CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

AUG 26 2014

Mr. Charles Liebal
OPW Fueling Containment Systems
3250 Highway 70 Business West
Smithfield, NC 27577

Dear Mr. Liebal:

EVALUATION FOR OPW FUELING CONTAINMENT SYSTEMS ENHANCED VAPOR RECOVERY PHASE I SYSTEM

As you know, Assembly Bill 2955 (statutes 2004, chapter 649) added section 25290.1.2(a) to chapter 6.7 of the Health and Safety Code. This section requires the Air Resources Board (ARB) and the State Water Resources Control Board (State Water Board) to certify, to the best of their knowledge and using existing resources, that equipment meeting the ARB's Enhanced Vapor Recovery (EVR) requirements also meets underground storage tank (UST) statutory requirements.

This determination letter combines and supersedes all previous determination letters for the OPW Fueling Containment Systems EVR Phase I System and includes the engineering statements from the determination letters issued September 6, 2013, April 16, 2013, April 16, 2013, January 5, 2009, April 10, 2007, and August 31, 2005.

On February 14, 2012 and June 13, 2014 we received an information packet from OPW Fueling Containment Systems requesting a review of various components of the OPW Fueling Containment Systems EVR Phase I System. The component(s) for which you seek our review includes the addition of (1) OPW 1-2200 Series Spill Containment and (2) a factory/field installed drain plug on the fill side of the OPW Series 1 Spill Containment. The proposed modifications were reviewed by a California Registered Professional Engineer, as indicated in the enclosed statements. Based on these signed statements and the information you provided, we have found no evidence that the proposed components conflict with chapter 6.7 of the Health and Safety Code.

State Water Board staff has reviewed the entire OPW Fueling Containment Systems EVR Phase I System and although the OPW Fueling Containment Systems EVR Phase I System does not conflict with Health and Safety Code chapter 6.7 and implementing regulations, the following regulatory limitations apply:

Spill Containment

OPW Series 1 Spill Containment
- 1-2100 Series Spill Containment
- 1-2200 Series Spill Containment
- 1-3100 Series Spill Containment
- 1-3700 Series Spill Containment

OPW / Pomeco 500 Series

The following limitations apply to Spill Containment:

1. The direct burial configuration of spill containment does not provide secondary containment for the tank fill riser. Secondary containment of the tank fill riser is required on all UST systems installed on or after July 1, 2003 and on certain other UST systems pursuant to chapter 6.7 of the Health and Safety Code and implementing regulations. Accordingly, the direct burial configuration can only be used on UST systems where secondary containment of the fill riser is not required.

2. As required by California Code of Regulations, title 23, section 2635(b)(1)(C), spill containers shall either have a drain valve which allows drainage of the collected spill into the primary container or provide a means to keep the spill container empty. For spill containment that do not have a drain valve, the UST facility owner/operator is required:
   i. To have a means to keep the spill container empty.
   ii. The process, procedures, and equipment (aka the means) to empty the container shall be identified as required by California Code of Regulations, title 23, section 2632(d).
   iii. Spill buckets should be kept clean and free of liquid (water and fuel) and debris.
   iv. Liquid from the container must be stored and or disposed of in accordance with hazardous waste laws and regulations. More information regarding hazardous waste determination can be found in California Code of Regulations, title 22, section 66262.11.

Overfill Prevention Device

OPW 61SO Series (Flapper Valve)
OPW 71SO Series (Flapper Valve)
OPW 53 VML (Ball Float Valve)
OPW 30 MV (Ball Float Valve)

The following limitations apply to overfill prevention:

1. As required by California Code of Regulations, title 23, section 2635(b)(2), the overfill prevention device shall have no manual override and shall meet one of the following options:

    i. Overfill device activates at 90 percent; restricts the flow to the tank or triggers and audible and visual alarm.
    ii. Overfill device activates at 95 percent; provides positive shutoff of the flow to the tank.
    iii. Overfill device activates at 95 percent; restricts the flow to the tank and activates an audible alarm five minutes before overfill.
    iv. Overfill device activates before fittings are exposed to product and provides positive shutoff of the flow to the tank.

2. When using a combination of ball float valves and flapper valves, the flapper valve should be set below the level of the ball float valves. If the ball float valve is installed below the flapper valve, it may interfere with the normal operation of the flapper valve.

Remote Fill Jack Screw Kits

OPW 61JSK-4RMT
OPW 61JSK Alternate Remote Fill

The following limitations apply to all remote fill configurations:

1. Owners or their agents are required to ensure that the space available in the tank is greater than the volume of product to be transferred to the tank prior to each delivery, therefore USTs must include a tank top access port or other method that allows product level gauging prior to delivery.[1]

2. Remote fill piping must be double-walled when connected to any one of the following:

    i. A UST system installed on or after July 1, 2003.[2]
    ii. A UST system where the overfill prevention valve activates at a level greater than 95 percent.[3]
    iii. A UST system where secondary containment of tank fill riser piping is otherwise required by state law or local ordinance.[4]

3. When remote fill piping is required to be double-walled, the requirement applies to ALL remote fill piping components including horizontal-to-vertical transitions and the short vertical piping sections at the tank top and remote fill

[1] California Code of Regulations, title 23, section 2712(k)
[2] Health and Safety Code, chapter 6.7, sections 25290.1 and 25290.2
[3] California Code of Regulations, title 23, section 2636(a)(1)
[4] Health and Safety Code, chapter 6.7, section 25299.2

locations. To achieve this, single walled piping components at the tank top and remote fill locations must be contained in sumps.

