UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

Date: *Dated as shown on electronic signature(s)*

Subj: Inspection Report
Clean Water Act - National Pollutant Discharge Elimination System ("NPDES")
Epping WWTF

From: Solanch Pastrana Del Valle, Environmental Engineer

Thru: Grace Beery, Student Intern

SOLANCH PASTRANA-DEL VALLE
Digitally signed by SOLANCH PASTRANA-DEL VALLE
Date: 2023.09.19 17:56:41 -04'00'

To: File

I. Facility Information

A. *Facility Name:* Epping WWTF

B. *Facility Location*: 40 Lagoon Road
Epping, New Hampshire 03042

C. *Facility Contacts:* Dennis Koch, Public Works Coordinator
(603) 679-5441, waterandsewer@townofepping.com

D. *NPDES ID No(s).:* NHG580012 & NHG58A009

II. Background Information

A. *Date(s) of inspection:* July 19, 2023

B. *Weather Conditions:* Sunny, mid 80s

C. *US EPA Representative(s):*
Solanch Pastrana Del Valle, Grace Beery

D. *State/Local Representative(s):* None

E. *Federally Enforceable Requirements Covered During the Inspection:*

F. *Previous Enforcement Actions:*
2016 EPA Administrative Order ("AO")(CWA-AO-R01-FY16-07) (issued on June 9, 2016)
2023 EPA Administrative Order (CWA-AO-R01-FY23-10) (issued on May 11, 2023)

III. Type and Purpose of Inspection

U.S. Environmental Protection Agency ("EPA") staff, Solanch Pastrana-Del Valle and Grace Beery ("EPA Inspectors") conducted an announced compliance evaluation inspection at the Epping Wastewater Treatment Facility ("WWTF")("Epping", the "Facility" or the "Site"), located in Epping, New Hampshire. The Group inspected compliance under the 2021 Small Wastewater Treatment Facilities General Permit ("2021 Small POTW Permit") (effective date April 1, 2022) and the 2020 Great Bay Total Nitrogen General Permit (effective date May 1, 2021).

Slide numbers mentioned throughout the report, correspond to the slides in the attached inspection photo album.

IV. Facility Description

The facility is a 0.5 million gallon per day ("MGD") secondary wastewater treatment facility that discharges to the Lamprey River. The following is a brief description of the plant's treatment process: wastewater first passes through a 6-millimeter fine screen, followed by grit removal. Most primary solids are removed in these steps. Wastewater then flows to a lift station, from here the wastewater can flow either to the lagoon system, composed of two lagoons, or to a 2-millimeter micro screen. From the micro screen, the wastewater flows to the Membrane Batch Reaction ("MBR") process, where the biological treatment takes place. The MBR is composed of three membranes. Following the MBR process, the wastewater flows through the ultraviolet light ("UV") system for disinfection. Significant upgrades to the facility have been ongoing since approximately September 2018.

On September 12, 2022, and again on January 11, 2023, the New Hampshire Department of Environmental Services ("NHDES") issued letters to the Town imposing a moratorium on new sewer connections and septage acceptance at the facility. All wastewater received and treated at the facility is from their collection system.

V. Inspection

The inspection was announced on July 6, 2023. Given the recent enforcement action entered between the EPA and Epping, it was necessary to coordinate the inspection with lead time.

A. Opening Conference

Solanch Pastrana-Del Valle and Grace Beery ("EPA Inspectors") arrived at the facility at approximately 9:40 AM. The group met with Epping personnel outside of their conference room and conducted brief introductions. The Epping group was composed of the following personnel: Jake Roger, Dennis Koch, Tom Dwyer, Anthony Shea, Norm Dionne, John Brackett, Gene Doswell, David Mercier, Forrest Hardart and Donnie Brown.

Ms. Pastrana explained the purpose of the site visit, presented her credentials, and requested permission to inspect the facility and to take pictures. Mr. Koch granted permission.

Ms. Pastrana asked for a status update on the AO Corrective Action Plan ("CAP") and current treatment operations. The group indicated that the wastewater was receiving full treatment and that the emergency bypass treatment system ("EBTS") was offline.

