New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany NY 12233-1750
Phone: (518) 402-9167 • **FAX:** (518) 402-9168
Website: www.dec.ny.gov

Joe Martens
Commissioner

October 26, 2012

John Reagan
Lafarge North America
PO Box 3
Ravena, New York 12143

Re: **SPDES Modification Permit**
DEC# 4-0124-00001/00057
Coeymans, Albany County

Dear Mr. Reagan:

Enclosed please find your new SPDES Permit which becomes effective on **November 1, 2012**, and expires on **September 30, 2015**. The modification to extend the effective date for the final effluent thermal limits at Outfall 003 and the final effluent limits at Outfall 023.

Please read all permit conditions carefully. All permit documents must be available upon request by the Department staff as well as distributed to and understood by your personnel responsible for the proper operation of the facility and compliance with the discharge limits. Any violation of these permit conditions constitutes a violation of the Environmental Conservation Law.

Should you object to this modified permit you have the right to request an adjudicatory hearing. Such request must be addressed in writing to the Regional Permit Administrator within 30 calendar days of the date of the mailing of this permit.

If you have any questions regarding this permit, you may contact the Division of Environmental Permits at the above address. Please refer to the above-referenced numbers when you are corresponding with this office or when you are applying to renew or modify this permit.

Any questions regarding your annual pollutant discharge elimination fee should be addressed directed to the Regulatory Fee Determination Unit at 1-800-225-2566.

Sincerely,

Sarah H. Evans
Environmental Analyst

Enc: Permit
Cc via email:
Andrea Dzierwa, R4
Jamie Malcolm, R4
Shayne Mitchell, CO
Sudhir Mahatma, CO
Chuck Nieder, CO
Colleen Kimble, CO
Nancy Baker, R4
File

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT

First3.99

Industrial Code:	3241	SPDES Number:	NY 000 5037
Discharge Class (CL):	03	DEC Number:	4-0124-00001/00057
Toxic Class (TX):	T	Effective Date (EDP):	October 1, 2010
Major Drainage Basin:	13	Expiration Date (ExDP):	September 30, 2015
Sub Drainage Basin:	01	Modification Dates:(EDPM)	July 19, 2011
Water Index Number:	H-214-1		May 1, 2012
Compact Area:			November 1, 2012

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq., hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: **Lafarge Building Materials, Inc.** Attention: **Environmental Manager**
Street: **P.O. Box 3**
City: **Ravena** State: **NY** Zip Code: **12143**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: **Lafarge Building Materials, Inc.**
Location (C,T,V): **Coeymans (T)** County: **Albany**
Facility Address: **Route 9W**
City: **Ravena** State: **NY** Zip Code: **12143**
NYTM -E: NYTM - N:
From Outfall No.: **023** at Latitude: **42 ° 29 ' 50 "** & Longitude: **73 ° 48 ' 41 "**
into receiving waters known as: **Unnamed Trib 1 to Coeymans Creek** Class: **C**

and; (list other Outfalls, Receiving Waters & Water Classifications)

(See next page)

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: **Lafarge North America**
Street: **P.O. Box 3**
City: **Ravena** State: **NY** Zip Code: **12143**
Responsible Official or Agent: **Environmental Manager** Phone: **(518) 756-5026**

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator
Regional Water Engineer
Regional Permit Administrator
EPA Region II - Michelle Josilo

Permit Administrator: Kent P. Sanders	
Address:NYS DEC 625 Broadway Albany, NY 12233-1750	
Signature: Kent P. Sanders	Date: 10/26/12

ADDITIONAL OUTFALLS

Outfall No.	Description	Latitude/Longitude	Receiving Water/Class
003[1]	Non-contact cooling water (NCCW), storm water, sanitary ww, CKD leachate, quarry pump out, dust control & truck wash water	42° 29′ 47″ / 73° 48′ 23″	Coeymans Creek/C(TS)
03C[1]	Settling Pond Overflow	42° 29′ 45″ / 73° 48′ 30″	Coeymans Creek/C(TS)
004	Quarry Sewage Sand Filter	42° 28′ 44″ / 73° 49′ 43″	Unnamed Sub-Tributary to Hannacroix Creek/D
005	Quarry Garage Oil/Water Separator	42° 28′ 45″ / 73° 49′ 44″	Unnamed Sub-Tributary to Hannacroix Creek/D
006[1]	Storm water – Aggregate areas	42° 29′ 37″ / 73° 49′ 02″	Unnamed Tributary 1 to Coeymans Creek/C
007	Storm water – Clay mining area, CKD landfill leachate.	42° 30′ 17″ / 73° 48′ 32″	Coeymans Creek/C(TS)
008	Becraft pond de-watering	42° 29′ 00″ / 73° 50′ 05″	Unnamed Sub-Tributary to Hannacroix Creek/D
010[3]	Pre-modermization: Quarry pumpout water and storm water. Post-modernization: Storm water.	42° 29′ 28″ / 73° 49′ 26″	Tributary 1 to Coeymans Creek/C
011	Storm water	42° 29′ 34″ / 73° 47′ 09″	Hudson River/C
012	Storm water	42° 29′ 24″ / 73° 47′ 14″	Hudson River/C
013	Storm water	42° 29′ 24″ / 73° 47′ 18″	Hudson River/C
014	Storm water	42° 29′ 32″ / 73° 48′ 04″	Coeymans Creek/C(TS)
015	Storm water	42° 29′ 38″ / 73° 48′ 10″	Coeymans Creek/C(TS)
016	Storm water	42° 29′ 33″ / 73° 48′ 06″	Coeymans Creek/C(TS)
017	Storm water	42° 29′ 29″ / 73° 48′ 47″	Unnamed Constructed Trib to Coeymans Creek *
018	Storm water	42° 29′ 28″ / 73° 48′ 49″	Unnamed Constructed Trib to Coeymans Creek *
019	Storm water	42° 29′ 30″ / 73° 48′ 03″	Coeymans Creek/C(TS)
020[2]	Excess quarry water	42° 29′ 31″ / 73° 48′ 59″	Unnamed Tributary 1 to Coeymans Creek/C
021[2]	Storm water	42° 29′ 33″ / 73° 48′ 53″	Unnamed Tributary 1 to Coeymans Creek/C
022[4]	Sanitary wastewater (formerly known as outfall 03A)	42° 29′ 50″ / 73° 48′ 41″	Tributary to outfall 003 prior to modernization project. Post-modernization the receiving water is Unnamed Tributary 1 to Coeymans Creek/C
023[4]	CKD leachate (formerly known as outfall 03B)	42° 29′ 50″ / 73° 48′ 41″[5]	Tributary to outfall 003 prior to modernization project. Post-modernization the receiving water is Unnamed Tributary 1 to Coeymans Creek/C

