



March 11, 2003

JCI Jones Chemicals, Inc.
Attn: Timothy J. Gaffney
808 Sarasota Quay
Sarasota, FL 34236

RE SODIUM HYPOCHLORITE SOLUTION 12.5%
Category Code: G4
NSF Registration No. 048799

Dear Timothy J. Gaffney:

NSF has processed the application for Registration of **SODIUM HYPOCHLORITE SOLUTION 12.5%** to the *NSF Registration Guidelines for Proprietary Substances and Nonfood Compounds (2002)*, which are available at www.nsf.org/usda. The NSF Nonfood Compounds Registration Program is a continuation of the USDA product approval and listing program, which is based on meeting regulatory requirements including FDA 21 CFR for appropriate use, ingredient and labeling.

This product is acceptable for use in meat, poultry, and other food processing areas as a Chlorine Water Treatment Product (G4), when used in accordance with the respective label instructions and use limitations. It may be used in all processing of meat and poultry plants at concentrations up to 5 parts per million calculated as available chlorine. Chlorine may be present in poultry chiller water, in water for reprocessing poultry carcasses internally contaminated with feces, and in red meat carcasses final wash water at concentrations between 20 and 50 parts per million calculated as available chlorine. The product must be dispensed at a consistent and uniform level and the method or system must be such that a controlled rate is maintained. The additive may not exceed 3 parts per million residual chlorine dioxide.

NSF Registration of this product is current when the NSF Registration Number, Category Code, and Registration Mark appear on the NSF-approved product label, and the registered product name is included in the current NSF White Book Listing of Nonfood Compounds at the NSF website (<http://www.nsf.org/usda>). The NSF Registration Mark can be downloaded from the NSF website, at http://www.nsf.org/mark/download_marks.html.

NSF Listing of all registered Nonfood compounds by NSF International is not an endorsement of those compounds, or of any performance or efficacy claims made by the manufacturer.

Registration status may be verified at any time via the NSF web site, at <http://www.nsf.org/usda>. Changes in formulation or label, without the prior written consent of NSF, will void registration, and will supersede the on-line listing.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carmen Grindatti".

Carmen Grindatti
NSF Nonfood Compounds Registration and listing program



Model FP7250

Air-Over-Water Pressure Tank (Vertical) - 120 Gallons

Epoxy-lined standard water tanks are excellent corrosion resistant tanks for home water systems applications such as retention tank, holding tank and pressure tank.

Key Features

- Replaces any standard galvanized, glass-lined or epoxy-lined tank
- Precision press fit design minimizes gaps between components, reducing the possibility of corrosion and seam leaks
- Tough polyester exterior paint
- Air volume control tap is standard

Warranty

1 year limited warranty

Chlorine Contact Time

Tank Volume:	120 gallons	90 gallons useful liquid storage	
Southern Comfort Lounge :	40 seats	* 25 gallons per seat =	1000 gallons/day
Tattoo Parlor :	2 Employees	* 20 gal/day/emp =	40 gallons/day
Used Tire Store :	2 Employees	* 20 gal/day/emp =	40 gallons/day
Total :			1080 gallons/day
12 hour operation	=	1.5 gallons usage per minute	
1.5 gal/minute	* 30 minutes	=	45 gallons of storage for 30 minute contact time (required)

90 Gallons of storage will exceed the 30 minute contact time required.

Material Safety Data Sheet

AQUACHLOR™ 10%, 12.5% Sodium Hypochlorite Solution 10% & 12.5%



Revised 5.25.2004

ALTIVIA Corporation
1100 Louisiana, Suite 3160
Houston, Texas 77002-5217

Emergency(Chemtrec): (800) 424-9300
Product Information: (713) 658-9000

HAZARDOUS INGREDIENTS/IDENTIFY INFORMATION

Hazardous Components	OSHA PEL	ACGIH TLV	CAS#	Other limits
Sodium Hypochlorite	N/E	N/E	7681-52-9	None listed
Sodium Hydroxide	2 mg/m ³	2 mg/m ³	1310-73-2	None listed

PHYSICAL / CHEMICAL CHARACTERISTICS

Specific Gravity @ 70°F	1.13 - 1.25	NaOCl (wt %):	9.5 – 13.5
Boiling Point:	Decomposes above 40°C (104°F)	Vapor Pressure (mmHg):	N/A
Freezing Point:	< -10°F (-12°C)	Vapor Density (Air = 1):	N/A
Solubility in Water:	Complete	pH (As is):	11.5 - 13.5
Appearance/Color:	Clear, colorless to pale yellow		

FIRE AND EXPLOSION HAZARDS

Flash Point:	Non-Flammable	LEL:	N/A
Flammable Limits:	N/A	UEL:	N/A
Special Fire Fighting Procedure/Precaution:	Use extinguishing media that is appropriate for the surrounding fire. Use water spray to cool fire exposed containers. Wear NIOSH/MSHA approved positive-pressure self-contained breathing apparatus and full protective clothing if involved in a fire.		
Unusual Fire/Explosion Hazards:	May release toxic gases (hydrogen chloride and chlorine) upon decomposition. Sodium hypochlorite is an oxidizing agent. Keep away from oxidizable materials in a fire situation. If possible to do so without risk, move containers from fire area to prevent over pressurization and rupture.		

