a. Cost of performing the work in accordance with existing requirement. Attach detailed breakdown \$ _____

b. Cost of performing the work in accordance with proposed VECP. Attach detailed breakdown. \$ _____

c. Gross Savings to the Contractor. \$ _____

d. Implementation Costs.
(1) Contractors Development and Implementation Cost. Attach detailed breakdown. \$ _____
(2) Estimated District Cost. \$ _____

9. **ESTIMATED VALUE ENGINEERING SAVINGS** \$ _____

10. **ESTIMATED NET SAVINGS TO CONTRACTOR** \$ _____
(c. minus d. above)

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EQUIPMENT RECORD

Equipment Number	_____
Equipment Name	_____
Description	_____
Location	_____
Manufacturer	_____
Address	_____
Representative	_____
Phone Number	_____
Date of Purchase	_____
Make	_____
Type	_____
Quantity	_____
Serial Number	_____
Size	_____
Model	_____
Electrical	_____
Power Voltage	_____ Control Voltage _____
Mechanical	_____
Weight	_____
Dimensions	_____
Other	_____
Motor Size	_____ Type _____
Motor Phase/Frequency	_____
Speed Control	_____
Rated Capacity	_____ Peak Capacity
Maximum Pump Speed	_____
Pump Rotation	_____ Impeller Dia _____
Instrumentation Range	_____
Operator Type	_____
Other	_____

EQUIPMENT RECORD DATABASE TEMPLATE

Columns A through H:

	A	B	C	D	E	F	G	H
1	EQUIPMENT RECORD DATABASE TEMPLATE (DRAFT)							
2								
3	Equipment Name	Equipment No.	Description	Manufacturer	Serial Number	Location	Representative	e-mail address
4	MF Feed Pump No. 1	WRA-MFS-PMP-101-CFG	Pumps secondary effluent to Pall MF units	Goulds	1000-03-04-099	MF Feed Pump Station	Wastewater Equipment Sales	jbeam@wwequip.com
5	MF Feed Pump No. 2	WRA-MFS-PMP-201-CFG	Pumps secondary effluent to Pall MF units	Goulds	1000-03-04-099	MF Feed Pump Station	Wastewater Equipment Sales	jbeam@wwequip.com
6	MF Feed Pump No. 3	WRA-MFS-PMP-301-CFG	Pumps secondary effluent to Pall MF units	Goulds	1000-03-04-099	MF Feed Pump Station	Wastewater Equipment Sales	jbeam@wwequip.com
7								
8	MF Filtrate Flow Meter	WRA- MFF-FE-171	Measures MF Filtrate Flow	Rosemount	2000001	Membrane Building	Wastewater Equipment Sales	jbeam@wwequip.com
9								
10								

Columns I through V:

	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1														
2														
3	Phone	Date of Purchase	Make	Type	Size	Model	Electrical	Power Voltage (volts)	Control Voltage (volts)	Mechanical	Weight (lbs)	Dimensions	Units (ft or in)	Motor Size (hp)
4	408.926.2258	2/1/2009	Horizontal split-case	centrifugal	2350 gpm	No. 1000	NA	480	NA	NA	250	2 x 3 x 2	ft	100
5	408.926.2258	2/1/2009	Horizontal split-case	centrifugal	2350 gpm	No. 1000	NA	480	NA	NA	250	2 x 3 x 2	ft	100
6	408.926.2258	2/1/2009	Horizontal split-case	centrifugal	2350 gpm	No. 1000	NA	480	NA	NA	250	2 x 3 x 2	ft	100
7														
8	408.926.2258	5/1/2009	NA	Magnetic	8 inches	No. 2000	mV to FIT	24	NA	NA	25	12 x 10 x 10	inches	NA
9														
10														

Columns W through AI:

	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI
1													
2			Motor							Impeller Dia.			
3	Type	Motor Phase	Frequency (Hz)	Speed Control	Rated Capacity	Peak Capacity	Capacity Units	Max Pump Speed	Pump Rotation	(inches)	Instrument Range	Operator Type	Other
4	TEFC	3	60	VFD	2350	2350	gpm	1800	clockwise	25	NA	NA	
5	TEFC	3	60	VFD	2350	2350	gpm	1800	clockwise	25	NA	NA	
6	TEFC	3	60	VFD	2350	2350	gpm	1800	clockwise	25	NA	NA	
7													
8	in-line	NA	NA	NA	NA	3000	gpm	NA	NA	NA	0-3000 gpm	NA	
9													
10													

EQUIPMENT RECORD DATABASE TEMPLATE

Columns A through H:

	A	B	C	D	E	F	G	H
1	EQUIPMENT RECORD DATABASE TEMPLATE (DRAFT)							
2								
3	Equipment Name	Equipment No.	Description	Manufacturer	Serial Number	Location	Representative	e-mail address
4	MF Feed Pump No. 1	WRA-MFS-PMP-101-CFG	Pumps secondary effluent to Pall MF units	Goulds	1000-03-04-099	MF Feed Pump Station	Wastewater Equipment Sales	jbeam@wwequip.com
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6	MF Feed Pump No. 3	WRA-MFS-PMP-301-CFG	Pumps secondary effluent to Pall MF units	Goulds	1000-03-04-099	MF Feed Pump Station	Wastewater Equipment Sales	jbeam@wwequip.com
7								
8	MF Filtrate Flow Meter	WRA- MFF-FE-171	Measures MF Filtrate Flow	Rosemount	2000001	Membrane Building	Wastewater Equipment Sales	jbeam@wwequip.com
9								
10								

Columns I through V:

	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1														
2														
3	Phone	Date of Purchase	Make	Type	Size	Model	Electrical	Power Voltage (volts)	Control Voltage (volts)	Mechanical	Weight (lbs)	Dimensions	Units (ft or in)	Motor Size (hp)
4	408.926.2258	2/1/2009	Horizontal split-case	centrifugal	2350 gpm	No. 1000	NA	480	NA	NA	250	2 x 3 x 2	ft	100
5	408.926.2258	2/1/2009	Horizontal split-case	centrifugal	2350 gpm	No. 1000	NA	480	NA	NA	250	2 x 3 x 2	ft	100
6	408.926.2258	2/1/2009	Horizontal split-case	centrifugal	2350 gpm	No. 1000	NA	480	NA	NA	250	2 x 3 x 2	ft	100
7														
8	408.926.2258	5/1/2009	NA	Magnetic	8 inches	No. 2000	mV to FIT	24	NA	NA	25	12 x 10 x 10	inches	NA
9														
10														

Columns W through AI:

	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI
1													
2													
3	Type	Motor Phase	Motor Frequency (Hz)	Speed Control	Rated Capacity	Peak Capacity	Capacity Units	Max Pump Speed	Pump Rotation	Impeller Dia. (inches)	Instrument Range	Operator Type	Other
4	TEFC	3	60	VFD	2350	2350	gpm	1800	clockwise	25	NA	NA	
5	TEFC	3	60	VFD	2350	2350	gpm	1800	clockwise	25	NA	NA	
6	TEFC	3	60	VFD	2350	2350	gpm	1800	clockwise	25	NA	NA	
7													
8	in-line	NA	NA	NA	NA	3000	gpm	NA	NA	NA	0-3000 gpm	NA	
9													
10													