4. A demonstration and verification that the overfill method operates properly may be required by the Unified Program Agency.

Pursuant to Health and Safety Code, chapter 6.7, section 25290.1.2(a), the State Water Board certifies that, to the best of its knowledge, the OPW Fueling Containment Systems EVR Phase I System, which includes the components listed on the enclosed system equipment list, meets the requirements of chapter 6.7 of the Health and Safety Code. This determination assumes the OPW Fueling Containment Systems EVR Phase I System is installed in accordance with the manufacturer's instructions and as required by chapter 6.7 of the Health and Safety Code and title 23 of the California Code of Regulations.

If you have questions regarding this letter, please contact Mr. Cory Hootman at (916) 341-5668 or by email at cory.hootman@waterboards.ca.gov.

Sincerely,

Victoria A. Whitney

Victoria A. Whitney, Deputy Director
Division of Water Quality

Enclosures (11):

1) OPW Fueling Containment Systems EVR Phase I System Equipment List (6/27/2014)
2) OPW 1-2100 Series Spill Containment Engineering Statement (8/3/2005)
3) OPW 500 Series Spill Containment Engineering Statement (8/3/2005)
4) OPW 1-3100 Series Spill Containment Engineering Statement (12/30/2008)
5) OPW 1-3700 Series Spill Containment Engineering Statement (3/1/2013)
6) OPW 1-2200 Series Spill Containment Engineering Statement (3/21/2014)
7) OPW Drain Valve Replacement Plug for Series 1 Spill Containment Engineering Statement (3/31/2014)
8) OPW 53VML Overfill Prevention Ball Float Engineering Statement (8/3/2005)
9) OPW 71SO Series Overfill Prevention Valve Engineering Statement (3/1/2013)
10) OPW 61JSK-4RMT Remote Fill Jack Screw Kit Engineering Statement (10/4/2006)
11) OPW 61-JSK-4410 Alternate Remote Fill Jack Screw Kit Engineering Statement (4/17/2013)

OPW
A DOVER COMPANY

OPW Phase I Vapor Recovery System Equipment List

Equipment	Manufacturer/Model Number
(GAS/E85) = Identifies that these components are approved for standard gasoline & E85 fuel blends	
Spill Containers 1	Spill Container OPW 1-Series (GAS/E85) OPW / Pomeco Container Bellows Capacity – 5, 7.5, or 15 gallons Single or Double Wall Type of Base – Composite or Cast Iron
Replacement Drain Valve Kit	OPW 1DK-2100 (GAS/E85)
Replacement Drain Plug Kit	OPW 1DP-2100 (GAS/E85)
Dust Caps	OPW 634TT-EVR (product) (GAS/E85) OPW 1711T-EVR (vapor) (GAS/E85) OPW 634LPC (product) (GAS/E85) OPW 1711LPC (vapor) (GAS/E85)
Product Adaptor	OPW 61SALP OPW 61SALP-MA (GAS/E85)
Vapor Adaptor	OPW 61VSA OPW 61VSA-MA (GAS/E85)
Extractor Assembly 2	OPW 233
Ball Float Vent Valve 2	OPW 53VML OPW 30MV
Jack Screw Kit	OPW 61JSK-4410 (Only used with Composite Base Spill Container) OPW 61JSK-44CB (Only used with Cast Iron Base Spill Container) OPW 61JSK-4RMT (Only Used on Remote-Fill Configuration) OPW 71JSK-44MA (GAS/E85) OPW 71JSK-4RMT (GAS/E85)

1 OPW 1-Series spill containers with a drain plug can be used on the fill side

2 If these components are installed or required by regulations of other agencies, only those components and model numbers specified above shall be installed or used.

OPW Fueling Containment Systems

3250 Highway 70 Business West
Smithfield NC, USA 27577
919-934-2786

Mission Statement

Revolutionizing fueling operations globally by optimizing safety, efficiency, reliability, and environmental sustainability through innovative fuel handling and information management solutions

OPW
A DOVER COMPANY

OPW Phase I Vapor Recovery System Equipment List

Equipment	Manufacturer/Model Number
Face Seal Adaptor	OPW FSA-400 OPW FSA-400-S (GAS/E85)
Drop Tube	OPW 61T (various lengths) OPW 61T-SS (various lengths) (GAS/E85)
Drop Tube Overfill Prevention Device [1]	OPW 61SO OPW 61SOM-412C-EVR (GAS/E85) OPW 71SO OPW 71SOM-412C (GAS/E85)
Double Fill	OPW (Configuration Only)
Remote Fill	OPW (Configuration Only)
Remote Additive Fill	OPW (Configuration Only)
Tank Bottom Protector [1]	OPW/Pomeco 6111-1400
Tank Gauge Port Components [1]	OPW 62M (Cap and Adaptor) OPW 62M-MA (GAS/E85)

[1] If these components are installed or required by regulations of other agencies, only those components and model numbers specified above shall be installed or used.