REACTIVITY DATA

Reactivity:	Reacts with acids, ammonia compounds, oxidizable materials, metals and reducing agents.
Stability:	Stable under proper storage conditions. May decompose upon heating and exposure to sunlight.
Incompatibility:	Acids, ammonia compounds, oxidizable materials, peroxides, metals (nickel, copper, tin, aluminum, and iron) and reducing agents.
Hazardous Decomposition/Byproducts:	Combustion: Hydrogen chloride and chlorine gas. Thermal Decomposition: Chlorine gas. Rate of decomposition increases with the concentration and with temperatures above 29°C (85°F).
Hazardous Polymerization:	Will not occur.
Condition to Avoid:	Avoid heat, flames, sparks and other sources of ignition. Avoid direct sunlight. Do not store above 29°C (85°F).

HEALTH HAZARDS & MEDICAL PROCEDURES

DANGER! CORROSIVE. MAY CAUSE SKIN AND EYE IRRITATION OR CHEMICAL BURNS TO BROKEN SKIN. CAUSES EYE DAMAGE. HARMFUL IF SWALLOWED.

ROUTES OF ENTRY

Inhalation:	Irritation of the respiratory system. Mist or fumes may cause bronchial irritation, coughing, difficult breathing, nausea and pulmonary edema.
Ingestion:	Oral or gastrointestinal irritation. Corrosion of mucous membranes, perforation of esophagus and stomach may follow.
Eyes:	Liquid or mist contact can produce severe eye irritation and burns. Prolonged exposures may cause eye damage and blindness.
Skin Contact:	Liquid contact can cause blistering and eczema. Prolonged exposure may cause dermatitis.

MEDICAL PROCEDURES

Inhalation:	Remove person from exposure to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration (CPR). If individual is breathing, but with difficulty, GET IMMEDIATE MEDICAL ATTENTION.
Ingestion:	Drink large quantities of water. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Avoid alcohol. GET IMMEDIATE MEDICAL ATTENTION. Do not use acidic antidotes or sodium bicarbonate.
Eyes:	Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. GET IMMEDIATE MEDICAL ATTENTION.
Skin Contracts:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Thoroughly clean and dry contaminated clothing and shoes before reuse. Discard footwear that cannot be decontaminated. GET IMMEDIATE MEDICAL ATTENTION.
Note to Physician:	The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage.

TOXICITY

The toxicity and corrosivity of sodium hypochlorite is a function of concentration and pH. This material is irritating and may be corrosive to all tissue.

Carcinogenicity: Sodium Hypochlorite is not listed as a carcinogen by NTP, IARC, ACGIH, or OSHA.

Toxicity: The acute oral LD50 (rat) is 12 g/kg.

CONTROL MEASURES

PERSONAL SAFETY EQUIPMENT

Ventilation: Use closed systems when possible. Provide local exhaust ventilation where vapor or mist may be generated. Ensure compliance with applicable exposure limits.

Respiratory: Cartridges must be NIOSH/MSHA approved against chlorine. In case of fire, use SCBA for rescue. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

Hands-Body: Wear chemical resistant clothing, rubber gloves (natural rubber, neoprene, nitrile, or PVC), aprons, or slicker suit and rubber boots when potential for contact with the material exists. Contaminated clothing should be removed, then discarded or laundered.

Face-Eyes: Wear splash resistant safety goggles with a face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

HANDLING AND STORAGE

Storage: Sodium Hypochlorite can be stored in approved rubber lined stainless steel tanks, fiberglass tanks (with a UV stabilizer package) or high density cross linked polyethylene (HDXLPE) tanks. As materials of construction vary, consult the tank manufacturer for compatibility with sodium hypochlorite before use. Store in a cool dry place away from heat sources and direct sunlight. Avoid heat, flames, sparks and other sources of ignition. Keep separated from incompatible substances. Do not reuse storage containers unless properly reconditioned.

Handling: Wear appropriate protective clothing. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors and mists. After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation.

Spill or Leak: Wear protective clothing and equipment. For large spills isolate hazard area and deny entry to unnecessary or unprotected personnel. Dike far ahead of liquid spill for later disposal. Prevent liquid from entering sewers or waterways. Sodium hypochlorite can be neutralized with weak reducing agents. Adequate ventilation is required when containing spills/leaks.

Disposal: Any disposal practice must be in compliance with local, state and federal laws and regulations. May be subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous waste Number: D002. This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) Permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

CONTAINER DISPOSAL: Triple rinse container. Then offer for recycling or reconditioning, or puncture and dispose of it in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning.

