CALIFORNIA
Water Boards

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SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

January 23, 2013

Mr. Don Mukai
S. Bravo Systems, Inc.
2929 Vail Avenue
Commerce, CA 90040

Dear Mr. Mukai:

REVISED APPROVAL OF THE DISPENSER CONVERSION FRAME, MODEL CONV-B2000/CONV-B2000-OPP AS AN UNDER-DISPENSER SPILL CONTAINMENT OR CONTROL SYSTEM TO INCLUDE PROVISIONS FOR THE CONV RETROFIT PLATE KIT INSTALLATION

This letter is in response to your application for approval of the revised S. Bravo Systems, Inc. (Bravo) Dispenser Conversion Frame, model CONV-B2000/CONV-B2000-OPP (CONV-B2000) including the CONV Retrofit Plate Kit. This revised approval letter of the Bravo Dispenser Conversion Frame CONV-B2000 including the CONV Retrofit Plate Kit supersedes the State Water Resources Control Board's (State Water Board) approval letter dated April 8, 2008.

Description of the CONV-B2000

The CONV-B2000 is a conversion frame designed to allow larger dispensers to be installed above smaller existing under-dispenser containment (UDC). When piping within the dispenser falls outside the footprint of the UDC, the CONV-B2000 is designed to direct any leaking product into the UDC where it will be contained and detected, as required by California regulations[1].

The CONV-B2000 is fabricated of galvannealed and epoxy powder coated 12 gauge (0.093" thickness) steel. It is designed to prevent interference of the UDC water splash guard, and includes a water splash guard to prevent water intrusion. The CONV-B2000 provides angles to drain releases back into existing UDC using a weir system of drainage. Enclosure 1 shows a typical drawing of the CONV-B2000. Exact dimensions are determined when an owner or operator sends UDC and dispenser information to

[1] For a detailed explanation of the requirements for dispenser piping refer to the State Water Board's December 21, 2007 letter "Clarification of Existing Regulations for Under-Dispenser Containment."

Bravo, since dimensions of the new dispenser and the existing UDC determine the size and angle of the sloped weirs.

Review Process of the CONV-B2000

Pursuant to California Code of Regulations (CCR), Title 23, § 2636(g)(3), we have reviewed the application to determine whether the system adequately protects the soil and beneficial uses of groundwater. During the review process the State Water Board received and reviewed the following documents: *Dispenser Conversion Frame, Model CONV-B2000* product literature; *State Registered Professional Engineer Approval* letter; *Conversion Frame Specifications; and Bravo Conversion Frame Installation/Inspection Manual*. A California registered Professional Engineer has reviewed the Bravo catalog sheet with specifications and the *B2000 Conversion Frame Installation Instructions* and has concluded that the frame is acceptable for adapting an existing installed UDC to a new dispenser (See Enclosure 2).

Conditions of Approval for the CONV-B2000

Based on the Professional Engineer's review and the documentation you've submitted, we are granting approval of the CONV-B2000 under the following conditions:

1. This model comes in several sizes in order to accommodate various dimensions of UDC and dispenser. Schematics of all existing and future sizes for the CONV-B2000 shall be made available upon request of the State Water Board.

2. Materials and procedures employed in the construction of the CONV-B2000 shall remain the same as the materials that were indicated in the documents reviewed by the State Water Board.

3. Installation procedures in no way supersede local, State, and federal regulations. Qualified individuals must obey all local laws, regulations, and requirements when installing the CONV-B2000.

4. The procedures (*CONV-B2000 Conversion Frame Installation/Inspection Manual* dated August 21, 2012) submitted in the approval process must be followed in their entirety. Any variations in the installation procedures must be reviewed and approved by the State Water Board.

5. Only qualified individuals meeting the requirements of CCR, Title 23, section 2715(h), including training and certification by the manufacturer (S. Bravo Systems, Inc.), are allowed to install this product.

6. Final authority to approve the use of the CONV-B2000 in a particular jurisdiction rests with the local regulatory agency. The local agency may require preapproval, permit, and/or inspection of the installation by either local agency staff or a registered professional engineer (special inspector) who has education and experience with underground storage tank system installations.

7. Per CCR, § 2636(f)(1) the UDC must be equipped with a continuous monitoring system that either activates an audible and visual alarm or stops the flow of product at the dispenser when it detects a leak. The placement of the under dispenser spill control or containment systems shall not interfere with the continuous monitoring system.