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Smithfield NC, USA 27577
919-934-2786

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Revolutionizing fueling operations globally by optimizing safety, efficiency, reliability, and environmental sustainability through innovative fuel handling and information management solutions

Appendix

Certification Statement for the OPW PHASE I EVR System[1]

Based on a careful review and analysis, I hereby certify that the OPW PHASE I EVR System, which is under consideration for California Air Resources Board (ARB) certification, meets the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The OPW PHASE 1 EVR System warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs, etc.) described below.

Limitations:

ENHANCEMENT OF OPW 1-2100 SERIES SPILL CONTAINERS

James H. Ray 8/3/05	8/15/95
Signed by Date	Signed by Date
(California Professional Engineer)	(Company Representative)
James H. Ray	Michael Bartush
Printed Name	Printed Name
(Individual)	OPW Fueling Components
Professional Engineer Company Name	Equipment Manufacture Name
2041 Hidden Valley Drive	P.O. Box 405003732
Mailing Address	Mailing Address
Santa Rosa, CA 95404	Cincinnati, OH 45240-5003
City, State, Zip Code	City, State, Zip Code
707 480-8115	513 870 3151
Phone Number	Phone Number
jhray@sbcglobal.net	mbartush@opw-fc.com
Email	Email

[1]This certification statement is part of the guidelines developed by the California Code of Air Resources Board (ARP) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statues 2004, Chapter 649:McCarthy).

[2]This certification is based on the presumption that the OPW PHASE I EVR System is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 California Code of Regulations.

Appendix

Certification Statement for the OPW PHASE I EVR System[1]

Based on a careful review and analysis, I hereby certify that the **OPW PHASE I EVR System**, which is under consideration for California Air Resources Board (ARB) certification, meets the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The **OPW PHASE 1 EVR System** warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs, etc.) described below.

Limitations:

ENHANCEMENT OF OPW 500 SERIES SECONDARY CONTAINMENT SPILL CONTAINERS

James H. Ray 8/3/05
Signed by Date
(California Professional Engineer)

James H. Ray
Printed Name

(Individual)
Professional Engineer Company Name

2041 Hidden Valley Drive
Mailing Address

Santa Rosa, CA 95404
City, State, Zip Code

707 480-8115
Phone Number

jhray@sbcglobal.net
Email

8/15/05
Signed by Date
(Company Representative)

Michael Bartush
Printed Name

OPW Fueling Components
Equipment Manufacture Name

P.O. Box 405003732
Mailing Address

Cincinnati, OH 45240-5003
City, State, Zip Code

513 870 3151
Phone Number

mbartush@opw-fc.com
Email

Enclosure 1

[1]This certification statement is part of the guidelines developed by the California Code of Air Resources Board (ARP) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statues 2004, Chapter 649:McCarthy).

[2]This certification is based on the presumption that the OPW PHASE I EVR System is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 California Code of Regulations.

Appendix

Certification Statement for the OPW 1-3100 Series Spill Container [1]

Based on a careful review and analysis, I hereby certify that the **OPW 1-3100 Series Spill Container** which is under consideration for California Air Resources Board (ARB) certification, meets the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The **OPW 1-3100 Series Spill Container** warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs, etc.) described below.

Limitations:

For new construction installations after July 1, 2003 the OPW 1-3100 Series must be installed in a containment sump, the OPW 1-3100 Series Spill Containment may not be used as a direct bury for new construction installations as it does not meet the construction requirements of California Health & Safety Code paragraphs 25290.2(j) and 25290.1(k).

12/30/08	Kris Kane 12/30/08
Signed by (California Professional Engineer) — Date	Signed by (Company Representative) — Date
Aaron M. Newman P.E.	Kris Kane
Printed Name (California Professional Engineer)	Printed Name (Company Representative)
DCV Consultants, Inc.	OPW Fueling Components
Professional Engineer Company Name	Equipment Manufacturer Name
156Mc Near Circle	PO Box 405083
Mailing Address	Mailing Address
Petaluma, CA 94952	Cincinnati, OH, 45240
City, State, Zip Code	City, State, Zip Code
707-479-4594	513-870-3162
Phone Number	Phone Number
anewman@dcvconsultants.com	kkane@opw-fc.com
Email	Email

REGISTERED PROFESSIONAL ENGINEER AARON M. NEWMAN No. M026244 Exp. 06/30/09 MECHANICAL STATE OF CALIFORNIA

12/30/08

[1] This certification statement is part of the guidelines developed by the California Air Resources Board (ARB) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statutes 2004, Chapter 649: McCarthy).

[2] This certification is based on the presumption that the **OPW 1-3100 Series Spill Container** is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 of California Code of Regulations.