024[2]	Storm water	42° 29′ 35″ / 73° 48′ 47″	Unnamed Tributary 1 to Coeymans Creek/C
025[2]	Storm water	42° 29′ 45″ / 73° 48′ 38″	Unnamed Tributary 1 to Coeymans Creek/C

* Tributary 1 to Coeymans Creek includes a ponded area immediately east of the railroad tracks and south of the conveyor belt. Flow from the ponded area splits, with some flow continuing downstream in the natural channel, and some flow draining to a constructed stream, required as part of a restoration project under Consent Order No. R4-2004-0511-54 (May 27, 2004).

1 – Outfall proposed for elimination as part of plant modernization project.

2 – Outfall proposed for creation as part of plant modernization project.

3 – Outfall proposed for modification as part of plant modernization project.

4 – Outfall renumbered in anticipation of plant modernization project.

5 – Outfall is located at approximately 42° 29′ 50″ / 73° 48′ 41″"until construction of treatment system is completed.

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

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OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.		

PARA-METER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (ML)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based standards, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the analytical method specified in the permit shall be used to monitor the amount of the pollutant in the outfall to this level, provided that the laboratory analyst has complied with the specified quality assurance/quality control procedures in the relevant method. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This ML can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, that trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, Temperature, concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Note 1: DAILY DISCHARGE: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day. DAILY MAX: The highest allowable daily discharge. DAILY MIN: The lowest allowable daily discharge. MONTHLY AVG (daily avg): The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week. 12 MRA (twelve month rolling avg): The average of the most recent twelve month's monthly averages. 30 DAY GEOMETRIC MEAN (30 d geo mean): The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of : the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. 7 DAY GEOMETRIC MEAN (7 d geo mean): The highest allowable geometric mean of daily discharges over a calendar week.

Note 2: ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards. The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
003	Non-contact cooling water (NCCW), storm water, sanitary ww, CKD leachate, quarry pump out, dust control & truck wash water	Coeymans Creek	EDPM	See footnote 9

	EFFLUENT LIMIT		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
PARAMETER *	INSTANTANEOUS MINIMUM	INSTANTANEOUS MAXIMUM				
pH	6.0	9.0	SU	2/Week	Grab	
Temperature (T) – Effluent		70	° F	Continuous	Recorder	1
Temperature (T) - Upstream (U) of Outfall		Monitor	° F	Continuous	Recorder	
Temperature (T) – Downstream (D) of Outfall		Monitor	° F	Continuous	Recorder	
ΔT = U minus D: June 1 – September 30		±2.0	° F	Continuous	Recorder	2
ΔT = D minus U: October 1 – May 31		5.0	° F	Continuous	Recorder	3
ΔT = Discharge minus U		Monitor	° F	Continuous	Recorder	

PARAMETER	EFFLUENT LIMIT		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow – Prior to recycle	Monitor	Monitor			MGD	Continuous	Recorder	
Flow – Final discharge	Monitor	Monitor			MGD	Continuous	Recorder	
Solids, Total Suspended	25	30			mg/l	2/Week	Grab	
Solids, Settleable	Monitor	0.1			ml/l	2/Week	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	2/Week	Grab	
Oil & Grease	Monitor	15			mg/l	2/Week	Grab	
Chlorine, Total Residual	Monitor	0.1			mg/l	2/Week	Grab	
Mercury, Total	Monitor	50			ng/l	Quarterly	Grab	
WET – Acute Invertebrate			0.3		TUa	See FN	See FN	4
WET – Acute Vertebrate			0.3		TUa	See FN	See FN	4
WET – Chronic Invertebrate			1.6		TUc	See FN	See FN	4
WET – Chronic Vertebrate			1.6		TUc	See FN	See FN	4

* ΔT = Temperature Differential

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
03C	Settling Pond Overflow	Coeymans Creek	EDPM	See footnote 9

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	4/Week	Grab	

PARAMETER	EFFLUENT LIMIT		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Outfall Observation (Flow)	Monitor	Monitor			Yes/No	4/week	Observation	6
Solids, Total Suspended	25	30			mg/l	4/week	Grab	
Solids, Settleable	Monitor	0.1			ml/l	4/week	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
004	Quarry Sewage Sand Filter Discharge	Unnamed Sub-Tributary to Hannacroix Creek	EDP	ExDP

PARAMETER	MINIMUM	AVERAGE	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	-	9.0	SU	1/Discharge	Grab	
Dissolved Oxygen	7.0	Monitor	-	mg/l	1/Discharge	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			GPD	1/Discharge	Instantaneous	
BOD_5	Monitor	5.0			mg/l	1/Discharge	Grab	
Solids, Total Suspended	Monitor	10			mg/l	1/Discharge	Grab	
Solids, Settleable	Monitor	0.1			ml/l	1/Discharge	Grab	
Nitrogen, as NH_3	Monitor	2.0			mg/l	1/Discharge	Grab	

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
005	Quarry Garage Oil/Water Separator	Unnamed Sub-Tributary to Hannacroix Creek	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	1/Discharge	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			MGD	1/Discharge	Instantaneous	
Oil & Grease	Monitor	15			mg/l	1/Discharge	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
006	Storm Water Runoff - Aggregate Processing Plant	Unnamed Trib 1 to Coeymans Creek	EDPM	See footnote 9

