

## **Marina Environmental Measures and Best Management Practices**

### **Clean Marina Plan – Harborview Marina**

The Clean Marina Program was developed by the Florida Department of Environmental Protection (FDEP) to help improve the health and cleanliness of waterways. The Harborview DRI is committed to adhere to or exceed the program criteria. This draft plan demonstrates the commitment to the Clean Marina Program.

The boaters at the private marina primarily will be residents of the Harborview DRI and guests of the nearby hotel/resort complex. A limited number of the marina club memberships will be available to non-residents. A dry storage facility is proposed for the storage of boats outside the marina basin and in adjacent uplands. An area for fueling and sewage pump-out is proposed to be located near the haul out lift for the dry storage.

A commitment to petroleum control and containment is pledged at the marina with the establishment of a Petroleum Spill Recovery Plan at the marina. Emergencies, such as fire or fuel spills will be planned and prepared for with the creation of an Emergency "Panic" File. Environmentally-friendly measures will be implemented at the marina such as, no heavy boat repairs will be allowed, no painting of boats, and no pressure washing will be allowed. The marina will also pledge to ensure that boaters use environmentally friendly cleansing agents, recycling of oil, batteries, etc., and properly dispose of trash. Environmentally – friendly boating classes will be held at the marina and signage will be placed at both the marina and the public boat ramp.

The following describes, in more detail, the Marina Environmental Measures and Best Management Practices that Harborview will employ at the marina and public boat ramp.

- 1. Generate an Emergency File:** Harborview Marina will have an Emergency "Panic" File on site. Employees will be knowledgeable on handling emergency situations and contacting the appropriate emergency response office. A concise and organized set of emergency response procedures and a list of the appropriate emergency contacts will be included in the Emergency File.

- 2. Prepare for a Hurricane:** A hurricane preparation plan will be established and followed upon approach of a tropical storm or hurricane. This plan will outline emergency procedures, identify key contacts, and reduce overall confusion. The hurricane plan will be reviewed annually by staff and provided to any subcontractors that may be utilized at the marina.
- 3. Fire Safety:** A fire safety plan will be established to ensure personnel are trained to prevent, control, and extinguish fires. Fire extinguishers will be readily available and clearly marked throughout the marina grounds.
- 4. Petroleum Spill Recovery Plan:** A petroleum spill response/fueling contingency plan will be developed to ensure that personnel are trained in its uses in accordance with Chapter 62N-16 F.A.C. Personnel will be taught to maintain proper petroleum containment and contact the appropriate agency should a spill occur. The spill plan will involve the deployment of sorbent booms at the site of the fuel spill and along the canal to contain the spill. The appropriate measures will be taken to remove and properly dispose of the spilled petroleum.
- 5. Petroleum Control and Containment:** Attempts will be made to reduce or eliminate the amount of fuel entering the boatyard and surface waters from boat bilges, fuel tank vents and spills. Examples include, but are not limited to, the fuel pump station will use automatic/back pressure/shut-off nozzles which ensures unattended fueling is disabled; oil absorbing material will be encouraged for use in bilge areas of all boats with inboard engines; and absorbent pads and/or spill response carts with booms will be available should a fuel spill occur. A fueling contingency plan also will be established at the marina (See above No. 4).
- 6. Cycle Outboard Engine Fueling:** Care will be taken to reduce the emission of incompletely combusted hydrocarbon by-products (bluish-white smoke emitting from the outboard motor) formed as a result of utilizing the wrong gas to oil ratio (50:1 or 60:1) while refueling tanks of outboard engine powered boats.
- 7. Fuel Waste Management:** Harborview Marina will provide the means to properly dispose of fuel waste. Separate, accessible containers for the recycling of waste or stale fuel and contaminated absorbent material will be provided to boaters. A fuel recycling program will be established for petroleum contaminated wastes.