B. Facility Tour

Mr. Anthony Shea and Mr. Mercier lead the inspectors through a walk of the treatment plant starting at the headworks. The group enter the headworks building, where the fine screen and grit removal are located (slides 2-3). Inside a channel, the Town has the influent flow ultrasonic meter (slide 4).

The influent then flows through the lift stations (slide 5). From there the wastewater flows through the MBR process (slides 6-7). The group walked over the grates above the MBRs and observed the crane system above them (slide 8). The cranes are used to lift the membrane from their enclosures and to move them into the designated cleaning area. Mr. Mercier indicated that the heated enclosure building required by the in the AO, needs to be big enough to contain the crane system within.

The group then moved to the Process Building. Chemicals and tanks used for pH control are housed in here (slide 9). Inside the building, the UV disinfection unit, the effluent composite sampler, and the effluent flow meter were observed (slides 10-12).

The group then moved toward the septage receiving building (slide 13). Mr. Mercier indicated that the building and equipment housed in there were bought and/or completed in late 2018. The area was observed to be clean and free of any debris.

Epping currently has two lagoons which are currently used for storage and partial treatment (slides 14-16). Inside Lagoon 2, the Inspector observed a submersible pump (slide 17). The submersible pump was currently offline. The group indicated that wastewater pumped from the lagoon would go into the EBTS system, which was not in used (slides 18-19). The EBTS system is composed by two yellow frac tanks. Near the EBTS, a shed was observed. The Inspectors were told that inside the shed, the Facility stored and controlled the use of bisulfate and polymers for the EBTS system. Partially treated effluent from the EBTS is then discharged into the effluent channel through a white pipe outside of Frac Tank 2 (slide 20).

At the effluent channel (slides 21-22), fully treated effluent and partially treated effluent is combined. Effluent is then discharged into the Lamprey River. The effluent flow meter was observed at the effluent channel (slide 23).

Mr. Shea then proceeded to show the inspector the in-house laboratory (slide 22).

C. Closing Conference

The group met outside the in-house laboratory to conduct the closing conference. The inspectors thanked the Epping personnel for taking time to provide the walk-through and reiterated how helpful it was to tour the facility to understand its operations. Inspectors indicated that a written report would be provided to the facility.

The Inspectors departed the facility at approximately 12:30 PM.

