



APPLICATION FOR PREAPPROVAL SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

For Office Use Only

APPLICATION NO.

OSP – 0236 -10

Check whether application is: NEW RENEWAL

1.0 Fuel Oil Systems Hunter Chappell
Manufacturer *Manufacturer's Technical Representative*

3167 Corporate Pl., Hayward, CA 94545
Mailing Address

(510) 727-6701 hchappell@fueloilsystems.net
Telephone *E-mail Address*

2.0 FOS-SALD24A Fuel Management System
Product Name *Product Type*

Panels are custom built.
Product Model No. (List all unique product identification numbers and/or serial numbers)

General Description: Rigid wall mounted leak detection panel installed in a NEMA 4 rated enclosure.

3.0 Fuel Oil Systems Doug Nakano
Applicant Company Name *Contact Person*

3167 Corporate Pl., Hayward, CA 94545
Mailing Address

(510) 727-6701 dnakano@fueloilsystems.net
Telephone *E-mail Address*

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

Signature of Applicant

11/28/2011

Date

Owner

Title

Fuel Oil Systems

Company Name

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Registered Design Professional Preparing the Report

4.0

Forell/Elsesser Engineers

Company Name

Marco Scanu, SE

Contact Name

S4454

California License Number

160 Pine St., 6th Flr., San Francisco, CA 94111

Mailing Address

415-837-0700

Telephone

c.sempere@forell.com

E-mail Address

California Licensed Structural Engineer Review and Acceptance of the Report

5.0

Forell-Elsesser Engineers, Inc.

Company Name

Marco Scanu, SE

Contact Name

S4454

California License Number

160 Pine St., 6th Flr., San Francisco, CA 94111

Mailing Address

415-837-0700

Telephone

m.scanu@forell.com

E-mail Address

Anchorage Pre-Approval

6.0

- Anchorage is pre-approved under OPA-
(Separate application for anchorage pre-approval is required)
- Anchorage is not Pre-approved

Certification Method

7.0

- Testing in accordance with:
 - ICC-ES AC-156
 - Other (Please Specify):
- Analysis
- Experience data
- Combination of Testing, Analysis, and/or Experience Data (Please Specify):

Testing Laboratory (if applicable)

8.0

National Technical Systems

Company Name

Deepa Shetty

Contact Name

38995 Cherry Street, Newark, CA 94560

Mailing Address

(510) 578-3500 x2105

Telephone

deepa.shetty@nts.com

E-mail

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Approval Parameters

9.0

Design in accordance with ASCE 7-05 Chapter 13: Yes No

Design Basis of Equipment or Components (F_p/W_p) = 2.15

S_{DS} (Spectral response acceleration at short period) = 2.86g

a_p (In-structure equipment or component amplification factor) = 2.5

R_p (Equipment or component response modification factor) = 6.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component fundamental period(s) = n/a

Building period limits (if any) = n/a

Overall dimensions and weight (or range thereof) = 24"H x 24"W x 16"D x 105 lbs

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15: Yes No

Design Basis of Equipment or Components (V/W) =

S_{DS} (Spectral response acceleration at short period) =

S_1 (Spectral response acceleration at 1 second period) =

R (Response modification coefficient) = 1.0

Ω_0 (System overstrength factor) = 1.0

C_d (Deflection amplification factor) = 1.0

I_p (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007: Yes No

10.0 List of attachments supporting the special seismic certification of equipment or components:

- Test Report
- Drawings
- Manufacturer's Catalog
- Calculations
- Other (Please Specify): SE Acceptance Letter, Product Range Summary, CBC 2010 & AC156 Requirements Checklist

11.0 OSHPD Approval (For Office Use Only)

<p>Signature & Date M. R. Karim, SHFR</p> <p>Name & Title</p>	<p>11/28/11</p>	<p>December 31, 2016</p> <p>Approval Expiration Date</p>
<p>Condition of Approval (if any):</p>	<p>S_{DS} (g) = 2.86 z/h = 1.0</p> <p>Special Seismic Certification Valid Up to</p>	

