

US EPA ARCHIVE DOCUMENT



September 30, 2004

Tom Driscoll
US EPA/OAQPS/EMAD/EFPAG
109 TW Alexander Drive (D243-02)
Research Triangle Park, NC 27709

Re: Response to Stage II Vapor Recovery Systems Issue Paper of August 12, 2004

Dear Tom:

I would like to share my thoughts and observations with you and the stakeholders present at the meeting held on Monday, September 20, 2004. It is very important that we understand the full effect of removing Stage II vapor recovery equipment before we attempt to find a suitable equation to define "wide spread use" of ORVR as a benchmark to start the process. Your Issue Paper reflects the wide spread public understanding of this issue by assuming that ORVR fleet penetration at some point will make Stage II redundant. This is not the case. Several years ago CARB staff was making the same assumption until further review disclosed that approximately 20% of the gasoline dispensed currently and in the foreseeable future will fuel non-ORVR vehicles and other motor driven units refueled at public service stations and other refueling locations.

If Stage II vapor recovery equipment is removed then 100% of the non-ORVR refueling vapor will be lost to the environment. Under these conditions the maximum total fleet vapor recovery efficiency when 100% of the scheduled ORVR equipped vehicles are in service will be approximately 76% based on the following simplified calculation.

$$\text{Avg. Refueling Loss} = \frac{20\% \text{ non-ORVR} \times 100 \text{ units of loss} + 80\% \text{ ORVR} \times 5\% \text{ of loss}}{100\%}$$

$$\text{Avg. Loss} = 24 \text{ units of loss}$$

$$\text{Vapor Recovery Efficiency} = \frac{100-24}{100} \times 100 = 76\%$$

This appears to me to be a major step backwards in our efforts to improve air quality.

It is recommended that current data from the US Department of Transportation and other sources be used to determine the actual distribution of gasoline to these two broad categories of motor vehicles in order to more accurately calculate the impact of dismantling Stage II systems.

A second recommendation for consideration is based on the need to compare equivalent operational characteristics for both ORVR and Stage II methods of vapor recovery. It is apparent that the *in use* vapor recovery efficiency of Stage II equipment has been considered in preparing the Issue Paper however I do not find any reference to *in use* vapor recovery efficiency for ORVR. I recommend that the EPA evaluate a selection of 1998 ORVR vehicles with high mileage, using shed test methods or their equivalent to determine the *in use* capabilities of ORVR vehicles. The "wide spread use" calculation could then be made with greater accuracy to determine the point in time when Stage II systems might be considered redundant.

Turning now to other matters related to current Stage II performance, I would like to share with you information developed by the New Hampshire Department of Environmental Services (a copy of the data spread sheet is enclosed for your reference). They have been monitoring a large percentage of the Stage II equipped GDF's to determine the extent of ground water pollution. To date their findings show that 129 GDF's of a total of approximately 300 are showing levels of MtBE that are unacceptable. The present standard for potable water is 13 parts per billion and all of the offending GDF's are well in excess of this limit. Many of these GDF's show peak levels of 100,000 parts per billion and they are with rare exception due to vapor fugitive emissions below grade. Almost all of the GDF's are assist vapor recovery systems. No ORVR compatible assist systems are on this list. Studies performed by the University of California, Davis in a report dated May 31, 2002 confirm that MtBE vapor releases are strongly associated with assist type systems.

The source of this pollution is positive pressure build- up in the ullage space of the underground storage tanks, which drives fugitive emissions to pollute the ground water and soil around the tanks. This problem is intrinsic in the design of assist systems. The assist design concept is based on the need to recapture vapor from the fill pipe of non-ORVR vehicles in equal volume to the gasoline dispensed during refueling. The system works well with these vehicles, recapturing at least 95% of the vapor displaced by the gasoline. However when refueling an ORVR vehicle there are no vapors to recapture in the vehicle's fill pipe and therefore the system recaptures essentially pure air in equal volume to the gasoline delivered and returns it the underground tank vapor space. The air returned to the underground tank will dilute the hydrocarbon concentration in the ullage space, thus promoting the evaporation of gasoline to re-establish the hydrocarbon equilibrium. Since the vapor space is already fully occupied with an air vapor mixture at atmospheric pressure the additional volume of gasoline vapor due to evaporation causes the pressure to rise. It is not uncommon to see pressure levels of +3" W.C. when the underground tanks and associated vapor piping are tight. Under these conditions vapor is lost through the pressure/vacuum vent valve to the surrounding air. If the system has large fugitive emission leaks UST pressure will not rise as much because the vapor is escaping below grade to the sub soil. It is well known in the industry that 95% to 98% of GDF's do not pass the Stage I tightness test in the "as found" condition (a copy of Stage I test results by Crompco Corp. is enclosed for your reference- note failure definition). It is very likely therefore that a service station with vacuum assist vapor recovery will be polluting the soil and ground water due to ORVR vehicle refueling.

The environmental damage does not stop at the New Hampshire border and thus represents a national concern. It is urgent therefore that the US EPA apply every effort to address this problem by requiring the use of CARB certified ORVR compatible Stage II vapor recovery equipment for new GDF's and on an accelerated schedule require retrofitting existing GDF's.

The acceptance of the new ORVR technology is damaged by the widely held belief that ORVR compatibility will cost too much. We would like the US EPA to know that there is no cost penalty for ORVR compatibility. For example, the cost of the Healy ORVR vacuum assist system is actually less than a Gilbarco Vapor-Vac or a Dresser Wayne-Vac system, neither of which is ORVR compatible. The comparison is based on a complete system including hanging hardware, installed and ready for use at the service station (a copy of our cost comparison data is enclosed for your reference).

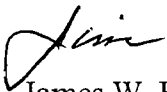
It is therefore very misleading when oil companies claim that they would be forced to spend substantially more money for the ORVR feature. I believe that manufacturers of the Balance System and the Hirt System can make the same cost effectiveness argument.

The Enhanced Vapor Recovery (EVR) program that California has been pursuing for several years has resulted in the certification of several new Stage I vapor recovery systems. These products have made a dramatic difference in the ability to maintain leak tightness over long periods of time. The service station that the Healy 900 Nozzle Systems has used to successfully complete the EVR Stage II certification for CARB includes EVR Stage I equipment. Data from our test site, covering the period from September 2002 until the present time, has recorded only one Stage I leak problem in two years. Healy Systems is proud to be the first to pass EVR Stage II testing. CARB plans to issue our certification in early November 2004.

The Healy 900 Nozzle and the Model 9942 Clean Air Separator have been added to our product line to meet the new certification requirements. The nozzle meets the EVR requirement for Spillage, Liquid Retention, Spitting and Post Refueling Drips, while the Clean Air Separator provides the necessary underground storage tank pressure control. The price increase for the Healy 900 Nozzle System is modest compared to the current 800 Nozzle System. For example a four uni-hose dispenser site would cost approximately \$7,400 more with the Model 900 nozzles and a Clean Air Separator (see enclosed Price List dated August 1, 2004).

California will require all new service stations to install EVR certified Stage I and Stage II equipment beginning in January 2005. When fully implemented this new technology will provide an additional 25 Tons/day of hydrocarbon vapor recovery statewide. If you have any questions about the material presented above please do not hesitate to contact me.

Sincerely,



James W. Healy

Enclosures

Stage II Testing Performed by Crompco Corp. Between 6/30/03 and 9/17/04

ST.	PD Tests	PD Fails	Fail %	WetB Tests	WetB Fails	Fail %	DryB Tests	DryB Fails	Fail %	A/L Tests	A/L Fails	Fail %
CT	180	34	18.9	143	5	3.5	143	3	2.1	54	22	40.7
DC	60	6	10	46	1	2.2	46	0	0	70	30	42.9
DE	115	14	12.2	50	4	8	49	0	0	106	33	31.1
FL	92	8	8.7	60	2	3.3	60	2	3.3	51	2	3.9
MA	1268	115	9.1	678	18	2.7	680	9	1.3	1029	248	24.1
MD	723	142	19.6	71	8	11.3	71	5	7	621	211	34
ME	28	5	17.9	3	1	33.3	3	0	0	24	7	29.2
NC	2	0	0	2	0	0	2	0	0	0	0	0
NH	67	8	11.9	56	1	1.8	56	1	1.8	44	15	34.1
NJ	2496	672	26.9	1533	113	7.4	1532	52	3.4	606	153	25.2
NY	914	223	24.4	731	64	8.8	732	35	4.8	279	93	33.3
OH	131	8	6.1	64	0	0	4	1	25	157	27	17.2
PA	1039	128	12.3	378	29	7.7	379	20	5.3	1019	251	24.6
RI	155	16	10.3	76	5	6.6	76	1	1.3	157	51	32.5
SC	2	0	0	0	0	0	0	0	0	0	0	0
VA	231	67	29	82	8	9.8	82	6	7.3	95	33	34.7
VT	11	0	0	1	0	0	1	0	0	1	0	0
Total	7514	1446	12.78	3974	259	6.5	3916	135	3.4	4313	1176	27.3
			avg			avg			avg			avg
Notes:												
PD failures are considered failures after all attempts have been made by the technician to repair tank fittings, dispenser fittings and hanging hardware while on-site.												
Blockage failures are underground blockage failures.												
A/L failures are considered failures even if 1 fueling point at the site fails and cannot be repaired by the technician while on site or if a fueling point is out of order at the time of the test.												
The only time A/L is considered a pass is if all fueling points are working properly at the time the test was conducted.												

