

## **NDEE RESPONSE**

2/13/14 email From NDEE “ NDEE has provided responses to several of the questions that you posed. Our responses are provided in blue font and inserted in the text of your email below.

## **PUBLIC RECORDS REQUEST**

11/29/23 email To NDEE and DHHS Public Records,

“... I am providing another slightly revised records request below. It is my intention to request basic administrative records used in the regular management and operation of the fluoride treatment program in Nebraska. If a record is not readily available, please simply let me know.

I also have some questions below that may apply to either NDEE or NDHHS.

Since last March, when I asked the City of Lincoln about the water fluoridation program, I have been seeking plain language to understand how our water is treated, monitored and reported. Recent records received from NDEE reflect various terms that appear, from my lay perspective, to be conflicting - terms including regulatory level, recommended level, Nebraska optimal level, concentration level, operational range, and control range. Again, I appreciate any readily available records or responses to better understand and define these terms, to clarify the significant range difference between Lincoln and Omaha, and the fluoride treatment program in general.

### **Records Request:**

**1. NDHHS current, dated regulation specifying the fluoridation level:** A dated regulation specifying the current fluoride level required by Neb. Rev. Stat. § 71-3305 (1), “fluoride ion content of the water... prescribed by the State Department of Health,” if different than Title 179, Chapter 1, Section 003.01, referenced in this undated document currently linked at [https://www.nebraska.gov/rules-and-regs/regsearch/Rules/Health and Human Services System/Title-179/Chapter-01.pdf](https://www.nebraska.gov/rules-and-regs/regsearch/Rules/Health%20and%20Human%20Services%20System/Title-179/Chapter-01.pdf). **[NOTE THAT AS OF 2/13/24 THIS LINK NOW PROVIDES REGULATION TITLE 179 – LABELED UNDER HISTORY WITH EFFECTIVE DATES: SAT AUG 27 1983 - CURRENT]**

**2. NDHHS supporting documentation:** Please confirm that the source NDHHS uses to support the regulation in Item #1 above is as noted in Item D below, the “Nebraska Optimum level – 1.0 mg/L (USPHS Recommended, 1962).” If there is additional, or other, regularly referenced supporting documentation, please provide a record of the five most significant supporting documents used to reaffirm the regulation specified in Item #1 above. “Significant” meaning that the document represents the current state of standard professional practice, as it applies to such areas as knowledge of benefits and harms, application, operation, disease prevention/causation, hazard notification, or other applicable areas of public water fluoridation and fluoride toxicity. For example, the records might include reports by DHHS staff or other findings, opinions, recommendations or reviews of:

- The most recent five year daily average maximum air temperature available, by county, in Nebraska, as indicated in Item D below, and the most recent reports available documenting the

incidence of dental caries, of bone diseases and of neurodevelopmental diseases in Nebraskans by age, county, and year, over a ten year period.

- CDC MMWR 6/2/2023 Weekly article, “Community Water Fluoridation Levels To Promote Effectiveness and Safety in Oral Health — United States, 2016–2021” which includes the recommendation, “To provide the benefits of community water fluoridation, water systems should target a level of 0.7 mg/L and maintain levels  $\geq 0.6$  mg/L,” with evidence why the lowest possible level would be most prudent under such controversy.
- The March 15, 2023 DHHS Draft National Toxicology Program's "Monogram on the State of the Science Concerning Fluoride Exposure and Neurodevelopmental and Cognitive Health Effects"
- The Journal of the American Dental Association January 2011 study, "Evidence-Based Clinical Recommendations Regarding Fluoride Intake From Reconstituted Infant Formula and Enamel Fluorosis"
- The 2006 National Academies of Sciences report, "Fluoride in Drinking Water"
- Any other benchmark studies from the last 10 years, example "A Benchmark Dose Analysis for Maternal Pregnancy Urine-Fluoride and IQ in Children"

**3. NDHHS due diligence and review:** Please provide the record documenting the process and expectation for timely review and update of the regulation referenced in Item #1 above.

**4. CDC Reporting (NDHHS or NDEE?):** the CDC website titled, “Water Fluoridation Reporting System,” specifies that “...data collected and used in WFRS are provided and owned by the states and tribes,” and “Public water systems that adjust fluoride levels are eligible for a CDC Community Water Fluoridation Quality Award if fluoride levels are maintained within an operational control range of 0.6 to 1.0 mg/L.”

*Reporting of state water fluoridation data to WFRS is not a required activity. In the past, this information has been reported to WFRS by the Nebraska Public Drinking Water Program, currently within the Drinking Water and Groundwater Division of NDEE. In recent years, staffing changes/reductions have prohibited the regular submittal of this data into WFRS.*

The CDC Fluoridation Status Report (Nebraska, 2022) entries for the City of Lincoln and for Douglas County MUD under Fluoride Concentration are both 0.70 (link [https://nccd.cdc.gov/DOH\\_MWF/Reports/FlStatus\\_Rpt.aspx](https://nccd.cdc.gov/DOH_MWF/Reports/FlStatus_Rpt.aspx)).