OTHER INFORMATION
TRANSPORTATION INFORMATION

DOT Shipping Name: Hypochlorite Solution, Corrosive

Class: 8

UN#: 1791

Packing Group: PG III

RQ: 100 lbs. (Sodium Hypochlorite)

REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCE CONTROL ACT):

All components of this mixture are listed on the TSCA Chemical Inventory.

SARA TITLE III, SECTION 302:

Not listed as an Extremely Hazardous Substance.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

Subject to reporting requirements under CERCLA (40 CFR 302).

CERCLA REPORTABLE QUANTITY:

Releases of Sodium Hypochlorite in quantities equal to or greater than the reportable quantity (RQ) of 100 pounds are subject to reporting to the National Response Center under CERCLA, Section 304 SARA Title III.

SARA TITLE III - HAZARD CLASSES:

Acute Health Hazard: Yes

Chronic Health Hazard: No

Fire Hazard: Yes (May release toxic gases on decomposition)

Sudden Release of Pressure Hazard: No

Reactivity Hazard: No

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To Know Act (EPCRA) of 1986 and of 40 CFR 372:

CAS NUMBER

No

INGREDIENT NAME

No

PERCENT BY VOLUME

No

This information must be included on all MSDS's that are copied and distributed for this material.

OTHER INFORMATION
HAZARD CODES

NFPA

Health: 3

Flammability: 0

Reactivity: 1

OXIDIZER

HMIS

Health: 3

Flammability: 0

Reactivity: 1

Rating System

0= No Hazard

1= Slight Hazard

2= Moderate Hazard

3= Serious Hazard

4= Severe Hazard

Disclaimer of Warranty:

The information provided in this Material Safety Data Sheet has been obtained from sources believed to be reliable. ALTIVIA provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. ALTIVIA knows of no medical condition, other than those noted on this material safety data sheet, which are generally recognized as being aggravated by exposure to this product.

Amico 2-20GPM Water Tube Design Liquid Flowmeter Measure 1"PT Dia Input

Description Item # SPM9818198625 Model # PRO3286783878

2-20GPM Water Tube Design Liquid Flowmeter Measure 1"PT Dia Input - Flowmeter measuring the oil or water easy to read for its clear scale. Straight tube style connect the liquid tube by two end thread. Stainless steel material inner and glasses tube design. Read float at largest diameter you will know the flow of water.

Amico - 2-20GPM Water Tube Design Liquid Flowmeter Measure 1"PT Dia Input

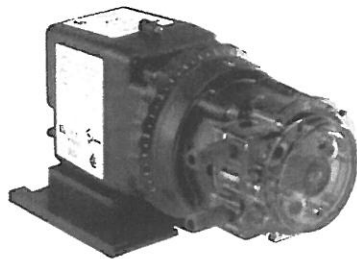
- Flowmeter measuring the oil or water easy to read for its clear scale.
- Straight tube style connect the liquid tube by two end thread.
- Stainless steel material inner and glasses tube design.
- Read float at largest diameter you will know the flow of water.



SPECIFICATION SHEET: 45 PUMP SERIES

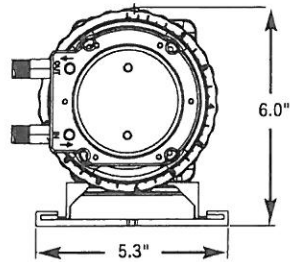
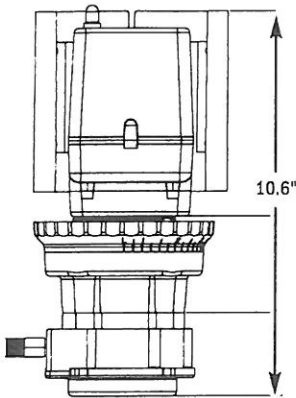
STENNER PUMPS

SINGLE HEAD ADJUSTABLE OUTPUT



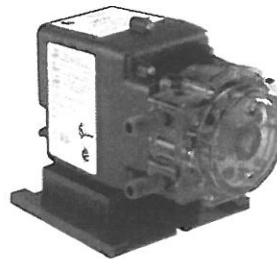
MODELS

- 45MHP2 · 45M1
- 45MHP10 · 45M2
- 45MHP22 · 45M3
- 45M4
- 45M5



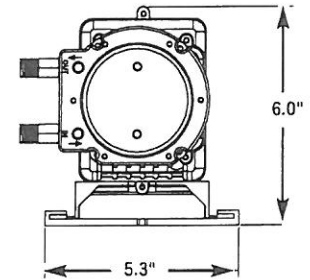
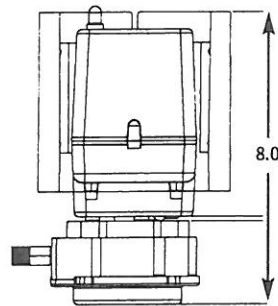
SHIPPING WEIGHT 9 lbs (4 kg)

SINGLE HEAD FIXED OUTPUT



MODELS

- 45MPHP2 · 45MP1
- 45MPHP10 · 45MP2
- 45MPHP22 · 45MP3
- 45MP4
- 45MP5



SHIPPING WEIGHT 8 lbs (3.6 kg)



PRODUCT LISTINGS VARY BY MODEL. CONTACT FACTORY FOR DETAILS.