Aaron M. Newman P.E.
3095 Skillman Ln.
Petaluma, CA 94952
707-479-4594
anewmanpe@comcast.net

March 1, 2013

OPW Fueling Components
9393 Princeton-Glendale Rd.
Hamilton, Ohio 45240
800-422-2525

Attn: Kris Kane

RE: Third Party Review and Approval of OPW Series 1-3700 Double Wall, Retrofit, Spill Containment

I have examined and reviewed the following items on the OPW Series 1-3700 Double Wall, Retrofit, Spill Containment.

1. Materials Compatibility
   a. Materials Compatibility Comparison Charts for Standard OPW 1-3700 and retrofit cover
2. ULC Approval
   EGYHC.MH27236, Spill Containment Devices for Flammable Liquid Storage Tanks
3. Structural Analysis
   206918 Cast Cover Analysis (700L/500L Edge Retrofit) Dated: 12-21-12
4. Product Test
   1-3700 Series Edge Steel Retrofit Cover Load and Fit Testing
5. Double Wall EDGE™ Field Replacement Kits for 500L and 700L Series Spill Containers literature.
6. Installation and Maintenance Instructions
   a. Installation and Maintenance Instructions for OPW 1-3700 Series Thread-On Double Wall Spill Containers to Retrofit into Existing 500L and 700L Buckets

Aaron M. Newman P.E.
3095 Skillman Ln.
Petaluma, CA 94952
707-479-4594
anewmanpe@comcast.net

Based on a careful review and analysis the information provided by OPW, I hereby certify that the OPW Series 1-3700 Double Wall, Retrofit, Spill Containment will provide containment of spills and is testable in accordance with California Health and Safety Code, Chapter 6.7. The integrity of the double walled model of the spill containment can be verified either continuously or periodically by testing the interstitial space (Since riser pipe for the spill containment is not double walled, the installation does not meet the monitoring requirements of California AB 2481).

Aaron M. Newman P.E.

Aaron M. Newman P.E.
Mechanical Engineer
California Engineers License #M026214

REGISTERED PROFESSIONAL ENGINEER
AARON M. NEWMAN
No. M026214
Exp. 06/30/13
MECHANICAL
STATE OF CALIFORNIA

3/1/13

Appendix

Certification Statement for the OPW 1-3700 Double Wall, Retrofit, Spill Containment[1]

Based on a careful review and analysis, I hereby certify that the **OPW 1-3700 Double Wall, Retrofit, Spill Containment** which is under consideration for California Air Resources Board (ARB) certification, meets the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The **OPW 1-3700 Double Wall, Retrofit, Spill Containment** warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs, etc.) described below.

Limitations:

For installations after July 1, 2003, the direct bury installation of the OPW 1-3700 Double Wall, Retrofit, Spill Containment may not be used as it does not meet the monitoring requirements of California Health & Safety Code paragraphs 25290.2(l) and 25290.1(k).

Aaron M. Newman 3/1/13	K Kane 3-1-13
Signed by (California Professional Engineer) — Date	Signed by (Company Representative) — Date
Aaron M. Newman P.E.	Kris Kane
Printed Name (California Professional Engineer)	Printed Name (Company Representative)
Aaron M. Newman P.E.	OPW
Professional Engineer Company Name	Equipment Manufacturer Name
3085 Skillman Ln.	9393 Princeton-Glendale Rd.
Mailing Address	Mailing Address
Petaluma, CA 94952	Hamilton, OH 45011
City, State, Zip Code	City, State, Zip Code
707-479-4594	513-870-3162
Phone Number	Phone Number
anewmanpe@comcast.net	kkane@opwfcs.com
Email	Email

REGISTERED PROFESSIONAL ENGINEER AARON M. NEWMAN No. M028214 Exp. 06/30/13 MECHANICAL STATE OF CALIFORNIA

[1]This certification statement is part of the guidelines developed by the California Air Resources Board (ARB) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statutes 2004, Chapter 649: McCarthy).

[2]This certification is based on the presumption that the **OPW 1-3700 Series Spill Container** is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 of California Code of Regulations.

Aaron M. Newman P.E.
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Petaluma, CA 94952
707-479-4594
anewmanpe@comcast.net

March 21, 2014

OPW Fueling Components
9393 Princeton-Glendale Rd.
Hamilton, Ohio 45240
800-422-2525

Attn: Kris Kane

RE: Third Party Review and Approval of OPW Series 1-2200, Spill Containment with drain valve and drain valve replacement plug.

I have examined and reviewed the following items on the OPW Series 1-2200 Spill Containment.

