

9 PLEASURE COVE

9.1 Waste Water Systems

Ponds:

There are four evaporation ponds for Pleasure Cove. During our inspection, these ponds were bright green due to the presence of algae. Pond #4 is unlined and does not have mist sprayers. Pond #1 is the largest. Ponds #2 and #3 have pumps for a sprinkler system. The wastewater retention ponds at Pleasure Cove are considered to be undersized for the current resort development.

Lift Stations:

There are three lift stations for 90 hookups.

LS by Women's Washrooms: This station contains two new Baldor pumps, configured in an alternating lead/lag system. There are three chambers that are enclosed by a wood hut with cut out windows for ventilation. A visual alarm alerts neighbors in case of high water. The force main for this lift station pumps to Ponds #2 and #3.

The chamber is cleaned once or twice a year to remove accumulated solids. The maintenance staff reports that there is not much infiltration or inflow, but there are no flow records to verify this claim.

LS Green Hut: This is an older, three chamber lift station that pumps wastewater to Pond #4. An alternating lead/lag set-up is used for the two centrifugal pumps with Dayton motors. A visual alarm is used to alert neighbors of a high-water condition.

LS by dumpsters: This old, three chamber station leads to Pond #1. An alternating lead/lag set-up is used for the two centrifugal pumps with Dayton motors. The audio and visual alarm at this station alerts the neighbors through loud ringing and visual illumination.

The lift stations would require additional reliable pumping capacity, new instrumentation and controls, a functional alarm system, and standby power facilities in order to be adequate. In addition, the structures housing the pump stations are damaged.

9.2 Potable Water Systems

Treatment Plant:

There are four filters at this plant, three of which run in serial. The clarifiers and pipes were replaced in 2000. There is a separate chlorine storage tank and finished water storage tanks.

Flow meters are located near the storage tanks. A visual alarm and radio are used for monitoring the polymer feed. Water samples are taken daily. Reportedly, the filters are backwashed daily. The backwash pipes drain into the lake. At the time of our site visit, the plant was not operating.

Storage Tanks:

Three storage tanks for 300 hookups. The tanks are approximately the following sizes:

- Tank #1 – 18.5' high, 10' diameter
- Tank #2 – 10' high, 12' diameter
- Tank #3 – 10' high, 12' diameter.

Tank #1 leaks. There is no overflow tank. Tank #1 is connected to Tanks #2 and #3. Only Tanks #2 and #3 have distribution lines. There are control valves in place for emptying the tanks for cleaning purposes. Chlorine residual levels are recorded at the tanks and the trailers. The County also takes chlorine measurements on a regular basis.

9.3 Roads/Parking Lots

Pavement Section:

As indicated in Table 7, roads are generally in poor condition. Ratings would be even worse if some areas had not already been reconstructed. Areas of alligator cracking should be excavated and replaced with compacted aggregate base. A 3-inch thick overlay should then be placed on all collector roads and a 2-inch thick overlay on all secondary roads. Additionally we note that several areas of pavement appear to be supported on fills that are settling or creeping downslope. Future maintenance may be required in some areas.

Geometry:

The main collector road generally has adequate width for two-way traffic. The few locations of inadequate width can be widened during paving. A fire truck turn around is necessary at the end of this road. The entire roadway should be posted no parking and should be striped after paving.

The width of the secondary road that is south of sampling location S6 (see Plate 7) is too narrow for two-way traffic, but there is adequate room for widening. Construction of a fire truck turn around at the end of this road may require the removal of a couple of trailers. Secondary roads that are north of S6 cannot be easily widened, but can either be converted into one-way loops or else they are very short and serve only a few dwellings. However in the congested area surrounding locations S7 and S8 there is insufficient parking space and residents currently park on the roads, blocking traffic. Even if converted to one-way, these roads are very narrow and must be marked no parking so that it will be necessary to provide parking in another location or to remove some trailers to increase the amount of parking space in this area. There are also a couple of sharp corners at intersections in this area that may require moving or removing some trailers to provide an adequate fire truck turning radius. Surveys will be necessary to determine

the appropriate roadway and parking geometry in these areas. No areas of overly steep grades were noted. After geometric modifications and an overlay secondary roads should be signed.

There are additional areas of dwelling units that are served by gravel roads that may have inadequate fire truck access, but these were not included in our study.

Other Considerations:

Because of the topography of the ravine where this resort is located, most roadways have been constructed by excavating into already steep slopes and placing fill on the downhill side (also on very steep slopes). In some cases cut slopes are more than 20 feet high. In areas of gravel roads towards the north end of the property there are some newer cuts that are more than 30 feet high and are nearly vertical. Although no evidence of major landslides was observed, numerous areas of sloughing and soil pop-outs have occurred. In addition, several areas of roadway appear to be located on old fills that show signs of settlement or creep. It should be assumed that many roadway areas will require high maintenance and occasional removal of small landslides. There also appears to be a significant risk of larger landslides. We recommend a geologic survey of this resort.