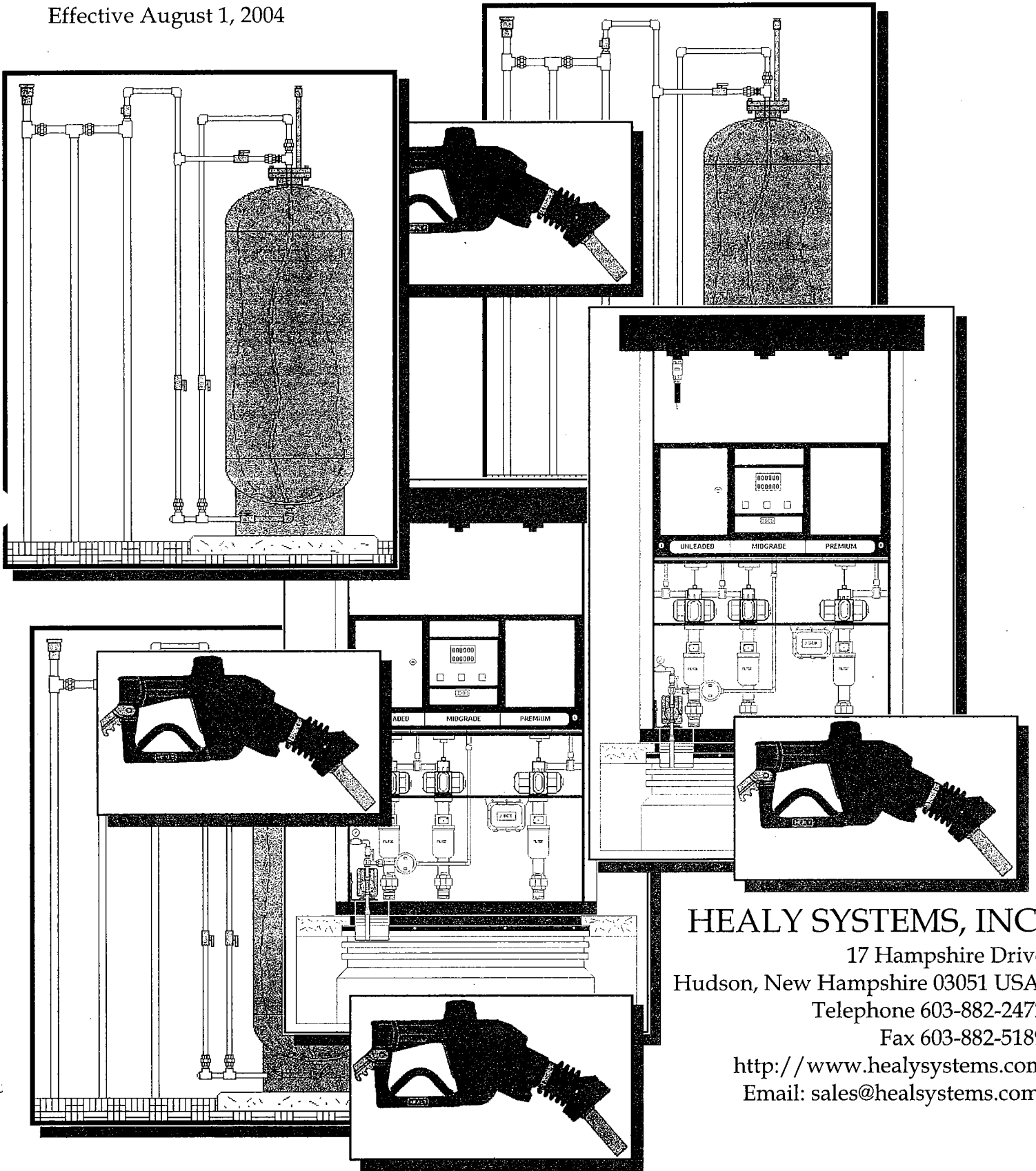
Average Multiproduct Dispenser (MPD) Conversion Cost
To Convert A Two-Hose Multiproduct Dispenser

COMPONENT	MANUFACTURER LIST PRICES				HEALY SYSTEMS
	GILBARCO	DRESSER WAYNE	DRESSER WAYNE	HEALY SYSTEMS	
	VAPORVAC NON ORVR	WAYNEVAC NON ORVR	HEALY FACTORY INSTALLED	ORVR FIELD INSTALLED	
• Vacuum Source	\$3,020	\$ 2,795	\$2,796	\$ 1,679	
• Hose Assembly, Including Breakaway, Pigtail	496	496	678	678	
• Vacuum-Assist Stage II Nozzle	480	480	583	583	
• Electrical and Vapor Installation Kits	-0-	-0-	-0-	322	
• Installation	-0-	-0-	-0-	300	
Total Dispenser Cost:	\$3,996	\$3,771	\$4,057	\$3,562	



PRICE LIST

Effective August 1, 2004



HEALY SYSTEMS, INC.

17 Hampshire Drive
Hudson, New Hampshire 03051 USA
Telephone 603-882-2472
Fax 603-882-5189
<http://www.healysystems.com>
Email: sales@healysystems.com



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TERMS AND CONDITIONS

Claims:	The responsibility of Healy Systems, Inc., ceases when goods are accepted by transportation company.
Delivery:.....	Healy Systems is not responsible for any delays in shipment or for any damage suffered by reason of such delays that are beyond Healy's control, such as fires, strikes, floods, or other contingencies.
Drop Shipment Discount:.....	Any order greater than \$1,000 list total can be drop shipped without penalty. Any order under \$1,000 list total will be drop shipped at a maximum 10% discount.
Freight:	FOB Hudson, New Hampshire. Outbound freight by UPS/Ground is prepaid on orders totaling \$3,000.00 or more net price for shipments within the Continental US. * Except Clean Air Separator. This has a flat -rate destination charge of \$139.00 to our central warehouse in Los Angeles. A Clean Air Separator will be shipped from the Los Angeles warehouse freight collect or can be picked-up by your carrier.
Minimum Order:	One hundred dollars (\$100.00) list. Line item minimum is ten dollars (10.00) list.
Payment Terms, Approved Accounts:.....	Net 30 Days. Invoices over thirty (30) days may be subject to a service charge of one and one-half percent (1-1/2%) per month.
Payment Terms, Non-Approved Accounts:.....	Prepayment of goods and freight.
Prices:	The possession of this price list by any person is not to be construed as an offer to sell the goods listed herein at prices stated.
Product Information:.....	Prices subject to change without notice. Specifications subject to change without notice. Not responsible for incorrect information contained within price list. Contact Healy Systems, Inc., for specific CARB and UL approval information. Protected under US Patents No. 4,056,131; 4,057,086, 4,095,626, 4,336,830; 4,343,337, and 5,327,944, as well as foreign patents and patents in process.
Rebuilt Nozzle Program:	Healy warrants rebuilt nozzle workmanship and materials to be free of defects for a period of 14 months from the date of shipment from Healy. Exclusions: This warranty excludes the field replaceable "rubber/plastic" parts at the front of the nozzle (i.e., boot, scuffguard, face seal assembly, etc.) or the spout or parts that have been subjected to misuse, handling or incorrect installation. <i>Cores must be returned no later than sixty days after issue of RMA number or the RMA will be canceled.</i>
Returned Goods:.....	Resalable material of standard manufacture must not be returned to Healy without first receiving written permission. Products accepted for return must be in first class condition, resalable as new, and shipping charges prepaid. Minimum handling charge is twenty percent (20%) deducted from price paid by distributor or current price, whichever is lower.

