# WDS CHEMICAL EXPOSURE SHOWER WDS MODEL CES TRIPLEX

## THE PURPOSE.

TO SHOWER DOWN ALL CONTAMINATED PERSONS SUCH AND FIRST RESPONDERS, POLICE AND OTHERS WHO HAVE BEEN INVOLVED IN A DISASTER INVOLVING CHEMICALS. THE SHOWER IS TO BE USED BY EXPOSED RESPONDERS BEFORE THEY ENTER A HOSPITAL, HOME BASE OR OTHER AREAS TO AVOID CONTAMINATING WORKERS, FACILITIES OR BYSTANDERS.

#### **HOW IT WORKS.**

THE WDS CES SYSTEM. WHEN THE SHOWER IS NOT IN USE, THE CLOSED PIT-MOUNTED TRANSFER VALVE WILL SEAL THE INTAKE TO THE HOLDING TANK.
RAINWATER WILL FLOW INTO THE PIT AND OVERFLOW OUT THE STORMWATER PIPE.
WHEN THE SHOWER IS ACTIVATED THE PIT-MOUNTED TRANSFER VALVE WILL
AUTOMATICALLY OPEN TRANSFERRING ALL CONTAMINATED SHOWER WATER TO THE HOLDING TANK.

# **SECTION**

#### SPECIFICATIONS:

THE SHOWER STSTEM IS TO BE MADE IN THE USA AND A PRODUCT OF WASTEWATER DIVERSION SYSTEMS OF MECHANICSVILLE, VIRGINIA AND CONSIST OF THE FOLLOWING: TRANSFER PIT WITH BAFFLE, TRANSFER VALVE, WATER USE DETECTION VALVE, SILT BASKET, GRATE AND FRAME.

1.1 PARTS DESCRIPTION.

### THE TRANSFER PIT.

A) PIT SHALL BE HEAVY DUTY MOLDED FIBERGLASS AND A MINIMUM OF 1/4" THICK IN NON-STRESS AREAS. Polyethylene plastic pits will not be acceptable for this application.

- B) THE INTERIOR OF PIT SHALL BE A SLICK SMOOTH WHITE GELCOATED FINISH OF CHEMICAL RESISTANT GEL COAT.
- C) THE PIT SHALL HAVE A STORMWATER BAFFLE TO KEEP FLOATING POLLUTANTS INSIDE THE PIT UNTIL THE SYSTEM IS ACTIVATED, WHICH WILL SEND THEM TO THE HOLDING TANK.
- D) THE TRANSFER VALVE LOCATION IN BOTTOM OF PIT SHALL BE RECESSED FOR COMPLETE DRAINING OF PIT.
- E) THE PIT SHALL HAVE A 304 STAINLESS STEEL SILT AND SOLIDS BASKET TO RETAIN ALL TRASH SUCH AS DISCARDED CIGARETTES AND OTHER DEBRIS.
- F) THE PIT SHALL HAVE A H20 CAST IRON FRAME AND ADA STYLE GRATE.
- G) THE PIT SHALL HAVE ONE 4" OUTLET TO THE HOLDING TANK AND ONE 4" OUTLET TO STORM DRAIN.

# THE PIT MOUNTED TRANSFER VALVE.

- A) WDS PIT MOUNTED TRANSFER VALVE SHALL BE MARKED MADE IN THE USA.
  THE TRANSFER VALVE SHALL BE C87833 LEAD FREE BRASS AND 304
  STAINLESS-STEEL AND WILL NOT NEED LUBRICATION. THE TRANSFER VALVE
  SHALL BE HYDRALICALLY OPERATED. ELECTRIC OR MANUAL VALVES WILL
  NOT BE ACCEPTABLE FOR THIS APPLICATION. THE TRANSFER VALVE SHALL
  OPEN TO SEWER AND HAVE THE FOLLOWING FEATURES.
- B) SHALL HAVE A POSITIVE CLOSURE SEAL.
- C) SHALL HAVE A DISCHARGE MINIMUM OF 250 GPM @ 20"/TDH.
- D) SHALL BE 6" OUTLET TO SEWER.
- E) SHALL HAVE ONLY 3 HOLDING POINTS FOR EASE OF REMOVAL.
- F) SHALL OPERATE DURING A POWER FAILURE.

# THE WATER USE DETECTION VALVE.

- A) THE WDS WATER USE DETECTION VALVE SHALL BE MARKED, MADE IN THE USA & WDS. ONE EACH FOR HOT & COLD WATER, SHALL BE MADE OF C87833 LEAD FREE BRASS AND 304 STAINLESS- STEEL. SHALL AUTOMATICALLY DETECT WATER USE AT SHOWER AND SEND WATER DOWN THE DRIVE LINE TO OPEN THE PIT MOUNTED HYDRAULIC TRANSFER VALVE TO SEWER. THE WATER USE DETECTION VALVE SHALL BE IN LINE SERVICABLE AND PERFORM THE FOLLOWING.
- B) HYDRAULICALLY DETECT WATER USE AT SHOWER AND SUPPLY THE APPROPIATE PRESSURE TO OPEN THE PIT MOUNTED TRANSFER VALVE TO SEWER.
- C) HAVE A MINIMUM SINSITIVIY OF 2 LITERS PER MINUTE ACTIVATION FLOW.

- D) HAVE A SENSITIVITY ADJUSTMENT TO WASHDOWN FLOW.
- E) BE MARKED; MADE IN THE USA, WORKING PRESSURE AND WDS
- F) BE INSTALLED AFTER AN ASSE 1013 COMPLIANT RPZ WITH LINE STRAINER

## THE SILT AND SOLIDS BASKET.

- A) BE MANUFACTURED OF 304 STAINLESS STEEL.
- B) HAVE 4 HANDLES FOR EASY REMOVAL FROM PIT.
- C) HAVE 1/4 HOLES FOR DRAINING.
- D) CATCH AND HOLD OVERSIZE SOLIDS.
- E) PLASTIC SILT & SOLIDS BASKETS WILL NOT BE ACCEPTABLE.

## THE CAST IRON GRATE & FRAME.

- A) FRAME SHALL BE CAST IRON & RATED H20 FOR HEAVY TRAFFIC.
- B) GRATE SHALL BE CAST IRON & RATED H20 FOR HEAVY TRAFFIC.
- C) GRATE SHALL BE CAST IRON & ADA STYLE.
- D) FABRICATED GALVANIZED STEEL GRATES WILL NOT BE ACCEPTABLE.

## THE STORMWATER BAFFLE.

- A) SHALL BE MOLDED FIBERGLASS.
- B) SHALL BE MINIMUM OF 1/4" THICK.
- C) SHALL BE WHITE CHEMICAL RESISTANT GELCOAT
- D) SHALL BE ATTACHED 1" BELOW STORMWATER OUTLET PIPE
- E) SHALL BE ATTACHED TO PIT WALL WITH STAINLESS SCREWS

## INSTALLATION.

A) Wastewater Diversion Systems, Inc. will supply the system as described above. Contractor will do the site work and supply all other items such as water piping, RPZ, shower heads and miscellaneous items to make a working system.

## WARRANTY.

B) All working /moving parts are warranted for 12 months after startup or 18 months from ship date. All warranties will require parts to be returned to WDS factory freight prepaid. All non-moving parts will be warranted for 10 years against defects in materials and workmanship.

## STARTUP.

C) Startup can be performed by WDS over the phone or by a WDS approved person or business paid for by the contractor.