8. The CONV-B2000 shall not interfere with the capability to conduct any required secondary containment testing of the UDC or the maintenance of leak detection equipment.

9. Per CCR, § 2636(g)(3)(C), the Underground Storage Tank Program Manager may modify or revoke this approval, at any time, if there is any evidence that CONV-B2000 fails to adequately protect the soil and groundwater from unauthorized releases.

10. Each frame is only considered to be approved as long as it is manufactured, installed, retrofitted, operated, and maintained in accordance with Bravo's requirements and the State Water Board's regulations.

11. The State Water Board has not reviewed the ability of the CONV-B2000 to adequately anchor the dispenser to the surrounding concrete. This approval in no way relieves the manufacturer or qualified individual from responsibility for ensuring that the dispenser is properly secured in accordance with applicable codes, regulations, and sound engineering practice.

12. This approval is based solely on UST statutes and regulations and does not take into account other codes that may apply (i.e., fire code, building code, etc.).

Description of the CONV Retrofit Plate Kit

The CONV Retrofit Plate Kit is necessary when existing conduit prevents the CONV-B2000 from being installed per the manufacturer's specified installation instructions. The kit is comprised of a pre-abraded fiber reinforced plastic plate, Bravo adhesive-epoxy, the necessary tools to apply the adhesive-epoxy and site specific installation instructions. The kits are specific to the impediment and therefore the fiber reinforced plastic plate provided is sized accordingly. The fiber reinforce plastic plate is modified on site in a manner to cover any portions of the CONV-B2000 that had to be removed to accommodate installation. When installed properly, any release within the dispenser would be directed to the UDC without the possibility of the release escaping to the environment due to protrusions through the conversion frame.

Review Process of the CONV Retrofit Plate Kit

Pursuant to California Code of Regulations (CCR), Title 23, § 2636(g)(3), we have reviewed the application to determine whether the system adequately protects the soil and beneficial uses of groundwater. During the review process the State Water Board received and reviewed the following documents: *Bravo CONV Retrofit Plan: Plan for Control of the CONV Retrofit Plate, Installation Manual for a Bravo CONV-Retrofit-Plate*

Kit, State Registered Professional Engineer Approval letter, and the documentation included in Bravo's request for review letter dated August 12, 2012. A California registered Professional Engineer has reviewed documentation containing the CONV Retrofit Plate Kit's specifications and installation procedures and has concluded that the CONV Retrofit Plate Kit is acceptable for retrofitting the CONV-B2000 to accommodate existing conduit that protrude through concrete on the exterior of the existing UDC (See Enclosure 3).

Conditions of Approval for the CONV Retrofit Plate Kit

Based on the Professional Engineer's review and the documentation submitted, we are granting approval of the CONV Retrofit Plate Kit under the following conditions:

1. All conditions listed above for the CONV-B2000 apply and must be met.

2. Materials and procedures employed in the CONV Retrofit Plate Kit shall be identical to those indicated in the *Installation Manual for a Bravo CONV-Retrofit-Plate Kit* dated September 24, 2012.

3. This kit comes in several sizes in order to accommodate various dimensions and layouts of conduit in dispensers. Instructions for all existing and future retrofits of the CONV Retrofit Plate Kit shall be made available upon request of the State Water Board.

4. Only qualified individuals meeting the requirements of CCR, Title 23, section 2715(h), including training and certification by the manufacturer (S. Bravo Systems, Inc.), are allowed to install the CONV Retrofit Plate Kit when authorized by Bravo in an official correspondence signed by a company representative on a per qualified individual, per site and per application basis.

5. The qualified individual must use only the Bravo supplied CONV Retrofit Plate Kit components and materials tailored for that specific installation on a per site and per application basis.

6. The qualified individual must follow the *Bravo CONV Retrofit Plan: Plan for Control of the CONV Retrofit Plate* dated August 21, 2012 and any written instructions supplied by Bravo for that specific installation procedure.

If you have any questions concerning this letter, please contact Cory Hootman at (916) 341-5668 or chootman@waterboards.ca.gov.

Sincerely,

Kevin L. Graves, Manager
Underground Storage Tank Program

Enclosures: 1) Drawing of Dispenser Conversion Frame, CONV-B2000
2) Professional Engineer's Signed Statement, CONV-B2000
3) Professional Engineer's Signed Statement, CONV Retrofit Plate Kit