SUBMITTAL NO. _____

O&M MANUAL REVIEW CHECKLIST

SUBMITTAL NO. _____
 SPEC. SECTION: _____
 SUBJECT: _____
 EQUIP. ITEM: _____

DATED: _____
 REVIEW DATE: _____
 REVIEWER: _____
 SUPPLIER: _____
 MANUFACTURER: _____

ACCEPTABLE: _____
 UNACCEPTABLE: _____

PROJECT NO.: SD- _____

DISPOSITION	ACCEPTABLE			COMMENTS
	YES	NO	NA	
GENERAL FORMAT				
• Minimum four copies	_____	_____	_____	_____
• Three ring hard back cover	_____	_____	_____	_____
• Cover label	_____	_____	_____	_____
System/equipment names	_____	_____	_____	_____
Equipment numbers	_____	_____	_____	_____
Building	_____	_____	_____	_____
Specification section	_____	_____	_____	_____
• Title page	_____	_____	_____	_____
• Typed table of contents	_____	_____	_____	_____
• Sections parallel equipment specifications	_____	_____	_____	_____
• Heavy section dividers w/numbered plastic tab	_____	_____	_____	_____
• Pages punched for 3 ring binder (punching does not obliterate data)	_____	_____	_____	_____
• Info larger than 8-1/2x11 folded showing title block	_____	_____	_____	_____
OPTIONAL plan pockets	_____	_____	_____	_____
• Identify applicable model nos. and data	_____	_____	_____	_____
• Legible copies	_____	_____	_____	_____
TECHNICAL CONTENT				
• Equipment descriptions:				
Equipment names, model nos. & tag nos.	_____	_____	_____	_____
Equipment & major component functions	_____	_____	_____	_____
Diagrams & illustrations	_____	_____	_____	_____
• Performance information				
Nameplate data	_____	_____	_____	_____
Performance test data/curves	_____	_____	_____	_____
• Installation instructions				
Installation procedures & drawings	_____	_____	_____	_____
Engineering data	_____	_____	_____	_____

SUBMITTAL NO. _____

Wiring diagrams	-----	-----	-----	-----
Alignment tolerances	-----	-----	-----	-----
Adjustment procedures	-----	-----	-----	-----
• Test procedures	-----	-----	-----	-----
• Operating instructions				
Startup procedures	-----	-----	-----	-----
Normal & routine operations	-----	-----	-----	-----
Control functions	-----	-----	-----	-----
Shutdown procedures	-----	-----	-----	-----
Emergency operations	-----	-----	-----	-----
• Troubleshooting guide	-----	-----	-----	-----
• Safety precautions:	-----	-----	-----	-----
Safety procedures	-----	-----	-----	-----
Lockout discussion	-----	-----	-----	-----
CAUTION, WARNING, DANGER text	-----	-----	-----	-----
Special safety equipment	-----	-----	-----	-----
• Maintenance summary forms				
(MFR's standard form is not acceptable)	-----	-----	-----	-----
• Preventive maintenance instructions	-----	-----	-----	-----
• Lubrication information:				
Location of lube points & frequency	-----	-----	-----	-----
Recommended type & grade, MFR, temperature range	-----	-----	-----	-----
• Overhaul instructions:				
Detailed assembly drawings w/parts list & numbers	-----	-----	-----	-----
Teardown/rebuild instructions	-----	-----	-----	-----
• Spare parts for equipment and components:				
Recommended spare parts list w/part numbers	-----	-----	-----	-----
Instructions for ordering (motors, etc.)	-----	-----	-----	-----
Long-term storage requirements	-----	-----	-----	-----
• Electrical information:				
Nameplate data	-----	-----	-----	-----
Relay, control, alarm contact settings	-----	-----	-----	-----
Interconnection wiring diagram	-----	-----	-----	-----
Motor standard test data & performance curves	-----	-----	-----	-----
Motor space heaters	-----	-----	-----	-----
• Instrumentation and control:				
Control diagrams	-----	-----	-----	-----
Panel layout drawings	-----	-----	-----	-----
Instrument data sheets	-----	-----	-----	-----
Wiring and terminal strip diagrams	-----	-----	-----	-----
Pneumatic piping drawings	-----	-----	-----	-----
• Long-term shutdown protection	-----	-----	-----	-----

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TYPICAL MAINTENANCE SUMMARY FORM

1. EQUIPMENT ITEM _____
2. MANUFACTURER _____
3. EQUIPMENT IDENTIFICATION NUMBER(S) _____
4. WEIGHT OF INDIVIDUAL COMPONENTS (over 100 pounds) _____
5. NAMEPLATE DATA (hp, voltage, speed, etc.) _____
6. MANUFACTURER'S LOCAL REPRESENTATIVE _____
 Name _____ Telephone Number _____
 Address _____

7. MAINTENANCE REQUIREMENTS

<u>Maintenance Operation</u> List briefly each maintenance operation required and refer to specific information in manufacturer's standard maintenance manual, if applicable.	<u>Frequency</u> List required frequency of each maintenance operation.	<u>Lubricant (If Applicable)</u> Refer by symbol to lubricant list required.	<u>Comments</u>
_____	_____	_____	_____
_____	_____	_____	_____

8. LUBRICANT LIST

<u>Reference Symbol</u>	<u>Shell</u>	<u>Chevron</u>	<u>Texaco</u>	<u>Arco</u>	<u>Or Equal</u>
List symbols used in Item 7 above.	List equivalent lubricants, as distributed by each manufacturer for the specific use recommended.				
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

9. SPARE PARTS. Include your recommendations regarding what spare parts, if any, should be kept on the job

MAINTENANCE SUMMARY DATABASE TEMPLATE

Columns A through H:

1	A	B	C	D	E	F	G	H
2	MAINTENANCE SUMMARY DATABASE TEMPLATE (DRAFT)							Manufacturer's Local
3	Equipment ID No.¹	Equipment Description	Manufacturer	Nameplate Data²	Units	Weight (lbs)³	Name	Company
4	WRA-MFS-PMP-101-CFG	MF Feed Pump No. 1	Goulds	100	hp	250	James Beam	Wastewater Equipment Sales
5								
6								
7	WRA-SE-TNK-101	Influent Tank	Pacific Tank	1,000,000	gallons	NA	Jack Daniels	Big Tanks for Sale
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19	NOTES							
20	¹ Equipment numbers may be found in the instrumentation ("I") drawings for the project. All equipment numbers begin with an area code prefix of "W__" followed by the alphanumeric designations shown on the drawing. Please include the W__ prefix with the equipment numbers.							
21	² Nameplate data rating for the equipment may be in a variety of units including horsepower, voltage, speed, etc. Please include units in the adjacent column.							
22	³ For equipment items over 100 lbs, please provide weight.							
23	⁴ List briefly each maintenance operation required and refer to specific information in manufacturer's standard maintenance manual, if applicable. Multiple operations or tasks should be listed individually under a single piece							
24	⁵ Provide information for number of times the maintenance task is to be repeated. List the frequency (number of times in a given period) and the duration (period units, e.g., per day, week, month) in separate columns adjacent to or							
25	⁶ Include recommendations regarding what spare parts, if any, should be kept on the job.							

Columns I through P:

1	I	J	K	L	M	N	O	P
2	Representative		Maintenance Requirements					
3	Phone	e-mail	Maintenance Task⁴	Frequency⁵	Duration⁶	Lubricant	Comments	Spare parts⁷
4	408.926.2258	jbeam@wwequip.com	(1) Grease main bearing	1	month	Mobil EZ Greazy	Your hands will get dirty	Main bearing
5			(2) Check oil fill level	2	week	Mobil Synthetic No. 2	Refill as necessary to maintain level between indicated markers.	
6			(3) Inspect for noise and vibration	1	month	NA		
7	510.256.9632	jdaniels@bigtanks.com	Inspect exterior coating	1	year		Look for flaking and chipping	can of spray paint
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20	¹ Include the W__ prefix with the equipment numbers.							
21	² of equipment, see example above.							
22	³ e another.							
23	⁴							
24	⁵							
25	⁶							



TRAINING EVALUATION

Thank you for your time and cooperation in completing this course evaluation. Please answer all questions honestly. Your response will help in improving, if necessary, and planning future programs. We want to know what you think. **Please print or write legibly.**

Employee Name _____
(optional)

Job Title _____

Workshop Title _____

Date _____

Instructor _____

Location _____

Check only one appropriate for each question.

