



## REQUEST FOR APPROVAL OF MONITORING PLANS FOR DISCHARGE OF DOMESTIC WASTEWATER TO WETLANDS

This form is to be used in conjunction with applications to discharge domestic wastewater to wetlands pursuant to Section 62-611.600, Florida Administrative Code (F.A.C.). Specific parameters to be monitored and the frequency of monitoring are specified in Section 62-611.700, Tables 1, 2 and 3. Monitoring plans shall utilize scientifically accepted methodology.

- (1) Attach a map and aerial photograph indicating the boundaries of the treatment wetland. On the attached map indicate the delineation of wetland jurisdictional boundaries and distinct vegetational communities within the treatment wetland. On the attached map indicate the location of each monitoring station, including vegetation transects and stations for biota, water and sediment chemistry, and stage recorders.
- (2) On the attached map and aerial photograph locate the proposed points of discharge to and from the treatment wetland. Identify district hydrological systems (pools) and provide the storage volume and detention time of each. Also indicate the general direction of water flow within the treatment wetland.
- (3) For sampling of benthic macroinvertebrates, the permit applicant may use either Hester-Dendy type artificial substrate samplers or natural substrate samplers such as benthic grabs or coring devices. Specify the sampling plan to be used to determine the minimum number of samples necessary at a given station to be 90% certain of being within 15% of the mean diversity of the population.
- (4) Specify the methodology to be used to sample fish populations in the treatment wetlands.

Electroshocking       Wegener Ring  Other \_\_\_\_\_

If a method other than electroshocking or Wegener Rings is used, provide a detailed description.

- (5) Specify the size of quadrats for sampling vegetation in each station.
  
- (6) For vegetation sampling, specify the sampling plan to be used to determine the minimum number of quadrats needed in each stratum to provide 90% certainty of being within 15% of the mean number of species of the population.
  
- (7) Specify the sampling plan and methodology for mosquitoes.
  
- (8) Specify the sampling plan and methodology for plant tissue analysis and soils.
  
- (9) Specify the methodology for establishing the list of threatened and endangered plant and animal species found in the treatment wetland.
  
- (10) Provide the following information for establishment of the groundwater monitoring plan (developed in accordance with Section 62-28.700, F.A.C.).
  - (a) background water quality;
  - (b) regional groundwater flow directions(s);
  - (c) site-specific groundwater flow direction(s);
  - (d) a surveyed site map detailing property boundaries, permanent benchmarks and corner monument located at the site;
  - (e) a map showing the location of all major well fields within a two-mile radius of the site boundary lines, including the latest data showing the cone of influence from the drawdown included by the well field (5-foot, 1-foot and zero radius of influence);
  - (f) a map showing the location of all private supply wells within one mile of the site boundary lines, including any data concerning well construction, casing depths and total depths of the wells;

- (g) soil sampling data and methods;
  - (h) water sampling procedures (see following section on quality standards);
  - (i) existing geologic and hydrologic data.
- (11) Attach a quality assurance plan formulated in accordance with the DER Guidance for Preparing Quality Assurance Plans, DER-QA-001/85.