

# **1. Bill of Materials**

# **Table of Contents**

<b>Section 1</b>	<b>Bill of Materials</b>
<b>Section 2</b>	<b>Orenco Buildings</b>
2.1	<i>Compressor Building 1</i>
2.2	<i>Park 2022 Chlorine Building 1</i>
2.3	<i>Park 2024 Chlorine Building 1</i>
<b>Section 3</b>	FCBS Control Panel
<b>Section 4</b>	Tidal Wave Mixer
<b>Section 5</b>	Depolox 400 M Analyzer
<b>Section 6</b>	Chemical Feed Skids
6.1	<i>D&amp;H Skid Brochure</i>
6.2	<i>Skid Drawings</i>
6.3	<i>Skid Components</i>
<b>Section 7</b>	Sample Return System
7.1	<i>SRS Drawing</i>
7.2	<i>SRS Components</i>
<b>Section 8</b>	Chemical Storage Tanks
8.1	<i>Tank Drawings</i>
8.2	<i>Tank Brochure</i>
<b>Section 9</b>	Radar Level Sensor
<b>Section 10</b>	Tankless Water Heater
<b>Section 11</b>	Emergency Eyewash & Shower

**Section 12**      Static Flow Mixer

12.1      Mixer Drawing

12.2      Injection Quill

# **Section 1**

**Bill of Materials**

# 1. Compressor Building

## 1.1 Orenco Fiberglass Shelter

Quantity	MFG Part Number	Description
1	Compressor Building 1	Orenco Fiberglass Shelter

# 2. FCBS (Reservoir Site)

## 2.1 Orenco Building

Quantity	MFG Part Number	Description
1	Park 2022 Chlorine Building 1	Orenco Fiberglass Shelter

## 2.2 FCBS Control Panel

Quantity	MFG Part Number	Description
1	FP-1S-P1	FCBS Control Panel

## 2.3 TWM Mixer

Quantity	MFG Part Number	Description
1	TWM15-230-33-V4050-3	TWM Mixer w/NEMA 4

## 2.4 Depolox 400 M Analyzer

Quantity	MFG Part Number	Description
1	W3T441932	E02 MODULE ELECTRONIC 400 M
1	W3T440611	FLOW CELL MODULE VARIASENS
1	W3T441936	E02 Sensor MEASURING MODULE - FC2
1	W3T441938	E02 Sensor MEASURING MODULE - PH
1	W3T391868	ORP MEASUREMENT MODULE

## **2.5 Chemical Feed Skid**

Quantity	MFG Part Number	Description
1	DFXAUS0530SPTLQ100UDC130EN	Metering Pump
7	50021-005 (VIT)	1/2" PVC Type 546 TU Ball Valve
1	PRM2050-P-S	Pressure Relief Valve
1	CC1000-S-S	Calibration Column
1	CKM050VS-PV	Check Valve
1	FI-100-8SV	Flow Indicator
1	TG-25ST100SS-PVC	Pressure Gauge
1	TG-55STB424B100-PVC	Pressure Switch
1	Big Wave Junction Box (Single)	Big Wave Junction Box

## **2.6 Venturi Sample Recovery**

Quantity	MFG Part Number	Description
1	JP13-03-137	Grundfos Sample Pump
1	MAZZ 0484-X PVDF	Mazzei Injector
1	51091G-007	3/4" Check Valve
1	50611-005	1/2" Ball Valve
3	50611-007	3/4" Ball Valve
1	YS075-P-S	Wye Strainer
1	53161-005	Needle Valve

## **2.7 Chemical Storage Tank**

Quantity	MFG Part Number	Description
2	IMT0120X19/X19	120 GAL TANK
2	MK07	7" MANWAY
2	BHPVV200	2" BULKHEAD FOR LEVEL SENSOR
2	BHPVV075	3/4" BULKHEAD CONNECTIOIN FOR PUMP SUCTION
2	UVAV8400	4" PVC SCH 80 U-VENT ASSY/VITON