	EXCELLENT 5	ABOVE AVERAGE 4	AVERAGE 3	BELOW AVERAGE 2	POOR 1
1. Quality of course content.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Organization of course content.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Ability to use the course material in your job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How much you learned from the training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Instructor's knowledge of the topic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Instructor's ability to communicate course information to you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Instructor's ability to hold your interest during the training.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Instructor's presentation methods.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Overall instructor rating.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Overall worth of training.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The training can be improved by: _____

What I liked most about the training was: _____

I will apply the material learned to my job in these ways _____

Would you recommend this training to fellow employees (same classification)? Yes No

Why or why not? _____

Photo Confidentiality Agreement

SD- #

1. Contractor agrees to not distribute any construction photographs, images or video of this construction project to outside or third parties, except with any subcontractors, suppliers or others directly involved with the project.

2. Contractor agrees that written consent of Engineer must be obtained prior to distribution of photographs, images, or video to outside third parties. This need for prior written consent includes, but is not limited to: publications or trade journals, public relations displays, magazine articles and other media available to the public.

3. Contractor agrees to exercise reasonable and prudent precautions and security measures to protect the integrity and confidentiality of all photographs, images and video taken of the construction project.

Firm: _____

By (Signature): _____

Title*: _____

Address: _____

Phone: _____

Date: _____

* Must be owner or officer of corporation



**VOLUNTARY RELEASE – ASSUMPTION OF RISK AND INDEMNITY AGREEMENT
FOR EAST BAY MUNICIPAL UTILITY DISTRICT MAIN WASTEWATER
TREATMENT PLANT SITE VISIT ATTENDEES**

These unlocked pdf specifications are provided for the convenience of the user. They are not to be used as a substitute for the contract documents. The contract documents are the only documents to be considered part of the contract. The user is responsible for ensuring that all unlocked pdf project specifications are used in accordance with the contract documents.

For and in consideration of permitting me to participate in a pre-bid site inspection at:
Main Wastewater Treatment Plant located at East Bay Municipal Utility District (EBMUD) property at
2020 Wake Ave, Oakland, CA,

on this date, [ENTER DATE: _____],

I, [ENTER NAME: _____], the undersigned, VOLUNTARILY RELEASE, DISCHARGE AND COVENANT NOT TO SUE EBMUD, ITS DIRECTORS, OFFICERS, AGENTS, AND EMPLOYEES (RELEASEES) for any and all loss, liability, expense, claims, suits, and damages, including attorneys’ fees, arising out of or resulting from my participation in said activity(ies), including but not limited to losses, damages, or harm to me or to any other person or property resulting from negligent acts, errors or omissions, or willful misconduct of Releasees or any other participant. By signing this agreement, I further release the RELEASEES from any and all claims and liabilities for injuries or property damage arising from my own negligent acts, errors or omissions, or willful misconduct.

The undersigned further agrees to indemnify, defend, and hold the RELEASEES harmless from and against any loss, liability, expense, claims, suits, and damages, including attorney’s fees, that arise out of or result from my negligence, recklessness, or willful misconduct in said activity(ies) or while on EBMUD property.

The undersigned acknowledges that I am aware of the risks associated with said activity(ies) and VOLUNTARILY elect to accept all risks associated with said activity(ies) and my entry onto EBMUD property to participate in said activity, whether those risks are known or unknown. Risks include fall and electrical energy hazards, ascending/descending ladders and possible contact with biological material.

The undersigned acknowledges that I have read this document and fully informed myself regarding its contents and understand that it is a release of all claims and assumption of all risk inherent in said activity. I am fully aware of the legal consequences of signing this document and waiving my right to sue EBMUD, and I voluntarily sign my name evidencing my acceptance of the above provisions.

(signature of attendee) (street address)

(print name) (city, state, zip code)

(date) (phone number)

APPENDIX B

GEOTECHNICAL AND ENVIRONMENTAL ASSESSMENT INFORMATION

1. Metals Analysis for Paints for SD-428
2. V&A O2 Plant Corrosion Assessment Report
3. SW Hi-Solids Polyurethane 250 Specification Sheet
4. District-Approved Treatment and/or Disposal Sites for Various Waste Types (2015)
5. Bulk Asbestos Analysis for O2 MCC Dust SD-428 (2024)
6. Bulk Asbestos Analysis for O2 MCC Shield (2002)

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APPENDIX B

ENVIRONMENTAL ASSESSMENT INFORMATION

B1. Metals Analysis of Paints for SD-428

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Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

EBMUD
Edna Lehnert
PO Box 24055 M/S 59

Oakland, CA 94623

Client ID: 2674
Report Number: M205410
Date Received: 11/30/18
Date Analyzed: 12/05/18
Date Printed: 12/05/18
First Reported: 12/05/18

Job ID / Site: 784-38532, MWWTP, O2 Production Plant

Date(s) Collected: 11/29/18

FALI Job ID: 2674
Total Samples Submitted: 3
Total Samples Analyzed: 3

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
112918-01	30821134	Pb	2100	ppm	200	EPA 3050B/7000B
112918-02	30821135	Pb	1500	ppm	60	EPA 3050B/7000B
112918-03	30821136	Pb	80	ppm	60	EPA 3050B/7000B

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Daniele Siu

Daniele Siu, Laboratory Supervisor, Hayward Laboratory

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Forensic Analytical LABORATORIES

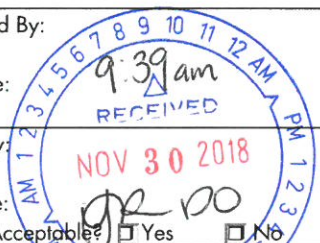
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Analysis Request Form (COC)

Client Name & Address: Edna Lehnert East Bay Municipal Utility District 375 11th Street Oakland, CA 94607		Client No.:	PO / Job#: 784-38532	Date: 11/28/18
Contact: Edna Lehnert		Phone: (510) 287-1512	Turn Around Time: Same Day / 1Day / 2Day / 3Day / 4Day / 5Day	
E-mail: edna.lehnert@ebmud.com		<input type="checkbox"/> PCM: <input type="checkbox"/> NIOSH 7400A / <input type="checkbox"/> NIOSH 7400B <input type="checkbox"/> Rotometer <input type="checkbox"/> PLM: <input type="checkbox"/> Standard / <input type="checkbox"/> Point Count 400-1000 / <input type="checkbox"/> CARB 435		
Site Name: MWWTP		<input type="checkbox"/> TEM Air: <input type="checkbox"/> AHERA / <input type="checkbox"/> Yamate2 / <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> TEM Bulk: <input type="checkbox"/> Quantitative / <input type="checkbox"/> Qualitative / <input type="checkbox"/> Chatfield <input type="checkbox"/> TEM Water: <input type="checkbox"/> Potable / <input type="checkbox"/> Non-Potable / <input type="checkbox"/> Weight % <input type="checkbox"/> TEM Microvac: <input type="checkbox"/> Qual / <input type="checkbox"/> D5755(str/area) / <input type="checkbox"/> D5756(str/mass)		
Site Location: O2 Production Plant		<input type="checkbox"/> IAQ Particle Identification (PLM LAB) <input type="checkbox"/> PLM Opaques/Soot <input type="checkbox"/> Particle Identification (TEM LAB) <input type="checkbox"/> Special Project <input checked="" type="checkbox"/> Metals Analysis Matrix: <u>Lead</u> Method:		
Comments: Lead paint samples for La Marche, D.		<input type="checkbox"/> Silica in Air <input type="checkbox"/> w/Gravimetry <input type="checkbox"/> Quartz Only		

