Message

From: Bernard, Lisa@Waterboards [Lisa.Bernard@waterboards.ca.gov]
Sent: 2/19/2016 5:13:47 PM
To: Villacorta, Claudia@Waterboards [Claudia.Villacorta@waterboards.ca.gov]; Goodwin, Cathleen@Waterboards [Cathleen.Goodwin@waterboards.ca.gov]
CC: Sablad, Elizabeth [Sablad.Elizabeth@epa.gov]; Dougherty, Mona@Waterboards [Mona.Dougherty@waterboards.ca.gov]
Subject: RE: Healdsburg TST Language

I think Cathy and I got it figured out yesterday.
Thanks

From: Villacorta, Claudia@Waterboards
Sent: Thursday, February 18, 2016 5:54 PM
To: Goodwin, Cathleen@Waterboards
Cc: Sablad, Elizabeth@epamail.epa.gov; Bernard, Lisa@Waterboards; Dougherty, Mona@Waterboards
Subject: Re: Healdsburg TST Language

I recall catching that on Eureka permit but guess that I missed making same comment on yours. There was also a minus sign missing. Lisa can tell you where. Claudia

Sent from my iPhone

On Feb 18, 2016, at 5:42 PM, Goodwin, Cathleen@Waterboards <Cathleen.Goodwin@waterboards.ca.gov> wrote:

Hi Elizabeth:

I'd like to follow up on our discussion today, regarding the TST language in Healdsburg's permit. I looked further into the language where it appears that mathematical symbols are missing (e.g., less than or equal to and minus signs). Lisa Bernard looked at our first permit with TST language and some of the emails and documents that we retained in the file record as that language was worked on. It's interesting to find that the mathematical symbols are missing in all of the Region 1 permits, but the symbols are included in Region 4 permits (example: Camarillo Sanitary District, Order No. R4-2014-0062-A01).

A close read of the language tells me and Lisa Bernard that the mathematical symbols should be added (and are highlighted in yellow), as follows:

MRP, Section V.A.6 Acute Toxicity, Quality Assurance and Additional Requirements

a. The discharge is subject to determination of "Pass" or "Fail" and "Percent (%) Effect" from acute toxicity tests using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_o) for the TST approach is: Mean discharge IWC response [CV1] [CV2] ≤ 0.80 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent (%) Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 100.

MRP Section V.B.6 Chronic Toxicity, Quality Assurance and Additional Requirements

a. The discharge is subject to determination of "Pass" or "Fail" and "Percent (%) Effect" from acute toxicity tests using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_o) for the TST approach is: Mean discharge IWC response [CV3] [CV4] ≤ 0.75 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent (%) Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 100.

I know that you were hesitant to recommend adding these symbols based on your knowledge that Charles and Robyn worked out the Region 1 language, based on the Region 4 language. But since the Region 4 language uses the symbols, it seems very likely that the symbols somehow got left out of our first permit with TST language and the error got carried over to subsequent permits.

Please let me know if you have any further thoughts on this and whether you want to run this by Debra.

Thanks again for your assistance and guidance.

Cathy

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