PRODUCT CERTIFICATION & APPROVAL GUIDE

<u>Product</u>	<u>CARB Certified For Use With</u>	<u>CARB Executive Order No.</u>
<u>Underground Sites</u>		
VP500 Vane Pump Central Vacuum Source	600 Bootless Nozzle/6280A System Monitor	G-70-165
2000 Blower Central Vacuum Source.....	600 Bootless Nozzle/6280A System Monitor	G-70-165
9000 Mini-Jet Central Vacuum Source	600 Bootless Nozzle/6280A System Monitor	G-70-165
VP500 Vane Pump Central Vacuum Source	400 ORVR Nozzle/6280A System Monitor	G-70-186
9000 Mini-Jet Central Vacuum Source	400 ORVR Nozzle/6280A System Monitor	G-70-186
VP1000 Dispenser-Mounted Vacuum Source.....	600 Bootless Nozzle	G-70-183-AA
VP1000 Dispenser-Mounted Vacuum Source.....	800 ORVR Nozzle	G-70-191-AA
VP1000 EVR Dispenser-Mounted Vacuum Source.....	900 EVR Nozzle with Clean Air Separator	Pending
VP1200 Dispenser-Mounted Vacuum Source.....	International Approvals	
<u>Aboveground Sites</u>		
100 Jet Pump Central Vacuum Source	400 ORVR Nozzle/6280A System Monitor	G-70-187
9000-Mini-Jet Central Vacuum Source.....	400 ORVR Nozzle/6280A System Monitor	G-70-187
VP500 Vane Pump Central Vacuum Source	400 ORVR Nozzle/6280A System Monitor	G-70-187
VP1200 Dispenser-Mounted Vacuum Source.....	International Approvals	



STAGE II VAPOR RECOVERY NOZZLES

Nozzles are supplied with black scuffguards unless otherwise specified.

To order a nozzle with a scuffguard color other than black, replace "X" with appropriate code:

X =	<u>Blue</u> BL	<u>Gold</u> GD	<u>Green</u> G	<u>Red</u> R	<u>Silver</u> SL	<u>White</u> W	<u>Yellow</u> Y
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800 SERIES ORVR-COMPATIBLE NOZZLE

Part No.	Description	Price
800-02G3 FS.....	ORVR-Compatible, Unleaded, Full Service, with Black (or "G3X" for color) Scuffguard (New)	\$298.00
800-02G3 RFS.....	ORVR-Compatible, Unleaded, Full Service, with Black (or "G3X" for color) Scuffguard (Rebuilt)	\$298.00
800-02G3 SS.....	ORVR-Compatible, Unleaded, Self Service, with Black (or "G3X" for color) Scuffguard (New)	\$298.00
800-02G3 RSS.....	ORVR-Compatible, Unleaded, Self Service, with Black (or "G3X" for color) Scuffguard (Rebuilt)	\$298.00
800 Core.....	800 Nozzle Core Credit (for core in reusable condition for rebuild)	\$45.00
6358.....	800 Nozzle Handguard (order Z057 for mounting hardware)	\$7.80
469.....	800 Nozzle Handle Cover	\$5.75
Z057.....	800 Nozzle Hold-Open Clip Kit, Including: (1) 6238 Hold-Open Clip, (1) 239-L Rear Guard Rivet, (1) 6249 Spring, (1) 6130-4 Lever Assembly, (1) 240-SS Pal Nut, (1) 219 Front Guard Rivet	\$8.85
235-C.....	800 Nozzle Lever Cover	\$2.20
640956.....	800 Nozzle Mini-Boot Clamp Only	\$2.20
279A.....	800 Nozzle Mini-Boot Face Seal Assembly With Wire	\$21.85
6395A.....	800 Nozzle Mini-Boot with Face Seal, No Clamp	\$49.40
6408.....	800 Nozzle Scuffguard, Black	\$9.90
6408BL.....	800 Nozzle Scuffguard, Blue	\$9.90
6408GD.....	800 Nozzle Scuffguard, Gold	\$9.90
6408G.....	800 Nozzle Scuffguard, Green	\$9.90
6408R.....	800 Nozzle Scuffguard, Red	\$9.90
6408SL.....	800 Nozzle Scuffguard, Silver	\$9.90
6408W.....	800 Nozzle Scuffguard, White	\$9.90
6408Y.....	800 Nozzle Scuffguard, Yellow	\$9.90
8014.....	800 Nozzle Spout Assembly, Unleaded, Including 6102A Spout Screw and 6206-OR O-Ring Kit	\$41.60
6206-OR.....	800 Nozzle Spout O-Ring Kit (Includes 414-1 O-Ring, HB-2 O-Ring and 6221 O-Ring)	\$3.40

600 SERIES BOOTLESS NOZZLE

Part No.	Description	Price
600-02G3 FS.....	Bootless, Unleaded, Full Service, with Black (or "G3X" for Color) Scuffguard (New)	\$291.50
600-02G3 RFS.....	Bootless, Unleaded, Full Service, with Black (or "G3X" for Color) Scuffguard (Rebuilt)	\$291.50
600-02G3 SS.....	Bootless, Unleaded, Self Service, with Black (or "G3X" for Color) Scuffguard (New)	\$291.50
600-02G3 RSS.....	Bootless, Unleaded, Self Service, with Black (or "G3X" for Color) Scuffguard (Rebuilt)	\$291.50
600 Core.....	600 Nozzle Core Credit (For Core In Reusable Condition for Rebuild)	\$45.00
6358.....	600 Nozzle Handguard (Order Z057 for Mounting Hardware)	\$7.80
469.....	600 Nozzle Handle Cover	\$5.75
Z057.....	600 Nozzle Hold-Open Clip Kit, Including: (1) 6238 Hold-Open Clip; (1) 239-L Rear Guard Rivet; (1) 249 Spring; (1) 6130-4 Lever Assembly; (1) 240-SS Pal Nut; (1) 219 Front Guard Rivet	\$8.85
235-C.....	600 Nozzle Lever Cover	\$2.20
6030.....	600 Nozzle Scuffguard, Black	\$8.85
6030BL.....	600 Nozzle Scuffguard, Blue	\$8.85
6030GD.....	600 Nozzle Scuffguard, Gold	\$8.85
6030G.....	600 Nozzle Scuffguard, Green	\$8.85
6030R.....	600 Nozzle Scuffguard, Red	\$8.85
6030SL.....	600 Nozzle Scuffguard, Silver	\$8.85
6030W.....	600 Nozzle Scuffguard, White	\$8.85
6030Y.....	600 Nozzle Scuffguard, Yellow	\$8.85
6206-G4.....	600 Nozzle Spout Assembly, Unleaded, Including (1) 6102A Spout Screw and (1) 6206-OR O-Ring Kit	\$62.40
6206-OR.....	600 Nozzle Spout O-Ring Kit (Includes (1) 414-1 O-Ring, (1) HB-2 O-Ring and (1) 6221 O-Ring)	\$3.40
6119.....	600 Nozzle Vaporguard Clamp Only	\$2.20
6118.....	600 Nozzle Vaporguard, Black, No Clamp	\$8.85
6118-1.....	600 Nozzle Vaporguard, Clear, No Clamp	\$8.85



400 SERIES ORVR-COMPATIBLE NOZZLE

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
400-04 FS	ORVR-Compatible, Unleaded, Full Service, with Black (or "-04X" for Color) Scuffguard (New)	\$275.60
400-04 RFS	ORVR-Compatible, Unleaded, Full Service, with Black (or "-04X" for Color) Scuffguard (Rebuilt)	\$275.60
400-04 SS	ORVR-Compatible, Unleaded, Self Service, with Black (or "-04X" for Color) Scuffguard (New)	\$275.60
400-04 RSS	ORVR-Compatible, Unleaded, Self Service, with Black (or "-04X" for Color) Scuffguard (Rebuilt)	\$275.60
400 Core	400 Core Credit (for core in reusable condition for rebuild)	\$25.00
408-2A	400 Nozzle Spout Assembly, Unleaded	\$41.60
408-OR	400 Nozzle Spout O-Ring Kit (Includes 414-1 O-Ring and HB-2 O-Ring)	\$2.90
289	400 Nozzle Stem Seal Assembly (The Only Field Replaceable Internal Nozzle Component)	\$5.75
409	400 Nozzle Boot Assembly, No Clamp	\$54.60
425	400 Nozzle Boot Clamp	\$2.20
279A	400 Nozzle Boot Face Seal Assembly With Wire	\$21.85
453	400 Nozzle Boot Only, No Clamp or Face Seal	\$30.65
283	400 Nozzle Face Seal Wire	\$0.60
6358	400 Nozzle Handguard (order Z057 for mounting hardware)	\$7.80
469	400 Nozzle Handle Cover	\$5.75
Z057	400 Nozzle Hold-Open Clip Kit, Including: (1) 6238 Hold-Open Clip, (1) 239-L Rear Guard Rivet, (1) 6249 Spring, (1) 6130-4 Lever Assembly, (1) 240-SS Pal Nut, (1) 219 Front Guard Rivet	\$8.85
235-C	400 Nozzle Lever Cover	\$2.20
468	400 Nozzle Scuffguard, Black	\$8.85
468BL	400 Nozzle Scuffguard, Blue	\$8.85
468GD	400 Nozzle Scuffguard, Gold	\$8.85
468G	400 Nozzle Scuffguard, Green	\$8.85
468R	400 Nozzle Scuffguard, Red	\$8.85
468SL	400 Nozzle Scuffguard, Silver	\$8.85
468W	400 Nozzle Scuffguard, White	\$8.85
468Y	400 Nozzle Scuffguard, Yellow	Special Order