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg LPM	Total Time	
112918-01	11-29-18 16:15 ⁺	Paint sample from ground level of O2 tower	A P C				
112918-02	11-29-18 16:15 ⁺	Paint sample from second level of O2 tower	A P C				
112918-03	11-29-18 16:15 ⁺	Paint sample from O2 plant (side unit)	A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				

Sampled By: E. Lehnert	Date/Time: 11/29/18	Shipped Via: <input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> US Mail <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Drop Off <input type="checkbox"/> Other:
Relinquished By: <i>Edna</i>	Relinquished By:	Relinquished By:
Date / Time: 11/30/18 9:37	Date / Time: 9:39 am	Date / Time:
Received By:	Received By: <i>DR DO</i>	Received By:
Date / Time:	Date / Time:	Date / Time:
Condition Acceptable? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No



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 Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 • Phone: 310/763-2374 • 888/813-9417
 Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, NV 89119 • Phone: 702/784-0040

List of District-Approved Treatment and/or Disposal Sites for Various Waste Types

as of June 2015

Note: All of the following transfer, treatment and/or disposal sites have been audited by the District and found to be acceptable, as of the time of the audit, for disposal of waste generated in the course of District projects. Since changes in facility ownership, operation, financial health, and waste acceptance policies may occur at any time among transfer, treatment and disposal facilities, the District makes no guarantee that the facilities listed below will be available or acceptable at the time of disposal. All disposal arrangements need to be pre-approved by the District through the Material Disposal Plan submittal required in Section 01 35 44 of this specification, as well as with the disposal facility through their waste acceptance process. All waste generated in the course of District projects must be treated or disposed of at one of the facilities on this list. If a facility from this list is selected that transfers the waste to another facility for treatment and/or disposal, the District will require evidence that the waste is treated and/or disposed of at one of the approved facilities on this list.

Facility Name	Facility Location	Type of Waste Accepted	
		General	Detailed
Acme Landfill	Martinez, CA	Class II, non-hazardous waste (I and III cells are CLOSED)	Construction-demolition (CD) debris, green waste, scrap metal, wood waste, appliances, other (clean fill, concrete, ceramic tile, asphalt, sheet rock, furniture)
Altamont Landfill & Resource Recovery Facility	Livermore, CA	Class II & III non-hazardous waste landfill	Municipal waste, construction debris, industrial waste, contaminated soils, liquid waste, sludges, treated auto shredder waste (TASW) metal, treated wood, green waste, friable and non-friable asbestos
American Recovery	Alhambria, CA	RCRA and Non-RCRA hazardous waste	Solid waste only such as oil absorbents, contaminated soil, etc. Liquid wastes not accepted..
Aqua Clear Farms	Rio Vista, CA	Class II, drilling mud only	Primarily drilling mud and cuttings from oil and gas exploration; typically 20-30% solids, 58-79% water and 1-2% hydrocarbons
California Asbestos Monofill	Copperopolis, CA	inert asbestos-containing waste only	Asbestos and inert waste tires
Chemical Waste Management, Inc. - Kettleman	Kettleman City, CA	Class 1, RCRA and Non-RCRA hazardous waste landfill	Accepts everything but compressed gases, radioactive waste, infectious material, explosives. NOTE: batteries, mercury, acids, acids requiring neutralization, fuels, oil recycling and wastes requiring incineration are transferred offsite for treatment/disposal at secondary facilities. If used, must ensure secondary facility has been audited by District
Clean Harbors (aka Safety Kleen, formerly Laidlaw) - Buttonwillow	Buttonwillow, CA	Class 1, RCRA and Non-RCRA hazardous waste treatment / landfill	All RCRA haz waste (except flammables, PCBs > 50 ppm, med waste, explosives, and rad waste > 20,000 pCi); hazardous bulk solid and liquid wastes
Clean Harbors Environ. Services, Inc. (Formerly Laidlaw)	5756 Alba St., Los Angeles, CA	RCRA and Non-RCRA hazardous waste treatment	Inorganic acids and bases, industrial wastewater, household haz waste, ethylene glycol, waste oils, batteries, incinerator ash, halogenated solvents, fluorescent and mercury lamps, mercury materials, PCBs, labpacks, asbestos
Safety-Kleen of California (Clean Harbors, formerly Evergreen Oil, Inc.)	Newark, CA	Class 1, RCRA Part B hazardous waste treatment	used oil, used oil filters, used anti-freeze, RCRA fuel and contaminated petroleum products, and RCRA/non-RCRA oily wastewater

Facility Name	Facility Location	Type of Waste Accepted	
		General	Detailed
Clean Harbors Environmental Services (formerly Solvent Service, Inc., SSI)	1021 Berryessa Road, San Jose, CA 95133	RCRA and Non-RCRA hazardous waste	Solvents, fuels, oils certain paints, corrosive liquids and solids organic and inorganic wastewaters, bulk and drummed solids, lab packs and RCRA solids (D004-D011, F006, D018-D043). T&S main facility handles container & bulk liquids for transfer - consolidation. Additional rail spur transfer facility is permitted.
Clean Harbors Wilmington LLC (aka Teris LLC - ENSCO West)	Wilmington, CA	RCRA and Non-RCRA hazardous waste	Oil recycling, storage and transfer facility for containerized liquid and solid hazardous waste; wastewaters treated at Clean Harbor's San Jose and/or other CH disposal facilities; incinerable wastes shipped to their Aragonite, UT, Kimball, NE, or El Dorado, AR; landfills sent to their Buttonwillow, CA
Crosby & Overton	Long Beach, CA Oakland, CA transfer station	RCRA Part B and Non-RCRA hazardous waste	Bulk liquids for on-site treatment: non-hazardous hydrocarbon-contaminated water, non-RCRA oily water and RCRA-D001 and/or D-18 (oil waters with gasoline). Drummed liquids & solids (roll-offs & triwalls): non-hazardous, non RCRA & RCRA, lab packs and household hazardous waste.
Depressurized Tech. (DTI)	Morgan Hill, CA	Class I, aerosol cans only (RCRA, non-RCRA, and non-haz)	Aerosol cans recovery & recycling (hazardous/non-hazardous; empty/full/partially full)
D/K Dixon	Dixon, CA	Non-RCRA	Used oil, oily water, used antifreeze
ECDC Environmental, L.C.	East Carbon, UT	Class V, non-RCRA hazardous waste	non-RCRA hazardous waste contaminated soils, non-regulated PCB wastes, municipal solid waste, commercial and industrial solid waste, construction/demolition waste; special waste allowed by Utah (e.g. California hazardous waste)
Evoqua Water Technologies (formerly Norris Environmental, U.S. Filter Recovery, Siemens Water Technologies)	Vernon, CA	Class I, RCRA hazardous waste treatment	RCRA solid and liquid waste treatment: acids, caustics, cyanide, chromate, trace organic compounds, hydrocarbons/oils
Forward Landfill, Inc.	Manteca, CA	Class II and III; non-hazardous waste	Non-hazardous waste, PCBs, and oily waste, friable and non-friable asbestos; trench spoils, drilling muds, sewage sludge, construction debris, oily soils
Jess Ranch	15850 Jess Ranch Rd., Tracy, CA95377	Clean fill and biosolids	Clean fill but only after testing including processed organic materials (food waste, green waste, wood waste). Other feedstock may include: organics, contaminated paper, natural fiber products and other inert materials (gypsum, clean C&D, untreated wood waste), biosolids organics composting facility
Keller Canyon Landfill Company (Republic Services)	901 Baily Rd. Pittsburg, CA	California Class II and III landfill that meets Federal Subtitle D requirements	Municipal solid waste, selected contaminated soils, shredder waste, commercial and industrial waste, filter cake/dewatered sludge, agricultural waste, construction/demolition debris, sewage sludge, spent catalyst fines, cannery waste, clean soils, off-spec products
Kleen Industrial Services/ Kleen Blast	Hayward, CA	New and recycled paint blast	New copper slag for paint blasting. Used slag can be returned to Kleen Blast and recycled if passes the TCLP test and is not RCRA hazardous waste. Used blast must be evaluated by the District's Regulatory Compliance Office BEFORE it is given to this vendor.
La Vista Quarry	28814 Mission Blvd., Hayward, CA	Class III, Construction Debris	Asphalt & concrete (<3' long), concrete with rebar (<3" from concrete), clean rock and gravel, asphalt roof tiles, broken toilets for recycling and with hardware removed.
Lighting Resources, LLC	1522 East Victory St, #4, Phoenix, AZ	Universal waste recycling	Commercial recycling facility for waste fluorescent lamps, ballasts, batteries, electronic waste and mercury devices.