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

Inspection Photo Album

Facility: Epping Wastewater Treatment Facility

EPA Inspectors: Solanch Pastrana-Del Valle
Grace Beery

NPDES Permit #: NHG580012 & NHG58A009

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CWA NPDES Inspection
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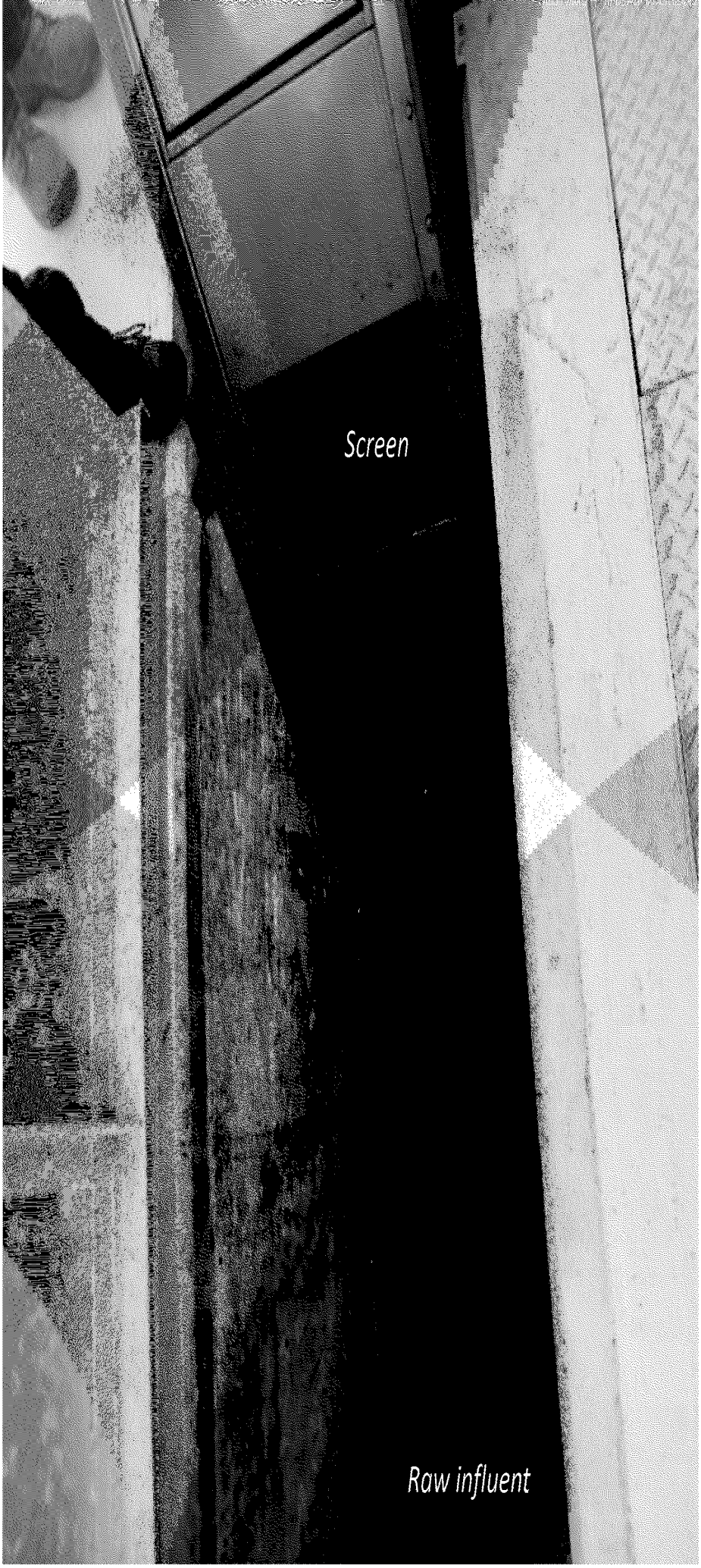

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MBR process

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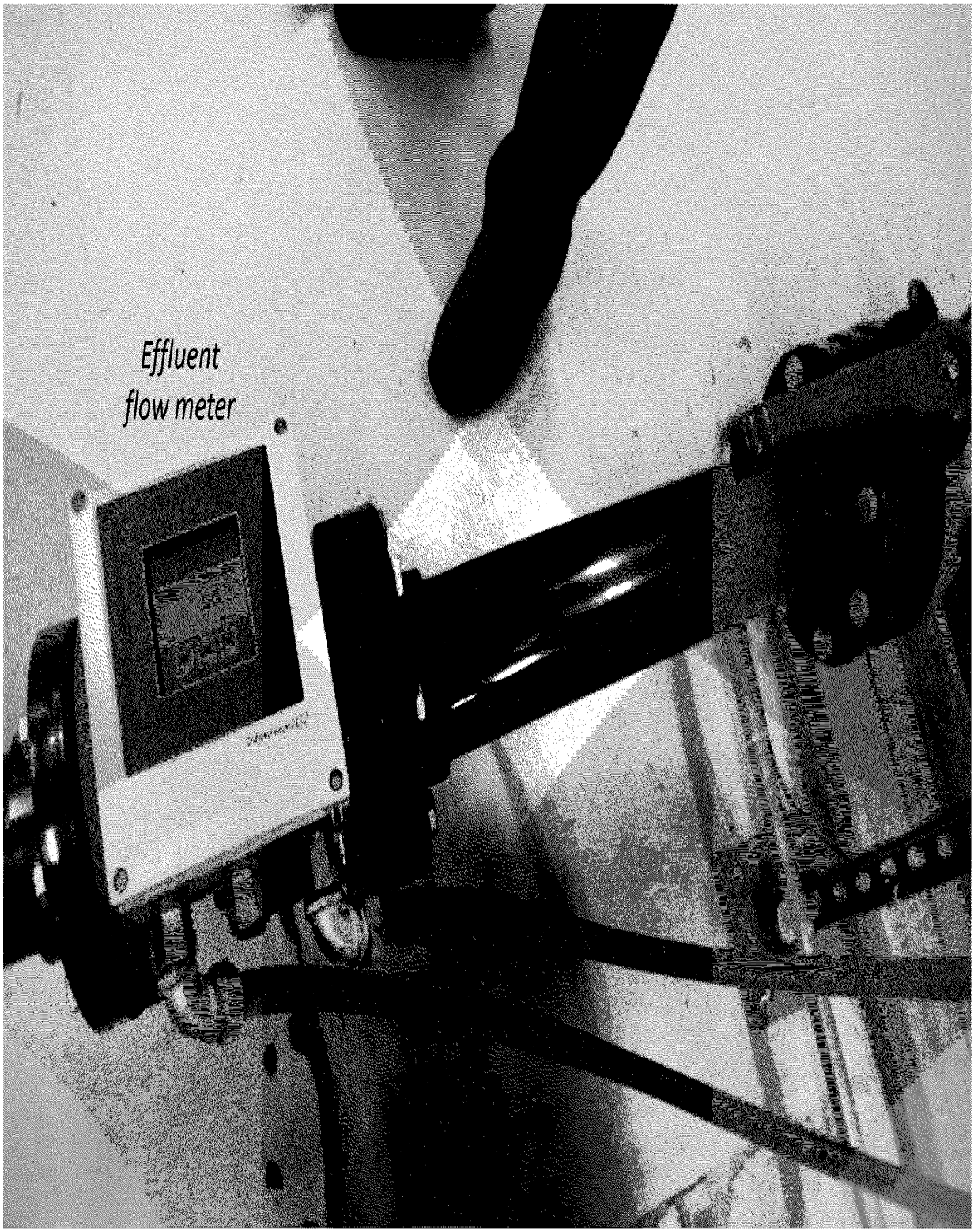