*The 0.70 ppm entries on the status report appear to be default optimal levels for fluoridated public water systems, provided by CDC, in accordance with CDC’s current recommendations.*

The Douglas County 2022 Water Quality Report states, “The District adds enough fluoride to make the tap water concentration approximately 0.7 ppm, well below the federal limit of 4.0 ppm.” And, the MUD reported a fluoridation level range of 0.571 – 0.806 ppm (link <https://www.mudomaha.com/wp-content/uploads/2023/03/CCR2022.pdf>).

*The link provided is for Metropolitan Utilities District’s 2022 Public Drinking Water Consumer Confidence Report, not necessarily Douglas County’s. There are other community public water systems in Douglas County, not associated with M.U.D. The 4.0 ppm federal limit referenced in that report, refers to the primary maximum contaminant level (MCL) for fluoride in the Safe Drinking Water Act (SDWA), which is what the CCR is required to address. Compliance with that MCL is a separate process to conformance with recommended fluoridation practices.*

The City of Lincoln 2022 Water Quality Report fluoride level ranged from 0.899 – 0.901 ppm. The report states, “Fluoride is added in treatment to bring the natural fluoride level of about 0.4 ppm to the State recommended level of 0.8 - 1.5 ppm.”

- Please provide the procedure and the metric used for the fluoride concentration level reported to the CDC, i.e. does it represent the yearly average from testing or some other metric?

*Historically, the data reported to CDC through WFRS represented monthly averages, based on reports received each month from fluoridated water systems. Fluoride data for naturally fluoridated, and unfluoridated systems is representative of routine monitoring conducted per SDWA requirements.*

The regulatory level and the optimal level, presented in the 10/25/2023 training (reference Item D below), appear to both be above 0.70 mg/L. Was Douglas County MUD fluoride concentration in compliance in 2022 or is the MUD under a separate ordinance? How long have the various fluoride levels and recommendations presented in the 10/25/2023 training been part of the annual Fluoride Training sessions?

*The fluoride levels presented in MUD’s 2022 report were in compliance with the MCL for fluoride as required by the SDWA, which is implemented by NDEE. As provided in Neb. Rev. Stat. § 71-3305, cities and villages required to fluoridate, must do so in accordance with the rules and regulations of the Department of Health and Human Services (Title 179 NAC 1). Determination of compliance with those rules and regulations would ultimately be the responsibility of DHHS.*

#### **Questions regarding NDEE emails 11/1/2023 and 11/14/2023 and attachments:**

A. Regarding the statement “(DHHS) is authorized to regulate fluoridation levels as provided in Neb. Rev. Stat. § 71-3306. The ... (NDEE) is tasked with administering the Nebraska Safe Drinking Water Act. Administration of the Nebraska Safe Drinking Water Act was moved from DHHS to NDEE by LB 148 (2021).”

- DHHS is authorized to regulate fluoridation levels as provided in Neb. Rev. Stat. § 71-3305 also, correct?

*Yes, per Neb. Rev. Stat. § 71-3305, DHHS is the agency authorized to regulate fluoridation.*

B. I understand that the slide presentation titled “Water Fluoridation, Dental Health Benefits,” by Dr. Charles F. Craft was included in the Annual Fluoridation Training conducted in Columbus by NDEE on 10/25/2023 before representatives of 8 Nebraska community water systems. Slide #5 says, “2015 USPHS now recommends an Optimal Fluoride concentration of .7mg/L”

- How is the individual operator expected to proceed with the information “2015 USPHS recommends an Optimal Fluoride concentration level of .7 mg/L,” given that the level differs from DHHS Title 179 regulation and the Nebraska Optimum level of 1.0 mg/L referenced in Item D below?

*As part of the training provided to water operators on water fluoridation, the current regulatory requirements, and their relationship to previous, and current CDC recommendations is explained in detail. Operators are informed that currently, Title 179 Chapter 1 requires that “The operation of*

*the fluoridation program shall be such that the fluoride ion content of the water available to users ...shall be in the range of 0.8 to 1.5 parts per million.” They are instructed that this range, as established in Title 179 Chapter 1, was based on existing CDC recommendations at the time the regulation was developed, and that CDC’s recommendations were changed in 2015, however the DHHS regulation has not yet been updated to reflect those changes. While references are made during the training to CDC’s revised recommendations, it is emphasized that those are currently only recommendations, and that the regulations still require that a fluoridated system provide water with a fluoride ion content of 0.8 to 1.5 parts per million.*

- Dr. Craft’s name does not appear on the 10/25/2023 training attendance sheet. Did Dr. Craft present these slides at the 10/25/23 annual fluoride training?