Facility Name	Facility Location	Type of Waste Accepted	
		General	Detailed
Newby Island Sanitary Landfill	Milpitas, CA	Class III, non-hazardous waste	Municipal solid wastes, industrial waste, construction/demolition waste, contaminated soils, clean soils, water treatment sludge, and wastewater sludge, grit, and screenings. No liquids, asbestos, or untreated infectious materials.
Phibro-Tech, Inc.	Santa Fe Springs, CA	RCRA hazardous waste treatment and recycler/recovery	Metals, ammonia, copper metal, acids (etchants), inorganic acidic and alkaline material recovery
Philip Services Corp, dba 21st Century EMI	Fernely, NV	RCRA TSDF recycler	Alkaline batteries for shredding and recycling, inorganic liquid wastes (acids and bases), lab packs containing total organic carbon at or less than 10% per drum. Also a transfer facility to organic wastes.
Potrero Hills Landfill	Suisun City, CA	Class III, Municipal Solid Waste Landfill	Municipal solid waste, agriculture and industrial waste, construction/demolition waste, composts green waste, electronic and 'white goods' recycling. We send our waste polymer sump rinsate to this facility.
Rabanco (Roosevelt Regional Landfill), Allied Waste Services, a Republic Services Company	Roosevelt, WA	Class III, non-hazardous waste	Municipal solid waste, construction debris, industrial waste, friable and non-friable asbestos, incinerator ash, contaminated waste. No liquids accepted.
Recology - Hay Road Landfill	Vacaville, CA do not use site in Gilroy, CA 95020	Class II, Municipal Solid Waste Landfill	Municipal solid waste, agriculture and industrial waste, construction/demolition waste, sewage sludge and resell treated biosolids; recycling program of green, food, and wood wastes for composting, reuse of concrete and asphalt, and transfer station for e-waste, tires, and metals. Also accepts NON-hazardous waste contaminated soils, friable and non-friable asbestos, and other designated special wastes.
Redwood Landfill	Novato, CA	Class III, non-hazardous waste	Municipal solid waste, construction debris, petroleum-contaminated soil, grit and grease, dredge and fill material, non-friable asbestos, incinerator ash, treated wood, storm drain cleanings, holding tank pumpings, agricultural wastes, triple-rinsed pesticide containers, sewage sludge. No liquids accepted.
Rho-Chem, LLC. (subsidiary of Philip Services Corp)	Inglewood, LA County, CA	RCRA storage and treatment	Class I - RCRA and Non-RCRA - spent solid and liquid recycler
RMC Pacific	Pleasanton, CA	Clean fill and concrete recycling	A good source of clean fill to purchase. If bringing unneeded construction material such as concrete debris, construction debris and/or asphalt debris, do NOT deposit this material at the Granite and Central Concrete sites located within the RMC site. Deposit this material onto the RMC site only
Rock Creek Landfill (Calaveras Co. owned)	Milton, CA	Class II, non-hazardous waste	Municipal garbage, construction /demolition debris, petroleum-contaminated soil <1000 ppm, sludge, ash, tires, green waste, treated wood; accepts wastes generated in Calaveras County and parts of Alpine County (whose access to local dump is cut off during winter) only
Safety Kleen	Denton, TX	Class I, RCRA and Non-RCRA hazardous waste	Hazardous waste recycling, metals recovery, and bulk storage liquid and solid hazardous waste.
Safety-Kleen, Sacramento	Sacramento, CA	RCRA and Non-RCRA hazardous waste	Paint, dry cleaning solvents, antifreeze, mineral spirits, immersion cleaning solvents, oil filters, photochemical solutions steel wool cartridges and silverflake for recycling and transferring to other treatment facilities.

Facility Name	Facility Location	Type of Waste Accepted	
		General	Detailed
Salesco Systems USA	Phoenix, AZ	RCRA and non-RCRA solid and liquid mercury and PCB waste from electrical components	Mercury wastes including liquid mercury, mercury compounds and solutions, and mercury contaminated soil; all types of lamps (sodium and mercury vapor, fluorescent, neon); activated carbon contaminated with mercury; PPE contaminated with mercury; PCB wastes from ballasts, transformers and other electrical equipment
Simco Rd. Regional Landfill, owned/operated by Idaho Waste Systems, Inc.	Boise, ID	Class III, RCRA Subtitle D, Non-haz municipal fill, solid waste	Municipal solid waste, sewage sledge, C&D waste, contaminated soil, asbestos, non-haz special wastes, liquids
US Ecology, Inc.	Beatty, NV	Class I, RCRA and Non-RCRA hazardous waste	RCRA (D, F, D, P and U authorized waste codes), solid chemical wastes, drummed and bulk solid wastes, PCB-contaminated materials at TSCA levels (liquid and solids), filter concentrate and cake and corrosive liquids
Vasco Road Landfill, LLC (Republic Services)	Livermore, CA	Class II and III non-hazardous waste	Municipal solid wastes, construction & demolition debris INCLUDING dry wall and non-friable asbestos containing materials, clean (naturally uncontaminated) soil, sewage & wastewater treatment sludge & grit, industrial sludges & filters from cleaning processes (foundry slag and sand), petroleum & lead contaminated soils and drilling muds (Class II and III), green waste for recycling (bio-solids, scrap metal, asphalt/concrete crushing).
Veolia Environmental Services (ES) Technical Solutions (Formerly AETS)	Richmond, CA	Oil recycling, containerized RCRA and non-RCRA hazardous waste for transfer	RCRA and non-RCRA haz wastes, household haz waste for transfer to secondary facility for treatment and/or packaging - disposal. Accepts: wastewater, contaminated soils, inorganics, organics, paint sludges, pesticides, reactives, halogenated and nonhalogenated solvents, heavy metals, acids, caustics, and oils. NOTE: if this facility is used, ensure final disposal facility is approved for EBMUD use
Vulcan Materials Co.	Pleasanton, CA	Class III, Land reclamation & aggregates recycling	Low moisture content, non-water soluble, non-decomposable, non-hazardous inert wastes. Construction & demolition wastes and excavated earth. Clean fill (no contaminants or organic material). Recycled asphalt, cinder blocks, bricks, concrete, clean rock/gravel. No liquids.

