Louisiana Department of Transportation and Development

PORTLAND CEMENT CONCRETE PLANT CERTIFICATION REPORT

I. GENERAL INFORMATION

District Name:_____ District Number: _____
Plant Name:_____ Plant Code: _____
Plant Make: _____ Model/Serial No.: _____
Location: _____ Parish: _____
Mailing Address:_____

Plant Type: ☐ Batch Plant ☐ Dry Batch
☐ Central Mixer ☐ Site Mixer

Date Inspected: _____ Capacity: _____ yd^3/hr
Date Insp. For Certification: _____ Approved: _____
Remarks: _____ Approved: _____

II. MATERIAL STORAGE AND HANDLING

A. Aggregates – Handling and Equipment

1. Stockpiles Building Method: ☐ Dozer ☐ Loader ☐ Excavator
Other (describe): _____
Remarks:_____
_____

Material Approved Producer/Supplier (Code)	Approved Source		Satisfactory Drainage		Separation						Contamination		Segregation	
					Adequate		Spacing		Partition					
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

2. Storage Bins (Holding Hoppers)

Method of Loading ☐ Excavator ☐ Loader ☐ Belt Conveyor
Other (describe):_____

Bin partitions extended 1 ft above bins: ☐yes ☐no
Individual bin for each size aggregate: ☐yes ☐ no
Number of bins sufficient for operation: ☐yes ☐ no
Bins designed for efficient discharge: ☐yes ☐ no
Bins designed so that material does not accumulate in corners: ☐yes ☐ no
Bins in acceptable condition (no holes): ☐yes ☐ no
Type of discharge gate: ☐ clam shell ☐ other _____ (describe)
Operating properly with no leakage: ☐yes ☐ no
Equipped with vibrators: ☐yes ☐ no
Batch control sufficient to add batch quality slowly and to positively shut off flow with precision: ☐yes ☐ no
Bins designed so that material has minimum segregation during discharge: ☐yes ☐ no
Inspection platforms and ladders safe and adequate for inspection: ☐yes ☐ no

Remarks:_____
_____

3. Conveyor System

Adequately transports aggregates for batching operations: ☐yes ☐ no
Condition is satisfactory with no spillage: ☐yes ☐ no
Belts free of holes and tears: ☐yes ☐ no
Remarks: _____
_____

4. Temperature Control

Provisions for cooling aggregate: ☐yes ☐ no
Provisions for heating aggregate: ☐yes ☐ no
Method(s) (describe): _____

Remarks:_____
_____

B. Cement – Handling and Equipment

1. Storage Bin

Individual bin for cement storage :	☐yes ☐ no
Sufficient for operations:	☐yes ☐ no
Bin in acceptable condition with no holes:	☐yes ☐ no
Bin designed to eliminate accumulation of material in corners:	☐yes ☐ no
Bin designed to discharge efficiently and freely into weight hopper:	☐yes ☐ no
Equipped with vibrators:	☐yes ☐ no
Batching control sufficient to add batch quantity slowly and positively shut off flow at desired weight	☐yes ☐ no
Connection between storage bin and weight hopper free of leaks:	☐yes ☐ no
Excessive dusting during batching:	☐yes ☐ no
Inspection platform and ladders safe and adequate for inspection:	☐yes ☐ no

Remarks:_____

_____

2. Source

Approved source:	☐yes ☐ no
Cement in storage from more than one source:	☐yes ☐ no
Cement in storage all one type:	☐yes ☐ no

Remarks:_____

_____

C. Fly Ash – Handling and Equipment

1. Storage Bin

Individual bin for fly ash storage: Number of Silos: _____ Capacity:_____ tons	☐yes ☐ no
Sufficient for operations:	☐yes ☐ no
Weatherproof:	☐yes ☐ no
Bin in acceptable condition with no holes:	☐yes ☐ no