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Quarterly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			GPD	Quarterly	Instantaneous	
Solids, Total Suspended	Monitor	45			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
007	Storm Water from Former Clay Mining Area and CKD Management	Coeymans Creek	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Quarterly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			GPD	Quarterly	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
008	Becraft Pond Dewatering	Unnamed Sub-Tributary to Hannacroix Creek	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Per discharge	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			GPD	Per discharge	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Per discharge	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Per discharge	Grab	

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
010	Pre-modernization: Quarry Pumpout Water and Storm Water. Post-modernization: Storm Water.	Unnamed Trib 1 to Coeymans Creek	EDPM	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Quarterly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			MGD	Quarterly	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
011, 012, 013	Storm Water – Near Gypsum Pile	Hudson River	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Quarterly	Grab	7

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			GPD	Quarterly	Estimated	
Solids, Total Suspended	Monitor	50			mg/l	Quarterly	Grab	7
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	7
Sulfite, Total	Monitor	Monitor			mg/l	Quarterly	Grab	
Sulfate, Total	Monitor	Monitor			mg/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	7

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
014, 015, 016, 019	Storm Water – Roadside Drainage Near and Under Conveyor Belt	Coeymans Creek	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Quarterly	Grab	7

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Solids, Total Suspended	Monitor	50			mg/l	Quarterly	Grab	7
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	7
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	7

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
017, 018	Storm Water – Along Main Road	Unnamed Constructed Trib (Restoration)	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Quarterly	Grab	7

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Solids, Total Suspended	Monitor	50			mg/l	Quarterly	Grab	7
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	7
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	7

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
020	Excess Quarry Water	Unnamed Trib 1 to Coeymans Creek	See footnote 10	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.5	8.5	SU	Quarterly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			MGD	Quarterly	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
021, 024, 025	Storm water from cement manufacturing area	Unnamed Trib 1 to Coeymans Creek	See footnote 11	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Monthly	Grab	

PARAMETER	EFFLUENT LIMIT		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			GPD	Monthly	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Monthly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Monthly	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	Monthly	Grab	
Oil & Grease	Monitor	15			mg/l	Monthly	Grab	

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
022	Sanitary Wastewater Treatment Effluent (formerly known as outfall 03A)	Pre-modernization: Outfall 003 Post-modernization: Unnamed Trib 1 to Coeymans Creek	EDPM	ExDP

PARAMETER	MINIMUM	AVERAGE	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.5	-	8.5	SU	Weekly	Grab	12
Dissolved Oxygen	7.0	Monitor	-	mg/l	Weekly	Grab	12

PARAMETER	EFFLUENT LIMIT		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			GPD	Continuous	Recorder	
BOD_5	Monitor	5.0			mg/l	Weekly	Grab	12
Solids, Total Suspended	Monitor	10			mg/l	Weekly	Grab	12
Solids, Settleable	Monitor	0.1			ml/l	Weekly	Grab	12
Ammonia, as NH_3 (June – October) (November – May)	Monitor Monitor	1.5 2.2			mg/l	Weekly	Grab	12
Coliform, Fecal	200	400			#/100 ml	Weekly	Grab	
Chlorine, Total Residual	Monitor	20			ug/l	Daily	Grab	12

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
023	CKD Leachate (formerly known as outfall 03B)	Pre-modernization: Outfall 003 Post-modernization: Unnamed Trib 1 to Coeymans Creek	EDPM	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.5	8.5	SU	Monthly	Grab	5

PARAMETER	EFFLUENT LIMIT		ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum						
Flow	Monitor	Monitor			GPD	Continuous	Recorder	8
Solids, Total Suspended	Monitor	10			mg/l	Monthly	Grab	5
Solids, Total Dissolved	Monitor	500			mg/l	Monthly	Grab	5
Sulfates, Total	Monitor	Monitor			mg/l	Monthly	Grab	
Aluminum, Total	2000	4000			ug/l	Monthly	Grab	5
Arsenic, Total	Monitor	150			ug/l	Monthly	Grab	5
Mercury, Total	Monitor	50			ng/l	Quarterly	Grab	5
WET – Acute Invertebrate			0.3		TUa	See FN	See FN	4
WET – Acute Vertebrate			0.3		TUa	See FN	See FN	4
WET – Chronic Invertebrate			1.0		TUc	See FN	See FN	4
WET – Chronic Vertebrate			1.0		TUc	See FN	See FN	4

FOOTNOTES

1 – An interim limit of "Monitor" for Instantaneous Maximum is in effect until December 31, 2013. A Daily Maximum Temperature of 70 ° F shall be in effect as a permanent limit thereafter.

2 - An interim limit of 4° F Instantaneous Maximum Temperature Differential (ΔT) for Downstream (D) minus Upstream (U) is in effect until December 31,2013. Thereafter, the effluent discharge will not raise or lower the Temperature of Coeymans Creek by more than 2° F, from the Temperature which existed before the discharge.

3 – An interim limit of "Monitor" for Instantaneous Maximum is in effect until December 31, 2013. Thereafter, from October1 through May 31 of each year, the discharge shall not raise the Temperature of Coeymans Creek by more than 5° F, or to a maximum of 50° F, whichever is less. Compliance with this provision shall be indicated in an attachment to each month's Discharge Monitoring Report.

FOOTNOTES (continued)

4 - Whole Effluent Toxicity (WET) Testing:

Testing Requirements - WET testing shall consist of **Chronic only**. WET testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be *Ceriodaphnia dubia* (water flea - invertebrate) and *Pimephales promelas* (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24 hr composite samples with one renewal for Acute tests and three 24 hr composite samples with two renewals for Chronic tests). The appropriate dilution series bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) at outfall 003 is **0.28:1** for Acute, and **0.56:1** for Chronic. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) at outfall 023 is **0:1** for Acute, and **0:1** for Chronic.