1. OPW 1-2200 Series Spill Containers Information for Third Party Review
    a. Comparisons between OPW 1-2100, OPW 1-3100 and OPW 1-2200 Spill containers
    b. Manufacturing Assembly Work Instructions for OPW 1-2200 Series
    c. Test Reports of the following OPW 1-2200 parts:
        i. O-ring ozone resistance
        ii. Flange adapter load test
        iii. Rubber material soak and property
        iv. Drain valve and plug E85 soak testing
        v. Volume Capacity
        vi. Cover load
        vii. Residual bolt torque
        viii. Upper ring elbow impact survivability
        ix. Cover and ring temperature, fit, ice build-up and survivability
        x. Cover seal hydrostatic pressure

2. OPW 1-2200 Series Thread-On Single Wall Grade Level Spill Containers with Replaceable Bellows, Installation and Maintenance Instructions
3. Sales Brochure for OPW 1-2100-EVR Series Direct Bury Spill Containment For CARB/EVR
4. Materials Compatibility, OPW 1-2200 Series Material specifications

Aaron M. Newman P.E.
3095 Skillman Ln.
Petaluma, CA 94952
707-479-4594
anewmanpe@comcast.net

5. ULC Approval
   ULC MH27236 Spill Containers for Flammable Liquid Storage Tanks

Based on a careful review and analysis the information provided by OPW, I hereby certify that the OPW Series 1-2200 Single Wall, Spill Containment will provide containment of spills and is testable in accordance with California Health and Safety Code, Chapter 6.7. This is not a double wall device that is capable of being continuously monitored therefore it must be installed inside a continuously monitored sump to meet the monitoring requirements of California AB 2481.

Aaron M. Newman P.E.
Mechanical Engineer
California Engineers License #M026214

Appendix

Certification Statement for the OPW 1-2200 Series Spill Container [1]

Based on a careful review and analysis, I hereby certify that the **OPW 1-2200 Series Spill Container** which is under consideration for California Air Resources Board (ARB) certification, meets the requirements of Chapter 6 7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The **OPW 1-2200 Series Spill Container** warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs etc) described below

Limitations:

This is not a double wall device therefore it must be installed inside a continuously monitored sump to meet the monitoring requirements of California AB 2481.

Signed by (California Professional Engineer) — Date: 4/4/14	Signed by (Company Representative) — Date: 4-9-14
Aaron M. Newman P.E.	Kris Kane
Printed Name (California Professional Engineer)	Printed Name (Company Representative)
Aaron M. Newman P.E.	OPW
Professional Engineer Company Name	Equipment Manufacturer Name
3095 Skillman Ln.	9393 Princeton-Glendale Rd.
Mailing Address	Mailing Address
Petaluma, CA 94952	Hamilton, OH 45011
City, State, Zip Code	City State, Zip Code
707-479-4594	513-870-3162
Phone Number	Phone Number
[illegible]@sbcglobal.net	kkane@opwfcs.com
Email	Email

[1] This certification statement is part of the guidelines developed by the California Air Resources Board (ARB) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2655 (Statutes 2004, Chapter 649 McCarthy).

[2] This certification is based on the presumption that the **OPW 1-2200 Series Spill Container** is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6 7 of California Health and Safety Code and Chapter 16 of California Code of Regulations.

Aaron M. Newman P.E.
3095 Skillman Ln.
Petaluma, CA 94952
707-479-4594
anewmanpe@comcast.net

March 31, 2014

OPW Fueling Components
9393 Princeton-Glendale Rd.
Hamilton, Ohio 45240
800-422-2525

Attn: Kris Kane

RE: Third Party Review and Approval of Spill Containment drain valve replacement plug on OPW Spill Containers that use the 1DK-2100 drain valve.

I have examined and reviewed the following items related to the OPW Drain Valve Replacement Plug for Spill Containers.

1. Installation and Maintenance Instructions OPW 1DP-2100 EVR Replacement Drain Plug
2. OPW Replacement Drain Plug Information for Third Party Review
    a. Comparisons between OPW 1-2100, OPW 1-3100 and OPW 1-2200 Spill Containers with Drain Valves
    b. Test Reports of the following OPW 1-2200 parts:
        i. O-ring ozone resistance
        ii. Drain valve and plug E85 soak testing

3. Sales Brochure for OPW 1-2100-EVR Series Direct Bury Spill Containment For CARB/EVR

4. ULC Approval
    ULC 20131023-MH27236 for Series 1-2100 and Series 1-2200 Spill Containers for Flammable Liquid Storage Tanks with Drain Valves or Plugs, Dated October 23, 2013

Based on a careful review and analysis the information provided by OPW, I hereby certify that the OPW Replacement plug can be used in place of a 1DP-2100 drain valve. The use of the plug will provide containment of spills and is testable in accordance with California Health and Safety Code, Chapter 6.7.

Aaron M. Newman P.E.

Aaron M. Newman P.E.
Mechanical Engineer
California Engineers License #M026214

REGISTERED PROFESSIONAL ENGINEER
AARON M. NEWMAN
No. M026214
Exp. 06/30/15
MECHANICAL
STATE OF CALIFORNIA

Appendix

Certification Statement for the OPW Spill Container drain valve replacement plug [1]

Based on a careful review and analysis, I hereby certify that the **OPW** drain valve replacement plug may be installed in place of the 1DK-2100 drain valves in OPW Spill Containers. The replacement is under consideration for California Air Resources Board (ARB) certification. The replacement meets the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The **OPW Spill Container** warranty is valid as long as the plug is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs, etc.) described below.

Limitations:

The drain valve replacement plug may be substituted for the OPW 1DK-2100 drain valve when allowed by the Authority Having Jurisdiction.