- 8. Used Oil and Petroleum Management:** Harborview Marina will have easily accessible and properly labeled containers for the proper disposal of used oil and fuel to prevent the introduction of these pollutants into the environment. Additionally, oil and fuel storage containers will be built with a surrounding berm that contains an impervious bottom in order to prevent leaching. Storage tanks will abide by the Storage Tank Rule (Chapter 62-761 F.A.C.). Care will be taken to ensure that oil and fuel are kept in separate containers and not combined. A recycling plan for used oil and fuel will be established for petroleum contaminated wastes as used oil and oil filters are prohibited from disposal in Florida landfills. Harborview Marina will register with the DEP as a Public Used Oil Collection Center (PUOCC).
- 9. Bilgewater:** Harborview Marina will make efforts to minimize the occurrences of contaminated bilgewater and discharges. The Harborview Marina will not allow the use of emulsifying soaps such as dish detergent to clean the bilge of inboard engines. Signage will be placed to encourage boaters to check for leaks of oil and fuel into the bilge and to fix leaks that may cause contamination of bilgewater. This approach will help keep unintended bilgewater discharge from entering the water. The marina also will construct a dock or land mounted oil/water separator to pump bilge water from the bilge to an oil/water separator which will then allow water to be filtered and discharged while the oil is contained for recovery. This oil-water separator will meet United States Environmental Protection Agency (USEPA) requirements for discharge to municipal facilities.
- 10. Boat Cleaning – In the Water:** Harborview Marina will pledge to encourage boaters to use cleaning methods that prevent or contain the release of pollutants to surface waters. Signage will be posted to educate boaters on the negative impact of many traditional cleaners and encourage the use of biodegradable cleaners that do not require rinsing. Signs will also be placed to promote proper boat cleaning methods such as using sponges and soft towels to clean the boat hull on a regular basis. Additionally, the marina will supply environmentally-friendly biodegradable cleaning products for sale in the "ship store". Furthermore, many of the boats will be placed in a dry storage facility which will reduce the need for in-water cleaning. The marina will prohibit the use of sudsing cleaners that must be rinsed that contain ammonia, sodium hypochlorite, chlorinated solvents, petroleum distillates, or lye. The marina will insist that cleaning methods, for boats that are cleaned in the water, use phosphate-free and biodegradable detergents in minimum amounts.

- 11. Boat Cleaning – Out of the Water:** A boat cleaning area will be placed near the dry storage area and will contain a surface which will allow water to percolate into the ground and prevent discharge into surface waters (i.e. gravel or grass). Rinse water also will be directed to a sanitary sewer that connects to the county's sewer system which should help avoid stormwater contamination. Industrial wastewater from washing and from pressure washing will not occur as pressure washing will be prohibited at the Harborview Marina and public boat ramp.

Harborview Marina will consider utilizing a designated boat wash area that functions as a car wash where the used water is recycled for reuse. This boat wash area would involve solid decking, gutters, and sumps to drain the water to the recycling area. This system could also be established near the boat lift to prevent accidental bilgewater from entering marina waters.

- 12. Boat Cleaning – Exotic Plants/Sealife:** The Harborview Marina will strive to minimize the introduction of exotic plants and animals. Signage will be posted to educate boaters on the affects of exotic plants and sealife on water quality, navigation, and recreational fishing. The marina will request that boaters and/or marina staff check bilges and live wells after boats are removed and taken to dry storage. The transfer of boats from saltwater to freshwater (via the boat lift) may reduce the opportunity for the introduction of exotic species in the marina basin. A boat rinse area will be located in close proximity to the dry storage facility where boaters can completely rinse vessels and properly dispose of collected exotic species and animals (see No. 11). Harborview or Charlotte County will encourage boaters that utilize the western public boat ramp to check their boats and trailers for plant or animal fragments.

- 13. Boating – Sensitive Habitat and Endangered Species:** Manatees will not be present within the private marina basin and residential waterways due to the construction of a weir at the boat lift in the marina access canal. The boat lift will serve to separate the saltwater portion of the access canal from the freshwater canal and marina system. Therefore, manatees will not be able to access the private marina basin and residential waterways. The waters of the Peace River are designated as a Manatee Refuge by the USFWS and as a result, manatees may be present in areas adjacent to the project site. Harborview will coordinate with the US Fish and Wildlife Services (FWS), the Florida Fish and Wildlife Conservation Commission (FWCC)

and the USCG to protect any manatees that may be present. FWCC and USCG approved signs will also be posted encouraging environmentally friendly boating practices when in the presence of endangered species and informing boaters of the local protected areas and speed zones.

Signage will be placed at the entrances to the southern Balboa canal to route all motorized vessels away from the canal. The marina will provide boaters with tide conditions by supplying tide tables to patrons on request.

It is important to note that no seagrass or shellfish beds were located in the marina, the entrance canal, or the other areas proposed for associated boat traffic. Only minimal areas of very sparse patches of low-quality seagrass (*Halodule wrightii*) with a percent cover of less than 5% were observed along the southern boundary of Harborview's West Village and the Peace River.