Monitoring Period - WET testing at outfall 003 shall be performed **Quarterly** beginning in January and lasting for a period of one full year, every five years, commencing with January 2011. WET testing at outfall 023 shall be performed **Quarterly** beginning in January and lasting for a period of one full year, every five years, commencing with the first January following the EDPM.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48 hr LC_{50}) or (100)/(48 hr EC_{50}) (note that Acute data is generated by both Acute and Chronic testing) and TUc = (100)/(NOEC) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48 hr LC_{50} or 48 hr EC_{50} and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TUc. Report a TUa of 0.3 if there is no statistically significant toxicity in 100% effluent compared to control.

The complete test report including all corresponding results, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period to the Toxicity Testing Unit. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48 hr LC_{50} or 48 hr EC_{50} for Acute tests and/or TUc, NOEC, IC_{25}, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

5 - Interim limits of "Monitor" are in effect for all parameters until December 31, 2013. Final limits as specified in the table shall be in effect thereafter.

6 - Flow monitoring is required starting April 1, 2011.

7 - An interim limit of "Monitor for Daily Maximum is in effect until October 1, 2011.

8 - An interim sample frequency of "monthly" and sample type of "pump record" limit in effect until December 31, 2013.

FOOTNOTES (continued)

9 - Discharge authorization and monitoring requirements expire on September 30, 2015 or when the plant modernization project is completed for this outfall, whichever date is sooner.

10 - Discharge authorization and monitoring requirements begin when this outfall is created as part of the plant modernization project.

11 - Discharge authorization and monitoring requirements begin on September 30, 2015 or when construction related to the plant modernization project is initiated within this outfall drainage basin, whichever date is sooner.

12 – Interim requirements are in effect until EDPM + 2 years. These interim requirements are equivalent to those specified in the table with the following exceptions: pH range 6.0-9.0; dissolved oxygen no monitoring required; BOD5 no monitoring required; CBOD5 monthly average 25 mg/l, daily maximum 40 mg/l; TSS monthly average 30 mg/l, daily maximum 45 mg/l; settleable solids daily maximum 0.3 ml/l; ammonia no monitoring required; and, chlorine 2000 ug/l.

SPECIAL CONDITION A – If the plant modernization project is not initiated by June 1, 2015 then the permittee shall submit a request for SPDES permit modification to the Department by this date. This request will be for authorization to discharge wastewater and stormwater runoff from industrial activity which is tributary to the outfall 003 pond that is not addressed by outfalls 022 - 025.

MERCURY MINIMIZATION PROGRAM

1. **General** - The permittee shall develop, implement, and maintain a Mercury Minimization Program (MMP) for those outfalls which have mercury effluent limits. The MMP is required because the 50 ng/L permit limit exceeds the statewide water quality based effluent limit (WQBEL) of 0.70 nanograms/liter (ng/L) for Total Mercury. The goal of the MMP is to reduce mercury effluent levels in pursuit of the WQBEL.

2. **MMP Elements** - The MMP shall be documented in narrative form and shall include any necessary drawings or maps. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. As a minimum, the MMP shall include an on-going program consisting of: periodic monitoring; an acceptable control strategy which will become enforceable under this permit; and, submission of periodic status reports.

   A. Monitoring - The permittee shall conduct periodic monitoring designed to quantify and, over time, track the reduction of mercury. Wastewater treatment plant influents and effluents, and other outfalls shall be monitored in accordance with the minimum frequency specified on the mercury permit limits page. Additionally, key locations in the wastewater and/or storm water collection systems, and known or potential mercury sources, including raw materials, shall be monitored at the above frequency during the first year of the MMP. Monitoring of key locations and known/potential sources may be reduced during subsequent years if downstream outfalls have maintained Mercury levels less than 50 ng/l during the previous year. Additional monitoring must be completed as may be required elsewhere in this permit or upon Department request. Monitoring shall be coordinated so that the results can be effectively compared between internal locations and final outfalls.

   All permit-related wastewater and storm water mercury compliance point (outfall) monitoring shall be performed using EPA Method 1631. Use of EPA Method 1669 during sample collection is recommended. Unless otherwise specified, all samples should be grabs. Monitoring at influent and other locations tributary to compliance points may be performed using either EPA Methods 1631 or 245.7. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-storm water substances may be performed using other methods as appropriate.

   B. Control Strategy - An acceptable control strategy is required for reducing mercury discharges via cost-effective measures, which may include, but is not limited to, source identification, more stringent control of tributary waste streams, remediation, and/or installation of new or improved treatment facilities. Required monitoring shall also be used, and supplemented if appropriate, to determine the most effective way to operate the wastewater treatment system(s) to ensure effective removal of mercury while maintaining compliance with other permit requirements.

   C. Annual Status Report - An annual status report shall be submitted to the Regional Water Engineer and to the Bureau of Water Permits summarizing: (a) all MMP monitoring results for the previous year; (b) a list of known and potential mercury sources; (c) all action undertaken pursuant to the strategy during the previous year; (d) actions planned for the upcoming year, and (e) progress toward the goal. The first annual status report is due October 1, 2011 and follow-up status reports are due annually thereafter. A file shall be maintained containing all MMP documentation which shall be available for review by DEC representatives. Copies shall be provided upon request.

3. **MMP Modification** - The MMP shall be modified whenever: (a)changes at the facility or within the collection system increase the potential for mercury discharges; (b) actual discharges exceed 50 ng/L; (c) a letter from the Department identifies inadequacies in the MMP; or (d) pursuant to a permit modification.

BIOLOGICAL MONITORING REQUIREMENTS

All submissions under this section should provide, unless otherwise noted:

Two (2) copies to the Steam Electric Unit Leader;

One (1) copy of the cover letter to the Division of Water, SPDES Compliance Information Section; and

One (1) copy of the cover letter to the Regional Water Engineer

Impingement Mortality and Entrainment Characterization Study

1. a. Beginning March 15,2013, the permittee will conduct the *Impingement Mortality and Entrainment Characterization Study* consistent with the methods outlined in the approved June 2,2010 Study Plan.

   b. The permittee shall submit a final *Impingement Mortality and Entrainment Characterization Study* report no later than 6 months after the study has been completed.