Aaron M. Newman P.E. 4/2/14	Kris Kane 4-9-14
Signed by (California Professional Engineer) Date	Signed by (Company Representative) Date
Aaron M. Newman P.E.	Kris Kane
Printed Name (California Professional Engineer)	Printed Name (Company Representative)
Aaron M. Newman P.E.	OPW
Professional Engineer Company Name	Equipment Manufacturer Name
3095 Skillman Ln	9393 Princeton - Glendale Rd.
Mailing Address	Mailing Address
Petaluma, CA 94952	Hamilton, OH 45011
City, State, Zip Code	City, State, Zip Code
707-479-4594	513-870-3162
Phone Number	Phone Number
anewmanpe@comcast.net	kkane@opwfcs.com
Email	Email

[1]This certification statement is part of the guidelines developed by the California Air Resources Board (ARB) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statutes 2004, Chapter 649: McCarthy).

[2]This certification is based on the presumption that the **OPW Spill Container** is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 of California Code of Regulations.

Appendix

Certification Statement for the OPW PHASE I EVR System[1]

Based on a careful review and analysis, I hereby certify that the **OPW PHASE I EVR System**, which is under consideration for California Air Resources Board (ARB) certification, meets the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The **OPW PHASE 1 EVR System** warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs, etc.) described below.

Limitations:

OPW 53VML BALL FLOAT VALVE MODIFICATION

James H. Ray 8/3/05	[signature] 8/15/05
Signed by Date	Signed by Date
(California Professional Engineer)	(Company Representative)
James H. Ray	Michael Bartush
Printed Name	Printed Name
(Individual)	OPW Fueling Components
Professional Engineer Company Name	Equipment Manufacture Name
2041 Hidden Valley Drive	P.O. Box 405003732
Mailing Address	Mailing Address
Santa Rosa, CA 95404	Cincinnati, OH 45240-5003
City, State, Zip Code	City, State, Zip Code
707 480-8115	513 870 3151
Phone Number	Phone Number
jbray@sbcglobal.net	mbartush@opw-fc.com
Email	Email

REGISTERED PROFESSIONAL ENGINEER JAMES H. RAY No. 24 512 EXP 12-31-05 CIVIL STATE OF CALIFORNIA

[1]This certification statement is part of the guidelines developed by the California Code of Air Resources Board (ARP) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statues 2004, Chapter 649:McCarthy).

[2]This certification is based on the presumption that the OPW PHASE I EVR System is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 California Code of Regulations.

Aaron M. Newman P.E.
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707-479-4594
anewmanpe@comcast.net

March 1, 2013

OPW Fueling Components
9393 Princeton-Glendale Rd.
Hamilton, Ohio 45240
800-422-2525

Attn: Kris Kane

RE: Third Party Review and Approval of OPW 71SO Vapor Tight, Overfill Prevention Valve with Test Capability

I have examined and reviewed the following items on the OPW 71SO Vapor Tight, Overfill Prevention Valve with Test Capability.

1. Materials Compatibility
   a. Materials Compatibility Comparison Charts for Standard OPW 71SO and for E85 compatible OPW71SOM
2. ULC Approval
   a. EGXYC.MH21147 Overfill Protection Device
3. OPW Reliability Tests
   a. Report 5196 – 71SO-400CT Flow Rate Test
   b. Report 5236 – 71SO-400CT Cable Cycle Test
   c. Report 5237 – 71SO-400CT Pull Test on Cable Components
   d. Report 5238 – 71SO-400CT Orifice Flow Rate Test
   e. Report 5239 – 71SO-400CT Float Cycle Test
   f. Report 5240 – 71SO-400CT Excess Cable Test
   g. Report 5241 – 71SO-400CT Pressure Decay Test
   h. Report 5242 – 71SO-400CT Field Test Site #1
   i. Report 5243 – 71SO-400CT Field Test Site #2

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4. Testable 71SO-T Overfill Prevention Valve Operation Description literature dated 10/12

5. Installation and Maintenance Instructions:
   a. Assembly, Installation and Maintenance Instructions for OPW 71SO Vapor Tight , Overfill Prevention Valves

Based on a careful review and analysis the information provided by OPW, I hereby certify that the OPW 71SO Vapor Tight, Overfill Prevention Valve with Test Capability will shut-off flow upon reaching a predetermined level and that it meets overfill requirements described in CALIFORNIA CODE OF REGULATIONS, Title 23, Waters, Division 3, State Water Resources Control Board and Regional Water Quality Control Boards, Chapter 16, Underground Tank Regulations 2635(b)(2)(c). The valve shutoff function is visibly verifiable without removing it from the tank.

Aaron M. Newman P.E.

Aaron M. Newman P.E.
Mechanical Engineer
California Engineers License #M026214

OPW 71SO Vapor Tight Overfill Prevention Valve Approval 3/1/13 Page 2 of 2

Appendix

Certification Statement for the OPW 71SO Vapor Tight, Overfill Prevention Valve with Test Capability[1]

Based on a careful review and analysis, I hereby certify that the OPW 71SO Vapor Tight, Overfill Prevention Valve with Test Capability which is under consideration for California Air Resources Board (ARB) certification, meets the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The OPW 71SO Vapor Tight, Overfill Prevention Valve with Test Capability warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs, etc.) described below.