9.4 Electrical Systems

Most concession buildings have individual PG&E meters and are served by an overhead high voltage distribution system with pole-mounted transformers owned by PG&E that runs through the marina. Some small concession buildings are sub-fed from larger buildings via a resort-owned distribution system. Electrical services ranged from poor to good. Internal wiring condition ranged from fair to good. Generally, the electrical systems are code compliant and adequate for current use, but many systems are not adequate for long term use. Several code violations were noted during the site inspection. A summary of the findings are presented in Table 24.

9.5 Boat Launch Facilities

The boat launch ramp at this resort consists of a 3½-inch thick concrete slab at a 12.5 percent slope. There are horizontal construction joints at approximately 10-foot centers. The plan dimensions are approximately 81½ feet width by 128 feet extending to the waterline. The ramp has a four launch lane capacity. There are two courtesy docks located at the ramp. Both are constructed of painted timber decking and exposed open-cell foam flotation billets. The first is an 80-foot long dock and the second contains four berthing slips. Both are showing deterioration.

The ramp appears to be in fair condition overall. There are several cracks possibly due to shrinkage of the concrete. The ramp does not appear to be experiencing any erosion of its underlying material. As with many of the previous ramps, any large cracks should be repaired

and curbs should be used to protect the adjacent areas. The ramp slope is acceptable. The turnaround area may be congested due to its proximity to the hillside. Parking capacity is acceptable along the road parallel to the shore.

The boat launch ramp will be retained as part of the camping facilities envisioned for this resort location. It is recommended that both courtesy docks not be retained for future use as they have exposed foam floats in an advanced state of deterioration.

9.6 Shoreline Developments

The shoreline had wood retaining walls at the north end of the trailer development at the dock, and a minimal wall around the pump station equipment building. There was evidence of some recent repair work on the walls, however, they were generally at, or very near to, the end of their service life, due to outward tilting and wood deterioration.

The following is a listing of retaining structures that appear to be acceptable structures, having a reasonable design life, if properly maintained:

- None noted.

9.7 Marinas and Fuel Systems

9.7.1 Dock Facilities

The Pleasure Cove Resort has a total of seven docks containing 82 uncovered berthing slips. Dock #1 was under construction at the time of the site visit. It is constructed of a galvanized steel frame with plastic pontoon floats. It has 22 berthing slips.

Dock #3 has gated entry and contains 23 berthing slips and has the fueling facilities located at outer end of the main walkway. The fueling facility is not a separate float at this resort and does not have floats that are impervious to gasoline spills. The fuel facilities and the remainder of the dock have painted timber decking with open-cell exposed foam flotation billets. The dock position is held through the use of mooring lines secured to the shore and chains with hand winches to control the tension on the outboard end of the main walkway.

Dock #4 is contains no berths and appears to be part of a dock that has come apart or is in the process of being repaired. It is composed of timber decking and exposed open-cell flotation billets.

Dock #5 is approximately 212 feet long and contains 28 berths. It has a gated entry. The dock is constructed of painted timber decking and exposed open-cell flotation billets.

Dock #6 has a gated entry and is approximately 55 feet long. It has a total of five berthing slips. It is topped with timber decking. The two floats leading to the main walkway has exposed open-cell foam floats, but the main walkway and fingerfloats have plastic encapsulated floats.

Dock #7 is a newer dock that berthed a single houseboat at the time of the site visit. It appears to be identical in construction to the new Dock #1 adjacent to the boat launch ramp. It contains no berths and is approximately 35 feet long with the access floats approximately 24 feet long.

Due to the state of deterioration of the exposed open-cell flotation billets prevalent at this resort, it is recommended that only Dock #1 and Dock #7 be retained for future use. They both utilize plastic encapsulated pontoon-type floats and are either new or in very good condition.

9.7.2 Fueling Services

There is one fuel dock here with a two dispensers. There is a store located on the fuel dock with an attendant for issuing gasoline to boats. The fueling dock is located at the end of a boat dock. There are two storage tanks on shore. One tank holds unleaded premium gasoline and the other tank holds unleaded regular gasoline. The tanks are piped to the two dispensers on the dock. The dispensers have two hoses with service station type nozzles. Each hose has a fuel cartridge type filter.

