

MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT  
**PERMIT TO OPERATE**

15018

24580 SILVER CLOUD CT., MONTEREY, CA 93940 TELEPHONE (831) 647-9411 • FAX (831) 647-8501  
OPERATION UNDER THIS PERMIT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS INCLUDED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED. THE EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD CONDITION AT ALL TIMES THIS PERMIT TO OPERATE MUST BE POSTED OR ACCESSIBLE.

**LEGAL OWNER OR OPERATOR:** MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

**EQUIPMENT LOCATED AT:** 14811 Del Monte Blvd. (2 Miles North of Marina)  
Marina, California

**EQUIPMENT DESCRIPTION AND CONDITIONS:** THIS PERMIT TO OPERATE IS ISSUED AND IS VALID FOR THIS EQUIPMENT ONLY WHILE IT IS IN THE CONFIGURATION SET FORTH IN THE FOLLOWING DESCRIPTION:

WASTEWATER TREATMENT AND RECLAMATION PLANT:

Wastewater Treatment Plant With An Average Dry Weather Flowrate Capacity Of 29.6 MGD, A Peak Dry Weather Flowrate Of 48.7 MGD, And A Peak Wet Weather Flowrate Of 75.6 MGD.

**PRIMARY AND SECONDARY TREATMENT PLANT**

Headworks And Pretreatment

1. Influent Junction Box, Covered, Venting To The Headworks Odor Control System, And Discharging To Barscreen(s).
2. Barscreen(s), Enclosed, Venting To The Headworks Odor Control System, And Discharging Solids To A Hopper Via Covered Screenings Conveyor, And Wastewater To Aerated Grit Chambers.
3. Two (2) Aerated Grit Chambers, Each 18' Wide x 51' Long x 20' Deep, Covered, With Two (2) Scum Pumps And Three (3) 25 Hp Blowers, Venting To The Headworks Odor Control System, And Discharging Solids To Two (2) Grit Mitt Washers Via Eight (8) 15 Hp Grit Pumps, And Wastewater To Primary Sedimentation/Clarification.
4. Two (2) Grit Mitt Washers, Discharging To Grit Hopper Via Two (2) Chutes.

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THIS PERMIT BECOMES VOID UPON ANY CHANGE OF OWNERSHIP OR ADDRESS. OR ANY ALTERATION.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSIONS OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY ARTICLE 1, CHAPTER 3 PART 4, DIVISION 26 OF THE HEALTH & SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES AND REGULATIONS OF THE AIR POLLUTION CONTROL DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATION OR STATUTES OF OTHER GOVERNMENTAL AGENCIES

  
AIR POLLUTION CONTROL OFFICER

5. Three (3) Liquid Waste Receiving Tanks, Each 20' Wide x 20' Long x 9' Deep, Covered, With Two (2) 15 Hp Vaughn Chopper Pumps And Three (3) 7½ Hp, 85 GPM Scum Pumps, Venting To The Headworks Odor Control System, And Discharging To The Influent Junction Box.
6. Headworks Odor Control System, With Two (2) Identical Biotrickling Filters Each Consisting Of:
  - 6' Diameter x 18' High Contacting Tower.
  - Polyurethane Foam Cubes.
  - One (1) 3 Hp Inline 1,800 SCFM Centrifugal Fan.
  - One (1) 1 Hp Recirculation Pump.
  - One (1) 30 Gallon Nutrient Tank.
  - One (1) Inline Grease Screen.

#### Primary Sedimentation/Clarification

1. Five (5) Primary Clarifiers, Each 85' Diameter x 11' High, Covered, Venting To Primary Sedimentation Odor Control System, And Discharging Sludge To Waste Solids Thickening Via Eight (8) 15 Hp, 250 GPM Primary Sludge Pumps, Scum To Primary Scum Dewatering Tank Via Three (3) 7½ Hp, 85 GPM Primary Scum Pumps, And Wastewater To Trickling Filters.
2. Scum Dewatering Tank, 4' Wide x 11' Long x 7½' Deep, Venting To Primary Clarifier #4 For Odor Control, And Discharging To Scum Storage Hopper.
3. Scum Storage Hopper, 2500 Gallons, Venting to Primary Clarifier For Odor Control.
4. Primary Sedimentation Odor Control System, With Activated Carbon Vessel, 10' Diameter x 9½' High x 2½' Bed Depth.  
  
System Vented By A 15 Hp Exhaust Fan, 4400 SCFM.