   The *Impingement Mortality and Entrainment Characterization Study* must be completed in accordance with the approved plan. The *Impingement Mortality and Entrainment Characterization Study* and approved plan will become an enforceable condition of this permit.

Design and Construction Technology Review

2. By November 1, 2010, the permittee must submit an approvable *Design and Construction Technology Review* that includes:

   a. An analysis of all feasible technologies and/or operational measures capable of being installed and implemented at Lafarge including, but not limited to, closed-cycle cooling. For each feasible alternative include:
      i. A detailed description of the alternative (including preliminary drawings and site maps, if appropriate);
      ii. A discussion of the engineering feasibility of the alternative;
      iii. An assessment of the mitigative benefits in reducing impingement mortality and entrainment abundance for all life stages of fish and shellfish, through utilization of the alternative;
      iv. A breakdown of all applicable costs including costs associated with capital improvements, operation and maintenance, and construction downtime;
      v. An estimate of the time required to implement the alternative; and
      vi. An evaluation of any adverse environmental impacts to aquatic biota, habitat, or water quality that may result from construction, installation, and use of the alternative.

3. Within 1 month of the Department's approval of the *Design and Construction Technology Review*, the permittee must submit for Department review and consideration, a proposed suite of technologies or operational measures that meets the requirements of 6 NYCRR Part 704.5 and Section 316(b) CWA and adheres to the following standards:

   a. Alone, or in combination, these technologies or operational measures *minimize* impingement mortality and entrainment of fish and shellfish at the permittee site.

   b. The reductions in entrainment and impingement mortality resulting from the proposed technologies and/or operational measures can be no less stringent, and if possible, should be substantially greater than the following performance requirements:
      i. Entrainment must be reduced by at least 60 percent from the calculation baseline;
      ii. Impingement mortality must be reduced by at least 80 percent from the calculation baseline.

0.5 mm Wedgewire Feasibility Study

4. By January 1, 2011, the permittee will submit plans to conduct a 0.5mm Wedgewire Screen Feasibility Study to determine the feasibility, and effectiveness of installing and operating 0.5mm wedgewire screens on the cooling water intake structure. These plans shall include:
   i. All field equipment, equipment deployment methods, and sampling methods to be used;
   ii. Pumping rates, frequencies, and through-slot velocities to be tested;
   iii. Technical specifications of wedgewire screens to be used in all feasibility testing (dimensions and materials,);
   iv. QA/QC plans as appropriate;
   v. Any statistical and modeling procedures to be used; and
   vi. Proposed final wedgewire screen installation plan.
   vii. A schedule for implementation of the Feasibility Study

5. The permittee shall submit a final Feasibility Study report no later than 3 months after the study has been completed.

Upon receipt of Department approval of the Feasibility Study plan, the permittee must complete the study and submit the Report in accordance with the approved schedule. The Feasibility Study and approved schedule will become an enforceable condition of this permit.

> NOTE: Based on this and other relevant information, the Department will select technologies and/or operational measures that meet the requirements of 6 NYCRR Part 704.5 and Section 316(b) of the Clean Water Act. Subsequent to these selections, the Department will modify this SPDES permit, noted in the following Schedule of Compliance as "EDPM," to require the use of these selected technologies and/or operational measures.

Technology Installation and Operation Plan

6. Within 3 months of the effective date of the permit modification, EDPM, requiring technologies and/or operational measures to meet requirements of 6 NYCRR Part 704.5 and Section 316(b) CWA , the permittee must submit an approvable *Technology Installation and Operation Plan*. This plan must include:

   a. A schedule for installing and implementing the technologies and/or operational measures selected to meet requirements of 6 NYCRR Part 704.5 and Section 316(b) CWA; and

   b. The methodology for assessing the efficacy of these technologies and operational measures.

   Upon receipt of Department approval, the permittee must implement the *Technology Installation and Operation Plan* in accordance with the approved schedule. The *Technology Installation and Operation Plan* and approved schedule will become an enforceable condition of this SPDES permit.

Verification Monitoring Plan

7. Within 3 months of Department approval of the *Technology Installation and Operation Plan*, the permittee must submit an approvable *Verification Monitoring Plan*. This plan must include details of procedures to confirm that the necessary reductions in impingement and entrainment required by this permit are being achieved, and must include the following:

   a. At a minimum, 2 years of in-plant impingement and entrainment monitoring to verify the full-scale performance of BTA measures. The facility may use a 5 year averaging period of flow data to verify performance of all BTA measures.

   b. A description of the frequency and duration of monitoring, the parameters to be monitored, and the basis for determining the parameters and the frequency and duration for monitoring.

c. A schedule of implementation.

d. A draft proposed Standard Operation Procedure (SOP) that describes the sampling protocols for these monitoring studies.

The plan and SOP must be updated as required by the Department. Upon receipt of Department approval the permittee must complete the *Verification Monitoring Plan* in accordance with the approved schedule. The *Verification Monitoring Plan* and approved schedule will become an enforceable condition of this SPDES permit.

8. Within 6 months of the completion of the *Verification Monitoring Plan* the permittee must submit an approvable report to the Steam Electric Unit Leader that demonstrates compliance with 6 NYCRR Part 704.5 and Section 316(b) CWA.

Additional Reporting Requirements

9. The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6 NYCRR Part 704 and Section 316(b) CWA for a period no less than 10 years from the EDP.

10. The permittee must submit status reports at EDP + 2.5 years and every 2 years thereafter. At a minimum, these status reports must include a description of the operational status of the facility during the preceding 2 years and compliance with Biological Requirements 1 through 7 of this permit.

11. Six (6) months prior to the expiration date of this permit, and every 5 years thereafter, the permittee must submit a report that includes:

    a. A description and detailed analysis of the cumulative reductions in impingement and entrainment achieved during the first 4 years of this permit modification, and

    b. A detailed analysis of technologies and/or operational measures available at that time, which have been demonstrated to, or have the potential to, further reduce fish mortality at Lafarge. The list of technologies and/or operational measures included in this analysis must be selected with the concurrence of the Department.