Do not use Lakeland Processing Company, Santa Fe Springs, CA

\\w-fp-ab-2.win.ebmud\data\workgroups\omd\rco\ECS\Haz Waste\Disposal Facility Audits>List of Acceptable TSDF Facilities to Append to Specs.xls

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)

NVLAP Lab Code: 101459-0

EBMUD EH&S
 Alexander Neuhaus
 375 11th Street, MS 704

 Oakland, CA 94607

Client ID: 2674
Report Number: B356033
Date Received: 01/23/24
Date Analyzed: 01/30/24
Date Printed: 01/30/24
First Reported: 01/30/24

Job ID/Site: PO# AGR400423; O2 Plant - EBMUD Wastewater

SGSFL Job ID: 2674-267

Date(s) Collected: 01/23/2024

Total Samples Submitted: 7

Total Samples Analyzed: 7

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
ASB-BLANK-1-23-24	12724790						
Layer: White Fibrous Material		ND					
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.							
ASB-L24-1-17-24	12724791						
Layer: White/Grey Fibrous Material		ND					
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.							
ASB-L28-1-17-24	12724792						
Layer: White/Grey Fibrous Material		ND					
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.							
ASB-TH1A-1-23-24	12724793						
Layer: White/Grey Fibrous Material		ND					
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.							
ASB-TH2A-1-23-24	12724794						
Layer: White/Grey Fibrous Material		ND					
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.							
ASB-OH18-1-23-24	12724795						
Layer: White/Grey Fibrous Material		ND					
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.							

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Client Name: EBMUD EH&S

Report Number: B356033

Date Printed: 01/30/24

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
-----------	------------	---------------	------------------	---------------	------------------	---------------	------------------

ASB-OH28-1-23-24 12724796

Layer: White/Grey Fibrous Material

ND

Total Composite Values of Fibrous Components: **Asbestos (ND)**

Cellulose (95 %)

Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.



Maria Casper, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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**Forensic Analytical
Analytical Report**

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Preliminary FAX

Bulk Asbestos Analysis

(EPA Method 600/R-93-116)

 EBMUD Waste Water Dept
Ken Kaneda

 PO Box 24055
Oakland, CA 94623

 Client ID: 3010
Report Number: B044947
Date Received: 11/12/02
Date Analyzed: 11/14/02
Date Printed: 11/14/02

Job ID / Site: JOB: Oxygen Plant Dewatering Bldg

FASI Job ID: 3010-14

Sample Number	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
---------------	------------	---------------	------------------	---------------	------------------	---------------	------------------

OZ PLANT No.1	10195885						
Layer: Black Non-Fibrous Debris							ND

 Total Composite Values of Fibrous Components: **Asbestos:(ND)**

Cellulose (Trace%)

Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.

OZ PLANT No. 3	10195885						
Layer: Black Non-Fibrous Debris							ND

 Total Composite Values of Fibrous Components: **Asbestos:(ND)**

Cellulose (Trace%)

Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.

OZ PLANT No.11	10195885						
Layer: Black Non-Fibrous Debris							ND

 Total Composite Values of Fibrous Components: **Asbestos:(ND)**

Cellulose (Trace%)

Comment: Wipe/Microvac/Debris sample: Quantitative data may not be repeatable or represent the entire sample.

Grit Dewatering	10195886						
Layer: Beige Fibrous Material							ND

 Total Composite Values of Fibrous Components: **Asbestos:(ND)**

Cellulose (95%)



Forensic Analytical

Analysis Request Form

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Client Name & Address: 3010-14
 # SD-1 Wastewater Treatment Department
 2020 Wake Ave.
 Oakland, CA 94607

P.O. #: SBMUD Purchase Card **Date:** 1 / 1

Turn Around Time: ___ hr/ 12hr / 24hr / 48 hr / ext: ___

Due Date: 11 / 14 / 2002 **Due Time:** ___ am/pm

PLM: Standard / Point Count / PCM: NIOSH 7400

TEM Air: AHERA / Yarnale 2 / NIOSH 7402
 TEM Bulk: Quantitative / Qualitative / Chatfield
 TEM Water: Potable / Non-Potable / Wt %
 TEM Microvac
 Special Project:

Contact: Mike Williams, CIH or Ken Kaneda
Phone #: 021.
 (510)287-1536 (Mike Williams)
Fax #:
 (510)287-1715 and (510)287-1715

Site: Oxygen Plant, Denaturing Bldg.
Job:
Matrix:
Analytes:

Comments:

Sample ID	Date/Time	Sample Location/Description	FOR AIR SAMPLES ONLY				Sample Area or Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
O ₂ Plant No. 1 Drain Vaporizer	11/8/02	MCC Bucket (Dust on wet towel)	A P C				
O ₂ Plant No. 3 O ₂ Vaporizer Heater	11/8/02	MCC Bucket (Dust on wet towel)	A H C				
O ₂ Vaporizer No. 11 Heater	11/8/02	MCC Bucket (Dust on wet towel)	A P C				
Co.'s Denaturing Steam Cleaner	11/8/02	MCC Bucket (Radon Damaged Shield residue)	A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				

Sampled by: Mike Williams, CIH CSP **Date:** 11 / 08 / 02 **Time:** 14:32

Shipped via: Fed Ex Airborne UPS US Mail Courier Drop Off Other:

Relinquished by: 	Relinquished by:	Relinquished by:
Date / Time:	Date / Time:	Date / Time:
Received by: 	Received by:	Received by:
Date / Time: 11/12/02 9:05am	Date / Time:	Date / Time:
Condition Acceptable? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No

APPENDIX C

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LISTING OF SOLE-SOURCED PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS

Specification Section	Product	Reason for Selection
26 09 16	Schweitzer Engineering Laboratories for motor management relays and fiber optic cable	Sole-source selection of the specified product is needed to reduce spare parts inventory and keep the equipment usage and training consistent.
40 70 00	Rosemount for air and oxygen level and pressure sensors/transmitter	Sole-source selection of the specified product is needed because the District has standardized on this manufacturer for most applications, in order to avoid the increased costs associated with maintaining a larger amount of spare parts and training Maintenance staff on multiple equipment manufacturers
40 70 00	Phoenix Contact for current transducers	Same as above.
40 70 00	United Electric for digital temperature switches	Same as above.
40 70 00	Bentley Nevada for vibration transmitters	Same as above.
40 70 00	Wilcoxon vibration transmitter iT301	Same as above.

END OF SECTION

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APPENDIX D

REFERENCE MATERIAL

TECO-WESTINGHOUSE MOTOR COMPANY
ROUND ROCK, TEXAS U.S.A.