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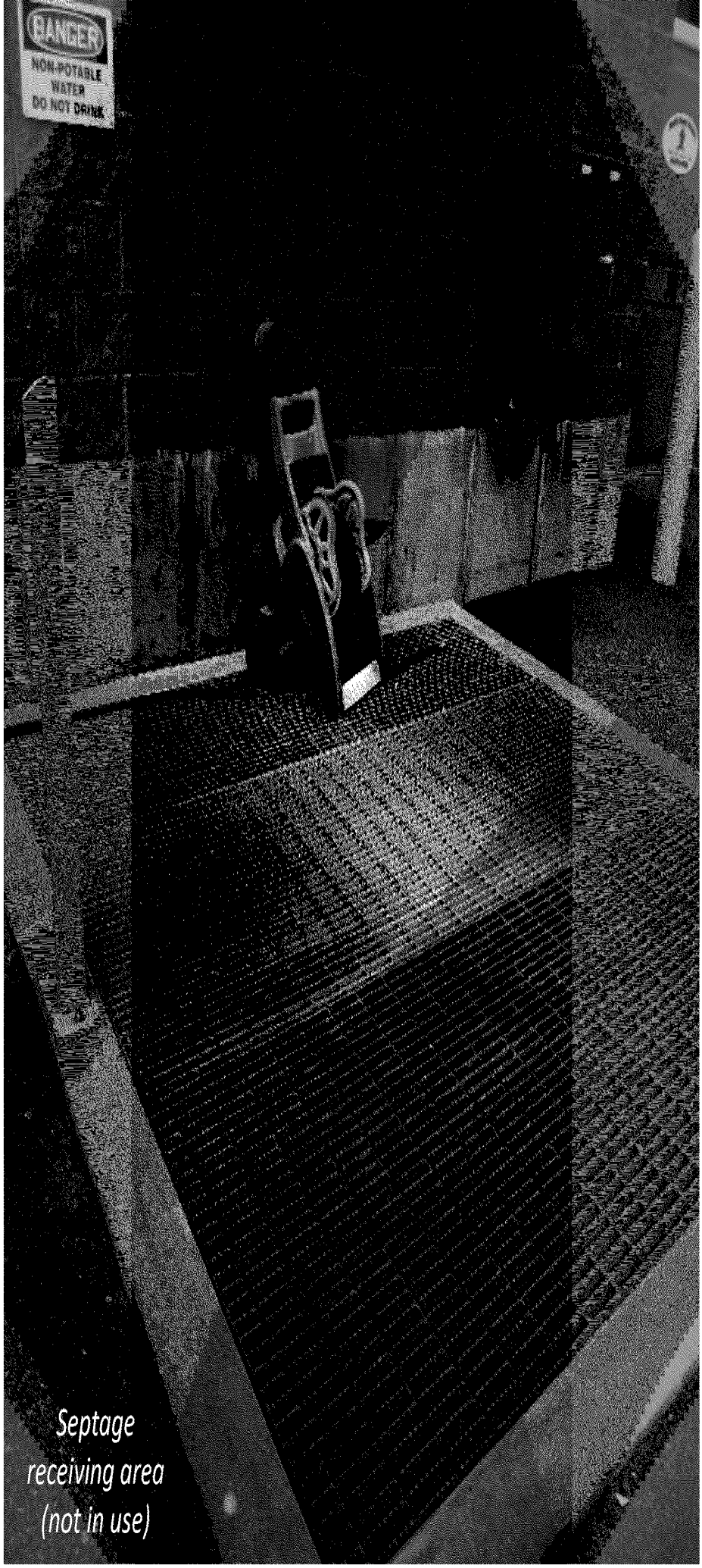