75B SERIES 3/4" STANDARD HEALY HOSE

Healy Straight Thread (S2) Swivels at Nozzle and Breakaway Ends

*Hose is Supplied in Black (75B) Unless Otherwise Specified; Contact Healy Systems for Pricing and Availability of Custom Colors
Healy Hoses are Approved by CARB for Up to 15-Foot Overall Assembly (Including Breakaway and Pigtail) Lengths*

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
75B-040-S2S2	.....04.0' Standard Healy Coaxial Hose, Black	\$103.00
75B-045-S2S2	.....04.5' Standard Healy Coaxial Hose, Black	\$106.50
75B-050-S2S2	.....05.0' Standard Healy Coaxial Hose, Black	\$109.50
75B-055-S2S2	.....05.5' Standard Healy Coaxial Hose, Black	\$112.50
75B-060-S2S2	.....06.0' Standard Healy Coaxial Hose, Black	\$116.00
75B-065-S2S2	.....06.5' Standard Healy Coaxial Hose, Black	\$119.50
75B-070-S2S2	.....07.0' Standard Healy Coaxial Hose, Black	\$123.00
75B-075-S2S2	.....07.5' Standard Healy Coaxial Hose, Black	\$126.00
75B-080-S2S2	.....08.0' Standard Healy Coaxial Hose, Black	\$129.00
75B-085-S2S2	.....08.5' Standard Healy Coaxial Hose, Black	\$132.50
75B-090-S2S2	.....09.0' Standard Healy Coaxial Hose, Black	\$135.50
75B-095-S2S2	.....09.5' Standard Healy Coaxial Hose, Black	\$139.00
75B-100-S2S2	.....10.0' Standard Healy Coaxial Hose, Black	\$142.00
75B-105-S2S2	.....10.5' Standard Healy Coaxial Hose, Black	\$146.00
75B-110-S2S2	.....11.0' Standard Healy Coaxial Hose, Black	\$149.00
75B-115-S2S2	.....11.5' Standard Healy Coaxial Hose, Black	\$152.00
75B-120-S2S2	.....12.0' Standard Healy Coaxial Hose, Black	\$155.00
75B-125-S2S2	.....12.5' Standard Healy Coaxial Hose, Black	\$159.00
75B-130-S2S2	.....13.0' Standard Healy Coaxial Hose, Black	\$162.00
75B-135-S2S2	.....13.5' Standard Healy Coaxial Hose, Black	\$165.00

PIGTAILS FOR USE WITH STANDARD HEALY HOSE

F2 = Fixed End (F) with Healy Straight Thread (2)

F3 = Fixed End (F) with Metric Thread (3)

S2 = Swivel End (S) with Healy Straight Thread (2)

S4 = Swivel End (S) with Balance-Type Thread (4)

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
75B-008-F2F2	.....Straight Thread Fixed Ends on Breakaway and Dispenser Ends	\$54.00
75B-008-F3F2	.....Straight Thread Fixed End on Breakaway End; Metric Thread on Dispenser End	\$54.00
75B-008-S2F2	.....Fixed End on Breakaway or Dispenser End; Swivel on Nozzle (O-Ring) End	\$61.50
75B-010-S4F2	.....Balance-Type, Swivel on Dispenser End and Fixed Thread of Breakaway End	\$86.50

75B SERIES COAXIAL HOSE ADAPTERS

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
CX6-A	.....Non-Vapor-Ready Standard (Low Hose) Units	\$35.50
CX6-VV2A	.....Balance-Vapor-Ready Dispensers (Obsolete Use 75B-010-S4F2 Pigtail as Replacement)	N/A
CX6-VV3A	.....Non-Vapor-Ready Multiproduct (High Hose) Units	\$69.00
565A	.....Hose Adapter Upgrade Kit (To Convert "Non-A" Hose Adapter To "A" Version)	\$3.40
740	.....Hose Thread Adapter, Healy Straight (Female) Thread to Healy Pipe (Male) Thread	\$32.00
609	.....Hose Thread Adapter, Metric (Male) to Healy Straight (Female) Thread	\$32.00



75B SERIES 3/4" HEALY HOSE FOR BALANCE-READY DISPENSERS

Healy Straight Thread (S2) Swivel at Nozzle and Balance Thread (S4) at Breakaway Ends

Hose is Supplied in Black (75B) Unless Otherwise Specified; Contact Healy Systems for Pricing and Availability of Custom Colors

Healy Hoses are Approved by CARB for Up to 15-Foot Overall Assembly (Including Breakaway and Pigtail) Lengths

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
75B-085-S4F2	08.5' Balance-Ready Dispenser Coaxial Hose, Black	\$148.50
75B-090-S4F2	09.0' Balance-Ready Dispenser Coaxial Hose, Black	\$151.00
75B-095-S4F2	09.5' Balance-Ready Dispenser Coaxial Hose, Black	\$154.00
75B-100-S4F2	10.0' Balance-Ready Dispenser Coaxial Hose, Black	\$157.50
75B-105-S4F2	10.5' Balance-Ready Dispenser Coaxial Hose, Black	\$161.00
75B-110-S4F2	11.0' Balance-Ready Dispenser Coaxial Hose, Black	\$164.00
75B-115-S4F2	11.5' Balance-Ready Dispenser Coaxial Hose, Black	\$167.00
75B-120-S4F2	12.0' Balance-Ready Dispenser Coaxial Hose, Black	\$171.00
75B-125-S4F2	12.5' Balance-Ready Dispenser Coaxial Hose, Black	\$174.00
75B-130-S4F2	13.0' Balance-Ready Dispenser Coaxial Hose, Black	\$177.00
75B-135-S4F2	13.5' Balance-Ready Dispenser Coaxial Hose, Black	\$180.50

BREAKAWAYS FOR USE WITH STANDARD AND BALANCE-READY DISPENSER HOSE

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
807	Breakaway, Swivel-Type**, for Standard and Balance-Type Hose	\$174.00
8701VV	Breakaway, 350-Lb. Strength, With Vapor Path Shut Off, for Standard Hose Only	\$113.50
715VV	Repair Kit for 8701VV Breakaway	\$29.65
716	Shear Screw, Brass	\$4.45
761	Scuffguard, Nozzle End for 8701VV Breakaway	\$4.45
762	Scuffguard, Dispenser End for 8701VV Breakaway	\$4.45
787	Shear Screw, Nickel-Plated Brass	\$4.45
795	Clamp Repair Tool for 8701VV Breakaway	\$131.50
Z055	O-Ring Kit (for 8701VV with Nickel-Plated Shear Screw)	\$7.00

HOSE ACCESSORIES AND SPARE PARTS

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
Z056	Hose-End Seal Kit, Including: (4) 291 O-Ring, (4) HB-4 Quad Seal, (2) 75414 O-Ring	\$10.95
HB-4	Hose-End Quad Ring	\$1.85
HB-2	Hose-End O-Ring, Large	\$1.30
516	Hose-End O-Ring, Large, for S4 Hose End	\$1.30
1301	Hose Flow Limiter, for Installation Between Dispenser and Hose	\$42.00
8103	Hose Clamp	\$7.80

**CARB Approvals Have Been Received For Healy's "Balance-Type" Dispenser Hose
And For Healy's 807 Swivel-Type Breakaway



DISPENSER RETROFIT KITS

Hose Adapters Are Not Included In Retrofit Kits

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
Z008	Standard (Low Hose), for Single-Hose Dispenser	\$75.00
Z009	Standard (Low Hose), for Dual-Hose Dispenser	\$112.50
Z044	Universal, for Six-Hose Multiproduct Dispenser	\$251.50
Z046	Universal, for Four-Hose Multiproduct Dispenser	\$191.50
Z047	Universal, for Two-Hose Multiproduct Dispenser	\$109.50

6280A SYSTEM MONITOR

Use With Central Vacuum Source Systems Only

Required When Station Monthly Throughput Is More Than 10,000 Gallons

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
6280A	System Monitor Assembly, Including: (1) 6280 System Monitor, (1) 6275 Vent Sensor, (1) HPVV Vacuum Vent Valve, (1) SMCB Control Box, (1) 9800-1 Pressure Switch, (1) HPV1.5 Pressure Vent Valve, (1) 9466 1" Check Valve	\$2,797.50
6280 Core	Reusable Monitor Core Credit (for core in reusable condition for rebuild)	\$262.50
1005W	Control Box STP-Sensing Relay, 3 Product Input	\$82.20
1005W-4	Control Box STP-Sensing Relay, 4 Product Input	\$82.20
6275	Vent Sensor Assembly	\$459.00
62755	Vent Sensor Assembly Pressure Switch for 6280A	\$207.50
6280	Monitor Only	\$1,622.00
628021	Control Box Power Supply, 12 VDC, 1.5 A	\$35.40
628028	Printer Paper Roll	\$2.20
628029	Printer Ribbon Cartridge	\$7.80
6299	Intrinsically Safe Module (Optional), for Use with Direct Burial Low Voltage Cable	\$339.00
9308	Back Pressure Condensate Drain Check Valve, 3/4" (For International Use)	\$109.50
9466	Back Pressure Condensate Drain Check Valve, 1" (For USA Use)	\$109.50
9800-1	Pressure Switch (Replaces 93928 Pressure Switch)	\$194.50
CB1A	Control Box Relay-with-Socket Kit	\$27.60
HPV1.5	Pressure Vent Valve, +1.5" WC Pressure	\$93.50
HPVV	Vacuum Vent Valve, +3" WC Pressure, -8" Vacuum	\$93.50
R6280	Rebuilt System Monitor Only (With Reusable-Core Return)	\$1,359.50
SMCB	Control Box Only, With Healy 1005W Solid State Relay	\$225.50
SMCB-1	Control Box Only, Without Healy 1005W Solid State Relay	\$160.00