Fly Ash Storage Bin – continued

Bin designed to eliminate accumulation of material in corners:	☐yes ☐ no
Bin designed to discharge efficiently and freely into weight hoppers:	☐yes ☐ no
Equipped with vibrators:	☐yes ☐ no
Batching control sufficient to add batch quantity slowly and positively shut off flow at desired weight:	☐yes ☐ no
Connection between storage bin and weight hopper free of leaks:	☐yes ☐ no
Excessive dusting during batching:	☐yes ☐ no
Inspection platform and ladders safe and adequate for inspection:	☐yes ☐ no

Remarks:_____

_____

2. Source

Approved source:	☐yes ☐ no
Fly Ash in storage from more than one source:	☐yes ☐ no
Fly Ash in storage all one type:	☐yes ☐ no

Remarks:_____

_____

D. Ground Granulated Blast - Furnace Slag - Handling and Equipment

1. Storage Bin

Individual bin for Ground Granulated Blast Furnace Slag storage: Number of Silos: _____ Capacity:_____ tons	☐yes ☐ no
Sufficient for operations:	☐yes ☐ no
Weatherproof:	☐yes ☐ no
Bin is in acceptable condition with no holes:	☐yes ☐ no
Bin designed to eliminate accumulation of material in corners:	☐yes ☐ no
Bin designed to discharge efficiently and freely into weight hoppers:	☐yes ☐ no
Equipped with vibrators:	☐yes ☐ no
Batching control sufficient to add batch quantity slowly and positively shut off flow at desired weight:	☐yes ☐ no
Connection between storage bin and weight hopper free of leaks:	☐yes ☐ no

Ground Granulated Blast -Furnace Slag-Handling and Equipment- Storage Bin – Continued

Excessive dusting during batching: ☐yes ☐ no

Inspection platform and ladders safe and adequate for inspection: ☐yes ☐ no

Remarks:_____

_____

2. Source

Approved source: ☐yes ☐ no

Ground Granulated Blast Furnace Slag in storage from more than one source: ☐yes ☐ no

Ground Granulated Blast Furnace Slag in storage all one type: ☐yes ☐ no

Remarks:_____

_____

E. Water – Handling and Equipment

Water from an approved source: ☐yes ☐ no

(describe): _____

Provisions for cooling water:

☐ Ice ☐ Other: _____ ☐yes ☐ no

Provisions for heating water: ☐yes ☐ no

Method(s) (describe):_____

Remarks:_____

_____

F. Admixtures – Handling and Equipment

Admixtures from an approved source: ☐yes ☐ no

Admixtures dispensed with the mixing water: ☐yes ☐ no

Manner of dispensing admixture satisfactory: ☐yes ☐ no

All admixtures used in batch from same manufacturer: ☐yes ☐ no

If more than one admixture is being used are they compatible: ☐yes ☐ no

Do admixtures being used require agitation: ☐yes ☐ no

Provisions for agitation in storage tanks: ☐yes ☐ no

Storage such that no contamination occurs: ☐yes ☐ no

Admixtures protected from freezing: ☐yes ☐ no

Remarks:_____

_____

III. BATCHING EQUIPMENT

A. Weight Hoppers

1. Aggregate	2. Cement
Provisions for overload..... □yes □ no Describe: _____	Provisions for overload..... □ yes □ no Describe: _____
Separate from cement weigh hopper... . □yes □ no Acceptable condition - no holes..... □yes □ no Discharge completely..... □yes □ no Type of discharge gate: □clam shell □ other* *Describe:_____ Operating Properly – no leakage or excessive dusting .....□yes □ no Equipped with vibrators..... □yes □ no Inspection platforms & ladders safe & is adequate for inspection.....□yes □ no Remarks _____	Separate from aggregate weigh hopper .. □yes □ no Acceptable condition - no holes ..... □yes □ no Discharge completely..... □yes □ no Type of discharge gate: *Describe:_____ Operating Properly – no leakage or excessive dusting.....□yes □ no Equipped with vibrators..... □yes □ no Inspection platforms & ladders safe & is adequate for inspection.....□yes □ no Remarks: _____
3. Fly Ash	**4. Ground Granulated Blast – Furnace Slag**
Provisions for overload..... □yes □ no Describe: _____	Provisions for overload..... □yes □ no Describe: _____
Separate from aggregate weigh hopper...□yes □ no Acceptable condition - no holes..... □yes □no Discharge completely..... □yes □no Type of discharge gate: *Describe _____ Operating properly – no leakage or excessive dusting .....□yes □ no Equipped with vibrators..... □yes □ no Inspection platforms & ladders safe & is adequate for inspection.....□yes □ no Remarks:_____	Separate from aggregate weigh hopper...□yes □ no Acceptable condition - no holes..... ... □yes □ no Discharge completely..... □yes □ no Type of discharge gate: *Describe_____ Operating properly – no leakage or excessive dusting .....□yes □ no Equipped with vibrators..... □yes □ no Inspection platforms & ladders safe & is adequate for inspection.....□yes □ no Remarks:_____
5.Water	**Additional Comments**
Is water weighed ..... □yes □ no Weigh hopper functioning properly with no leakage .....□yes □ no	_____ _____ _____

B. Scales

1. General

Separate scale system for each type component that is weighed: ☐yes ☐ no

All scale parts including knife edges and supports clean and functioning properly: ☐yes ☐ no

Does wind influence the weights recorded on the scales: ☐yes ☐ no

Do all scales zero: ☐yes ☐ no

Scale heads and beams protected from the weather and dust: ☐yes ☐ no

Scale heads and beams readily visible to the operator: ☐yes ☐ no

If scales are tied to a remote terminal, is the weight visible: ☐yes ☐ no

Do the terminal and scale weights coincide: ☐yes ☐ no

Are the scales accurate to 0.4% of the net applied load: ☐yes ☐ no

Are the max. graduations on the scale 0.1% of the rated scale capacity: ☐yes ☐ no

Are aggregates weighed accumulatively: ☐yes ☐ no

Is scale is used to weigh the water for batching: ☐yes ☐ no

Is the scale accurate to 1% at ½ the max. allowable water per batch: ☐yes ☐ no

Remarks:_____

_____

2. Beam Scales

	Aggregate	Cement	Fly Ash	Slag	Water
Make					
Graduation					
Capacity					
Date Calibrated					
Maximum Error	%	%	%	%	%

Separate beam for each ingredient: ☐yes ☐ no

Scales provided with zero balance beam: ☐yes ☐ no

Scales provided with a tell-tale device: ☐yes ☐ no

Dust cover intact: ☐yes ☐ no

Poises can be locked: ☐yes ☐ no

Remarks:_____

_____

3. Dial Indicating Scales

	Aggregate	Cement	Fly Ash	Slag	Water
Make					
Graduations					
Capacity					
Date Calibrated					
Maximum Error	%	%	%	%	%

Separate beam for each ingredient: ☐yes ☐ no

Dial glass sealed against dust and weather : ☐yes ☐ no

Remarks:_____

_____

C. Metering Device

1. Water Meters

Make		**Date Calibrated**	
Min. Graduation		**Maximum Error, %**	

Dispensing method: ☐ Automatic ☐ Manual

Accurate to 1% at ½ the max. allowable water per batch: ☐yes ☐ no

Maximum graduation, 1 gal: ☐yes ☐ no

Any leakage: ☐yes ☐ no

Meter readily visible to the batcher: ☐yes ☐ no

Remarks:_____

_____

1. Admixture Dispensers

	Air Entrainment	Water Reducer		Superplasticizer	Other
		Normal Set	Set Retarder		
Make					
Min. Graduation					
Capacity					
Date Calibrated					
Maximum Error	%	%	%	%	%