Septage receiving area (not in use)

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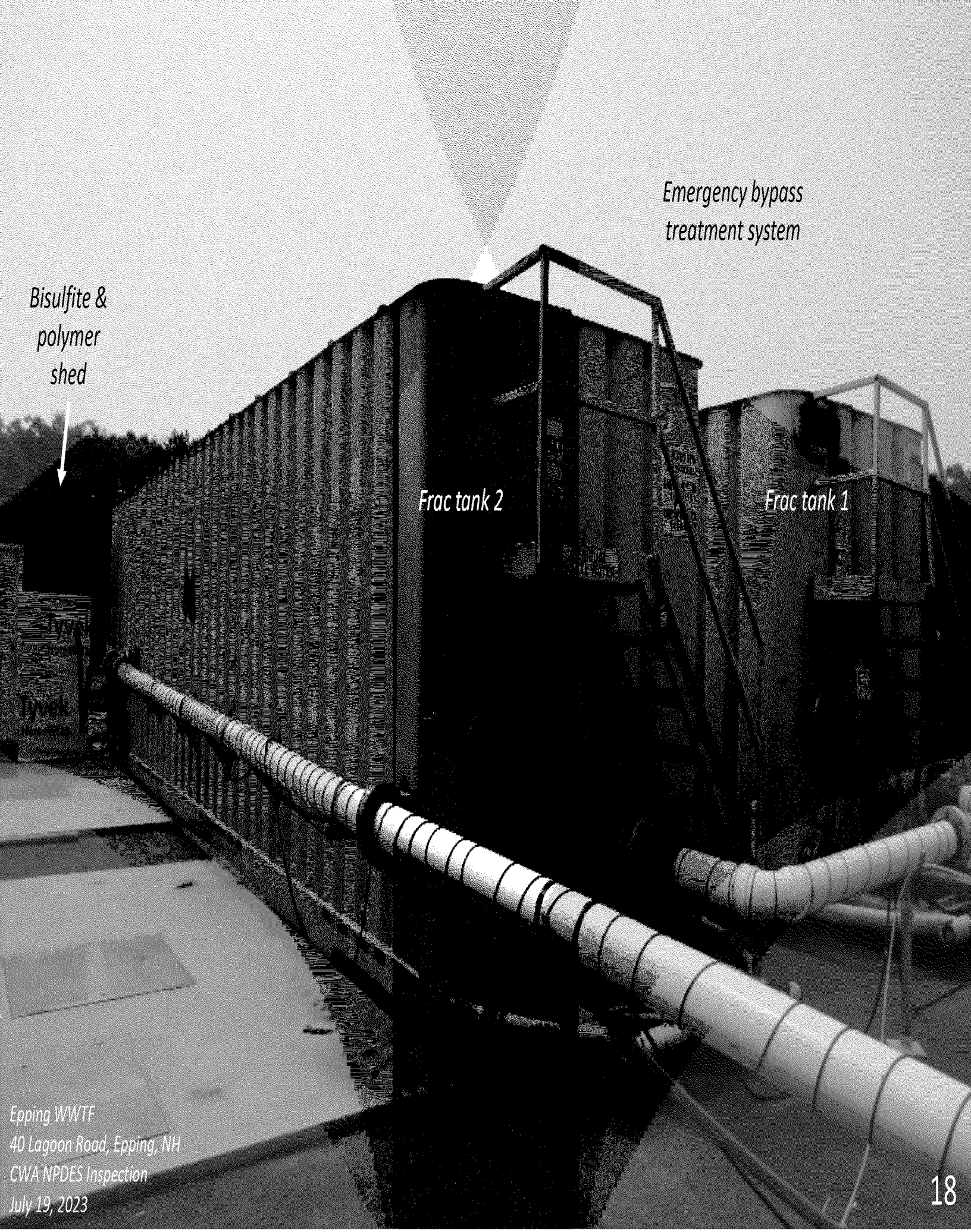

