SF-RAD Metadata Specifications for:

Field Data

Importance 1: Required, 0: Optional

SF-RAD Field Name	Definition	Importance
matrix_type	What is tested: wastewater (W); air (A); surface swab (S)	1
sample_location_code	Code corresponding to the location (e.g. WG01)	1
sample_id	Format: Sample Location-Date-Time (parent ID) [XXXX-YYMMDDHH]	1
sampling_date	Date of the sampling	1
sampling_time	Time of the sampling	0
gps_latitude_degrees	GPS coordinates (latitude) of the sampling location, in degrees	0
gps_latitude_minutes	GPS coordinates (latitude) of the sampling location, in minutes	0
gps_latitude_seconds	GPS coordinates (latitude) of the sampling location, in seconds	0
gps_longitude_degrees	GPS coordinates (longitude) of the sampling location, in degrees	0
gps_longitude_minutes	GPS coordinates (longitude) of the sampling location, in minutes	0
gps_longitude_seconds	GPS coordinates (longitude) of the sampling location, in seconds	0
water_temp	Temperature of the sampled wastewater, in C	0
water_ph	pH value of the sample in the field	0
water_salinity	Salinity, quantity of dissolved salts (NaCl, Mg2SO4, KNO3, NaHCO3), in ppt (part per thousand)	0
water_conductivity	Specific Conductiviy, measure of water's ability to carry an electric charge which is related to the dissolved salts in the sample (ÂµS/cm)	0
sample_turbidity	Turbidity (light scattering property of water that results in loss of transparency) of the sample, in nephelometric turbidity units (ntu)	0
sample_dissolved_oxygen	Dissolved Oxygen, amount of oxygen dissolved in sample, in mg/L	0
location_air_temp	Temperature of the air at the location and time of sampling, in C	0
location_air_humidity	Humidity of the air at the location and time of sampling, in %	0
water_flow_rate	Wastewater flow rate. For the Central District Wastewater Treatment Plant the units are million gallons per day (mgd). We plan to collect flow on a few sites at UMiami for which the flow rate would be gallons per day (gpd)	0
water_flow_unit	Unit of flow field indicating rate for water/air movement	0
sample_collection_method	Method used to collect the sample	0
sample_collection_team	Persons that collected the sample	0
location_access_team	Persons that provided access to the sampling location	0
sample_tss	Total suspended solids in the sample (mg/L)	0
sample_cbod5	5-day carbonacious biochemical oxygen demand (mg/L)	0
composite_type	If composite, provide the type	0
composite_start_date	If composite, date (MM/DD/YYYY) when sampling started	0
composite_start_time	If composite, start time for composite	0
composite_end_date	If composite, date (MM/DD/YYYY) when sampling completed	0
composite_end_time	If composite, end time for composite	0
composite_aliqots_attempted	Number of aliquots collected for composite sample	0
composite_aliqots_obtained	Aliquot number for composite sample (this question to be asked based upon number of aliquots listed above)	0
composite_aliqots_time	Time when the aliquot was collected (this question to be asked based upon number of aliquots listed above)	0
composite_aliqots_volume	Aliquot volume collected at that time (mL) (this question to be asked based upon number of aliquots listed above)	0
probe_serial_number	Identify which probe used to measure water quality (Temperature, pH, Salinity, etc..)	0
sodium_thiosulfate_added	Added to Neutralize Chlorine Residual	0
concentration_of_sodium_thiosulfate	Concentrated solution of sodium thiosulfate to minimize dilution from aliquot added to sample bottle (100 g/L usually)	0
volume_of_sodium_thiosulfate	Volume of sodium thiosulfate solution added to bottle (0.5 ml or 1.0 ml depending upon sample bottle size)	0
notes	Any notes related to sampling	0
time_zone	Current local time zone corresponding to the time specified in 'sample_collect_time', represented as a UTC time offset (e.g., UTC-06:00)	0
county_names	Names of all counties served by this sampling site (i.e., served by this wastewater treatment plant or, if 'sample_location' is "upstream", then by this upstream location); if there are cities/jurisdictions served that are not within a county (e.g., independent cities), list those in 'other_jurisdiction'	0
zipcode	ZIP code in which this sampling site is located	1
sample_location	Sample collection location in the wastewater system, whether at a wastewater treatment plant (or other community level treatment infrastructure such as community-scale septic) or upstream in the wastewater system	1
institution_type	If this sample represents wastewater from a single institution, facility, or building, specify the institution type; otherwise, specify "not institution specific"	0
epaid	NPDES permit number for the wastewater treatment plant specified in 'wwtp_name'	0
wwtp_name	The name of the Wastewater Treatment Plant (WWTP) to which this wastewater flows. If this wastewater does not flow to a WWTP, specify an identifiable name for the septic or other treatment system to which this wastewater flows. An arbitrary name may be used if you do not wish to disclose the real name.	0
wwtp_jurisdiction	State, DC, US territory, or Freely Associated State jurisdiction name (2-letter abbreviation) in which the wastewater treatment plant provided in 'wwtp_name' is located	1
capacity_mgd	Wastewater treatment plant design capacity	0
industrial_input	Approximate average percentage of wastewater from industrial sources that is received by the wastewater treatment plant specified in 'wwtp_name'	0

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stormwater_input	Does the wastewater treatment plant specified in 'wwtp_name' treat water from a combined sewer system (i.e., a sewer system that collects both sewage and stormwater)?	0
influent_equilibrated	Is influent to the wastewater treatment plant specified in 'wwtp_name' ever stored prior to treatment to equilibrate or modulate the influent flow rate?	0
collection_storage_time	Duration of time the sample was stored after collection and prior to reaching the lab	0
collection_storage_temp	Temperature at which the sample was stored after collection and prior to reaching the lab	0
equiv_sewage_amt	Equivalent unconcentrated volume of wastewater or mass of sludge in PCR reaction	0
lab_id	An ID assigned to a testing lab. It must be unique across labs used for this NWSS reporting jurisdiction's testing. If the same lab is used across multiple NWSS reporting jurisdictions, each NWSS reporting jurisdiction may assign that lab a different lab ID.	0
population_served	Estimated number of persons served by this sampling site (i.e., served by this wastewater treatment plant or, if 'sample_location' is "upstream", then by this upstream location)	0
sewage_travel_time	What is the approximate sewage travel time, on average, from sewage source to this sampling site (i.e., this wastewater treatment plant or, if 'sample_location' is "upstream", then this upstream location)? This should be specified as a duration in hours, not a time of day.	0
county_fips	County code assigned by federal government to indicate location numerically	1
state_names	A pipe separated list of US state names where collection occurs	0