FEATURES

- Positive displacement pump
- 3-point roller design assists in anti-siphon protection.
- Pump head requires no valves, allows for easy maintenance.
- Self-priming against maximum working pressure, foot valve not required.
- Pump does not lose prime or vapor lock.
- Pumps off-gassing solutions and can run dry.
- Output volume is not affected by back pressure.
- Injection check valve included with 45MHP & 45MPHP models.
- Easy to change pump tube; lubrication is not required.
- Pump tubes and pump heads interchange between models.
- Models tested by WQA to conform to ANSI/NSF STD 61.
- Adjustable models tested by ETL to conform to ANSI/NSF STD 50.
- All pump accessories included allow a fast and easy installation.



Stenner Pump Company
3174 DeSalvo Road
Jacksonville, Florida 32246

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US Toll Free 800.683.2378
Fax 904.642.1012

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sales@stenner.com
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SPECIFICATION SHEET: 45 PUMP SERIES

STENNER PUMPS

SPECIFICATIONS

OUTPUT RANGE

adjustable models only, 5%-100%,
2.5% increments

MAXIMUM WORKING PRESSURE

100psi (1.7 bar) for the following models

45MHP2, 45MHP10, 45MHP22
45MPHP2, 45MPHP10, 45MPHP22

25 psi (6.9 bar) for the following models

45M1, 45M2, 45M3, 45M4, 45M5
45MP1, 45MP2, 45MP3, 45MP4, 45MP5

MAXIMUM AMBIENT and FLUID TEMPERATURE

125°F (52° C)

MAXIMUM SUCTION LIFT

25' vertical lift

MOTOR TYPE

1/30 HP, shaded pole, class B

FINAL MOTOR RPM

26

DUTY CYCLE

Continuous

MOTOR VOLTAGE (AMP DRAW)

120V 60Hz 1PH (1.7)
220V 60Hz 1PH (0.9)
230V 50Hz 1PH (0.9) International
250V 50Hz 1PH (0.9) International

POWER CORD PLUG END

120V 60Hz - NEMA 5/15, 230V 50Hz - CEE 7/VII
220V 60Hz - NEMA 6/15, 250V 50Hz - CEE 7/VII

WET END COMPONENTS

PERISTALTIC TUBE

Santoprene® *FDA approved
optional Tygothane®** FDA approved

TUBE FITTINGS, COMPRESSION NUTS

Type 1 rigid PVC-NSF listed

SUCTION STRAINER & WEIGHT

Type 1 rigid PVC body, ceramic weight - NSF listed

SUCTION/DISCHARGE TUBING & FERRULES

LDPE polyethylene, NSF and FDA approved

CHECK VALVE (injection fitting & body)

Type 1 rigid PVC-NSF listed

CHECK VALVE DUCKBILL

Santoprene®* FDA Approved
Pellathane®¹ (with Tygothane® tube)

OTHER COMPONENTS

ALL PUMP HOUSINGS

GE Lexan®¹¹ Polycarbonate

PUMP HEAD ROLLERS

HDPE

ROLLER BUSHINGS

Bronze Oilite

ALL FASTENERS

Stainless Steel

POWER CORD TYPE

SJTOW

*Santoprene® is a registered trademark of Advanced Elastomer System.

**Tygothane® is a registered trademark of Saint-Gobain Performance Plastics.

¹Pellathane® is a registered trademark of The Dow Company.

¹¹Lexan® is a registered trademark of General Electric.

Consult General Electric for chemical resistance of Lexan®

ACCESSORY KIT SHIPPED WITH EACH PUMP

- 3 connecting nuts 1/4" or 3/8"
- 3 ferrules 1/4" or 6mm Europe
OR 2 ferrules 3/8"
- 1 injection check valve 26-100 psi (1.7-6.9 bar)
OR 1 injection fitting 0-25 psi (0-1.7 bar)
- 1 weighted suction line strainer
1/4", 3/8" or 6mm Europe
- 1 20' roll suction/discharge tubing
1/4" or 3/8", white or UV black
OR 6 mm white Europe
- 1 spare pump tube
- 1 mounting bracket
- 1 manual