SYSTEM TEST EQUIPMENT

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
2302A	Gage Kit, 1-0-1" Water Column Magnehelic	\$131.50
6059	Spout Adapter, Air/Liquid (A/L) Ratio Test (For Use With 600 Series Nozzle Only)	\$107.50
8034-1	Sleeve, Air/Liquid (A/L) Ratio Test (For Use With 800 Series Nozzle Only)	\$107.50
939349A	Gage Kit, 0-100" Water Column	\$131.50
TG707	Gage Kit, Tank Correction (Obsolete)	N/A
Z076	Roots Meter Package, 600 Series Nozzle, Includes: (1) Dresser Roots Vapor Recovery Meter, (1) Flange Kit, (1) 1-1/2 NPT x 1/2 NPT Reducer, (2) 1/2 NPT x 3/4 Hose Barb Fitting, (1) 6.0' x 3/4" Tygon Hose, (1) 600 Series Nozzle Spout Adapter	\$4,031.00
Z077	Roots Meter Package, 800 ORVR Series Nozzle, Includes: (1) Dresser Roots Vapor Recovery Meter, (1) Flange Kit, (1) 1-1/2 NPT x 1/2 NPT Reducer, (2) 1/2 NPT x 3/4 Hose Barb Fitting, (1) 6.0' x 3/4" Tygon Hose, (1) 800 ORVR Series Nozzle Spout Adapter	\$4,031.00



VP1000 SERIES DISPENSER-MOUNTED VACUUM SOURCE

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
VP1000A	For Use With 120 VAC Solenoid Dispensers Only; Use If a Dispenser-Specific VP1000 Version is Not Shown Below (VP1000D-K); Includes 1360A Dispenser Interface Module Assembly and 1404 Universal Mounting Kit Assembly	\$1,678.50
VP1000B	For Use with Electronic Blender Dispensers Only; Use If a Dispenser-Specific VP1000 Version is Not Shown Below (VP1000D-K); Includes 1360A Dispenser Interface Module Assembly and 1404 Universal Mounting Kit	\$1,678.50
VP1000C	Wayne Ovation and 3 Vista Series Dispensers Only (Includes 1365A Dispenser Interface Wiring Harness Assembly and 1404 Universal Mounting Kit)	\$1,751.50
VP1000D	Gilbarco 300 Blender Dispensers Only (Includes MC100 Module, 1368A Dispenser Interface Module/Wiring Harness Assembly and 1404 Universal Mounting Kit)	\$1,735.50
VP1000E	International Only	Contact Healy
VP1000F	Wayne 1V and 2V Blender Dispensers Only (Includes MC100 Module, 1363A Dispenser Interface Wiring Harness Assembly and 1404 Universal Mounting Kit)	\$1,751.50
VP1000G	Wayne Vista and DL Non-Blender Dispensers Only (Includes MC100 Module, 1354A Dispenser Interface Wiring Harness Assembly and 1404 Universal Mounting Kit)	\$1,751.50
VP1000H	Tokheim Premier C Blender Dispensers with 24 VDC Solenoids Only (Includes MC100 Module, 1362A Dispenser Interface Wiring Harness Assembly and 1404 Universal Mounting Kit)	\$1,751.50
VP1000J	Tokheim Earlier-Series Blender Dispensers with AC and DC Solenoids (Includes MC100 Module, 1372A Dispenser Interface Wiring Harness Assembly and 1404 Universal Mounting Kit)	\$1,751.50
VP1000K	Gilbarco Encore 300 and 500 Series Three-Product Non-Blender Dispensers Only (Includes 1369A Dispenser Interface Wiring Harness Assembly and 1404 Universal Mounting Kit)	\$1,751.50
VP1000L	Gilbarco Encore 300 and 500 Series (Blenders and Non-Blenders) Dispensers Only with 24 VDC Solenoids NOTE: For Dispensers Manufactured after April 25, 2003 (Includes 1373A Dispenser Interface Wiring Harness Assembly and 1404 Universal Mounting Kit)	\$1,751.50
1316	Potted Conduit Assembly, 6"	\$65.00
1341A	VP1000 External Pump Housing, Stainless Steel	\$335.00
1360	Wire Harness for Use with MC100 Module (Generic)	\$17.50
1360A	1360 Wire Harness/MC100 Module Assembly	\$203.50
1362	Wire Harness for Use with Tokheim Premier C Series Blender Dispensers with 24 VDC Solenoids	\$73.50
1362A	1362 Wire Harness/MC100 Module Assembly	\$276.50
1363	Wire Harness for Use with Wayne 1V and 2V Blender Dispensers	\$73.50
1363A	1363 Wire Harness/MC100 Module Assembly	\$276.50
1365	Wire Harness for Use with Wayne Ovation and 3 Vista Series Dispensers	\$73.50
1365A	1365 Wire Harness/MC100 Module Assembly	\$276.50
1368	Wire Harness for Use with Gilbarco Encore 300 Blender Dispensers Only	\$57.50
1368A	1368 Wire Harness/MC100 Module Assembly	\$260.50
1369	Wire Harness for Use with Gilbarco Encore 300 Non-Blender Dispensers Only	\$73.50
1369A	Wiring Harness/RCS120A-4222D Assembly	\$274.50
1372	Wire Harness for Use with Earlier-Version Tokheim Blender Dispensers with Both AC and DC Solenoid Valves	\$73.50
1372A	1372 Wire Harness/MC100 Module Assembly	\$266.50
1373	Wire Harness for Use with Gilbarco Encore 300 & 500 Series (Blenders and Non-Blenders) Dispensers with 24 VDC Solenoid Valves	\$73.50
1373A	1373 Wire Harness/MC100 Module Assembly	\$276.50
1404	Universal Mounting Kit	\$170.50
MC100	Universal Interface Module for All Dispensers, Dual Voltage Control with Delay	\$203.50
VP1000-5	Vacuum Pump Only	\$1,304.50
VP1000-5 Core	VP1000-5 Core Credit (for core in reusable condition for rebuild)	\$350.00
RVP1000W	Replacement Wire Harness, 84", Installed on Usable VP1000-5	\$179.00
VP1000VRC	Vane and Rotor Replacement Kit for VP1000 Only (Includes Vanes, Rotor, Shaft Key, Cover O-Ring, And White Washer)	\$160.00
Z070E	Electrical Installation Kit for VP1000 Series Vacuum Source	\$210.50
Z071V	Vapor Piping Installation Kit for VP1000 Series Vacuum Source	\$111.50



ENHANCED VAPOR RECOVERY (EVR) EQUIPMENT

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
9942	Clean Air Separator*	\$6,900.00
900-EVR FS	EVR-Compatible, Unleaded, Full Service, with Black (or "EVRX" for color) Scuffguard (New)	\$360.00
900-EVR RFS	EVR-Compatible, Unleaded, Full Service, with Black (or "EVRX" for color) Scuffguard (Rebuilt)	\$360.00
900-EVR SS	EVR-Compatible, Unleaded, Self Service, with Black (or "EVRX" for color) Scuffguard (New)	\$360.00
900-EVR RSS	EVR-Compatible, Unleaded, Self Service, with Black (or "EVRX" for color) Scuffguard (Rebuilt)	\$360.00
900 Core	900 EVR Nozzle Core Credit (for core in reusable condition for rebuild)	\$45.00
800S-RS	800 Unleaded, Full Service, Rebuilt as a 900S -EVR RFS, with Black Scuffguard (Rebuilt)	\$360.00
800 Core	800 Nozzle Core Credit (for core in reusable condition for rebuild)	\$45.00
800S Core	800S Nozzle Core Credit (for core in reusable condition for rebuild)	\$45.00
8155	800S Drip-less Nozzle Spout Assembly, Including 6102A Spout Screw and 6206-OR O-Ring Kit	\$68.20
6408	800 Nozzle Scuffguard, Black	\$9.90
6408BL	800 Nozzle Scuffguard, Blue	\$9.90
6408GD	800 Nozzle Scuffguard, Gold	\$9.90
6408G	800 Nozzle Scuffguard, Green	\$9.90
6408R	800 Nozzle Scuffguard, Red	\$9.90
6408SL	800 Nozzle Scuffguard, Silver	\$9.90
6408W	800 Nozzle Scuffguard, White	\$9.90
6408Y	800 Nozzle Scuffguard, Yellow	\$9.90
6395B	800S Nozzle Mini-Boot with Face Seal, No Clamp	\$59.40

* Refer to Freight Policy on Page 3

VP1200 SERIES SELF-CONTAINED DISPENSER-MOUNTED VACUUM SOURCE

Primarily for use in international markets; contact Healy Systems for more information.