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OSP APPLICATION
 Fuel Oil Systems - FOS-SALD24A
 Product Range Summary

Fuel Oil Systems - FOS-SALD24A Fuel Management System						
Product Range Summary						
	Height	Width	Depth	Max. Weight	Modules	Notes
Unit						
FOS-SALD24A	24.0 in	24.0 in	16.0 in	105 lbs	11 (max.)	1,2
FOS-SALD24Z	24.0 in	24.0 in	16.0 in	105 lbs	0 (min.)	1,2
Notes						
1. Enclosure is NEMA 4 rated.						
2. Enclosure is 14ga cold-formed carbon steel.						

Enclosure	Part #	Test Status
Hoffman NEMA 4 Enclosure <i>tested with polycarbonate window kit</i>	CSD242416W	Tested

Internal Components		
Fuel Management System Console	Part #	Test Status
Franklin Fueling TS-5000 Console	T5000DP	Tested
Fuel Management System Modules	Part #	Test Status
Franklin Fueling TS-5000 Probe Module	TS-PRB	Tested
Franklin Fueling TS-5000 2-Wire Sensor Module	TS-2WSNS	Tested
Franklin Fueling TS-5000 3-Wire Sensor Module	TS-3WSNS	Tested
Franklin Fueling TS-5000 4-20mA Input Module	TS-420IB	Tested
Franklin Fueling TS-5000 (10) 120V Input Module	TS-ACI	Tested
Franklin Fueling TS-5000 Relay Output Module	TS-RLY	Tested

FORELL/ELSESSER ENGINEERS, INC.
 160 Pine Street, 6th Floor
 San Francisco, CA 94111

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Tested Unit #2 (NTS-ENV-2)

NTS-ENV-2
FOS-SALD24A
24" H x 24" W x 16" D
105 lbs

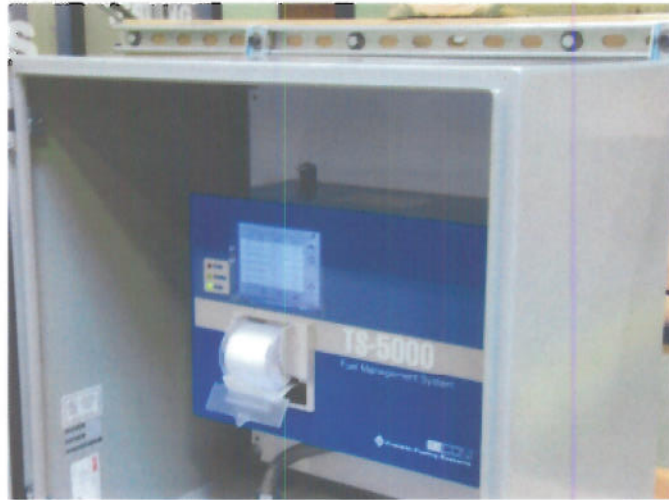
Maximum configuration
11 internal system modules

Enclosure
Hoffman CONCEPT
CSD242416W
24" H x 24" W x 16" D NEMA 4
Polycarbonate window kit

Internal Components

Franklin Fueling

TS-5000 fuel management system console
(model #TS5000DP)
TS-PRB probe module (x1)
TS-2WSNS 2-wire sensor module (x2)
TS-3WSNS 3-wire sensor module (x1)
TS-420IB 4-20mA input module (x1)
TS-ACI (10) 120V input module (x3)
TS-RLY relay output module (x3)



TEST SUMMARY

Tested Unit #1 (NTS-ENV-1)

NTS-ENV- 1
FOS-SALD24Z
24”H x 24”W x 16”D
105 lbs

Minimum configuration
0 internal system modules

Enclosure:
Hoffman CONCEPT
CSD242416W
24”H x 24”W x 16”D NEMA 4
Polycarbonate window kit

Internal Components:
Franklin Fueling
TS-5000 fuel management system console
(model #TS5000DP)