Limitations:

[signature] 3/1/13	[signature] 3-1-13
Signed by (California Professional Engineer) Date	Signed by (Company Representative) Date
Aaron M. Newman P.E.	Kris Kane
Printed Name (California Professional Engineer)	Printed Name (Company Representative)
Aaron M. Newman P.E.	OPW
Professional Engineer Company Name	Equipment Manufacturer Name
3995 Skillman Ln.	9393 Princeton - Glendale Rd.
Mailing Address	Mailing Address
Petaluma, CA 94952	Hamilton, OH, 45011
City, State, Zip Code	City, State, Zip Code
707-479-4594	513-870-3162
Phone Number	Phone Number
anewmanpe@comcast.net	kkane@opwfcs.com
Email	Email

[1] This certification statement is part of the guidelines developed by the California Air Resources Board (ARB) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statutes 2004, Chapter 649, McCarthy).

[2] This certification is based on the presumption that the OPW 71SO Vapor Tight, Overfill Prevention Valve with Test Capability is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 of California Code of Regulations.

James H. Ray
CIVIL ENGINEER
2041 Hidden Valley Drive
Santa Rosa. CA 995404
707-480-8115

October 4, 2006

OPW Fueling Components, Inc.
P.O. Box 405003
Cincinnati, OH 45240-5003

RE: CERTIFICATION BY STATE REGISTERED PROFESSIONAL ENGINEER
CCR Title 23, Division 3 and Chapter 16 Health and Safety Code Chapter 6.7
OPW REMOTE FILL PHASE I EVR SYSTEM
Modification to EO VR--102-E to include remote

Based on a careful review and analysis, I hereby certify that the OPW Phase I Vapor recovery System (EO VR-102-E), with one additional modification to the items now pending by application to CARB, will function as a remote fill vapor return, which is now under consideration by CARB will meet the California Air Resources Board (ARB) certification, meets the requirements of Chapter 6.7 of the Health and Safety Code.

I reviewed the following materials:

1. CARB Executive Order VR-102-E
2. OPW Drawings DC-61SALP-1020-EVR, DC-61VSA-1020-EVR, DC-634LPC-0400, ED00673ZA, DC-1711LPC-0300, E00651ZA, DC-62M-0375, EC-71SO-41OC and comparison drawing of Current CARB 61SO and New CARB 71SO
3. OPW Catalogue material on 71SO Overfill Prevention Valve.
4. OPW Installation and Maintenance Instructions for OPW 71SO-EVR VAPOR TIGHT OVERFILL PREVENTION VALVES.
5. Letter March 1, 2006 M. Bartush (OPW) to G. Lew (CARB) listing basis for enhancements and specific materials used.
6. Letter September 25, 2006 listing the specific improvement of the existing products.
7. **OPW 61JSK-4RMT Jack Screw Kit (Cap, adapter, trap door, jack screw). This is the additional item for the remote configuration.**
8. **3 OPW drawings of remote installation and parts.**
9. **1 drawing of site to be used forCARB testing.**

James H. Ray
Civil Engineer
C24518

Appendix

Certification Statement for the OPW REMOTE PHASE I EVR System[1]

Based on a careful review and analysis, I hereby certify that the modifications to OPW PHASE I EVR Remote Fill Configuration which is under consideration for California Air Resources Board (ARB) certification, meets the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring).[2]

The OPW PHASE 1 EVR Remote Fill Configuration warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the limitations (e.g., tank capacity, fueling points, throughputs, etc.) described below.

Limitations:

Approval for Phase 1 EVR Remote Fill Configuration.

10-4-06	10-13-06
Signed by (California Professional Engineer) — Date	Signed by (Company Representative) — Date
James H. Ray	Mike Bartush
Printed Name	Printed Name
(Individual)	OPW Fueling Components
Professional Engineer Company Name	Equipment Manufacture Name
2041 Hidden Valley Drive	P.O. Box 405003732
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City, State, Zip Code	City, State, Zip Code
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Phone Number	Phone Number
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Email	Email

[1]This certification statement is part of the guidelines developed by the California Code of Air Resources Board (ARP) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statues 2004, Chapter 649:McCarthy).

[2]This certification is based on the presumption that the OPW PHASE I EVR System is constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 California Code of Regulations.

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April 17, 2013

OPW Fueling Components
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Hamilton, Ohio 45240
800-422-2525

Attn: Kris Kane

RE: Third Party Review and Approval of OPW Alternate Remote Fill 61JSK Jack Screw Kit for addition to OPW Phase 1, Executive Order VR-102-L

I have examined and reviewed the following items on the OPW Alternate Remote Fill 61JSK Jack Screw Kit and the associated equipment that extend the vapor envelope of the underground storage tank.

1. Equipment
    a. OPW 61JSK-4RMT Jack Screw Kit
    b. Morrison Bros., Company, Fig 530 Series, Nipple Check Valve, Catalogue Sheet
    c. ASCO, 2/2 Series 8210, Pilot Operated, Gas Shutoff Solenoid Valve, with Viton Seals, Catalogue Sheet

2. OPW Compatibility Tests
    a. Report # 5147 – Soak testing of OPW 61JSK-4410 alternate remote fill configuration with additive Date: November 2, 2011

3. System Drawings
    a. OPW provided client drawing of remote fill installation for additive inclusion to during fuel drops.
    b. Veeder-Root provided drawing of the Positive Shutdown Wiring Diagram.