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
VP1200-1	Self-Contained Suction Pump-Mounted Assembly	\$546.00
VP1200-3	Self-Contained Suction Pump-Mounted Assembly with Flame Arrestors	\$628.50
VP1200VR	Vane and Rotor Replacement Kit	\$154.00

9000 SERIES MINI-JET CENTRAL VACUUM SOURCE

*All Central Vacuum Source Installations Require Use of the Healy 6280A System Monitor Assembly
Central Vacuum Sources Are Not Available for Sale for New Sites in California*

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
9000-02	Mini-Jet, Non-Electric, With Syphon	\$1,327.50
912A	Check Valve Strainer Assembly	\$48.00
940	Regulator Only	\$145.00
940A	Vacuum Regulator Upgrade Kit	\$151.00

VP500 SERIES VANE PUMP CENTRAL VACUUM SOURCE

*All Central Vacuum Source Installations Require Use of the Healy 6280A System Monitor Assembly
Central Vacuum Sources Are Not Available for Sale for New Sites in California*

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
VP500C/1	One Cabinet-Mounted Vane Pump. Capacity: Ten Fueling Positions or a Typical Site With Five Nozzles In Simultaneous Full-Flow Operation. Includes 9800-1 Pressure Switch	\$2,583.00
VP500C/2	Two Cabinet-Mounted Vane Pumps. Capacity: Twenty Fueling Positions or a Typical Site With Ten Nozzles In Simultaneous Full-Flow Operation. Includes 9800-1 Pressure Switch	\$4,346.50
VP500B	Vane Pump On Base with U-Bolts and Angle Bracket Mounting, Replacement Only. Capacity: Ten Fueling Positions or a Typical Site With Five Nozzles In Simultaneous Full-Flow Operation	\$1,393.00
9214	Flame Arrestor	\$41.60
VP500	Vane Pump with Regulator and Flame Arrestor Assembly, Replacement	\$1,338.00
VP500VR-3	Vane and Rotor Replacement Kit (Pin Drive)	\$545.00



2000 SERIES BLOWER CENTRAL VACUUM SOURCE

All Central Vacuum Source Installations Require Use of the Healy 6280A System Monitor Assembly

Central Vacuum Sources Are Not Available for Sale for New Sites in California

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
2000C.....	2000 Blower, One Cabinet-Mounted Blower; Capacity: Eighteen Fueling Positions or a Typical Site With Nine Nozzles In Simultaneous Full-Flow Operation. Includes 9800-1 Pressure Switch.....	\$4,128.00
S-5.....	O-Ring for 9214 Flame Arrestor.....	\$2.20
2000.....	Blower Only, Replacement.....	\$2,634.50
9214.....	Flame Arrestor.....	\$41.60

100 JET PUMP CENTRAL VACUUM SOURCE

All Central Vacuum Source Installations Require Use of the Healy 6280A System Monitor Assembly

Central Vacuum Sources Are Not Available for Sale for New Sites in California

<u>Part No.</u>	<u>Description</u>	<u>Price</u>
100.....	100 Jet Pump (Two Required for Each Hose).....	\$213.50
1005W.....	STP-Sensing Relay, 3 Product Input.....	\$82.20
1258A.....	Relief Valve Assembly.....	\$32.80
131.....	Diaphragm Assembly.....	\$17.70
930.....	O-Ring.....	\$3.40
973.....	Syphon.....	\$104.00

NOTES

Area containing horizontal lines for handwritten notes.



HEALY SYSTEMS LIMITED WARRANTY

Healy Systems Inc., products are warranted for workmanship, performance, and materials when properly installed, used and maintained. All Healy products, subassemblies, and raw materials are fully inspected and tested at the manufacturing facility. Healy warrants the workmanship and materials to be free of defects for a period in accordance with the provisions stated below:

- The equipment has been installed according to the manufacturer's instructions and diagrams.
- The nearest Healy Authorized Service Representative qualified to perform service on the defective equipment must perform warranty service. Only Authorized Service Representatives are allowed to perform warranty service. Use of service personnel other than qualified Healy Service Representatives without prior written approval by Healy Systems Inc. will void the warranty.
- Claims for warranty repair or replacement service must have a written "Returned Material Authorization" (RMA) from Healy Systems, and must be shipped freight prepaid to Healy Systems for inspection.
- Healy Systems Inc., upon inspection at its facilities, and after determination of a warranty claim, will, at its option, repair or replace defective parts returned to its factory. Repaired or replaced parts will be returned freight prepaid by Healy Systems.
- Healy Systems is not responsible for labor or materials necessary to disconnect or connect the warranted product for return to Healy.
- Healy reserves the right to make changes in the design or to make additions or improvements with respect to its products without incurring any obligation to modify or install same on previously manufactured products.
- Healy warrants the workmanship and materials of the following products to be free of defects for a period of fourteen months from the date of shipment from Healy: hoses (including breakaway and pigtail); 9000 Mini-Jet, VP500 Vane Pump, 2000 Blower, Type 100 Jet Pump, VP1200 Vacuum Source; System Accessories; and Upgrade Kits and Retrofit Kits.
- Nozzles - New & Rebuilt: Healy warrants the workmanship and materials to be free of defects for a period of fourteen months from the date of shipment from Healy. Exclusions: This warranty excludes the field replaceable "rubber/plastic" parts at the front of the nozzle (i.e., boot, scuffguard, face seal assembly, etc.) or the spout or parts that have been subjected to misuse, handling or incorrect installation.
- Dispenser Mounted Vacuum Source - VP1000: Healy warrants the workmanship and materials to be free of defects for a period of twenty-six months from the date of shipment from Healy. This applies to the vacuum pump and motor assembly only. The Mounting Hardware and the Interface module are warranted for workmanship and materials to be free of defects for a period of fourteen months from the date of shipment from Healy.
- Vapor Recovery System Monitor - 6280A: Healy warrants the workmanship and materials to be free of defects for a period of fourteen months from the date of shipment from Healy. Exclusions: Consumable items such as printer ribbons and paper are not warranted. The use of a consumable item not specified by Healy will void the warranty.
- Spare Parts: Healy warrants the workmanship and materials to be free of defects for a period of ninety days from the date of shipment from Healy.
- General Exclusions: This warranty shall not apply to any product which has been altered in any way, which has been repaired by any party other than an authorized Healy Systems Service Representative, or when such failure is due to misuse or conditions of use. Use of non-Healy replacement parts, the unauthorized addition of non-Healy items to Healy equipment, and the unauthorized alteration of Healy equipment void this warranty. Healy shall, as to each defect, be relieved of all obligations and liabilities under a components warranty if the vapor recovery system or components shall have been operated with any accessory, equipment, or a part not specifically approved by Healy and not manufactured by Healy to Healy's design and specifications. Provided, that this provision shall not apply to any accessory equipment or part in use which does not affect the safety or functionality of the vapor recovery system or system component. Healy Systems makes no warranty with respect to the Healy performance of equipment or Healy's performance of services under this agreement, express or implied, and Healy Systems hereby disclaims the implied warranties of merchantability and fitness for a particular purpose.
- This warranty shall not cover any Healy System components that have been in contact with fuels containing greater than 15% methanol, 15% ethanol, or 15% MTBE by volume. Any component(s), which is exposed to M85/E85 fuel (or other alcohol-rich fuel), is not covered under the Healy Systems warranty.

This warranty is a limited warranty. Anything in the warranty notwithstanding, implied warranties for fitness, particular purpose and merchantability shall be limited to the duration of the express warranty. Healy Systems expressly disclaims and excludes any liability for consequential or incidental damage for breach of any express or implied warranty.

Healy...Specializing in Stage II Vapor Recovery Technology



HEALY SYSTEMS,
INC.

FAX

17 Hampshire Drive, Hudson, NH 03051 · Tel.: 1-603-882-2472 · Fax: 1-603-882-5189

Date: October 1,
2004

Time: 9:45
AM

*Page 1 of 4, Including Cover
Page*

To: Tom Driscoll

Fax No.: (919) 541-1039

Company: US EPA

From: James Healy

Subject: NH-DES

Message:

Dear Tom,

Attached are copies of the New Hampshire DES Report that was inadvertently omitted from yesterday's fax and mailing.

Regards,

A handwritten signature in cursive script, appearing to read "Jim", is written below the typed name "James Healy".

