

**From:** Hartman, Jelena@Waterboards  
**To:** [Melissa Turner](mailto:Melissa.Turner@waterboards.com)  
**Cc:** [Jimmerson, Chris@Waterboards](mailto:Jimmerson.Chris@Waterboards.com); "Lindsay Nelson"  
**Subject:** RE: Request to Amend the ESJWQC MRPP and QAPP  
**Date:** Friday, November 09, 2012 4:41:00 PM  
**Attachments:** [example language.docx](#)

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Hi, Melissa-

Just a quick follow-up regarding the request to update the monitoring program. Attached is a document that summarizes and clarifies some of the points brought up during our discussion earlier today. The example should help with revising the request, but it is not meant to suggest the exact language or the content of the request.

Please let me know if you have any questions or concerns, or if you would like to further discuss the request.

Kind regards,

Jelena

> -----Original Message-----

> From: Lindsay Nelson [<mailto:lnelson@mlj-llc.com>]

> Sent: Monday, November 05, 2012 5:15 PM

> To: Hartman, Jelena@Waterboards

> Cc: Parry Klassen; Michael L. Johnson; Melissa Turner; Rachael West; Stephanie Henderson

> Subject: Re: Request to Amend the ESJWQC MRPP and QAPP

>

> Dear Jelena:

>

> As we discussed on the phone last Friday, I am resubmitting an amended letter

> from the ESJWQC requesting to amend the current ESJWQC MRPP and QAPP.

> The original letter, submitted on October 31st, only listed two of the three

> requests to amend. Please disregard the original letter, as the attached amended

> letter should be complete. We will mail the letter with a wet signature to you

> within the week. Once approved, the Coalition will submit an updated QAPP and

> EPA 8141A Standard Operating Procedure (SOP). Please let us know if you have

> any further questions.

> Thanks

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> --

> Lindsay A. Nelson

> Environmental Scientist

> Michael L Johnson, LLC

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Initial Preservation/Holding Requirements for Sediment Chemistry and Sediment TOC

The ILRP MRP Order No. R5-2008-0005 specifies preservation and holding requirements for sediment TOC chemistry and sediment chemistry analysis as “can be held at 4C for up to 48 hours, and should be analyzed within this 48 hour period, but can be frozen at any time during the initial 48 hours for up to 12 months maximum at -20C” (MRP Attachment C, Appendix E, page 1).

The 2008 Surface Water Ambient Monitoring Program (SWAMP) QAPrP recommends sediment sample preservation for TOC analysis “at 6°C for up to 28 days, and must be analyzed within this period but can be frozen at any time during the initial 28 days, for up to a year maximum at -20°C” (2008 SWAMP QAPrP, Table B4). The general guidelines in Test Methods for Evaluation Solid Waste, Physical/Chemical Methods (SW-846) specify that sediment samples for semivolatile organics analyses (e.g. USEPA methods 8270 and 8081) should be cooled to ≤6°C. Samples should be extracted within 14 days and extracts analyzed within 40 days following extraction (SW-846, Table 2-40(A) and Table 4-1). The preservation and holding time guidelines for sediment chemistry are consistent with the SWAMP requirements for organophosphate pesticides and pyrethroids in sediment (2008 SWAMP QAPrP, Tables B25 and B30). Alternatively, samples can be frozen at -20°C up to 1 year, with identical extraction and analysis requirements following thawing (2008 SWAMP QAPrP, Tables B25 and B30).

The Coalition requests to amend the preservation/holding time requirement for sediment TOC chemistry analysis to “store at ≤6°C (not frozen), analyze or freeze (-20°C) within 28 days” and amend the requirements for sediment chemistry analysis to “store at ≤6°C (not frozen), extract within 14 days or freeze (-20°C) within 48 hours”. Table 1 below lists the current preservation requirement and requested changes. Once approved, the Coalition will submit an amended QAPP.

Table 1...

Analytical Parameter	Initial Preservation/Holding Requirements- Current QAPP	Initial Preservation/Holding Requirements- Requested Update
Total Dissolved Solids	Store at 4°C	Store at <6°C
Total Suspended Solids		
Turbidity		
Soluble Orthophosphate		
TKN, Ammonia, Total Phosphorus, Nitrate-Nitrite as N	Preserve to ≤pH 2 with H <sub>2</sub> SO <sub>4</sub> , store at 4°C	Preserve to <pH 2 with H <sub>2</sub> SO <sub>4</sub> , store at <6°C
Metals/Trace Elements, Hardness	Filter as necessary; preserve to ≤pH 2 with HNO <sub>3</sub> , store at 4°C	Filter as necessary; preserve to <pH 2 with HNO <sub>3</sub> ; store at <6°C
<i>E. coli</i> (pathogens)	Store at 4°C	<u>Preserve with Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub>, store at &lt; 8°C</u>
Total Organic Carbon	Preserve with HCl, store at 4°C	Preserve with HCl, store at <6°C
Carbamates	Store at 4°C; extract within 7 days	Store at <6°C; extract within 7 days
Organochlorines		
Organophosphates		
Herbicides (general)		
Herbicides (paraquat dichloride)	Store at 4°C; extract within 7 days	Store at <6°C; extract within 7 days
Herbicides (glyphosate)	Store at 4°C; freeze (-20°C) within 2 weeks	Store at <6°C; freeze (-20°C) within 2 weeks
Aquatic Toxicity	Store at 4°C	Store at <6°C
Sediment Toxicity	Store at 4°C, do not freeze	Store at <6°C, do not freeze
Sediment Grain Size	Store at 4°C, do not freeze	Store at <6°C, do not freeze
Sediment Total Organic Carbon	Store at 4°C, freeze (-20°C) within 48 Hours	Store at <6°C or freeze (-20°C) within 28 days
Sediment Chemistry	Store at 4°C, freeze (-20°C) within 48 Hours	Store at <6°C, <u>extract within 14 days</u> or freeze (-20°C) within <u>48 hours for up to 12 months</u>

**Deleted:** The laboratory contracted by the Coalition follows a 28 day hold time for sediment TOC chemistry analysis (Walkley Black; 2010 ESJWQC QAPP, Appendix XXXIV ) and a 14 day hold time for pyrethroids/chlorpyrifos analysis (USEPA 8720; ESJWQC QAPP, Appendix XXXII). These hold times are consistent with other methods listed in the ILRP MRP for sediment TOC and pyrethroids/chlorpyrifos analysis, including USEPA 415.1, USEPA 9060, SW-846, USEPA 1660 and USEPA 8081 and 8081A (MRP Attachment C, Appendix A, page 5). It is unclear where the requirement of a 48 hour hold time comes from. A review of the 2008 SWAMP QAPrP also references a 28 day hold time for sediment TOC; there is no listed hold time requirement for pyrethroids/chlorpyrifos analysis. ¶

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**Comment [JSH1]:** It appears that sodium thiosulfate should be pre-added to containers, please remind me if we discussed this already and I am forgetting the explanation.

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