

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 11-54

MONTHLY CONTROLLED SOLIDS

DISTRIBUTION REPORT

June 2011

August 2011

Terrence J. O'Brien
President
Barbara J. McGowan
Vice President
Cynthia M. Santos
Chairman of Finance
Michael A. Alvarez
Frank Avila
Patricia Horton
Kathleen Therese Meany
Debra Shore
Mariyana T. Spyropoulos

Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street Chicago, Illinois 60611-3154 f: 312.751.5194 312.751.5190

Thomas C. Granato, Ph.D.
Acting Director of Monitoring and Research
thomas.granato@mwr.org

August 31, 2011

Mr. S. Alan Keller, P.E.
Manager, Permit Section
Illinois Environmental
Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Dear Mr. Keller:

Subject: Metropolitan Water Reclamation District of Greater Chicago – Controlled Solids Distribution Program Illinois Environmental Protection Agency Permit No. 2010-SC-0200, June 2011

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago - Controlled Solids Distribution Program for June 2011, as required by Illinois Environmental Protection Agency Permit No. 2010-SC-0200.

Sludge flow schematic diagrams for solids processed during June 2011 are shown in [Figure 1](#)- John E. Egan Water Reclamation Plant (WRP), [Figure 2](#) - Calumet WRP, and [Figure 3](#) - Stickney WRP.

Biosolids were distributed to fifteen sites in June. The user information report for those sites is presented in [Table 1](#), and the analysis of the composited biosolids delivered to those sites are presented in [Table 2](#).

Very truly yours,

Thomas C. Granato, Ph.D.
Acting Director
Monitoring and Research

TCG:OO:cm
Attachments
cc: V. Aistars (USEPA)
R. Sulski (IEPA)
K. Kits
C. O'Connor

TABLE 1: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT
FOR AGITATION DRIED, ANAEROBICALLY- DIGESTED SOLIDS

Location No.	Name and Address of User	Source	Dates	Quantity (dry tons)		Biosolids Use	Application	
				June 2011	Cumulative 2011		Area (acres)	Rate (tons/acre)
1	Calumet WRP Metropolitan Water Reclamation District of Greater Chicago Chicago, Illinois 60628	Stickney WRP	2, 3	811.8	811.8	Incorporation with top soil for turf growth	12	67.7
2	Cinder Ridge Park District 24801 Lakepoint Drive Wilmington, IL 60481	Stickney WRP	3	79.8	149.9	Topdressing as fertilizer for turf growth	7	21.4
3	Chicago Park District Montrose Beach Park 4400 North Lake Shore Drive Chicago, IL 60613	Stickney WRP	3, 7	169.9	307.6	Incorporation with top soil for turf growth	5	61.5
4	Chicago Park District Pottawatomi Park 7340 North Rogers Avenue Chicago, IL 60626	Stickney WRP	3	44.6	44.6	Incorporation with top soil for turf growth	1	44.6
5	Benet Academy 2200 Maple Avenue Lisle, IL 60532	Stickney WRP	8	42.3	42.3	Topdressing as fertilizer for turf growth	2	21.1

TABLE 1 (Continued): CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT
FOR AGITATION DRIED, ANAEROBICALLY- DIGESTED SOLIDS

Location No.	Name and Address of User	Source	Dates	Quantity (dry tons)		Biosolids Use	Application	
				June 2011	Cumulative 2011		Area (acres)	Rate (tons/acre)
6	East Leyden High School 3400 Rose Street Franklin Park, IL 60131	Stickney WRP	8	32.2	32.2	Topdressing as fertilizer for turf growth	2	16.1
7	West Leyden High School 1000 North Wolf Road Northlake, IL 60164	Stickney WRP	8	156.4	156.4	Incorporation with top soil for turf growth	5	31.3
8	Reavis High School 6034 West 77th Street Burbank, IL 60459	Stickney WRP	8	101.7	101.7	Topdressing as fertilizer for turf growth	5	20.3
9	Evanston High School 1600 Dodge Avenue Evanston IL 60201	Stickney WRP	29	31.9	31.9	Topdressing as fertilizer for turf growth	2	16.0
10	Town of Leyden Franklin Park 2501 North Mannheim Road Leyden, IL 60018	Stickney WRP	29	1.8	1.8	Topdressing as fertilizer for turf growth	0.1	18.0

TABLE 1 (Continued): CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT
FOR AGITATION DRIED, ANAEROBICALLY- DIGESTED SOLIDS

Location No.	Name and Address of User	Source	Dates	Quantity (dry tons)		Biosolids Use	Application	
				June 2011	Cumulative 2011		Area (acres)	Rate (tons/acre)
11	Hinsdale High School 5500 South Grant Street Hinsdale, IL 60521	Stickney WRP	29	52.7	193.8	Topdressing as fertilizer for turf growth	9	21.5
12	Keith Construction 54 Sawgrass Drive Lemont, IL 60439	Stickney WRP	29	90.1	90.1	Incorporation with top soil for turf growth	1	90.1
13	Chicago Park District Franklin Park 4320 West 15th Street Chicago, IL 60623	Stickney WRP	29	116.4	116.4	Incorporation with top soil for turf growth	2	58.2
14	Woodridge Park District Cypress Cove Park 2600 Center Drive Woodridge, IL 60517	Stickney WRP	29	16.6	16.6	Topdressing as fertilizer for turf growth	1	16.6
15	Marmion Academy 1000 Butterfield Road Aurora, IL 60502	Stickney WRP	30	32.0	32.0	Topdressing as fertilizer for turf growth	2	16.0

TABLE 2: ANALYSIS OF DIGESTED BIOSOLIDS APPLIED TO LAND
FROM THE STICKNEY WATER RECLAMATION PLANT
DRYING AREA DURING JUNE 2011

		User Location No. ¹			
		1, 2, 3, 4	3	5, 6, 7, 8	9, 10, 11, 12 13, 14, 15
<u>Constituent</u>	<u>Unit</u>				
pH		5.7	6.0	6.1	6.0
Total Solids	%	55.4	64.9	75.8	76.3
Total Volatile Solids	"	39.3	35.0	33.4	35.0
Volatile Acids as Acetic Acid	mg/kg	350	247	160	153
Total Kjeldahl-N	"	20,435	21,027	19,388	19,650
NH ₃ -N	"	629	963	1,084	261
Total P	"	21,388	23,360	20,190	24,938
As	"	<10	<10	<10	<10
Cd	"	3.2	3.4	3.2	3.2
Cr	"	160	165	162	163
Cu	"	425	479	443	403
Hg	"	1.1	1.2	1.2	1.3
K	"	3531	2517	3090	3284
Mn	"	587	605	605	597
Mo	"	9	10	10	9
Ni	"	40	43	43	41
Pb	"	131	135	131	132
Se	"	<5	<5	<5	<5
Zn	"	839	883	867	867

¹Locations listed in Table 1.