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CUSTOMER KOFFLER
CUSTOMER ORDER NO. 0113120
APPLICATION CENTRIFUGAL COMPRESSOR

DATE - DEC 6, 2023
S.O. 9A07AA
REVISION - 01

DATA FOR WORLD SERIES, HORIZONTAL, BRACKET TYPE INDUCTION MOTOR

1. RATING

HP	1500	HERTZ	60.0	INSUL CLASS	F
RPM FL	3544	SERVICE FACTOR	1.15	KVA CODE	G
VOLTS	4160	RISE C (1.15 SF)	90	DUTY	CONTINUOUS
AMPS FL	175	METHOD	RES	NUMBER OF POLES	2
PHASES	3	AMBIENT C	40		

2. MECHANICAL

FRAME	6809*	BRG TYPE	SLEEVE	END PLAY (INCH)	0.50
ENCLOSURE	WP1	LUBE TYPE	SELF	MOTOR WK2 (LB-FT2)	395
		ROTATION (NDE)	CCW	LOAD WK2 (LB-FT2)	520

3. STARTING PERFORMANCE - NOMINAL

	100% VOLTS	65% VOLTS
AMPS (LR)	1199	735
AMPS (LR) %	686	421
POWER FACTOR %	22.3	21.0
START TORQUE %	125	47
ACCELERATION SEC	3.3	9.7
SAFE LOCK SEC FROM HOT	8.0	21.4
SAFE LOCK SEC FROM COLD	9.4	24.9

BREAKDOWN TORQUE AT 100% VOLTS = 320 %

4. EFFICIENCY - NOMINAL

LOAD	%	115	100	75	50
EFFICIENCY	%	94.91	95.23	95.53	95.31

5. POWER FACTOR - NOMINAL

LOAD	%	115	100	75	50
POWER FACTOR	%	93.3	93.3	92.5	89.5

6. POWER FACTOR CORRECTION

MAX KVAR = 209

MAX FL P.F. = 97.9 %

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Induction Motor Starting Characteristics Calculated at 100% Rated Voltage

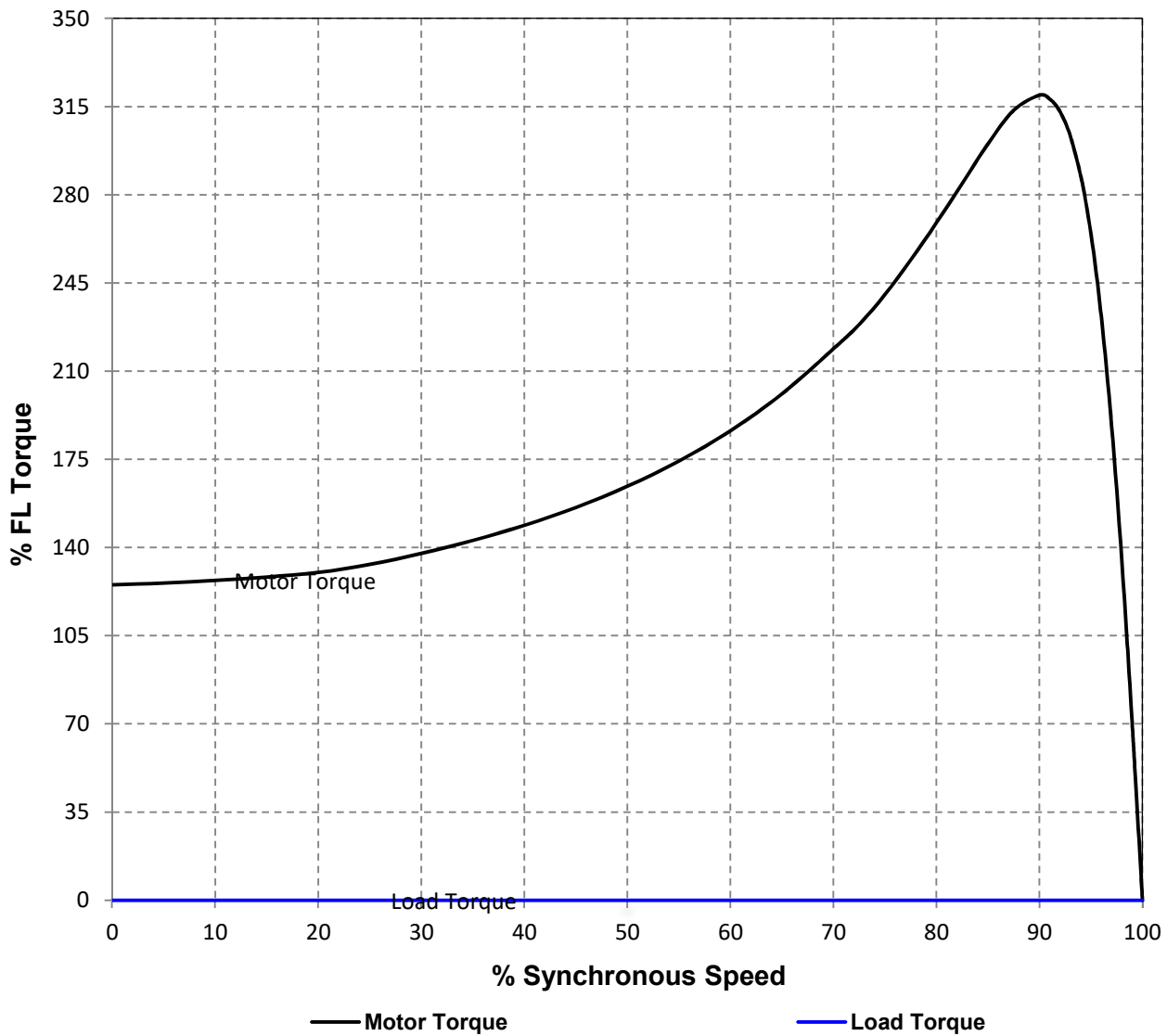
TWMC Order: 9A07AA

Engineer: L.OKOYE

Load Curve: SAME AS 9153A

Application: CENTRIFUGAL COMPRESSOR Customer: KOFFLER

Poles	2	FL Rpm	3544	Lock Torque(%)	125	FL Torque(lb-ft)	2223
HP	1500	Sync Rpm	3600	Lock Current(%)	686	FL Current(Amps)	175
Hertz	60.0	Frame	6809	Rated Volts	4160	Accel Time(sec)	3.29
Phases	3	Rated PF(%)	93	Motor Inertia(lb-ft ²)	395	Load Inertia(lb-ft ²)	520



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Induction Motor Starting Characteristics Calculated at 65% Rated Voltage