**14. Solid Waste Management:** The Harborview Marina will provide adequate trash disposal receptacles including recycling bins for glass, aluminum cans, and batteries. There will be enough trash receptacles on site to ensure sufficient space for refuse between scheduled trash pick-ups. These receptacles will be clearly marked and contain "wind/wildlife-proof" covers. Marina staff will perform daily (AM and PM) "walk-throughs" of the facilities to pick up stray litter and check for spills or other forms of refuse. This will include netting debris from the marina basin waters. Additionally, staff at the boat lift facilities will inspect the lift itself and the surrounding areas for debris and litter. The marina staff will convey the importance of proper waste disposal practices to marina attendees by providing pamphlets, flyers, billing inserts, and signs near dumpsters. The signs near dumpsters will instruct patrons not to place hazardous wastes/used oil in dumpster or trash receptacles and directing them to the hazardous waste and oil collection areas.

**15. Liquid Waste Storage Management:** Harborview Marina will have a liquid waste storage facility in close proximity to the dry storage facility which will house containers for bilgewater, used oil, used oil filters, contaminated spill control materials, old gasoline, and hazardous wastes. The storage area will be covered to prevent rainwater from making contact with containers, be constructed of impervious materials to prevent leaching, and be locked at all times. The marina will establish a spill contingency plan on how to deal with a fire or accidental spill. This plan will also detail how to manage liquid

waste during an approaching hurricane. This plan will also be incorporated into the marina's fueling contingency plan (See above No. 4).

- 16. Hazardous Waste Management:** Adequate waste storage facilities will be constructed to follow Waste Storage Best Management Practices. Snap top funnels will be utilized to help prevent spillage of waste when adding to the waste container and this will ensure that containers and tanks are closed after waste is added. The marina will contract with an approved hazardous waste hauler for periodic waste disposal. Spill control material and empty containers for emergency clean-up will be readily available to boaters and staff. Well marked, out of the weather, non-leaking containers for rechargeable batteries to be recycled will be provided to boaters. Additionally, a well-marked secure area will be provided where lead acid batteries can be temporarily stored for recycling. The batteries will be stored on impervious surfaces with sides to contain any spills that may occur and under cover from rain and direct sunlight with all cell caps in place. Signage will be placed to ensure that only waste that is hazardous is handled as such and that containers are properly labeled with the appropriate hazardous material label. Hazardous wastes generated at the marina are expected to be minimal, however hazardous wastes that are generated will be managed and disposed of in accordance with 40 Code of Federal Regulation 260-268 and not store on-site for more than 180 days. Compliance monitoring at the marina will be required under the Resources Conservation and Recovery Act (Chapter 62-730, F.A.C.). Used oil and oil filters will be managed and disposed of in accordance with Chapter 62-710, F.A.C. The spill contingency plan will provide a comprehensive guide to managing any spill, fire, or potential spill or fire and is included in the fueling contingency plan (see above No. 4).
- 17. Painting:** The Harborview Marina will not allow vessels to be painted on marina grounds. Many boats will be stored out of the water and in the dry storage facility, thereby reducing the number of bottom painted vessels to contact the water for long periods of time. Additionally, the marina basin and waterway system within the Harborview East Village will be freshwater which again reduces the need to maintain bottom painted vessels.
- 18. Land Based Hull Maintenance Paint Removal and Sandblasting:** The Harborview Marina will not allow any paint removal, scraping, or sand blasting at the marina.