*Dr. Craft was unable to be present at the training on 10/25/23. In his absence, the information was presented by NDEE staff familiar with the material.*

- Consider updating the reference to a U.S. Surgeon General last in office in 2006 from “current” to “former”.

C. Regarding the slide presentation, “Water Fluoridation Training, Regulatory Requirements,” slide #12, titled “TITLE 179 NAC 1,” the first bullet point says, “Recommended CDC control range is 0.1 below to 0.5 mg/L above optimum.” Slide #13, titled “NEW STANDARD!” the first bullet point says, “April 2015 – CDC changed the recommended optimal fluoride level to 0.7 mg/L.” The second bullet point says, “Operational range – 0.5 to 0.9 mg/L.”

- How is the individual operator expected to proceed with the information “April 2015 – CDC changed the recommended optimal fluoride level to 0.7 mg/L,” given that the level differs from DHHS Title 179 regulation and the Nebraska Optimum level of 1.0 mg/L referenced in Item D below?

*As part of the training provided to water operators on water fluoridation, the current regulatory requirements, and their relationship to previous, and current CDC recommendations is explained in detail. Operators are informed that currently, Title 179 Chapter 1 requires that “The operation of the fluoridation program shall be such that the fluoride ion content of the water available to users ...shall be in the range of 0.8 to 1.5 parts per million.” They are instructed that this range, as established in Title 179 Chapter 1, was based on existing CDC recommendations at the time the regulation was developed, and that CDC’s recommendations were changed in 2015. However, the regulations have not yet been updated to reflect those changes. While references are made during the training to CDC’s revised recommendations, it is emphasized that those are currently only recommendations, and that the regulations still require that a fluoridated system provide water with a fluoride ion content of 0.8 to 1.5 parts per million.*

- How does the control range in slide #12, “Recommended CDC control range is 0.1 below to 0.5 mg/L above optimum,” relate to the operational range in slide #13, “Operational range – 0.5 to 0.9 mg/L?”

*The range of 0.1 mg/L below to 0.5 mg/L above the optimum level was the previous operational range recommended by CDC. Current guidance provided in the Water Fluoridation, Principles &*

*Practices M4 Manual, Sixth Edition, published by the American Water Works Association, identifies +/- 0.2 mg/L of the optimal level as an achievable operating range.*

- A specific slide was not found covering the requirement in Title 179 NAC 2-002.04A, to notify the public when fluoride levels exceed 2.0 mg/L. With State department does this notification responsibility reside?

*The public notification requirement for exceeding the secondary maximum contaminant level (MCL) for fluoride in Title 179 NAC 2 is part of the Safe Drinking Water Act (SDWA), and is the responsibility of NDEE. Monitoring for fluoride, and compliance calculations is conducted as provided in Title 179 Chapter 3-005.03, and is separate from the requirements of Title 179 Chapter 1. A system that is found to be in violation of the secondary MCL will be required to notify the public as referenced in Title 179 NAC 2-002.04A.*

D. Regarding the slide presentation, “Fluoride Testing,” slide #3, titled “Fluoride Monitoring,” bullet point says, “Narrow window for acceptable results:

Regulatory – 0.8 to 1.5 mg/L (NE Regs)

Recommended – 1.0 to 1.3 mg/L

Nebraska Optimum level – 1.0 mg/L

(USPHS Recommended, 1962)

- This slide appears to set the current Nebraska Optimum fluoride level based on the USPHS Drinking Water Standards, 1962, Page 8, column labeled, “Recommended control limits – Fluoride concentrations in mg/L,” in relation to annual average of maximum daily air temperature over a five year minimum at 58.4 – 63.8 degrees, is this correct?

*Yes, previous CDC recommendations on optimal fluoride concentrations in water were based on air temperature. The effects of fluoride are cumulative. Previous recommendations were developed based on the premise that in warmer climates people consumed more water. Essentially, less fluoride was needed per glass, because you were drinking more glasses of water. Those previous recommendations were the basis for the levels of fluoride currently provided in Title 179 Chapter 1.*

- How does the Nebraska Optimum level of 1.0 mg/L relate to the CDC recommended level 0.7 mg/L and operational control range of 0.6 to 1.0 mg/L? Is this set by NDEE or NDHHS?

*An optimal fluoride level of 0.9 – 1.0 mg/L reflects CDC’s previous recommendations that were adjusted for average regional air temperature. 0.7 mg/L is CDC’s current recommended level that does not vary regionally. NDEE is not familiar with the control range of 0.6 To 1.0 mg/L, or the basis for it. The authority to develop regulations related to water fluoridation is provided to NDHHS per Neb. Rev. Stat. § 71-3305.*