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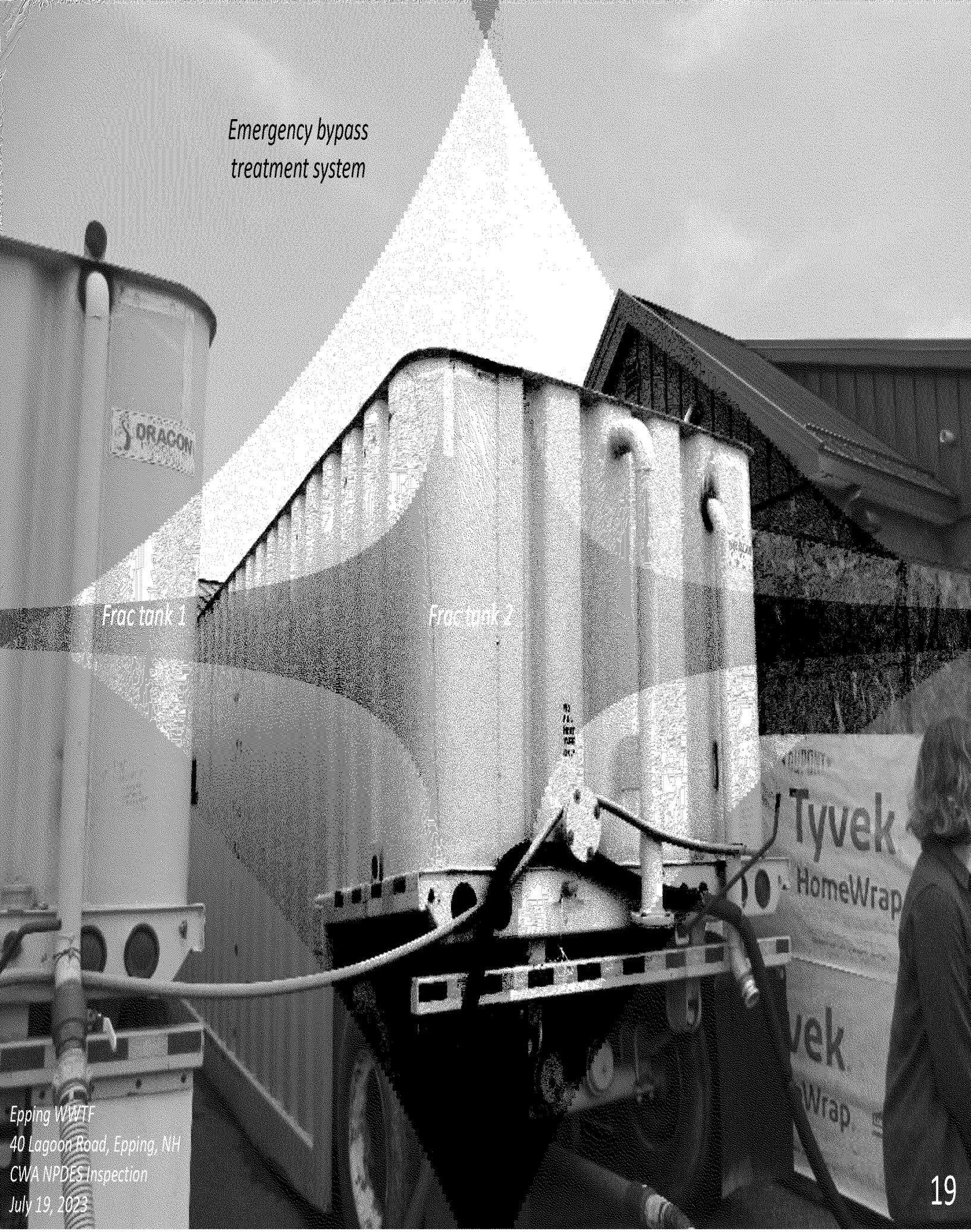