Site Name	Town	DES ID#	Historical High	Current Range	Contaminant Levels	Exempt	Balance	Remarks	Tank Type	Liquid Released?	Offsite Plume?	Risk Rating	Neighb. Wells	Inspection Date	Findings	Management Strategy	Comments
Bowles Market	Bradford	198400068	58000	44 - 5800	480	Exempt	480	Exempt	1972 SW Fib	No	Yes	No	12/03 - CP	No Closure F/N	Notify inspectors	Offsite at low levels	
Exxon Div of CFI	Salmon	198500044	11,000	2270 - 4300	6300	Gilbrico Refuel	6300	Gilbrico Refuel	1970 SW Fib	No	Maybe	No	3/03 - SW	CP test	Old tank		cracked spill bucket, offsite issue
Manual Station #60	Manchester	198600002	150000	3580 - 7400	4250	Balance	4250	Balance	1980 SW Fib	Yes, high BTX	No	No	12/02 - GB	Overfills, CP	Ongoing pump n treat		
Berlton Mobil	Bradford	198703001				Wayne Vapor Vac		Wayne Vapor Vac	1983 SW Fib	No	Yes	No	10/02 - GB	Overfills			
Supreme Plaza	Hooksett	198704039	108000	55 - 20300	55	Balance	55	Balance	1985 SW Fib	No	Yes	No	6/02 - TB				
Texaco Station	Merrimack	198705008	150000	17000 - 46000	46000	2 pl. Wayne Vapor Vac	46000	2 pl. Wayne Vapor Vac	1989 DW Fib	No	SW Impact	No	8/02 - GB	CP flex con.			Contamination discharges into sea
Shell	Nashua	198705008	22000	D/D data	22000	D/D data	22000	D/D data	1988 DW Fib	No	No	No	9/03 - HS	Bad sensors	Action needed	Detected offsite and in surface wa	
Charter Station	Durham	198706033	198802010			20 on 5/04		Wayne Vapor Vac	1985 SW Fib	No	No?	No	1/03 - SW	Post Permit	Action needed	Inspection/New Owner helped	
Concord Sunoco	Hooksett	198802012	122000	165 - 40800	40800	Handoff, Unknown	40800	Handoff, Unknown	1992 DW Fib	No	Yes	No	4/03 - JD	sensor	Action needed	Offsite plume impacting Gas stat	
Duponts Cligo	Dover	198802012	12000	27 - 64000	64000	2 pl. Wayne Vapor Vac	64000	2 pl. Wayne Vapor Vac	1988 DW Fib	No	Yes	No	3/03 - SW	Failed Stage II	Water in inlet	water and sewer, offsite contamin	
Cumberland Farms - 162 Main St Keene	Conway	198808012	17000	3 - 4200	2350	2 pl. Wayne Vapor Vac	2350	2 pl. Wayne Vapor Vac	1998 DW Fib	No	Yes	Yes	8/04 - HS	Failed Stage II			Concentration rose before Stage I
CFI Facility #2849	Conway	198903003	26000	44 - 18000	57	on 7/04		Wayne Vapor Vac	1998 DW Fib	No	Yes	Yes	8/04 - JD	Spill bucket not tight, vapors in interstitial			Water well concentrations increas
Gully Station 55257	Epping	198904007	1040	20.4 to 1040	1040	2 pl. Balance	1040	2 pl. Balance	1998 DW Fib	No	Yes	Yes	7/04 - HS, 08	Failed Stage	No action		
Gully Station 55235	Gilford	198904010				Exempt			1998 DW Fib	No	Probably	No	04/02 - SW				
MT. Mike's	Hillsborough	198904015	18000	2000 - 18000	2900	Handoff, Unknown	2900	Handoff, Unknown	1988 DW Fib	No	No	No	5/02 - SW	flex con.			Water and Sewer available, no off
Farmington Gully	Farmington	198904024	17000	180 - 17000	2300	Handoff, Unknown	2300	Handoff, Unknown	1988 DW Fib	No	Maybe	No	03/03 - SW	of @ 95%	Notify UST inspectors	Monitoring wells in wrong location	
Former Eastman Street Exxon	Concord	198904036	492	ND - 492	492	Wayne Vapor Vac	492	Wayne Vapor Vac	1990 DW Fib	No	Yes	No	10/03 - RS	Post Permit	Install new wells		
7-Eleven	Nashua	198906001	50000	1480 - 50000	50000	2 pl. Gilbrico	50000	2 pl. Gilbrico	1990 DW Fib	No	Yes	No	8/04 - JD	Liquid in sump/spill buckets			Water, likely offsite
Cumberland Farms	Greenland	198906010	110000	280 - 110000	33000	2 pl. Wayne Vapor Vac	33000	2 pl. Wayne Vapor Vac	1993 DW Fib	No	Yes	No	5/04 - JD	10/03 2 fill caps replaced, JD liquid in			CK Smith, drop in MBE post insp
Mallord's Texaco	Milford	198906048	239000	53500 - 239000	239000	2 pl. Gilbrico	239000	2 pl. Gilbrico	1993 DW Fib	No	Yes	No	12/03 - JD	sump in alarm			
Joe's IGA	Bandgewater	198907023				Exempt			1993 DW Fib	No	No	No	3/02 - SW	17" hole to gw			
Mobil Station	Keene	198908043				Casual, exempt			1985 SW Fib	No	No	No	8/03 - CP				
Cumberland Farms #70117	Newington	198909005	16000	272 to 16000	16000	Casual, Refuel	16000	Casual, Refuel	1990 DW Fib	No	No	No	9/03 - SW	LLD & interstitial sensor			
Texaco Station	Plymouth	198910001				2 pl. Gilbrico			1989 DW Fib	No	Yes	No	11/03 - JD, 3	Stage II & vq Replace 5R			
Xtra Mart	Seabrook	198910013	6500	2200 - 6500	2200	Handoff, Unknown	2200	Handoff, Unknown	1989 DW Fib	No	Yes	No	5/04 - HS	Stage II test	Good pilot candidate	contamination into Merrimack rise	
Texaco Station	Manchester	198910032	190000	2000 - 190000	33000	2 pl. Gilbrico	33000	2 pl. Gilbrico	1989 DW Fib	No	Yes	No	10/02 - GB	overall	No action	water and sewer	
J. Schwartz Motor Trans	Manchester	198910044	5500	2 to 5500	5500	Handoff, Gilbrico	5500	Handoff, Gilbrico	1989 DW Fib	No	Maybe	No	9/03 - CP	overall	Notify inspectors	water and sewer	
Exxon Station	Manchester	198910066	16000	480 to 16000	16000	Handoff, Exempt	16000	Handoff, Exempt	1988 DW Fib	No	Yes	No	11/03 - JD	overall			
Red's of Lafayette	Lafayette	198912002				Exempt			1988 DW Fib	No	Yes	No	12/01 - SW	not in compliance			
Meredith Irving	Meredith	199002010				Wayne			1990 DW Fib	No	No	No	10/03 - RS	Water in sump, boot off dw pipelined			
Cumberland Farms #2806	Franklin	199003013	27000	BDL to 550	550	Wayne	550	Wayne	1988 DW Fib	No	Yes	No	7/03 - JD	Stage II test	Good pilot candidate	contamination into Merrimack rise	
Pike Station	Haverhill	199004001				Exempt			1990 DW Fib	No	No	No	8/03 - GB	Overfills			
Cumberland Farms #2855	Rollingsford	199007017	23500	76 to 3300	640	Wayne Vapor Vac	640	Wayne Vapor Vac	1983 SW Fib	No	Yes	No	10/03 - CP	gas in interstitial	No action	water and sewer	
Former Exxon Station 3-0959	Concord	199007029	67000	1800 to 67000	67000	Handoff, Gilbrico	67000	Handoff, Gilbrico	1988 DW Fib	No	Yes	No	7/03 - JD	Water in sump, boot off dw pipelined			
Rite 3 Sunoco	Conway	199008005	1420	BD to 56	56	Casual, exempt	56	Casual, exempt	1990 DW Fib	No	Yes	No	8/03 - GB	Overfills			
Shell Station - 270 Main Dunstable	Nashua	199008010				2 pl. Gilbrico			1990 DW Fib	No	No	No	8/03 - GB	Overfills			
Cumberland Farms #284	Nashua	19902302	17000	BDL to 1300	BDL	Wayne Vapor Vac	BDL	Wayne Vapor Vac	1989 DW Fib	No	No	No	8/03 - CP	gas in interstitial	No action	water and sewer	
Main Street Sunoco	Keene	199101014	5830	60.9 to 173	60.9	Casual, exempt	60.9	Casual, exempt	1989 DW Fib	No	No	No	10/03 - JD	overall	95% Needs watching	Private wells, past offsite contain	
Mobil Station	North Hampton	199101053	41000	130 to 41000	444	2 pl. Wayne Vapor Vac	444	2 pl. Wayne Vapor Vac	1989 DW Fib	Yes	Yes	Yes	9/03 - SW	sensors in alarm			
Chickadee	Epping	199102044	59800	444 to 59800	660	Handoff, Wayne Vapor Vac	660	Handoff, Wayne Vapor Vac	1988 DW Fib	No	No?	No	11/03 - JD	dry break replaced			
Firm Exxon Div of CFI	Portsmouth	199103039	101000	12200 to 101000	5200	2 pl. Wayne Vapor Vac	5200	2 pl. Wayne Vapor Vac	1981 DW Fib	No	Yes	No	4/03 - RS	Failed Stage II	Wells may be off plume	water and sewer	
Cumberland Farms #2813	Concord	199105002	10000	BDL to 5200	5200	2 pl. Wayne Vapor Vac	5200	2 pl. Wayne Vapor Vac	1981 DW Fib	No	No	No	8/03 - SW	ball float issue			
Exxon Station	Nashua	199106004	605	182 to 605	182	Handoff, Gilbrico Refuel	182	Handoff, Gilbrico Refuel	1991 DW Fib	No	No	No	11/03 - JD	inventory	Pilot candidate	water and sewer offsite cont.	
Geely - 587 Lahaeyte Road	Seabrook	199106004	39500	815 to 39500	39500	2 pl. Unknown	39500	2 pl. Unknown	1981 DW Fib	No	No	No	3/02 - SW	vent line repair earlier			
Mobil Service Station No. 10968	Manchester	199107017	11100	574K to 1110K	442	2 pl. Balance	442	2 pl. Balance	1987 DW Fib	No	No	No	11/02 - SW				
File-Line Sunoco	Portsmouth	199108016	9500	32 to 3270	32	Balance	32	Balance	1985 SW Fib	No	No	No					
T-Bird	Andim	199110077				2 pl. Gilbrico				No	No	No					