4. Evaluations
    a. Evaluation Of Remote Fill Configuration And Other Additions to OPW Phase I, EVR System (VR 102-G), Dated April 10, 2007
    b. Eight Sample Pressure Decay Tests that demonstrate that remote fill as it is proposed is vapor tight.

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c. Letter from Laura Fisher (SWRCB) To CUPAs and participating agencies, Dated February 2, 2012, indicating that Clean Power Additive has been determined not to effect FFS and Veeder-Root components and has been added to LG – 113 Letters
d. Letter from Ken Wilcox Associates, Inc, to Laura Fisher, SWRCB, dated March 6n 2013, regarding the compatibility of the Clean Power Additive with the Veeder-Root PLLD equipment.

5. Installation and Maintenance Instructions
   a. OPW 61JSK-4410 Alternate Remote Fill Configuration
   b. Letter from Bob Luby, Veeder-Root Red Jacket Support, explaining Power Integrity System Back-Up for Positive shutdown utilizing the TLS350 Output relays, for the additive system.

6. General Information
   a. Clean Power Additive Material Safety Data Sheet (Proprietary)

Based on a careful review and analysis the information provided by OPW, I hereby certify that the OPW Alternate Remote Fill 61JSK Jack Screw Kit along with the check and solenoid valves will provide containment of liquid and vapors in accordance with California Health and Safety Code, Chapter 6.7, Paragraph 25290.1. Design and Construction Requirements for Underground Storage Tanks Installed on or After July 1, 2004. In addition to the above parts, the integrity of the entire underground system (including the additive tank and its associated equipment) must be verified by continuously monitoring of the interstitial space. Product Line Leak Detection shall be provided as part of the additive system in accordance with California Health and Safety Code, Chapter 6.7, Paragraph 25290.1.h. Overfill prevention shutdown of the additive pump shall be provided in accordance with California Health and Safety Code, Chapter 6.7, Paragraph 25290.1.f

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Mechanical Engineer
California Engineers License #M026214

REGISTERED PROFESSIONAL ENGINEER
AARON M. NEWMAN
No. M026214
Exp. 06/30/13
MECHANICAL
STATE OF CALIFORNIA

4/17/13

Appendix

Certification Statement for the OPW Alternate Remote Fill 61JSK Jack Screw Kit for addition to OPW Phase 1, Executive Order VR-102-L[1]

Based on a careful review and analysis, I hereby certify that the **OPW Alternate Remote Fill 61JSK Jack Screw Kit, Morrison Bros., Company, Fig 530 Series, Nipple Check Valve and ASCO, 2/2 Series 8210, Pilot Operated, Gas Shutoff Solenoid Valve with Viton seals** which are under consideration for California Air Resources Board (ARB) certification, meet the requirements of Chapter 6.7 of the California Health and Safety Code (the State Water Resources Control Board's underground storage tank requirements, including enhanced leak detection and continuous vacuum, pressure, or hydrostatic monitoring.)[2]

The **OPW Alternate Remote Fill 61JSK Jack Screw Kit** warranty is valid as long as the system is installed, operated, and maintained according to manufacturer's instructions and in a manner that does not exceed the design limitations.

Other Requirements: The remote fill is added to the tank system to allow for additive to be introduced into the fuel in the underground storage tanks. The additive UST, piping and pump system shall be constructed in accordance with Chapter 6.7 of California Health and Safety Code and Chapter 16 of California Code of Regulations. These requirements shall include but not be limited to continuous monitoring of primary and secondary containments, pressurized line leak detection and overfill protection.

Aaron M. Newman P.E. 4/17/13	Kris Kane 4-17-13
Signed by (California Professional Engineer) — Date	Signed by (Company Representative) — Date
Aaron M. Newman P.E.	Kris Kane
Printed Name (California Professional Engineer)	Printed Name (Company Representative)
Aaron M. Newman P.E.	OPW
Professional Engineer Company Name	Equipment Manufacturer Name
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REGISTERED PROFESSIONAL ENGINEER AARON M. NEWMAN No. M029214 Exp. 06/30/13 MECHANICAL STATE OF CALIFORNIA

[1]This certification statement is part of the guidelines developed by the California Air Resources Board (ARB) and State Water Resources Control Board (State Water Board) to implement provisions of Assembly Bill 2955 (Statutes 2004, Chapter 649: McCarthy).

[2]This certification is based on the presumption that the **OPW Alternate Remote Fill 61JSK Jack Screw Kit; Morrison Bros., Company, Fig 530 Series, Nipple Check Valve; and ASCO, 2/2 Series 8210, Pilot Operated, Gas Shutoff Solenoid Valve, with Viton seals** are constructed, installed, maintained, and operated in accordance with all applicable requirements of Chapter 6.7 of California Health and Safety Code and Chapter 16 of California Code of Regulations.