45 SERIES PUMP ADJUSTABLE OUTPUT

Single Head Model	Maximum Pressure	Pump Tube Number	Approximate Output @ 60 Hz						Approximate Output @ 50 Hz		
			gallons per day	liters per day	gallons per hour	liters per hour	ounces per minute	milliliters per minute	liters per day	liters per hour	milliliters per minute
45MHP2*	100 psi (6.9 bar)	#1	0.2 to 3.0	0.8 to 11.4	0.01 to 0.13	0.03 to 0.48	0.02 to 0.27	0.56 to 7.92	0.6 to 9.1	0.03 to 0.38	0.31 to 6.32
45M1	25 psi (1.7 bar)	#1									
45MHP10*	100 psi (6.9 bar)	#2	0.5 to 10.0	1.9 to 37.9	0.02 to 0.42	0.08 to 1.58	0.04 to 0.89	1.32 to 26.32	1.5 to 30.3	0.06 to 1.26	1.04 to 21.04
45M2	25 psi (1.7 bar)	#2									
45MHP22*	100 psi (6.9 bar)	#7	1.1 to 22.0	4.2 to 83.3	0.05 to 0.92	0.18 to 3.47	0.10 to 1.96	2.92 to 57.85	3.3 to 66.6	0.14 to 2.78	2.29 to 46.25
45M3	25 psi (1.7 bar)	#3									
45M4	25 psi (1.7 bar)	#4	1.7 to 35.0	6.4 to 132.5	0.07 to 1.46	0.27 to 5.52	0.15 to 3.11	4.44 to 92.01	5.1 to 106.0	0.21 to 4.42	3.54 to 73.61
45M5	25 psi (1.7 bar)	#5	2.5 to 50.0	9.5 to 189.3	0.10 to 2.08	0.40 to 7.89	0.22 to 4.44	6.60 to 131.46	7.6 to 151.4	0.32 to 6.31	5.28 to 105.14

*Pump supplied with injection check valve for 26-100 psi (1.7-6.9 bar) applications

45 SERIES PUMP FIXED OUTPUT

Single Head Model	Maximum Pressure	Pump Tube Number	Approximate Output @ 60 Hz						Approximate Output @ 50 Hz		
			gallons per day	liters per day	gallons per hour	liters per hour	ounces per minute	milliliters per minute	liters per day	liters per hour	milliliters per minute
45MPHP2*	100 psi (6.9 bar)	#1	3.0	11.4	0.13	0.48	0.27	7.92	9.1	0.38	6.32
45MP1	25 psi (1.7 bar)	#1									
45MPHP10*	100 psi (6.9 bar)	#2	10.0	37.9	0.42	1.58	0.89	26.32	30.3	1.26	21.04
45MP2	25 psi (1.7 bar)	#2									
45MPHP22*	100 psi (6.9 bar)	#7	22.0	83.3	0.92	3.47	1.96	57.85	66.6	2.78	46.25
45MP3	25 psi (1.7 bar)	#3									
45MP4	25 psi (1.7 bar)	#4	35.0	132.5	1.46	5.52	3.11	92.01	106.0	4.42	73.61
45MP5	25 psi (1.7 bar)	#5	50.0	189.3	2.08	7.89	4.44	131.43	151.4	6.31	105.14

*Pump supplied with injection check valve for 26-100 psi (1.7-6.9 bar) applications

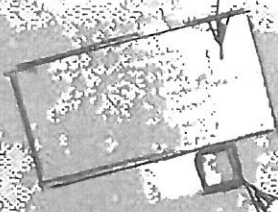
NOTICE: The information within this chart is solely intended for use as a guide. The output data is an approximation based on pumping water under a controlled testing environment. Many variables can affect the output of the pump. Stenner Pump Company recommends that all metering pumps undergo field calibration by means of analytical testing to confirm their outputs.

DISTANCES 10 POSSIBLE CONTAMINATION

CAUSE BLVD

Pump House

Southern Comfort Lounge



Approximately 30'

Mechanical Treatment Plant for Bar > 100 feet from well

DRAINAGE CANAL

APPROXIMATELY 44'

MH 1 = Mobile Home Building # 1

MH 2 = Mobile Home Building # 2

Water Well



MH 1

TREATMENT PLANT FOR TARDO PARLOR (ABANDONED)

TREATMENT PLANT FOR TARDO PARLOR (New Installation) > 100 ft from well

Approximate Property Boundary

Approximately 18'