Travelport	Greenland	1991110083	25000 35 to 638		442	2 pt. Balance		Dispenser	Yes	High BTEX										
Broad Street Exxon	Nashua	1991110117	Check with Ken																	
Bosco Ball Store	Barrisford	199201013	7520 17 to 6750																	
Bedford Mobil	Bedford	199201019	LNAPL	LNAPL	LNAPL															
31 Nazhara Road Services	Peltonborough	199201020	149000 2400 to 35500																	
Quik Mart	Londonderry	199201021																		
Lee Circle Mobil	Somersworth	199203034																		
Former Exxon #70118	Newington	199204011	5000 980 to 3820																	
Former Exxon #2817	Concord	199204023	11000 1500 to 4300																	
Former Exxon #17 S. Main	Concord	199208022	18																	
Gary's Fuel	Haverhill	199209012	18																	
Manchester Street Sunoco	Concord	199209022																		
Evans Expressmart	Epsom	199210019	18000 3500 to 18000																	
Cumberland Farms #2890	Concord	199210028	88100 2080 to 88100																	
Mobil Station #10967	Manchester	199211004	High MBE in indoor air. SI coming																	
Foodstop	Hanover	199212001	34600 356 to 34600																	
Former Circle K Store #20517	Manchester	199301027																		
Exxon Station	Bedford	199304007	2510 3 to 2510																	
Former Sherman's County Store	Chesterville	199305015	81500 51000 to 81500																	
Cumberland Farms #70115	Nashua	199307020	33100 809 to 9360																	
Riverdale Automotive	Newmarket	199308006	6000 284 to 6000																	
Cumberland Farms #2858	Nashua	199308011	39000 130 to 4500																	
Newmarket Convenience/Gelby	Newmarket	199309045	2180 129 to 2180																	
Windham Plaza	Windham	199312031																		
Ft. Brookside Station	Wilton	199312032																		
Cumberland Farms - 292 N. Main	Rochester	199401032	130000 5600 to 130000																	
Pineville Mobil	Rochester	199401032	23200																	
Charlie's	Goffstown	199405023	23200																	
Shell Service Station #55247	Pembroke	199407020																		
Gelby	Dover	199407052	113000 3200 to 5500																	
Former Circle K Fuel Stop	Memmark	199410012	24000 78 to 24000																	
Cumberland Farms - 2 Highland	Rochester	199410033	8190 946 to 8190																	
Gelby	Derry	199501007																		
Wolfeboro Irving	Wolfeboro	199503053																		
North Hampton Mobil	North Hampton	19951005	2600 350 to 2600																	
Cumberland Farms #2903	Windham	199512047																		
Waterhouse Country Store	Derry	199512047																		
Kershaw's Quick Stop	Newmarket	199512019	5500 2500 to 5500																	
Domest Leaseing	Dover	199601009	168000 50400 to 103000																	
Living Mainway	Francestown	199601022	Old data																	
Francestown Village Store	Francestown	199602026																		
Laf's Paradise	Northham	199701012																		
Titon Irving	Titon	199705024																		
O'Brien General Store	Saabrook	199708026																		
Cumberland Farms #2822	Milton	19971019	120000 880 to 120000																	
Windham Exxon	Windham	199711013	50000 1860 to 50000																	
Former Exxon Station #3-8827	Hocksett	199712013	13000 1960 to 13000																	
Cumberland Farms #2834	Goffstown	199801047	47200 BDL to 8200																	
Cumberland Farms #2808	Meredith	199805030	2300 Wayne Vapor Vac																	
111-Quick Stop	Hampstead	199804065	24100 35 to 24100																	
Norridge Gelby	Dover	199805063	76900 24000 to 76900																	
Go Go Mart	Andum	199806030																		

Mobil Station No. 1720	Manchester	199808045	58900	336 to 20400	20400	Manchester, Wayne Vapor Vac	No	No	No		Inspection	water and sewer
Rochester Gully	Rochester	199809066	8380	B.D.L. to 2800	398	Zpl. Toxhem	1998 DW Fibr Yes	No	No		No action	water
Amnada Hess	Chickster	199809068				Manchester Healy Snp Lock	1998 DW Fiberglass				May be a mixture of old and new plumes	
Cumberland Farms	Hudson	199810037	13000	3100 to 13000	3400	Wayne Vapor Vac					SVE system operating	
Pressant Valley Variety Store	Canaan	199810046				Exempt					SVE system operating	
Karl's Southside Service	Dover	199810032	140000	420 to 140000	420	Zpl. Cibaero	1999 DW Fiberglass				4/04 - JD, SW Failed Stage II passed relest	
Cumberland Farms #2843	Rochester	199811013	190000	970 to 190000	190000	Zpl. Wayne Vapor Vac	1986 DW Fiberglass				Portion of plume commingled, wall #4 only MIBE	
Isingless County Store	Hillsborough	199812218	68000	15000	5000	Wayne	1999 DW Fiberglass					
Cumberland Farms #2830	Durham	200004049	6400	740 to 2000	740	Zpl. Wayne Vapor Vac						
Cumberland Farms #2827	Raymond	200005037	50000	3400 to 44000	44000	Zpl. Wayne Vapor Vac	1986 DW Fibr Yes	Yes	No		soil under dispenser, liq. interstitial space, drop tube gaskets	
ExxonMobil Station	Manchester	200005043	166000	120 to 166000	230	Manchester, Cibaero retri.	1983 SW Fibr No	Yes	No			
Exxon Div of CFI	Hooksett	200005045	5890	551 to 2790	2200	Cibaero retri.		No	No		7/04 - HS Stage II failed/relest	
Conoco Phillips	Manchester	200005046	29000	22000 to 29000	10500	Manchester, Cibaero	1995 SW Fibr Yes	Yes	No		water in sunn Rapid decrease after ins. water and sewer	
Former Conoco Phillips	Manchester	200005048	3100	121000 8760 to 121000	3100	Manchester, Cibaero retri.	1989 DW Fibr No	No	No		water and sewer	
Former Exxon Station 3-8250	Manchester	200005049	409000	18000 to 140000	18000	Manchester, Cibaero retri.	1982 SW Fiberglass				Dispenser pan sensors	
M. Mike's	Dover	200006007				Zpl. Unknown	1999 DW Fiberglass					
Cumberland Farms #2837	Milford	200012069	32000	9 to 32000	17000	Wayne					TBA sky high at 110000	water
Shell Service Station #166713	Dover	200101053	2200	93 to 2200	93	Zpl. Unknown					Notify inspectors	
Former Cumberland Farms	Manchester	200108014	7900	250 to 7900	7900	Balance					Tanks removed in 2001	
Xtra Mart	Laconia	200110047	30400	2620 to 30400	2610	Coaxial, exempt	1988 DW Co Yes	Yes	No		Notify inspectors	water
Tank Type Breakdown												
		% 2nd Release	# Total Tanks									
Single wall fiberglass		18%	197									
Single wall ctmers		2%	312									
Double wall fiberglass		31%	912									
Double wall composite		14%	1197									
Double wall steel		17%	1436									
Fiberglass >= 10 yrs		46%										
Tank >= 10 yrs		72%										

13 Parks per Redlin