OPERATIONS AND MAINTENANCE MANUAL

HDPE DOUBLE WALL TANKS

IMPORTANT! READ & UNDERSTAND THIS ENTIRE MANUAL BEFORE USING PRODUCT.

CUSTOMER

JOB NO. _____

MODEL NUMBER _____

SERIAL NUMBER _____

DATE SHIPPED

O & M MANUAL

SCOPE: This manual is intended to familiarize the user owner with the usage of your tank. If you encounter a situation where you are not sure what is the proper action call our service department at 330.562.TANK (8265) , 9 AM to 5 PM, EST.

I. SHIPPING

Generally, tanks 2,000 gallons and smaller will be shipped via common carrier and larger tanks shipped via dedicated truck. For tanks that must be shipped on their sides, the most direct method will be employed.

II. RECEIVING

A) Upon receipt look for shipping damage. While this is not common, any damage must be noted on the freight company receipt in order for any claims to be pursued.

Handling

1. Most **tanks** are shipped with lifting lugs. You must use care when receiving and handling plastic tanks. Always use a spreader ban when lifting larger tanks (smaller tanks may only be equipped with one lifting lug).

2. Avoid any sharp point contact to the tank.

3. Always place on a solid, flat, clean surface with total bottom support.

4. For lifting, use nylon straps and slings. Do not use chains to handle tanks.

5. Be careful not to expose fittings to sharp blows as they are plastic and subject to damage in handling.

III. STORING

A) Short term: (up to 6 weeks)

1. Upon receipt, the **tank** must be stored in a vertical or horizontal position insuring that all fittings are protected and manways are in place. Do not remove any fitting blanks until you are ready to install piping to your tank.

IV. INSTALLATION

A) Handling

1. Most **tanks** must be installed on a solid flat pad or stand. The tank bottom/stand requires 100% bottom support.

2. Avoid any sharp point contact to the tank.

3. Always place on a solid, flat, clean surface with total bottom support.

4. Use nylon straps and slings, do not use chains to handle tanks.

5. Be careful not to expose fittings to sharp blows as they are plastic and subject to damage.

B) Your **tank** must be installed on a solid flat pad or stand. The tank bottom requires 100% bottom support.

C) Insure that **NO** foreign materials such as rocks are stuck to the bottom of the tank prior to placement on pad.

D) Your tank should be installed vertical and plumb.

E) Allow for tank expansion and contraction when piping to all fittings. As most tanks will be piped with schedule 80 PVC pipe it is not difficult to allow for movement. Tanks with fittings 3" and larger may require the use of expansions joints.

F) All piping must be 100% independently supported from the tank.

G) Some **tanks** are supplied with hold down bands. Do not pre-drill any anchor locations. Anchors should be installed after tank is on site by match drilling to lug locations.

H) Do not tighten the lugs to your pad as you must allow for the tank to expand and contract during its usage. This ability to expand and contract is where the tanks get their strength.

I) All piping to sidewalls, either by flanges or coupling, must be installed with its own independent support. It must also be non rigid to allow for tank flexing as noted above in item F. Common piping for storage tanks are socket connected sch. 80 PVC piping. It is not difficult to allow for flexibility up to 2". Above 2" you may need to use expansions joints or hoses.

As installations vary with field conditions, you must check your piping to insure you have adequate room for the tank to expand and contract.

J) All sidewall fittings will be shipped with blanks or plugs. Do not remove these until you are ready to attach piping.

(See Storage Notes)

V. VENTING

A) All **tanks** are designed to operate at atmospheric pressure.

B) When connecting vent piping check to insure that line losses do not cause pressure on the tank. When connecting to a vent line that is assisted with blower; insure that a negative condition does not exist in the tank.

C) IMPROPER VENTING CAN CAUSE PREMATURE TANK FAILURE AND WILL RESULT IN THE CANCELLATION OF ALL WARRANTIES.