Mechanical Sewage Treatment Plant (for fire store) ± 108' from well

Approximate 50' Radius

Approximate 100' Radius



10/26/2015

© 2015 Google

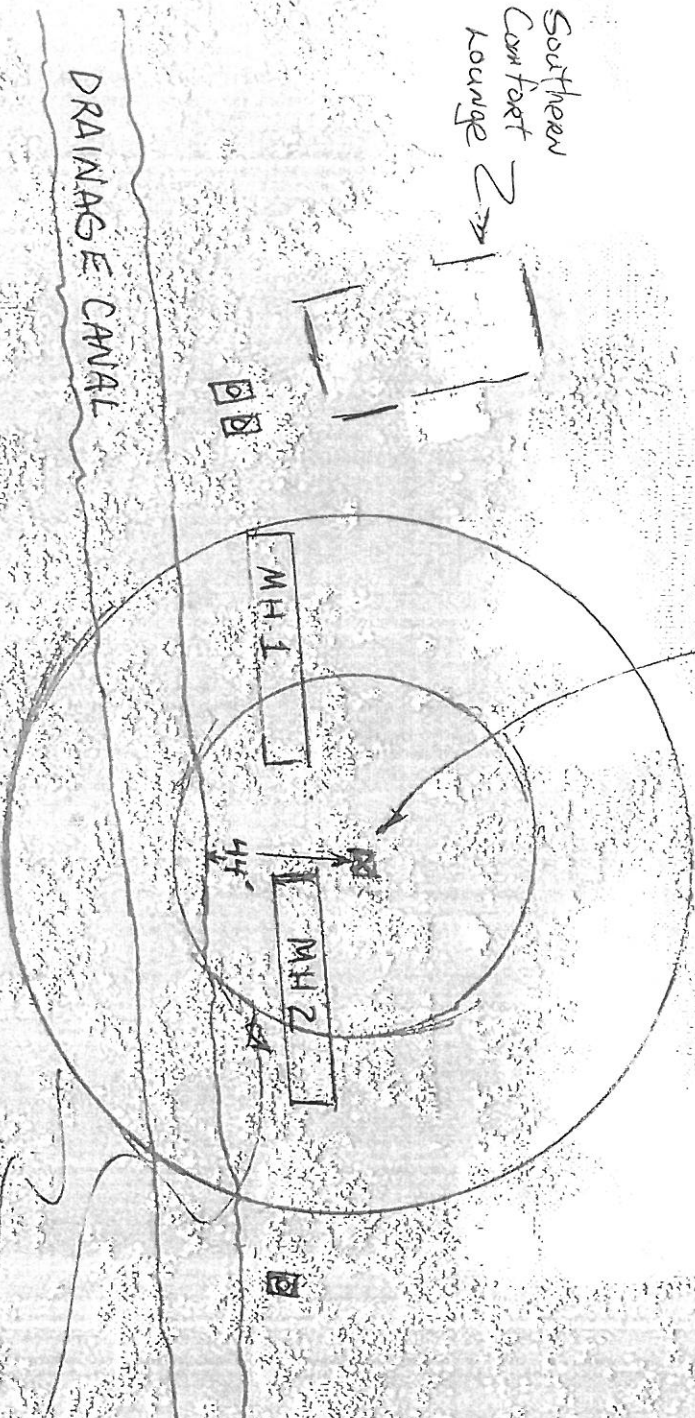
NEW UPGRADE of WATER SUPPLY

GAUSE BIND

Southern
Comfort
Koumge

DRAINAGE CANAL

Well House, Well, Disinfection,
Storage moved here



1) All treatment plants are
greater than 100' from
water well

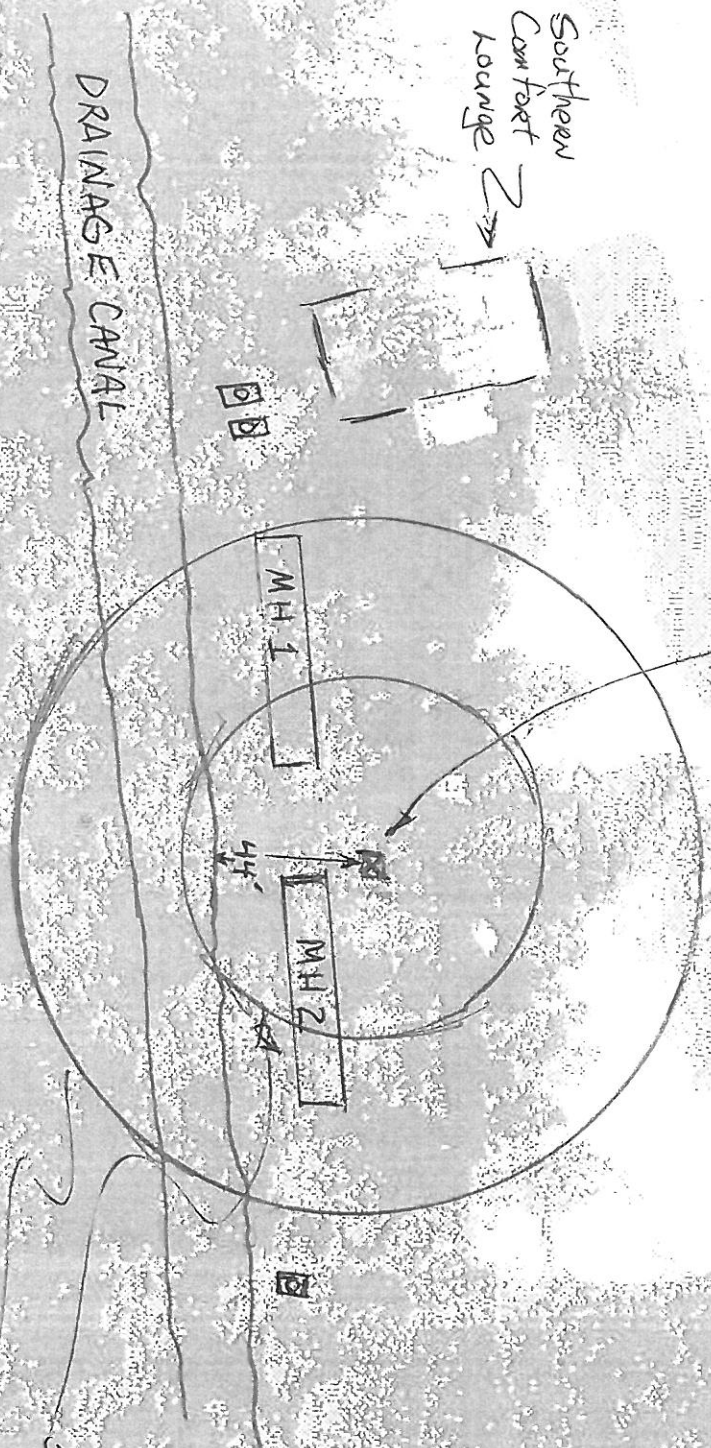


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NEW UPGRADE of water supply

GAUSE BVD

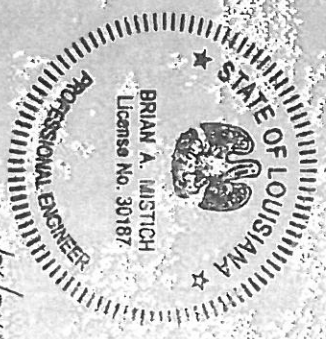
Southern
Comfort
Lounge →



Well House, Well, Disinfection,
Storage moved here

1) All treatment plants are
greater than 100' from
water well

100' Radius
50' Radius



Calibration Column

DESCRIPTION

Milton Roy test tube Calibration Columns are designed specifically for use in determining flow rates of chemical metering pumps. Pump flow rate verification on periodic basis or after maintenance is important to system accuracy.

