



Linda S. Adams  
Secretary for  
Environmental Protection

# Air Resources Board

Mary D. Nichols, Chairman  
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Sacramento, California 95812 • [www.arb.ca.gov](http://www.arb.ca.gov)



Arnold Schwarzenegger  
Governor

#07-01

July 18, 2007

Mr. Jean-Michel del Amo  
Regional Manager USA/Canada  
Nupi Americas, Inc.  
1511 Superior Way  
Houston, Texas 77039

Dear Mr. del Amo:

On January 20, 2007, you requested the Air Resources Board (ARB) certification for Nupi's new range of SuperSmartflex semi-rigid (SuperSmartflex) pipe for use in vapor recovery piping applications, utilizing underground storage tanks and buried vapor return piping. The SuperSmartflex has an additional layer of Polyvinylidene Difluoride (PVDF) material to meet UL 971 listing. The original Smartflex piping Approval Letter #03-12a was issued by ARB on November 24, 2003, and was superseded by Approval Letter #03-12b dated April 26, 2005. The SuperSmartflex pipes that were submitted for ARB testing were: primary 2 inch and 3 inch TSMAXP and secondary 3 inch and 5 inch TSMAXPD (see enclosure).

The SuperSmartflex pipe system consists of a high-density polyethylene (HDPE) pipe with an internal organic alloy barrier lining. A green PVDF outer layer (for primary pipe) and a green PVDF inner layer (for secondary pipe) have also been added as shown in the enclosure. Nupi pipe fittings (single and double wall) are also manufactured from HDPE organic alloy materials as well. The pipes and fittings are connected by electro-fusion welded joints and have full secondary containment – when the SuperSmartflex double wall fittings are utilized. **Note: Only the SuperSmartflex piping that comes in straight lengths as shown in the enclosure has been evaluated for use as vapor return piping.**

Pursuant to sections 25290.1.2, 41955, and 41957 of the California Health and Safety Code, the approval or determination from four state agencies are a precondition to certification by ARB. We have received the appropriate approval or determination letters from the agencies listed below.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

- Department of Food and Agriculture  
Division of Measurement Standards  
April 6, 2001
- Department of Industrial Relations  
Division of Occupational Safety and Health  
March 26, 2007
- Office of the State Fire Marshal  
Department of Forestry and Fire Protection  
June 6, 2007
- State Water Resources Control Board  
Division of Water Quality  
August 25, 2006

As required by the Vapor Recovery Certification Procedure, CP-201, the SuperSmartflex pipe system shall be installed in accordance with Section 4.12 for vapor return piping. This applies to piping used for vapor return paths from the dispenser riser to the underground storage tanks (USTs) and from the vapor vent stack riser to the USTs at gasoline dispensing facilities (GDFs).

The following list includes additional requirements and recommendations for installation of the SuperSmartflex pipe system:

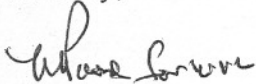
- USTs shall be manifolded together.
- No piping sold or transported in rolls (coils) shall be used.
- Inspect and verify that the proper slope is at least 1/8 inch per foot after final grade of pipe bedding has been established and prior to back-filling piping trenches. Bedding material (pea gravel or like) should be brought up to at least 50 percent and no more than 90 percent of pipe diameter prior to inspection.
- Back-pressure and liquid blockage testing are required once final grade of station has been established and all finished surfaces applied. The test shall be conducted in accordance with TP-201.4, the Dynamic Back-Pressure Test.
- Back-pressure and liquid blockage testing of the SuperSmartflex pipe system at GDFs are recommended to be performed annually in accordance with TP-201.4, the Dynamic Back-Pressure Test.

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The SuperSmartflex pipe system (single and double wall), when installed in accordance with the manufacturer's instructions and the requirements and recommendations listed above, will not adversely affect the performance of a Phase II vapor recovery system utilizing USTs and buried vapor return piping. Therefore, the SuperSmartflex piping system may be used in Phase II vapor recovery applications.

If you have any questions or need further assistance, please contact Sam Vogt at (916) 322-8922 or via email at [svogt@arb.ca.gov](mailto:svogt@arb.ca.gov), or Joe Guerrero at (916) 324-9487 or via email at [jguerrero@arb.ca.gov](mailto:jguerrero@arb.ca.gov).