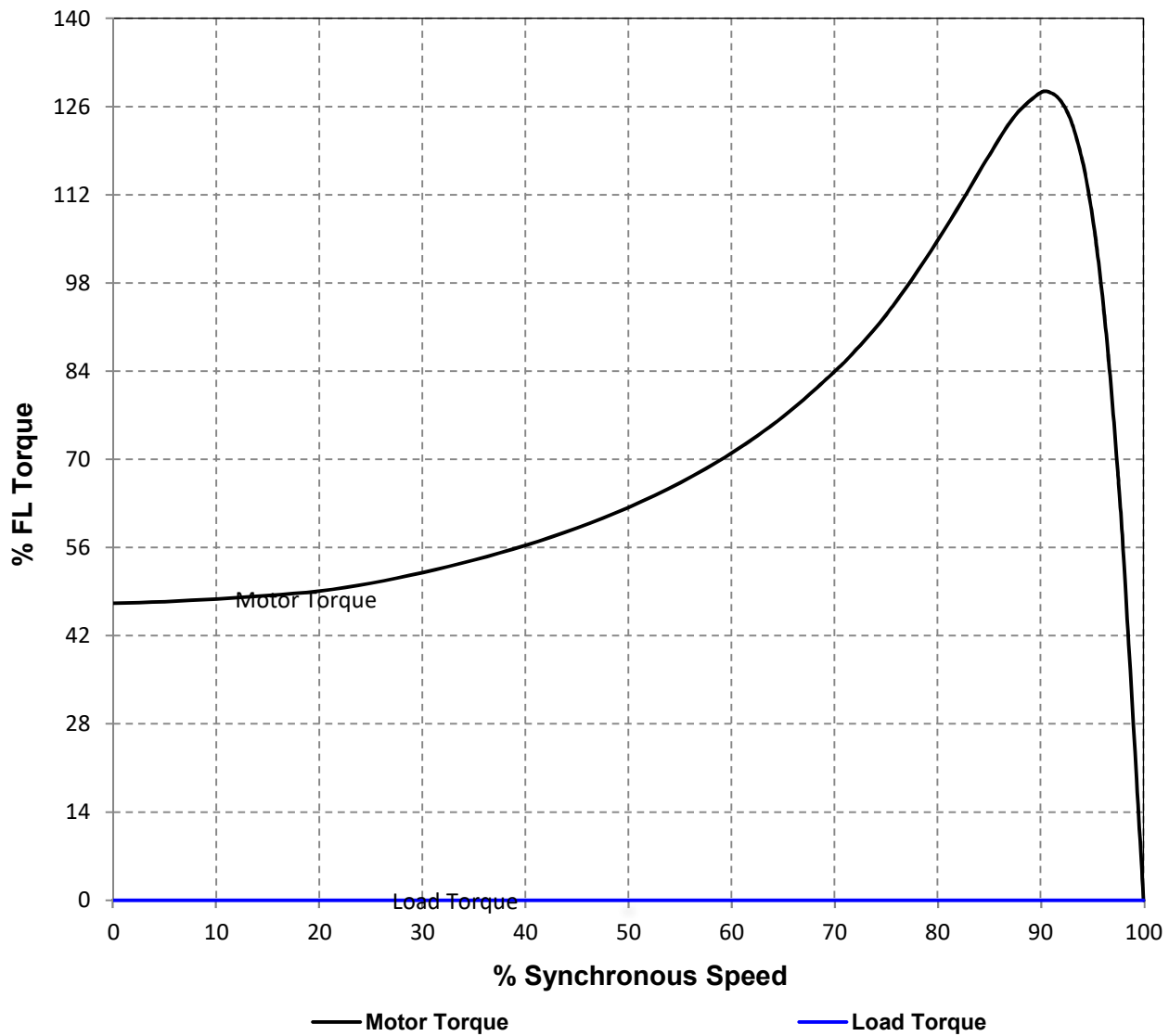
TWMC Order: 9A07AA

Engineer: L.OKOYE

Load Curve: SAME AS 9153A

Application: CENTRIFUGAL COMPRESSOR Customer: KOFFLER

Poles	2	FL Rpm	3544	Lock Torque(%)	47	FL Torque(lb-ft)	2223
HP	1500	Sync Rpm	3600	Lock Current(%)	421	FL Current(Amps)	175
Hertz	60.0	Frame	6809	Rated Volts	4160	Accel Time(sec)	9.74
Phases	3	Rated PF(%)	93	Motor Inertia(lb-ft ²)	395	Load Inertia(lb-ft ²)	520



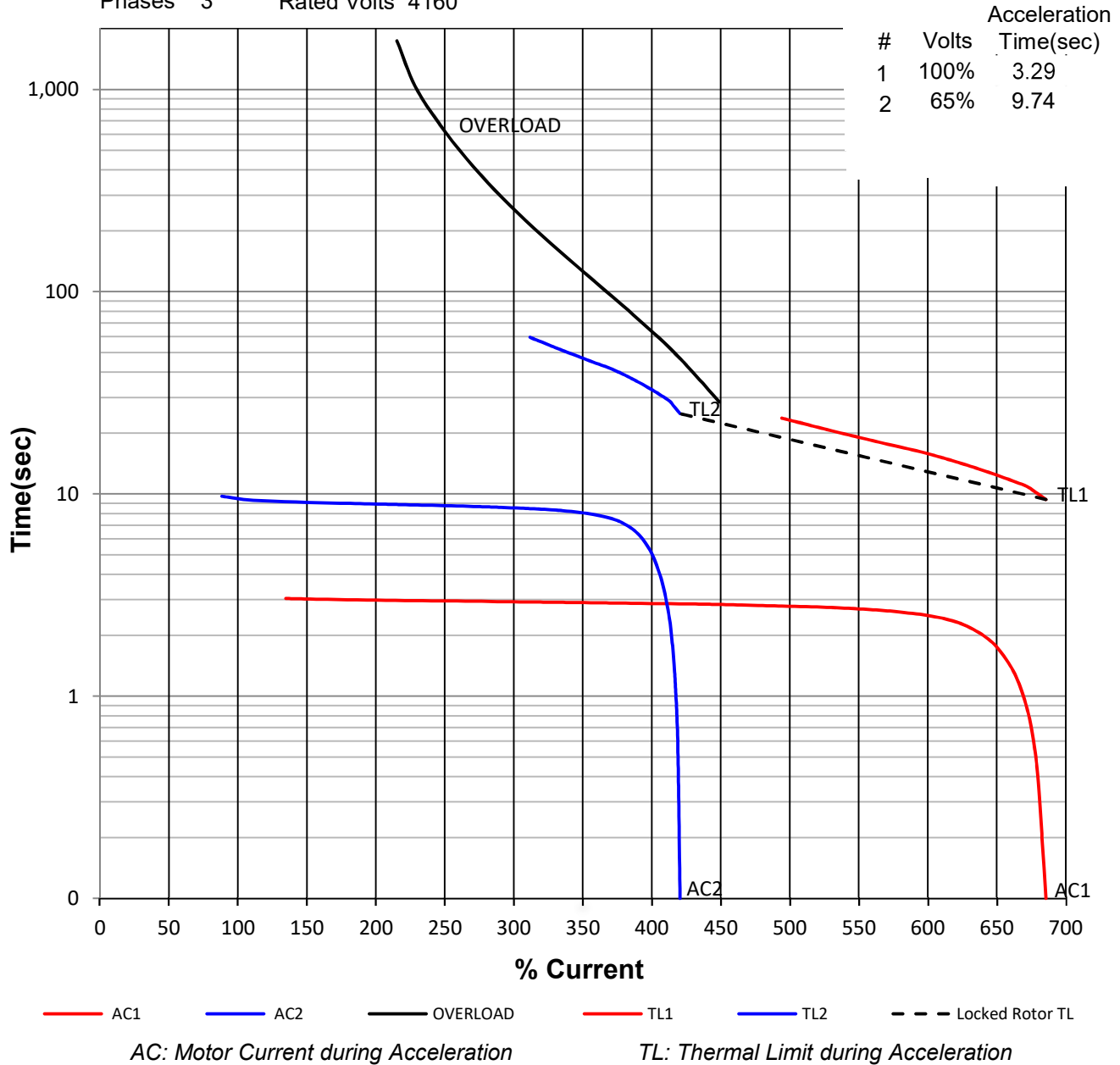
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Time vs Current and Thermal Limit Curves Motor Initially at Ambient

TWMC Order: 9A07AA Engineer: L.OKOYE Load Curve: SAME AS 9153A
 Application: CENTRIFUGAL COMPRESSOR Customer: KOFFLER

Poles	2	FL Rpm	3544	Lock Torque(lb-ft)	2784	FL Torque(lb-ft)	2223
HP	1500	Sync Rpm	3600	Lock Current(amps)	1199	FL Current(amps)	175
Hertz	60.0	Frame	6809	Motor Inertia(lb-ft ²)	395	Load Inertia(lb-ft ²)	520
Phases	3	Rated Volts	4160				



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Time vs Current and Thermal Limit Curves Motor Initially at Operating

TWMC Order: 9A07AA Engineer: L.OKOYE Load Curve: SAME AS 9153A
Application: CENTRIFUGAL COMPRESSOR Customer: KOFFLER

Poles	2	FL Rpm	3544	Lock Torque(lb-ft)	2784	FL Torque(lb-ft)	2223
HP	1500	Sync Rpm	3600	Lock Current(amps)	1199	FL Current(amps)	175
Hertz	60.0	Frame	6809	Motor Inertia(lb-ft ²)	395	Load Inertia(lb-ft ²)	520
Phases	3	Rated Volts	4160				