#### Trickling Filters

1. Six (6) Trickling Filter Towers, Covered, 24' Media Depth, With Four (4) 300 Hp, 14,000 GPM Trickling Filter Pumps, Discharging To Solids Contact/Bioflocculation Tanks.

#### Solids Contact Process

1. Three (3) Solids Contact/Bioflocculation Tanks, Each 24' Wide x 125' Long x 21' Deep, With Four (4) 200 Hp, 2,340 SCFM Blowers, And Snail Removal System, Discharging To Secondary Sedimentation/Clarification.
2. Snail Removal System, With Two (2) 2 Hp Pumps, Discharging To Grit Mitt And Screw Conveyor.

#### Secondary Sedimentation

1. Six (6) Secondary Clarifiers, Each 110' Diameter x 14' High, Returning Secondary Sludge To Solids Contact/Bioflocculation Tanks Via Four (4) 50 Hp, 3,000 GPM Return Pumps, Discharging

Waste Secondary Sludge To Waste Solids Thickening Or Anaerobic Digester Via Three (3) 15 Hp, 360 GPM Waste Pumps, And Wastewater/Effluent To Ocean Outfall System Via Rapid Mix When Water Recycling Facility Is Offline.

#### Waste Solids Thickening

1. Gravity Thickener Tank, 55' Diameter x 10' High, Covered, Venting To Waste Solids Thickening Odor Control System, And Discharging To Anaerobic Digester Via One (1) 25 Hp, 250 GPM Thickened Sludge Pump.
2. Dissolved Air Flotation Thickener Tank, 55' Diameter x 10' High, Covered, With Two (2) 1,300 GPM Pressurization Pumps, Venting To The Waste Solids Thickening Odor Control System, And Discharging To Anaerobic Digester Via Two (2) 25 Hp, 250 GPM Thickened Sludge Pumps.
3. Waste Solids Thickening Odor Control System, Consisting Of:  
Activated Carbon Vessel, 8' Diameter x 9' High x 2½' Bed Depth.  
System Vented By A 10 Hp Exhaust Fan.

#### Anaerobic Digestion

1. Four (4) Anaerobic Digester Tanks, Each 86' Diameter x 30' High, Covered, With Four (4) 10 Hp, 500 GPM Digester Recirculation Pumps, Three (3) 100 Hp, 200 SCFM Digester Gas Mixing Compressors, And One (1) 100 Hp, 7,800 GPM Pump Mixing System, Venting To Digester Gas Collection System, And Discharging To Sludge Dewatering Via Two (2) 300 GPM Digested Sludge Pumps.

#### Digester Gas Collection And Disposal System

1. Three (3) Digester Gas Compressors.
2. 10,000 Ft<sup>3</sup> High Pressure Digester Gas Storage Tank, Discharging To Waste Gas Flares And/Or Boiler.

#### Sludge Dewatering

1. Two (2) 540 Gallon Flocculation Tanks, Two (2) FKC Rotary Screen Thickeners And Two (2) FKC Rotary Screw Presses Along With Polymer Storage Tank, And Associated Piping. Screw Presses Discharge To Dewatered Sludge Storage Area Via Two (2) Covered Screw Conveyors.
2. Two (2) Sludge Lagoons, Each 65' Wide x 740' Long.
3. Thirty-Seven (37) Asphalt Lined Digested Sludge Drying Beds, Each 75' Wide x 243' Long.

## **TERTIARY TREATMENT PLANT AND RIVER DISINFECTION SYSTEM**

### Reclamation Pump Station And Diversion Structure

1. Diversion Structure, Inside Dimensions 20' Long x 12' Wide x 19½' Deep At Maximum Depth, Underground Covered Concrete Basin, Diverting Treated Wastewater Via Pump Station To Coagulation/Flocculation Facility.
2. Pump Station, Inside Dimensions 23' Long x 17' Wide x 17¾' Deep At Maximum Depth, Underground Covered Basin With Three (3) Variable Speed, Submersible Pumps Each With A Rated Maximum Capacity Of 10,000 GPM And Driven By A 310 HP Motor.

### Coagulation/Flocculation Facility

1. Rapid Mixing Basin, 7' Square x 6¾' Deep, With One (1) Vertical Turbine Mixer Driven By A 15 HP Variable Speed Motor, Discharging To Flocculation Basins.
2. Two (2) Flocculation Basins, With Three (3) Chambers Each, Each Chamber 21' Long x 21' Wide x 16' Deep And Equipped With A High Efficiency Foil Mixer Driven By A Variable Speed Motor, Discharging Via Effluent Channel To Filtration Facility.