- 19. Engine Repair and Maintenance:** Harborview Marina will encourage boaters to use "low emissions" fuel and maintain engine systems in an "environmentally-friendly" manner through regular maintenance schedules and tune-ups. The marina will not allow engine repair in the marina basin, however simple engine repair will be performed in the dry dock storage area when the boats are out of the water. The marina will supply a proper container for the transfer of used engine fluids and oil to be stored in the waste storage facility. An area for used batteries will be supplied in a non-leaking secondary container placed out of the influence of rain and direct sunlight. An appropriate hazardous waste hauler will be called to remove the used batteries.
- 20. Soiled Rags:** Harborview Marina will supply clearly labeled, fire safe containers for storing ignitable rags until they can be laundered or properly disposed. The marina will invest in recyclable cloth rags which can be recycled and cleaned by an industrial laundry service. As a result, the marina will contract with a permitted industrial laundry service that will pick up soiled rags and deliver clean rags on a regular basis.
- 21. Distress Signal Flare Management:** Harborview Marina will provide an area separate from flammable materials for the temporary storage of distress signal flares that may have been damaged, water logged or expired. The marina staff will make arrangements with the local fire department for thermal treatment of waste flares placed in the fire safe container. Signs will be posted near solid waste receptacles to prohibit the disposal of waste flares in dumpsters and solid waste containers.
- 22. Mercury-Containing Devices: Bilge Pump Float Switches and AC Thermostats:** Harborview Marina will provide water-tight containers in secure areas for boaters to place unusable mercury bilge pump float switches and a/c thermostats. The containers will be marked "For Mercury Bilge Pump Float Switch and AC Thermostat Recycling Only" and will be kept closed and under cover. Signs and flyers will be posted or placed in bills to alert boaters on the disposal ban on mercury bilge pumps and AC thermostats. The appropriate phone numbers will be included for information and to access recycling programs that recycle such materials.
- 23. Mercury Containing Lamps:** Harborview Marina will have clearly labeled containers for the placement of discarded fluorescent and HID lamps for recycling. Signs will be posted around the marina to alert

the public on the incineration ban for mercury-containing lamps and direct the public to the specific recycling bin area.

- 24. Used Antifreeze Management:** Harborview Marina will provide clearly labeled containers and easy mechanisms for collecting, recycling, or disposing of used anti-freeze. The containers will be picked up by a permitted facility for recycling. The antifreeze containers will be protected from the elements and located in a locked area. The containers will be inspected regularly for leaks or deterioration. Leaking containers will be replaced immediately. Dedicated antifreeze collection equipment will be utilized for disposal of used antifreeze (collection funnels, transfer pans or buckets, and storage drums or tanks). Environmentally-friendly anti-freeze will be provided for purchase in the marina's "ship store". Signs will be posted around the marina to encourage anti-freeze recycling and direct boaters to the appropriate anti-freeze disposal area.
- 25. Refrigerants:** Harborview Marina will provide convenient collection containers for recycling and disposing of used refrigerants. All containers will be clearly labeled and readily available for the appropriate disposal of refrigerants. The used refrigerants will be sent to a permitted facility for recycling and signs will be posted around the marina encouraging refrigerant recycling.
- 26. Fish Waste Management:** Harborview Marina will restrict fish cleaning to all areas except the designated fish cleaning area. The fish cleaning station will contain a macerator for fish waste disposal to the central sewer, trash receptacles, and waste water hookups. The marina will allow for fish waste to be used as chum bait in open waters away from the facility. Signs will be posted in the fish cleaning area educating boaters on sound fish waste management and proper fish waste disposal.
- 27. Stormwater Pollution:** Harborview Marina will establish a Stormwater Pollution Prevention plan and will have a stormwater National Pollution Discharge Elimination System (NPDES) stormwater permit. As part of the pollution prevention plan, Harborview staff will conduct stormwater sampling with organized record keeping of results at a frequency specified in the NPDES permit.
- 28. Landscaping Management:** Harborview Marina will utilize native Florida vegetation in landscaping to the extent practicable in the community and surrounding marina areas. The marina will utilize



environmentally-friendly fertilizer and pesticide using manufacturers' instructions.

- 29. Sewage Pumpouts and Waste Dump Receptacles:** Harborview Marina will provide sewage pumpouts in a location near the fueling area. The marina will have signs posted that direct boaters to the pumpout location. Regular inspections will be conducted to ensure that the pumpout system is working properly and pipes are kept clear from plugging. Marina staff will be on-site to ensure that the pumpout system is used properly by boaters and that no other products other than sanitary waste are pumped into the system. There will be clearly labeled receptacles on site for the disposal of other materials such as oil and hazardous waste.
- 30. Gray Water:** Harborview Marina will work to reduce the volume of gray water discharges into the marina basin. Harborview Marina will provide shoreside shower and laundry facilities to boaters. Trash receptacles will be easily accessible and regularly maintained to minimize food wastes.
- 31. Education and Training:** The Harborview Marina operator will attend the Clean Marina Workshop to ensure the fulfillment of the Marina Environmental Measures. Furthermore, applicable signage and pamphlets will be placed around the marina to help ensure boaters are complying with the Clean Marina program. Other measures taken to create a Clean Marina at Harborview include the prohibition of personal watercrafts (i.e. jetskis) in the marina. Harborview will provide navigation markers for boaters to easily access the canal to the marina.