

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 22-12

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FIRST QUARTER 2022

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

CECIL LUE-HING RESEARCH AND DEVELOPMENT COMPLEX
6001 WEST PERSHING ROAD CICERO, ILLINOIS 60804-4112

Edward W. Podczerwinski, P.E. Director of Monitoring and Research

May 13, 2022

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Ms. Catherine Siders
Illinois Environmental Protection Agency
Bureau of Water
DWPC Compliance Section #19
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9274

Dear Ms. Siders:

Subject: Lawndale Avenue Solids Management Area - Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2020-AO-64903, Monitoring Report for January, February, and March 2022

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for January, February, and March 2022, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2020-AO-64903. Biosolids were not placed in the solids drying area during the first quarter of 2022.

<u>Table 1</u> Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on March 9, 2022.

<u>Table 2</u> Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on February 28, 2022.

Very truly yours,

Albert E. Cox, Ph.D.

Albert Cox

Environmental Monitoring and Research Manager Monitoring and Research Department

AC:BM:lf Attachment

cc: Mr. J. Patel, IEPA/Mr. T. Bennett, IEPA Mr. B. Fleming, IEPA/Dr. H. Zhang

| Metropolitan Water Reclamation District of Greater Chicago |
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| LAWNDALE AVENUE SOLIDS MANAGEMENT AREA |
| MONITORING REPORT FOR |
| FIRST QUARTER 2022 |
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| $\mathbf{B}\mathbf{y}$ |
| Benjamin Morgan |
| Environmental Soil Scientist |
| Albert Cox |
| Environmental Monitoring and Research Manager |
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| Monitoring and Research Department |
| Edward W. Podczerwinski, Director May 2022 |

May 2022

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON MARCH 9, 2022

| | Monitoring Well No. | | | | | | | | |
|---|---------------------|--------------------|--------------------|--------------------|-------------------|--|--|--|--|
| Parameter | M-11 | M-12 | M-13 | M-14 | M-15 | | | | |
| рН | 7.9 | 7.7 | 7.6 | 7.8 | 7.5 | | | | |
| | | | mg L ⁻¹ | | | | | | |
| Cl ⁻ SO ₄ ²⁻ NO ₂ ⁻ +NO ₃ ⁻ -N | 21 203 <0.25 | 15 374 <0.25 | 10 676 <0.25 | 10 132 <0.25 | 9 829 <0.25 | | | | |

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-9N AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON FEBRUARY 28, 2022

| | Lysimeter No. | | | | | | | | | |
|--|-----------------|-------------|------------|---------------|--------------------|---------------|------|----------|-------------|--|
| Parameter | L-1N | L-2N | L-3N | L-4N | L-5N | L-6N | L-7N | L-8N | L-9N | |
| рН | NC ¹ | 7.4 | 7.7 | 7.1 | 7.3 | 7.3 | NC | NC | 7.2 | |
| | | | | | mg L ⁻¹ | | | | | |
| Cl ⁻ | NC | 231 | 141 | 24 | 554 | 86 | NC | NC | 358 | |
| SO ₄ ²⁻ NO ₂ -+NO ₃ N | NC NC | 159 2.34 | 53 0.78 | 1,543 0.74 | 1,634 0.81 | 1,411 0.92 | | NC NC | 177 0.30 | |

¹Sample could not be collected from L-1N, L-7N, and L-8N because the lysimeters were dry on February 28 and during resampling on March 7 and March 9, 2022.