D) Your double wall tank is equipped with a vent in the secondary containment. This vent also provides access to your interstitial space. If you do not have a lower sidewall inspection port/drain/leak detection system this fitting is how you can drain your secondary containment. TO REMOVE SECONDARY CONTENTS using this port see section XI.

VI. WATER TESTING

A) After the tank has been piped, close any bottom fittings and fill to the top of the straight shell with water for 8 hours min. DO NOT USE PRODUCT until this has been completed! Once the time has elapsed, and there are no leaks, then you may put your tank into service.

B) CONDENSATION MAY FORM ON THE OUTSIDE OF YOUR TANK. This does not mean it is leaking. Make sure to thoroughly inspect all questionable areas before making a decision. If you do find a problem contact Protectoplas immediately.

VII. OPERATIONS

A) Insure that any changes to the installation do not affect the venting of the Primary and Secondary tank. All tanks are designed for atmospheric pressure only. An inadequate sized, or blocked vent will cause your tank to implode/explode.

B) Make sure that the chemical you are storing in the tank is compatible with the construction material.

C) DO NOT OVERFILL THE TANK. The working capacity of the vessel is the straight side capacity. You must monitor the liquid level when the tank is not equipped with an overflow.

D) Check all piping connection before use. Do not fill interstitial space with any product.

E) Monitor your secondary containment. Double wall tanks can collect large amounts of condensation in the interstitial space. This liquid must be removed. Failure to do so can cause tank to implode due to external pressure on primary containment. Always check liquid to ensure contents of tank are not entering interstitial space.

VIII. SPARE PARTS

A) There are no parts that should require routine replacement.

B) Should you require any fittings, they are generally in stock for sizes 2” through 8” (mechanical). Fittings should not require replacement under normal operating conditions.

C) The addition of extra nozzles will require a factory service call.

IX. REPAIRS

IF YOU DETERMINE THAT YOUR SECONDARY TANK CONTAINS LIQUID, DO NOT DRAIN CONTENTS FASTER, OR ENTIRELY DIFFERENT TO THE LEVEL OF THE PRIMARY TANK. Remove contents from secondary (if possible) before the primary. Call a tech with any questions (330) 562.8265

A) There are no customer repairs that can be made. If you feel there is a condition that requires action, contact our service department to discuss the situation.

B) When contacting our service department, please have the serial number and model number available.

C) For warranty claims a warranty repair form must be completed. This will be supplied by the service department.

X. HOLD DOWN SYSTEM (if applicable)

A) If you have purchased a cable hold down system DO NOT PRE-DRILL CONCRETE PAD. Your cable hold down system comes with pre-drill base plates which are used to mark anchor locations.

B) Set your base plates a min of 2" from tank wall. All systems must have proper anchors installed in the concrete. All anchors are "by others", check with local regulations for size/type requirements.

C) All cable systems come with pre-cut cable covers. Make sure to install cable cover where the cable loops through your tanks hold down lug(s). Failure to install cable covers can and will result in damage to your tank.

XI. INTERSTITIAL VENT

A) Locate your interstitial vent. It is a small, typically 1" FNPT, coupling with a vent (either gooseneck or mushroom style) welded into the top of your secondary containment.

B) To remove contents from secondary containment. Drill a 1.25" Dia hole*** to the left or right of existing vent port. BE 100% SURE TO NOT CONTACT PRIMARY TANK. Unthread existing vent from coupling, attach pump to FNPT port (pump by others). Remove a sample from secondary contents and test for product. Once all contents have been removed, thread vent into the ***new 1.25" hole***, and cap welded coupling. Contact tech with any questions at 330.562.8265

****Note: IF YOU HAVE A VENT LARGER THAN 1"FNPT, DRILL A LARGER DIA. HOLE. Do not use a hole smaller than the existing vent port.*

If you have any questions or concerns pertaining to these instructions please call Protectoplas at 330-562-TANK (8265) 9-5 east. Stan. Time.