## **2.8 ProMinent Radar Level Sensor**

Quantity	MFG Part Number	Description
2	DULCOLEVEL	Liquid Level Radar Sensor

## **2.9 Water Heater**

Quantity	MFG Part Number	Description
1	AP054480 EFD (EEMAX)	Tankless Electric Water Heater

## **2.10 Emergency Eyewash & Shower**

Quantity	MFG Part Number	Description
1	GFR1902 (GUARDIAN)	Freeze-Resistant Safety Station

# **3. FCBS (Well Site)**

## **3.1 Orenco Fiberglass Shelter**

Quantity	MFG Part Number	Description
1	Park 2024 Chlorine Building 1	Orenco Fiberglass Shelter

## **3.2 FCBS Control Panel**

Quantity	MFG Part Number	Description
1	FP-1S-P1	FCBS Control Panel

## **3.3 Analyzer**

Quantity	MFG Part Number	Description
1	W3T441932	E02 MODULE ELECTRONIC 400 M
1	W3T440611	FLOW CELL MODULE VARIASENS
1	W3T441936	E02 Sensor MEASURING MODULE - FC2
1	W3T441938	E02 Sensor MEASURING MODULE - PH
1	W3T391868	ORP MEASUREMENT MODULE

### 3.4 Chemical Feed Skid

Quantity	MFG Part Number	Description
1	GMXA1602PVE2Q00UDC0300EN	Gamma X Diaphragm Pump
7	50021-005 (VIT)	1/2" PVC Type 546 TU Ball Valve
1	PRM2050-P-S	Pressure Relief Valve
1	CC1000-S-S	Calibration Column
1	CKM050VS-PV	Check Valve
1	FI-100-8SV	Flow Indicator
1	TG-25ST100SS-PVC	Pressure Gauge
1	TG-55STB424B100-PVC	Pressure Switch
1	BPM050-P-S	Back Pressure Valve
1	PD0012PH01S	Pulsation Dampener
1	Big Wave Junction Box (Single)	Big Wave Junction Box

### 3.5 Venturi Sample Recovery

Quantity	MFG Part Number	Description
1	ICT0040X19	40 GAL TANK
1	Smart Trak AX23	Flow Line Level Sensor
1	JP13-03-137	Grundfos Sample Pump
1	MAZZ 0484-X PVDF	Mazzei Injector
2	839-101	¾" X ½" MPT x FPT Reducer Bushings
1	51091G-007	3/4" Check Valve
1	50611-005	1/2" Ball Valve
3	50611-007	3/4" Ball Valve
2	3857S-805	1/2" Unions (PVC, EPDM)
1	YS075-P-S	Wye Strainer
1	53161-005	Needle Valve

### 3.6 Sodium Hypo Tank

Quantity	MFG Part Number	Description
1	IMT0250X19/X19	250 GAL TANK
1	MK07	7" MANWAY
1	BHPVV200	2" BULKHEAD FOR LEVEL SENSOR
1	BHPVV075	3/4" BULKHEAD CONNECTION FOR PUMP SUCTION
1	UVAV8400	4" PVC SCH 80 U-VENT ASSY/VITON
1	DWTDMMV100	1" DOUBLE MALE OUTLET



### **3.7 Prominent Radar Level Sensor**

Quantity	MFG Part Number	Description
1	DULCOLEVEL	Liquid Level Radar Sensor

### **3.8 Water Heater**

Quantity	MFG Part Number	Description
1	AP054480 EFD (EEMAX)	Tankless Electric Water Heater

### **3.9 Emergency Eyewash & Shower**

Quantity	MFG Part Number	Description
1	GFR1902 (GUARDIAN)	Freeze-Resistant Safety Station

### **3.10 Static Flow Mixer**

Quantity	MFG Part Number	Description
1	8-10S-3-3-7.I(.50)	8" KOFLO Static Mixer
1	QR-.5S-.5PV-4.5	KOFLO Injection Quill