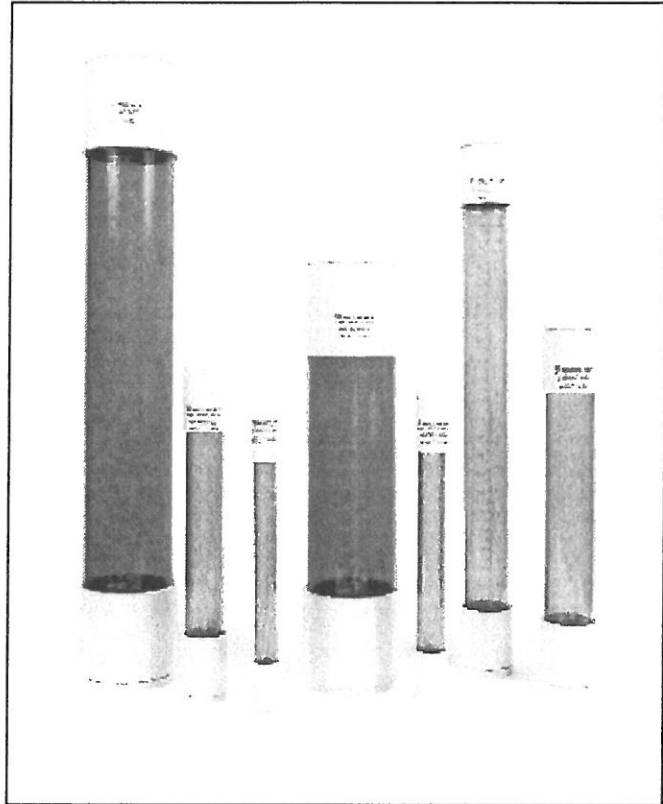
The test tube Calibration Columns provide a fast, easy, economical means of checking flow rates of your chemical metering pump. The units are easily installed (see instructions and diagram on reverse side).

Test tube Calibration Columns are available in the six sizes shown below. Flow rates shown below are based on a 30 second sample time.

- 60 ml . . . for pumps up to 2.0 GPH
- 100 ml . . . for pumps up to 3.3 GPH
- 250 ml . . . for pumps up to 8.3 GPH
- 500 ml . . . for pumps up to 16 GPH
- 1000 ml . . for pumps up to 34 GPH
- 2000 ml . . for pumps up to 67 GPH
- 4000 ml . . for pumps up to 120 GPH

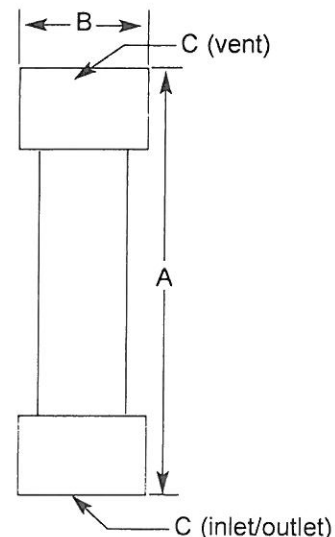
FEATURES

- Rugged PVC materials of construction
- Large, easy to read label with operating instructions for ease of use
- Graduated in ml and standard divisions -- no conversion needed
- Easy to Clean
- Available from stock



