State Water Resources Control Board (SWRCB) Letter No. 004 Subject: Preparation Method EPA SW5035 Date: April 26, 2002

Background:

Use of USEPA Method SW5035 is required for collection of soil samples in the field when USEPA Method 8260B is utilized for sample analysis.

Overview:

USEPA Method 8260B is currently the standard method when using GC/MS instrument <u>analyzing</u> samples for volatile organic compounds (VOCs). An integral part of Method 8260B is the application of EnCore or other equivalent sampling procedure for collecting soil samples in the field (USEPA Method SW5035). By not exposing samples to the atmosphere, this method minimizes the loss of VOCs from the samples prior to their analyses. This procedure is especially important for low VOCs' saoil testing (concentration <200 ug/kg) but is also applicable to high VOCs samples. The *Leaking Underground Fuel Tank (LUFT) Field Manual, October 1989*, also specifies the use of EPA Method SW5035 for samples analyzed for VOCs. The SWRCB implementation of electronic reporting of analytical data recommends reporting of sample preparations and field preservation in the EDF deliverable:

- If samples are to be analyzed within 48 hrs, then no preservation is needed. For low VOCs' concentrations, soil or solid samples may be preserved with a sodium bisulfate solution for longer hold time (*PRESCODE* "P18" for "Sodium Bisulfate" preservation).
- For high VOCs' concentrations, soil or solid samples should be collected in a watermiscible solvent (i.e., methanol) (*PRESCODE* "P13" for "Methanol" preservation).

Since results generated using these field preparation methods may vary considerably, identifying how the sample was prepared/collected is essential. Hence, EDF contains codes that reflect the field preparation/preservation information.

Special Conditions:

This applies to solid, soil, and sediment matrices.

Areas of Impact:

Field(s):EXMCODE, EXTDATE, RECDATE, and PRESCODEEntry:EXMCODE = "SW5035"PRESCODE = "P13" and "P18" may be left blank

Policy:

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a)	Scenario 1 – Sample prepared/preserved in the field with sodium bisulfate.	
	Code use:	EXMCODE = "SW5035"
		<i>PRESCODE</i> = "P18"; others as appropriate
		<i>EXTDATE</i> = Sampling date (i.e., <i>LOGDATE</i>)
		<i>RECDATE</i> = Sampling date (i.e., <i>LOGDATE</i>)
b)	Scenario 2 – Sample prepared/preserved in the field with methanol.	
	Code use:	EXMCODE = "SW5035"
		<i>PRESCODE</i> = "P13"; others as appropriate
		<i>EXTDATE</i> = Sampling date (i.e., <i>LOGDATE</i>)
		<i>RECDATE</i> = Sampling date ((i.e., <i>LOGDATE</i>)
c)	c) Scenario 3 – No field preparation/preservation.	
	Code use -	EXMCODE = "SW5035"
		<i>PRESCODE</i> = none specific to method SW5035; others as appropriate
		EXTDATE = Actual preparation/extraction date at the lab (i.e., EXTDATE)
		RECDATE = Actual received date at the lab (i.e., $RECDATE$)