### Filtration Facility With Backwash

1. Six (6) Dual Filters Each Having 720 Ft<sup>2</sup> Of Filter Area And The Capability To Be Backwashed With Air And Water, Discharging Clear Water To Disinfection Facility.
2. Two (2) Positive Displacement Blowers For Backwashing, Each Blower Rated At 1,140 SCFM And Driven By A 100 HP Motor.
3. Backwash Equalization Basin With A Total Capacity Of 276,700 Gallons With Two (2) Submersible Pumps, Each With A Capacity Of 1,900 GPM And Driven By 35 Hp Motor.

### Recycled Water Disinfection Facility

1. Mixing Chamber Including One (1) Chlorine Induction/Mixing Unit, Submersed And Driven By A 20 HP Motor. Mixing Chamber Overflows To Either Of Two (2) Chlorine Contact Trains (Basins).
2. Two (2) Chlorine Contact Trains (Basins), Each With A Design Rate Capacity Of 19.2 MGD, 38.5 MGD Total, Discharging To Storage Pond.
3. Two (2) Filtration Backwash Submersible Pumps, Each Pump Rated At 6,120 GPM And Each Driven By A 90 HP Motor.

### River Water Disinfection

1. River Water Self-Cleaning Screen Filters Which Includes Five (5) Hydac Automatic, PLC-Controlled, 200 Micron, 6 MGD Vertical Cone Wrapped Screens And Two (2) 25 Hp, 660 GPM End Suction Centrifugal Backwash Return Pumps.

2. 30" Diameter Influent Check Structure, With One (1) Submerged 15 Hp Chlorine Induction/Mixing Unit And One (1) 3" Chlorine Feed Line, Discharging Into The Chlorine Contact Pipe.
3. 66" Chlorine Contact Pipe And Effluent Check Structure, Discharging To Storage Pond Via 42" Pipe.

Storage Pond

1. Storage Pond With 86 Acre-Feet Capacity, Discharging Via Overflow To 30" And 54" Reclamation Distribution Pipelines.

Chemical Storage And Feed Building

1. Two (2) Primary Coagulant Storage Tanks, Each With 7,200 Gallons Capacity For Storing Either Aluminum Sulfate Or Polymer Solution, And One (1) 7,200 Gallon Storage Tank For Sodium Hypochlorite.
2. Two (2) Ferric Chloride Storage Tanks, Each With 1,200 Gallon Capacity.

Chlorine Storage And Feed Building

1. Chlorine Storage And Feed Area With:  
  
Two (2) Manifolds Each Connecting Five (5) Operating One-Ton Chlorine Containers For A Total Of Ten (10) Chlorine Containers, Discharging To Evaporator Units.  
  
Three (3) Wallace & Tiernan Series 50-200 Evaporator Units, Discharging To Chlorinator Units.  
  
Five (5) Chlorinator Units, Two (2) Wallace & Tiernan And Three (3) Capitol Controls Model 4843C, Discharging To Chlorine/Sulfur Dioxide Scrubbing System.
2. Chlorine Scrubbing System, With Two-Stage Sodium Hydroxide Scrubber Capable Of Scrubbing 10,000 Pounds Of Chlorine.

THE EQUIPMENT FOR WHICH THIS PERMIT TO OPERATE IS ISSUED MAY BE OPERATED ONLY WHEN IN COMPLIANCE WITH THE FOLLOWING CONDITIONS:

Conditions:

1. Annual volume of wastewater treated and number of persons and housing units served must be reported to the District, upon request, at the time of permit renewal.
2. A tracking plan and records must be maintained by the Monterey Regional Water Pollution Control Agency (MRWPCA) of the total number of persons and housing units it serves each year, as well as the total annual volume of wastewater treated.

These records shall be maintained for at least two years and shall be reported to the District and available for District inspection upon request. These records shall be original hard copy.

3. Objectionable odors or emissions that constitute a public nuisance shall not be discharged from the plant.
4. This facility shall be operated only when in full compliance with all applicable requirements of State Law, District Regulations, and all terms and conditions of this Permit to Operate.
5. The operation of this facility must remain fully consistent the Air Quality Management Plan as adopted by the Monterey Bay Unified Air Pollution Control District Board.
6. This Permit to Operate is issued upon the basis of the delineation of the facility's service area and method of operations as described in its complete application for this permit. Any change in MRWPCA's service area or operations requires prior application to the District for and issuance of, an Authority to Construct or revised Permit to Operate which reflects and authorizes such boundary changes.

NOTE: This permit replaces Permit to Operate 13597 issued to Monterey Regional Water Pollution Control Agency on May 27, 2009. The annual renewal date remains June 27.

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