General Requirement

12. Modification of the facility cooling water intake must not occur without prior Department approval. The permittee must submit written notification, including detailed descriptions and plans, to the NYS DEC Steam Electric Unit; the Director of the Bureau of Watershed Compliance; and both the Regional Permit Administrator and the Regional Water Engineer, Region 4, at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR §704.5 and Section 316(b) of the Clean Water Act. As determined by Department, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

SCHEDULE OF COMPLIANCE - BIOLOGICAL MONITORING REQUIREMENTS

The permittee shall comply with the following schedule:

Action Code	Outfall Number(s)	Compliance Action *	Due Date
	N/A	1.a. Conduct *Impingement Mortality and Entrainment Characterization Study(IM/EC)* according to the Department approved schedule.	Beginning March 15, 2013
		1.b. Submit a final *IM/EC* report.	Conclusion of the *IM/EC* study + 6 months
		2. Submit an approvable *Design and Construction Technology Review (DCTR).*	November 1, 2010
		3. Submit a proposed suite of technologies or operational measures for Department review and consideration.	DCTR approval + 1 month
		4. Submit plans for a Feasibility Study for 0.5mm wedgewire screens.	January 1, 2011
		5. Submit a Feasibility Study report.	Conclusion of study +3 months
		6. Submit an approvable *Technology Installation and Operation Plan (TIOP).*	EDPM + 3 months**
		7. Submit an approvable *Verification Monitoring Plan (VMP).*	TIOP approval + 3 months
		8. Submit an approvable report to the Steam Electric Unit Leader that demonstrates compliance with 6 NYCRR Part 704.5 and 316(b) of the Clean Water Act.	VMP completion + 6 months
		10. Submit status reports.	EDP + 2.5 years and every two years thereafter
		11. Submit report on cumulative reductions in impingement and entrainment and analyses of technologies.	EDP + 4.5 years and every five years thereafter

* Where applicable, **Compliance Action** numbers coincide with action item numbers found under **Biological Monitoring Requirements.**

** From the suite of technologies and/or operational measures submitted to the Department for review, the Department will select technologies and/or operational measures that meet the requirements of 6 NYCRR Part 704.5 and Section 316(b) of the Clean Water Act. Subsequent to these selections, the Department will modify this SPDES permit to require the use of these selected technologies and/or operational measures. This subsequent permit modification is denoted as "EDPM."

SCHEDULE OF COMPLIANCE - SPECIAL MONITORING and STORM WATER BMPS

a) The permittee shall comply with the following schedule:

Outfall No.	Compliance Action	Due Date
NA	**Quench Water Monitoring** – The permittee shall obtain and analyze samples of ground water used for quenching the non-contact cooling water (NCCW), before commingling with any other Outfall 003 substream (cooling water, ground water, storm water, truck wash water). Such samples shall be taken before commingling with the Outfall 003 effluent. Each of the 2 quench water supply wells shall be sampled and analyzed. A sample shall be obtained once per month for 3 consecutive months by grab, and shall be analyzed for Priority Pollutant metals using accepted EPA methods for the analysis of water and wastewater. For Total Mercury, EPA Method 1631 shall be used. Following completion of sampling and analyses, a report shall be submitted to the Department which summarizes all results of the sampling in terms of concentrations.	February 1, 2011
007, 023	**CKD Leachate and Runoff Monitoring** – In addition to the routine monitoring required for Outfalls 007 and 023, the permittee shall monitor CKD landfill leachate at the leachate collection wet well, before commingling with any other Outfall 003 wastewaters. Outfall 007 shall also be monitored. Monitoring shall be for the EPA Priority Pollutant Metals and other parameters as listed below, at a frequency of 1/Month for 3 consecutive months. Monitoring shall be performed by EPA approved methods for the examination of wastewater, and shall include the following parameters: Outfall 007 only: Aluminum, Total Arsenic, Total Mercury, Total Outfalls 023 & 007: Antimony, Total; Nickel, Total; Chloride Beryllium, Total; Selenium, Total; Conductivity Cadmium, Total; Silver, Total; Potassium Chromium, Total; Thallium, Total; Sodium Copper, Total; Zinc, Total; Sulfate Lead, Total Upon completion of leachate monitoring, the permittee shall submit a report to the Department which includes summary and discussion of all monitoring results.	February, March & April of 2011 30 days from completion of monitoring
Various	**Storm Water BMPs** - The permittee must complete all storm water outfall BMP work which was itemized in a letter from facility Environmental Manager John Reagan to Andrea Dzierwa of the Department's Region 4 Office, dated May 30, 2008.	October 1, 2011

The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

SCHEDULE OF COMPLIANCE (Continued)

b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule of requirements without further delay, and to limit environmental impact associated with the non-compliance;
3. A description or any factors which tend to explain or mitigate the non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

c) The permittee shall submit copies of any document required by this Schedule of Compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, NY 12233-3505, unless otherwise specified in this permit or in writing by the Department.

SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and storm water discharges including, but not limited to, drainage from raw material storage.

   The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

2. **Compliance Deadlines** - The initial completed BMP plan shall be submitted by April 1, 2011 to the Regional Water Engineer. The BMP plan shall be implemented within 6 months of submission, unless a different time frame is approved by the Department. The BMP plan shall be reviewed annually and shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions (with the exception of SWPPPs - see item (4.B.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan (or of any SWPPPs) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

   The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at http://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit.

4. A. **13 Minimum BMPs** - Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of storm water elements of the BMP is available in the September 1992 manual *Storm Water Management for Industrial Activities,* EPA 832-R-92-006 (available from NTIS, 703-487-4650, order # PB 92235969). As a minimum, the plan shall include the following BMPs:

1. BMP Pollution Prevention Team
2. Reporting of BMP Incidents
3. Risk Identification & Assessment
4. Employee Training
5. Inspections and Records
6. Security
7. Preventive Maintenance
8. Good Housekeeping
9. Materials/Waste Handling, Storage, & Compatibility
10. Spill Prevention & Response
11. Erosion & Sediment Control
12. Management of Runoff
13. Street Sweeping

Note that for some facilities, especially those with few employees, some of the above BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

B. **Storm Water Pollution Prevention Plans (SWPPPs) Required for Discharges of Storm Water From Construction Activity to Surface Waters** - As part of BMP #11, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated storm water is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for storm water discharges. SWPPPs are not required for discharges of storm water from construction activity to ground waters.