Sincerely,



William V. Loscutoff, Chief  
Monitoring and Laboratory Division

Enclosure

cc: Kevin Graves  
State Water Resources Control Board

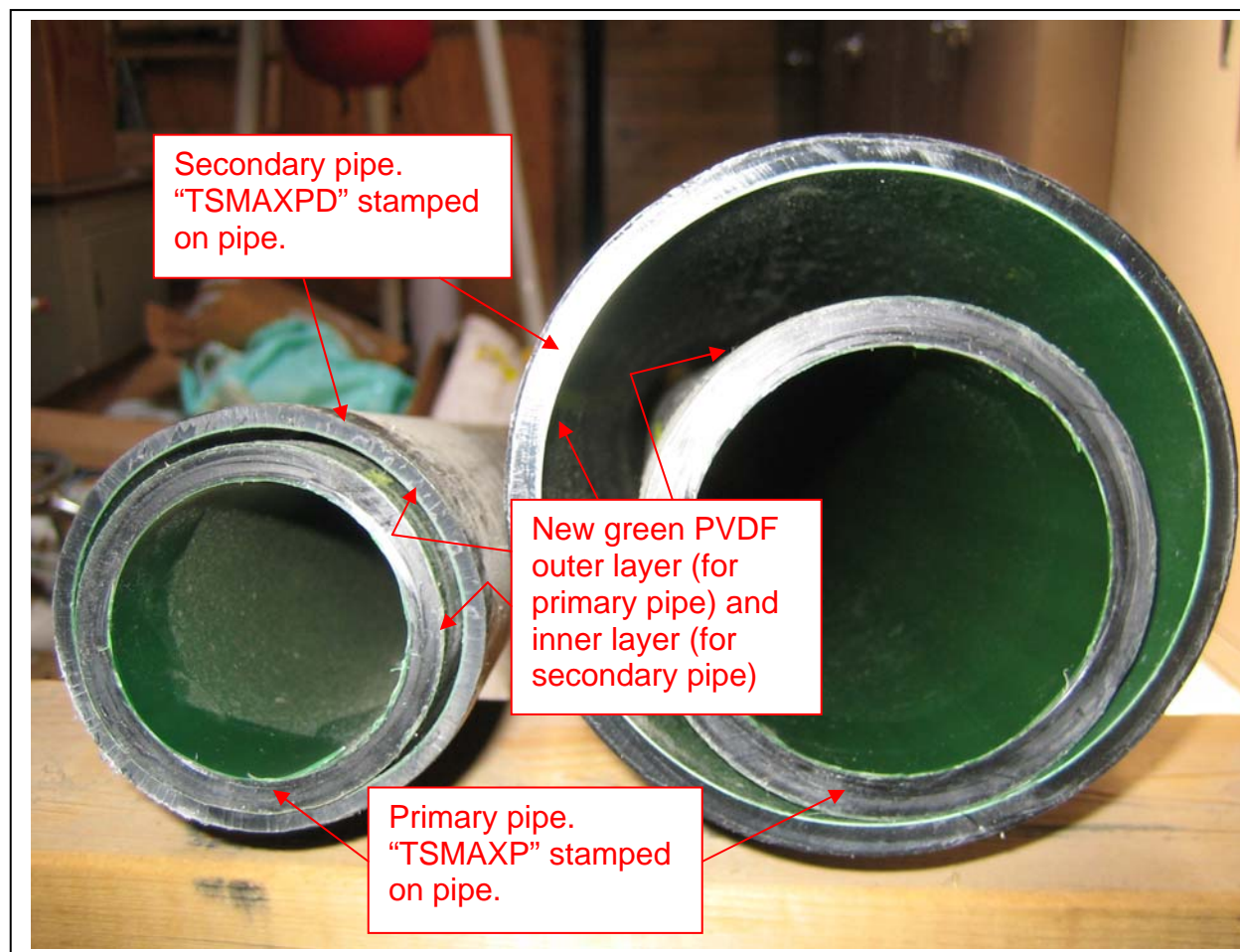
John Marvin  
Bay Area Air Quality Management District

Randy Matsuyama  
South Coast Air Quality Management District

Randy Smith  
San Diego County Air Pollution Control District

Jim Swaney  
San Joaquin Valley Air Pollution Control District

Gary Ma  
Yolo-Solano Air Quality Management District

NUPI SUPERSMARTFLEX PIPING

Stamp on Pipe	Catalog Code	O.D.	I.D.	Wall thickness
<b>TSMAXP (primary)</b>	TSMAXPD63B6	n/a <sup>^</sup>	2"	<sup>1</sup> / <sub>4</sub> "
	TSMAXPD90B6	n/a <sup>^</sup>	3"	<sup>5</sup> / <sub>16</sub> "
<b>TSMAXPD (secondary)</b>	TSMAXPD63B6 *	3"	n/a <sup>^</sup>	<sup>1</sup> / <sub>8</sub> "
	TSMAXPD90B6**	5"	n/a <sup>^</sup>	<sup>1</sup> / <sub>4</sub> "

\* 3" O.D. secondary pipe is same Catalog Code as primary 2 ½" O.D. pipe but ordered as "Double wall vapor/vent pipe, 2 ½" X 2".

\*\* 5" O.D. secondary piping is not currently listed in the catalog, but is ordered as (Double wall vapor/vent pipe, 3").

<sup>^</sup> Primary pipes are referenced and measured using I.D. while secondary pipes are referenced and measured using O.D.

**Note:** A double-wall pipe consists of a primary pipe inside a secondary pipe, while a single wall pipe consists of a primary pipe only. A primary pipe can be recognized by a green internal and external lining running the length of the pipe, while an external pipe only has a green internal lining running the length of the pipe. All pipe measurements are approximate.