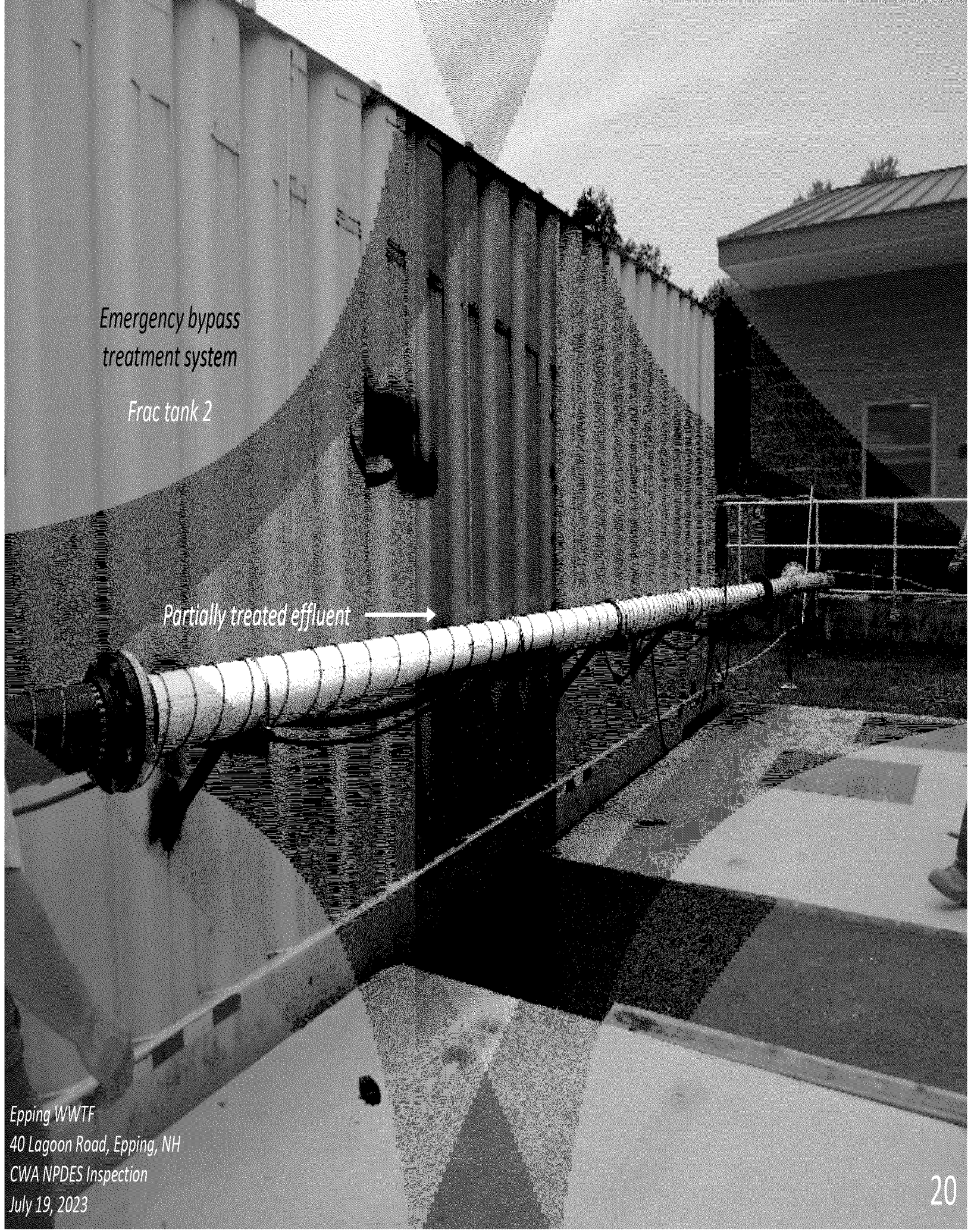

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In-house laboratory

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