

## AGENDA ITEM 4

### Sand Committee – August 18, 2014

#### Potential Urging Resolution

At present, there is no explicit testing requirement to assess the chemical quality of sand that is to be used in beach renourishment activities in Florida. Existing language in renourishment permits requires the absence of “toxic material”, but stops short of identifying explicit procedures or requirements for that demonstration. It would be prudent to establish a minimum requirement for analytical testing, as tangible support for conclusions regarding the presence, absence and/or significance of relevant substances.

To some extent, the appropriate suite of chemicals for analysis will be a function of historical knowledge about activities at a site where potential renourishment fill originates. The following analytical categories are suggested for inclusion as a baseline, with appropriate supplementary tests to be identified and implemented based upon such historical knowledge.

- “RCRA 8” metals with extraction by USEPA Method 3050 and analysis by USEPA Method 6010 or 200.7 (i.e., arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver). Data to be expressed in mg/kg;
- Total Recoverable Petroleum Hydrocarbons (TRPH) by Florida Department of Environmental Protection (FDEP) FL-PRO method. Data to be expressed in mg/kg;
- Chlorinated hydrocarbon pesticides by USEPA Method 8081, specifically aldrin, chlordane, dieldrin, endrin, heptachlor, and the DDT/DDD/DDE group. Data to be expressed in mg/kg; and,
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082 (i.e., Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260). Data to be expressed in mg/kg.

As an alternative approach, USEPA Method 8270 may be used to capture the analytes listed in both the third and fourth categories, though that method is capable of identifying a much larger universe of substances than the individual methods cited.

The number of samples to be collected for analysis will be dependent upon the quantity of material to be applied in the beach environment. Specific protocols and sample numbers should be developed on a site-specific basis, based upon discussions with Florida DEP and the entity that is proposing the beach

renourishment. An appropriate number of background samples should be required as well, to establish background conditions on the beach prior to the addition of local renourishment sand.