The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Storm Water Management Design Manual,* unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for storm water discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

5. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater and/or storm water collection system of that facility.

For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.

6. **Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6NYCRR 595-599 and 612-614). Storm water discharges from handling and storage areas should be eliminated where practical.

A. Spill Cleanup - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of storm water and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of storm water following the spill cleanup to determine discharge acceptability. If the water contains no pollutants it may be discharged. Otherwise it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.

B. Discharge Operation – Storm water must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated storm water. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers and must not be reopened unless the transfer area is clean of contaminants. Storm water discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

C. Discharge Screening - Prior to each discharge from a secondary containment system the storm water must be screened for contamination*. All storm water must be inspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of the overall BMP Plan, e.g. the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compounds. If the screening indicates contamination, the permittee must collect and analyze a representative sample** of the storm water. If the water contains no pollutants it may be discharged. Otherwise it must either be disposed of in an on site or off site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Engineer can be contacted to determine if it may be discharged without treatment.

D. Discharge Monitoring - Unless the discharge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit effluent and monitoring requirements, the permittee shall monitor the outlet as follows:

(i) *Bulk Storage Secondary Containment Systems:*

(a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge* following any cleaned up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present.**

(b) Every fourth discharge* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present.**

(ii) *Transfer Area Secondary Containment Systems:*

The first discharge* following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present.**

E. Discharge Reporting - Any results of monitoring required above, excluding screening data, must be submitted to the Department by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.

F. Prohibited Discharges - **In all cases, any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited.** The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills or leaks, tank bottoms, maintenance wastewaters, wash waters where

detergents or other chemicals have been used, tank hydrotest and ballast waters, contained fire fighting runoff, fire training water contaminated by contact with pollutants or containing foam or fire retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.

* Discharge includes storm water discharges and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessment.

** If the stored substance is gasoline or aviation fuel then sample for Oil & Grease, Benzene, Ethylbenzene, Naphthalene, Toluene, and Total Xylenes (EPA Method 602). If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for Oil & Grease and Polynuclear Aromatic Hydrocarbons (EPA Method 610). If the substance(s) are listed in Tables 6-8 of SPDES application form NY-2C, then sampling is required. If the substance(s) are listed in NY-2C Tables 9-10, sampling for appropriate indicator parameters may be required, e.g. BOD_5 or Toxicity Testing. Contact the facility inspector for further guidance. In all cases Flow and pH monitoring are required.

DISCHARGE NOTIFICATION REQUIREMENTS

a) Except as provided in (c) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed within 90 days of the Effective Date Permit.

b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address :

NYSDEC Division of Water Regional Phone: ( ) - ### -####

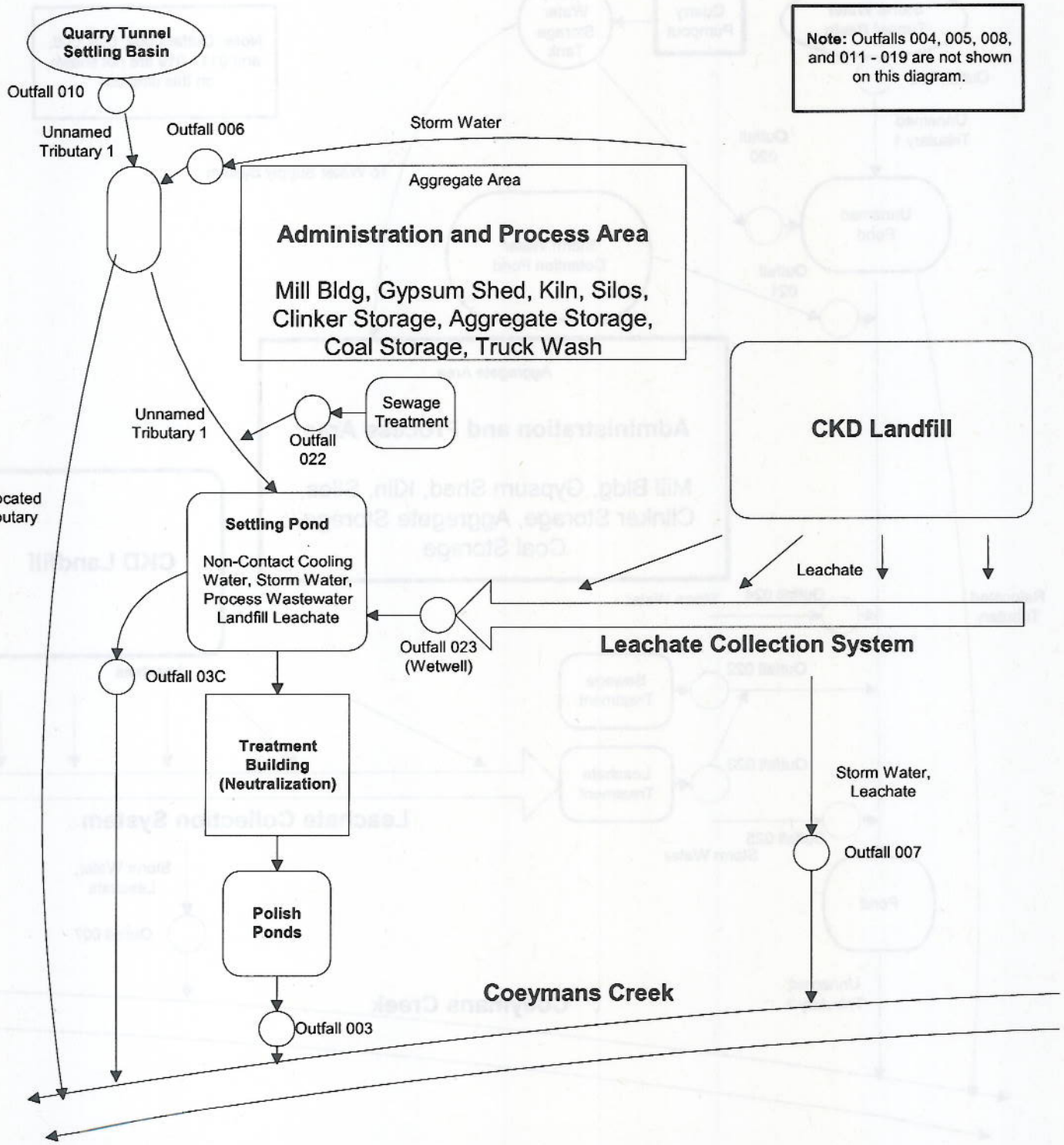
e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of five years.