DIMENSIONS

Model Number	Capacity	A	B	C
TT-0060	60 ml	13-3/4"	1-5/16"	1/4" Female NPT
TT-0100	100 ml	14-3/8"	1-5/8"	1/2" Female NPT
TT-0250	250 ml	15-3/4"	2-1/4"	1/2" Female NPT
TT-0500	500 ml	17-3/16"	2-3/4"	3/4" Female NPT
TT-1000	1000 ml	27-1/16"	2-3/4"	3/4" Female NPT
TT-2000	2000 ml	21-1/4"	5"	2" Female NPT
TT-4000	4000 ml	31"	5"	2" Female NPT

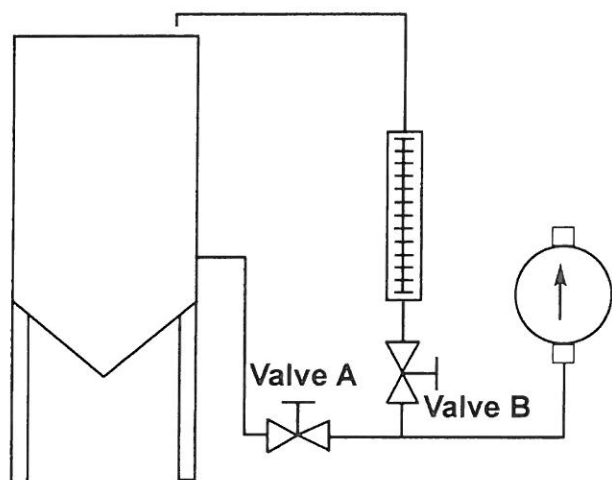


INSTALLATION INSTRUCTIONS

The recommended installation is shown below.

1. Install the test tube in the suction line to the chemical feed pump. The test tube should be installed in a vertical position, adjacent to the chemical storage tank. The test tube is filled by gravity; therefore, the tank must be full, or nearly full, in order to use the test tube.
2. Two (2) ball valves are required and must be installed as shown below. Valves are not included with the test tube, but may be purchased from Milton Roy.
3. A return (overflow) line must be provided, connection the top of the calibration column to supply tanks. Do not install any valve in this overflow line, as the test tube must be vented to atmosphere at all times.
4. A support strap is provided with each test tube for added stability at the top if needed.

RECOMMENDED INSTALLATION



IMPORTANT INSTALLATION NOTES:

- A. This unit must be vented to atmosphere when in use.
- B. Never use this device on discharge side of pump.
- C. This device is intended for verification of metering pump flow rate.
- D. Maximum pressure = static head pressure of tank.
Maximum temperature = 130° F.
- E. Not suitable for all chemicals. Consult factory.

OPERATING INSTRUCTIONS

A stop watch or standard wrist watch with sweep second hand is required.

1. With the pump operating normally, storage tank full or nearly full, and both valve A and valve B in the full open position, the test tube will fill with liquid.
2. When the liquid level reaches the zero division mark, close valve A. (Any division mark may be used as a starting point; however, by filling to the zero mark, you may measure over a longer period of time, enabling you to get a better calibration.)
3. Allow liquid level to drop for a period of at least 309 seconds before reopening valve A. (It is simplest to reopen valve A when liquid level is at one of the division lines.)
4. Finally, divide the number of divisions that the liquid has dropped by the number of minutes used. The answer is the pump flow rate in gallons per hour (GPH). For TT-4000 only, divide the number of divisions that the liquid has dropped by the number of minutes used and multiply the answer by ten. The answer is the pump flow rate in gallons per hour (GPH).
5. Example: Using the TT-1000 unit, the liquid level drops from the zero division to the 10th division in 30 seconds (0.5). The flow rate, then, is $10 / 0.5 = 20.0$ GPH.
6. Check the actual measured flow rate against the setting on the pump.
7. When the test tube is not in use, valve B may be closed.
8. Valve A must remain open at all times except while the test tube is in use.

NOTE:

With both valves in the open position, the test tube may be used as a level gauge. This practice should only be followed when process liquid level is below the maximum calibration column height. If liquid level is higher than maximum calibration column height, the calibration column will overflow and force the process liquid to return to the tank.

AVAILABLE ACCESSORIES:

In addition to metering pumps & chemical feed systems, Milton Roy offers the following accessories:

- Back Pressure Valves
- Pulsation Dampeners
- Gauge Glasses
- Valve Actuators
- Safety Valves
- Dissolving Baskets
- Pressure Gauges
- Floats
- Tanks
- Mixers
- Traps

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