Separate device for each admixture: ☐yes ☐ no

Dispensing method: ☐ Automatic ☐ Manual

Any leakage: ☐yes ☐ no

Accuracy sufficient to ensure the correct vol. of admix. in the batch with 3%: ☐yes ☐ no

Device protected from weather and contamination: ☐yes ☐ no

Remarks:_____

_____

IV. TICKET SYSTEM

Automatic Printer: ☐ Applicable ☐ Not Applicable

System tamper proof: ☐yes ☐ no

Does the system print the following:

a. Time of batching to the nearest minute ☐yes ☐ no

b. Water quantity added to batch ☐yes ☐ no

c. Batch weights for each component: ☐yes ☐ no

d. Moisture content of aggregate: ☐yes ☐ no

e. Quantities of admixture: ☐yes ☐ no

f. Batch number: ☐yes ☐ no

g. Day, month, and year ☐yes ☐ no

h. Maximum quantity of water to be added to job site: ☐yes ☐ no

Are moisture content of aggregate or quantities of admixtures placed on ticket by batcher in lieu of printing: ☐yes ☐ no

NOTE: *Form 03-22-4028, Batch Certification of Portland Cement Concrete must be attached to the automatic system printer ticket.*

Form 03-22-4028, Batch Certification of PCC: ☐ Available ☐ Not Available

Remarks:_____

_____

V. MIXING

A. ☐ **Truck Mixer** ☐ **Shrink-Mixed** ☐ **Central Mixer** Make:_____

Batch Size: _____yd^3 Capacity_____yd^3/hr

Timing device which automatically locks the discharge lever when the drum has been charged and releases it at the end of mixing cycle: ☐yes ☐ no

Uniformly mixes the batch components: ☐yes ☐ no

B. Water Storage and Dispensing

Adequate water storage and an accurate, automatic dispensing device meeting the following requirements:

Water meter accurate to 1% at ½ the allowable water per batch: ☐yes ☐ no

Maximum graduation is 1 gal ☐yes ☐ no

Any leakage: ☐yes ☐ no

Meter readily visible to the batcher: ☐yes ☐ no

C. Manufacturer's Plate

Manufacturer's plate listing:

a. Capacity of drum: ☐yes ☐ no

b. Mixing speed: ☐yes ☐ no

Blades meet manufacturer's requirements: ☐yes ☐ no

D. Admixture Dispensers

Admixture dispensers meet the following specifications:

Separate device for each aggregate: ☐yes ☐ no

Dispensing method: ☐yes ☐ no

☐ Automatic ☐ Manual

Any leakage:

Accuracy sufficient to ensure the correct volume of admixture in the batch within 3%: ☐yes ☐ no

Device protected from weather and contamination: ☐yes ☐ no

General condition satisfactory: ☐yes ☐ no

Is mixture completely discharged in satisfactory manner: ☐yes ☐ no

Remarks:_____

_____

VI. PLANT SITE LABORATORY

Building

Building dedicated only for testing purposes: ☐yes ☐ no

Site convenient and otherwise acceptable: ☐yes ☐ no

Floor space a minimum of 160ft^2 ☐yes ☐ no

Weatherproof: ☐yes ☐ no

Secured by suitable locks and catches: ☐yes ☐ no

Air conditioned: ☐yes ☐ no

Heated: ☐yes ☐ no

Ventilation adequate/All fumes vented (fume hood): ☐yes ☐ no

Sink with running water: ☐yes ☐ no

Adequate lighting and power outlets: ☐yes ☐ no

Minimum of one outside door: ☐yes ☐ no

Sufficient, sturdy benches and tables for work surfaces: ☐yes ☐ no

Sanitary facilities: ☐yes ☐ no

Remarks:_____

_____

General remarks on plant certification:_____

_____ _____ _____ _____

Certified Inspector Date District Lab Representative Date

_____ _____ _____ _____

Project Engineer Date District Lab Engineer Date