f) The permittee shall periodically inspect the outfall identification signs in order to ensure that they are maintained, are still visible and contain information that is current and factually correct.

FLOW DIAGRAM AND MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:

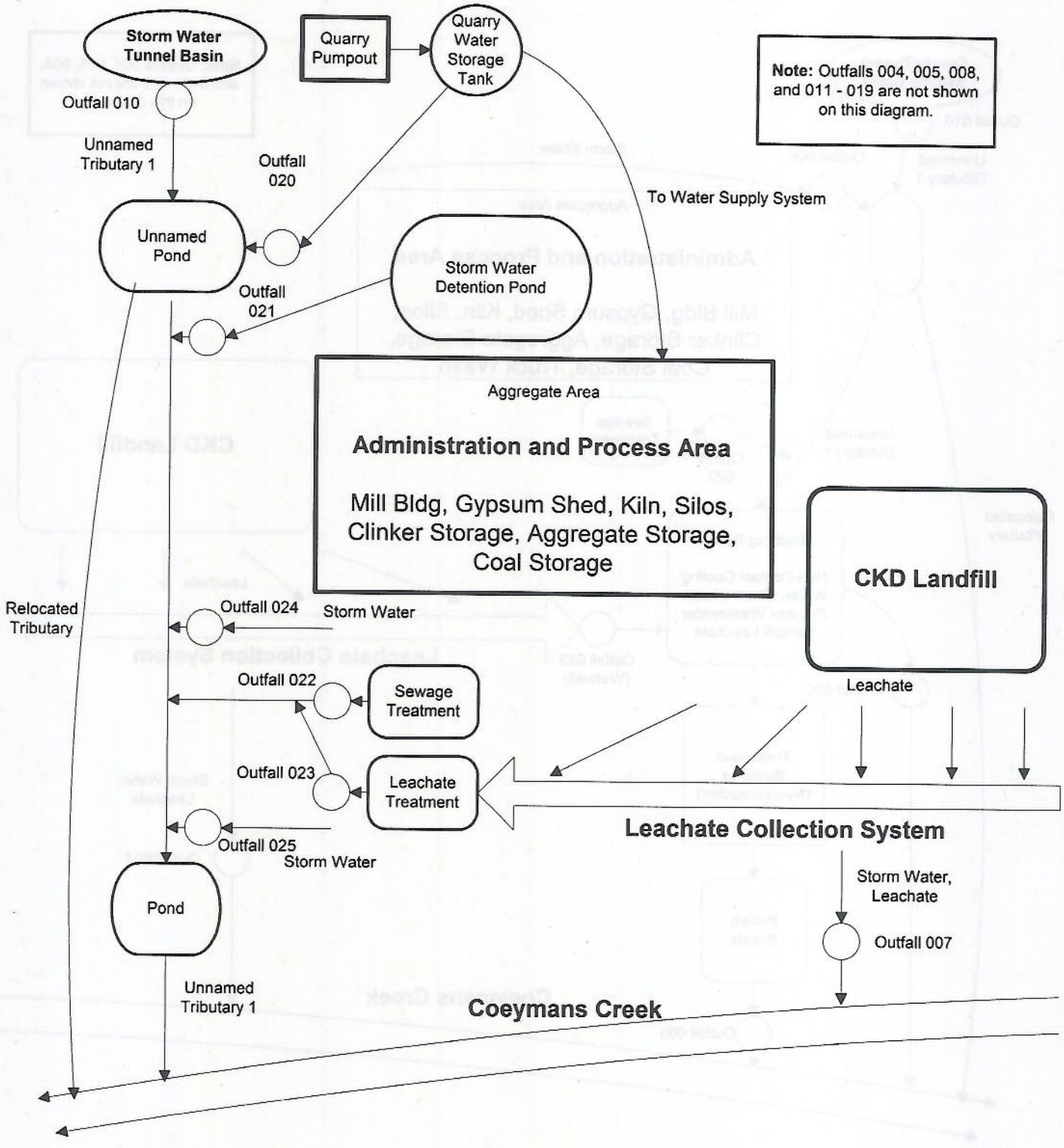
EXISTING PRE-MODERNIZATION DISCHARGES



FLOW DIAGRAM AND MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:

FUTURE POST-MODERNIZATION DISCHARGES



MAP SHOWING OUTFALL LOCATIONS

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) 6 NYCRR Part 750 is hereby incorporated by reference and its conditions are enforceable requirements of this permit. The permittee shall comply with all conditions set forth in this permit and with 6 NYCRR Part 750, including, but not limited to: additional monitoring and reporting requirements and conditions, including noncompliance reporting.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

[X] completed and signed Discharge Monitoring Report (DMR) forms for each ONE month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

[ ] (if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

[ ] (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:
[ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency specified below

Send the **original** (top sheet) of each DMR page to:
Department of Environmental Conservation
Division of Water, Bureau of Water Compliance
625 Broadway, Albany, New York 12233-3506
Phone: (518) 402-8177

Send an **additional copy** of each DMR page to:

Send the **first copy** (second sheet) of each DMR page to:
Department of Environmental Conservation
Regional Water Engineer, R-4
1130 North Westcott Road
Schenectady, NY 12306-2014

Phone: (518) 357-2045

c) Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

d) More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

e) Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

f) Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

g) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.