There are two dock storage tanks located on shore. This is flat unpaved gravel area adjacent to a paved road. The tanks are located about 30 feet from the road. The storage tanks are above grade, horizontal, rectangular, steel, double wall tanks that sit on a common concrete slab. One tank capacity is 2,000 gallons and stores premium unleaded gasoline. The other tank capacity is 1,000 gallons and stores regular unleaded gasoline. The tank appurtenances include a primary vent, emergency vent, product dispensing pump, sight gauge, fill line and vapor recovery line. Each tank has stairs for access to the fill nozzle. There is no leak detection monitoring system for the tank. There is no containment parking area for the tank truck.

Each tank has a 4-inch vapor line coupler, a large vertical cone with cover attached to the fill nozzle to catch spills from the filling hose and a 2 inch product dispensing pump. The pump dispensing line does not contain an on/off solenoid valve. The pump discharge lines reduce to 1-½ inch lines and the lines are routed toward the fueling dock underground. The lines are tape wrapped galvanized threaded pipe. The underground piping is not double wall piping. The lines come out of the ground near the fueling dock and are connected to two hose reels. Two hoses are routed down the shoreline to the boat dock. A connection is made on the dock to galvanized steel piping which is located in a piping trough in the walkway of the boat dock. A hose connection is made again to the fueling dock steel piping at the end of the walkway. The piping to the two dispensers is routed under the fueling dock. Shut off valves are located at the hose connections.

The on-shore piping does not conform to the California Fire Code, Section 5202. The piping is 1 ½ inch Schedule 40 galvanized steel pipe with threaded joints. Valves are bronze, threaded. The threaded joints are corroded and are not made up properly. Threaded pipe should be gauged to check for conformance to American Standard taper pipe threads before being made up. Bronze valves are a low melt material. Except for the piping at the tank, the piping is buried. The buried piping has a tape wrap. There is no cathodic protection. This piping is suitable for potable water, but not for fuel piping.

Suitable fuel piping for this service at the tank would be 1 ½ inch Schedule 80 black steel pipe with socket weld joints or threaded joints. The threaded joints would be gauged. Socket weld joints are preferred. Threaded joints would be used where necessary for equipment connections. Valves would be steel. The piping would be painted.

Suitable buried piping for this service would be double wall plastic piping with leak detection.

The dock piping does not conform to the California Fire Code, Section 5202. Dock piping is the same material as on shore piping tank piping. Connection to shore piping is made with fuel hose. There is a substantial length of fuel hose attached to the floating dock nearest shore and is used in lieu of hard piping. Hose couplings are threaded. The piping is in a covered piping trough on the second floating dock and on the floating fuel dock and is accessible.

Suitable fuel piping for this service would be flexible double wall pipe in a ducted metal jacket. Leak detection is not required. Final connection to the dispensers would be made in a sump box. This type of piping is specially designed for marina installations.

9.8 Preliminary Environmental Assessment

A site visit was conducted to assess and photograph present site conditions. Mr. Steve Petty, resort manager, was interviewed regarding site history and operations. Results of the interview and site observations are presented in the following table. Results of the preliminary environmental assessment are summarized in the following site observations table:

SITE OBSERVATIONS

General Observations	Remarks	Observed	Not
Current Use	Resort with restaurant, store, boat facilities and mobile homes	X	
Past Use			X
Structures	Numerous buildings, restrooms, kiosks, office, store	X	
Terrain	Varied	X	
Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Hazardous chemical and petroleum products in connection with known use. Fill dirt from an unknown source.	Small quantities of oil for equipment	X	
Aboveground storage tanks (ASTs)	Gasoline AST.	X	
Underground storage tanks (USTs)			X
Odors			X
Pools of Liquid			X
Drums	Used oil recycled by SafteyClean	X	
Hazardous chemical and petroleum products in connection with unknown use.			X
Unidentified substance containers			X
Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Chemical storage or agricultural chemical mixing areas	Small quantities of Roundup	X	

SITE OBSERVATIONS (CONTINUED)

Asbestos, and lead based paints	Not assessed.		
Polychlorinated biphenyls (PCBs)	Pole mounted transformers	X	
Pits, Ponds, or Lagoons	Waste water ponds.	X	
Stained soil or pavement			X
Stressed vegetation			X
Hazardous Waste Storage			X
Solid Waste			X
Waste Water		X	
Process waste water			X
Wells			X
Dry wells			X
Surface water	Waste water ponds	X	
Storm basins/catch	Storm drains.	X	

SITE OBSERVATIONS (CONTINUED)

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Storm drains			X
Drains and sumps			X
Septic system			X
Loading and unloading areas			X
Burned or buried debris			X

In summary, the environmental survey did not reveal recognized environmental conditions at the site. Small quantities of pesticides/herbicides such as Roundup are used on site. In addition, a used oil recycling bin is located on site. The used oil is collected by SafteyClean.