



Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Water Quality

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Arnold Schwarzenegger
Governor

CERTIFIED MAIL NO. 7004 1160 0002 0463 4837

April 8, 2008

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

Dear Mr. Mukai:

APPROVAL OF THE DISPENSER CONVERSION FRAME, MODEL CONV-B2000 AS AN UNDER-DISPENSER SPILL CONTAINMENT OR CONTROL SYSTEM (UDSCCS)

This letter is in response to your application for approval of the Bravo Dispenser Conversion Frame, model CONV-B2000 (CONV-B2000).

Description of the UDSCCS

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 regulations¹.

The CONV-B2000 is fabricated of epoxy powder coated 12 gage (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 Bravo, since dimensions of the new dispenser and the existing UDC determine the size and angle of the sloped weirs.

Review Process

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*

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."

CONV-B2000 product literature; *State Registered Professional Engineer Approval* letter; *Conversion Frame Specifications*; and *Bravo Conversion Frame Installation Instructions*. State Water Board staff also visited the Bravo production facility where the CONV-B2000 is manufactured. 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).

Conditions of Approval

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 Resources Control Board (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. Installers must obey all local laws, regulations, and requirements when installing the CONV-B2000.
4. The procedures (*Bravo Conversion Frame Installation Instructions*, dated 3/25/08) 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 installers 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 pre-approval, 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

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, 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 installer 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.).

If you have any questions concerning this letter, please contact Donielle Jackson at (916) 341-5863 or dijackson@waterboards.ca.gov.

Sincerely,



Kevin L. Graves, P.E.
Underground Storage Tank Program Manager

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

Bravo Systems CONV-B2000 Dispenser Conversion Frame

Water Splash for new dispenser
prevents water intrusion.
Typically 3/4" minimum height.

New Dispenser Anchor Bolt point.
These vary in number: 2-6 bolt points.

Angled Weir to drain
fuel from hydraulic
cabinet back into the
existing dispenser
sump (UDC) only.

Multiple holes
allow access to
concrete anchor bolts that
secure the conversion frame to
the dispenser island.
These vary in number: 2-8 bolt points.

Raises Dispenser to clear
sump water splash lip.
Typical height: 2 - 5"



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FEBRUARY 20, 2006

S. Bravo Systems, Inc.
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Commerce, CA 90040

**RE: STATE REGISTERED PROFESSIONAL ENGINEER APPROVAL
CCR Title 23 Division 3, Chapter 16, Section 2636(g) (2)**

BRAVO DISPENSER CONVERSION FRAME - MODEL CONV-B2000

This surface mounted dispenser anchorage frame adapts an existing installed under dispenser containment to a new dispenser.

I have examined and reviewed the following items on the Bravo Dispenser Conversion Frame:

1. Bravo catalog sheet with specifications.
2. B2000 Conversion Frame Installation Instructions.

Upon review of the materials and construction it is my opinion and conclusion that sound engineering design and engineering of the product provides an adapter that allows for the replacement of an existing dispenser leaving the existing under dispenser containment in place.

James H. Ray

James H. Ray
Civil Engineer



9-14-06