
ENVIRONMENTAL PROTECTION

EP301*

ENVIRONMENTAL PROTECTION ACT 1986

ENVIRONMENTAL PROTECTION (CONCRETE BATCHING AND CEMENT PRODUCT MANUFACTURING) REGULATIONS 1998

Made by the Governor in Executive Council on the recommendation of the Environmental Protection Authority.

Citation

1. These regulations may be cited as the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998*.

Interpretation

2. In these regulations —

“**agitator**” means a tank attached to a concrete mixing truck, or other plant, in which the ingredients of concrete are mixed;

“**aggregate**” means broken stone, brick or gravel which forms one of the ingredients of concrete;

“**cement**” means argillaceous and calcareous materials used in cement products;

“**cement product manufacturing**” means the manufacturing of products in which cement or concrete is the principal ingredient;

“**concrete**” means a mixture of cement, sand, aggregate and water;

“**concrete batching**” means the production, or batching and loading for transport, of concrete;

“**filter**” means a bag, cartridge or other device used in an air cleaning system to collect dust;

“**operator**” means a person carrying on concrete batching or cement product manufacturing;

“**premises**”, in relation to an operator, means the premises at which the operator carries on concrete batching or cement product manufacturing;

“**weigh hopper**” means plant or equipment by which the ingredients of concrete are weighed before being loaded into an agitator.

Minimization of dust

3. (1) An operator must not carry on concrete batching or cement product manufacturing unless it is carried on in such a manner that no visible dust escapes from the premises (or if there are no defined boundaries to the premises, no such dust escapes onto any place to which the public has access).

(2) An operator must immediately clean up any material spilt during concrete batching or cement product manufacturing.

Control of dust from trafficable areas

4. (1) An operator must ensure that all parts of the premises to which vehicles have access —

- (a) are either —
 - (i) paved or sealed; or
 - (ii) treated with water or surfactants as often as is necessary;and
- (b) are swept, hosed or otherwise cleared of any loose aggregate, sand, cement, concrete or other material as often as is necessary,

to prevent loose material adhering to vehicles and to minimize dust.

(2) An operator must not allow any vehicles carrying concrete, or any of the ingredients of concrete, to leave the premises until it has been washed free of cement slurry and dust.

Storage of aggregate and sand

5. (1) An operator must store all aggregate and sand kept on the premises in storage bins or bays which are designed to minimize airborne dust, or where the use of such bins or bays is not practicable, in stockpiles on the ground.

(2) An operator must not allow the height of aggregate or sand in a storage bin or bay to exceed the height of the bin or bay (including any windshields fitted to it).

(3) Where aggregate or sand is stored in a stockpile on the ground the operator must keep it covered or damp, or otherwise treat it, so as to minimize airborne dust.

(4) If, during the unloading of aggregate or sand, any visible dust escapes from the premises the operator must ensure that unloading stops immediately and does not resume until appropriate measures have been taken to prevent the escape of the dust from the premises.

Storage of cement

6. (1) An operator must store all cement kept on the premises —

- (a) in bags; or —
- (b) in a cement storage silo
 - (i) which complies with subregulation (2); or
 - (ii) which is one of a series of interconnected silos at least one of which complies with subregulation (2).

(2) To comply with this subregulation a cement storage silo must be fitted with —

- (a) an air cleaning system, which complies with regulation 7, through which all air extracted from the silo while it is being filled must pass before it is discharged into the environment; and
- (b) either —
 - (i) a level indicator which complies with regulation 8(1); or
 - (ii) a relief valve, which complies with regulation 8(3).

(3) An operator must seal all inspection ports, hatches and other openings to a cement storage silo while cement is being unloaded into the silo.

(4) If, during the filling of a cement storage silo, any visible cement dust escapes from the silo the operator must ensure that no further loads of cement are unloaded into the silo until appropriate measures have been taken to prevent the escape of dust from the silo.

Air cleaning system for cement storage silo

7. (1) The air cleaning system for a cement storage silo must —

- (a) be either —
 - (i) a mechanical rapping air cleaning system with a minimum filter area of 23 square metres; or
 - (ii) a reverse pulse air cleaning system which reduces dust emissions to less than 50 milligrams of particulate matter per cubic metre;and
- (b) discharge air from the system into a weigh hopper or to an outlet which is within one metre of the ground.

(2) An operator must inspect the filters, or if the system is fitted with pressure gauges for the detection of blockages or leaks, check those gauges, at least weekly and immediately clean, repair or replace any filter which is blocked or damaged or has an excessive build-up of dust.

(3) An operator must test the air cleaning system for a cement storage silo at least weekly and if it is not working efficiently, must not unload any cement into the silo until the system is repaired.

(4) An operator must keep on the premises, or in a readily accessible place, sufficient spare filters to replace all such bags or cartridges used in the air cleaning systems of all cement storage silos on the premises.

Level indicator system or relief valve for cement storage silo

8. (1) A level indicator system for a cement storage silo must include —
- (a) an audible alarm which sounds if cement stored in the silo reaches —
 - (i) 0.6 m below the inlet to the silo's air cleaning system; or
 - (ii) 2 tonnes less than the silo's maximum capacity;and
 - (b) a test circuit which indicates whether the level indicator and alarm are working correctly.
- (2) Where a level indicator is used to comply with regulation 6(2)(b) the operator must ensure that the test circuit is activated before a load of cement is unloaded into the silo and that no cement is unloaded into the silo if the level indicator or alarm are not working correctly.
- (3) A relief valve for a cement storage silo must be designed —
- (a) to automatically prevent the level of cement in the silo rising above the level referred to in subregulation (1) (a) (i) or (ii); and
 - (b) so that any excess cement is piped into a weigh hopper or to an outlet which is within one metre of the ground.

Movement of materials on premises and loading of agitators

9. (1) An operator must not use —
- (a) a hopper, conveyor, chute, bucket elevator or transfer point to move material on the premises; or
 - (b) any area of the premises to load agitators,
- unless it is —
- (c) enclosed;
 - (d) fitted with wind shields, water sprays or a dust extraction system; or
 - (e) otherwise designed and operated,
- so as to prevent the escape of any visible dust.
- (2) An operator must maintain in good working order all wind shields, water sprays, dust extraction systems and other devices used to comply with subregulation (1).

Cement product manufacturing premises to be cleaned

10. (1) An operator carrying on cement product manufacturing must regularly clean all inside areas on the premises to prevent the accumulation of dust on any surface.
- (2) An operator must not use water to carry out the cleaning referred to in subregulation (1) unless all fittings and electrical installations in that area of the premises are waterproof or otherwise designed to withstand water.
- (3) Subregulation (2) does not apply in relation to a building in which cement product manufacturing was being carried on before these regulations came into operation.

Control of waste water

11. (1) An operator must ensure that —
- (a) all water draining off any area where agitators, mixers or moulds are loaded or where concrete is batched drains into a slurry pit;
 - (b) all water used to wash out agitators, mixers or moulds or to clean up spilt material drains into a slurry pit;
 - (c) all other water draining off sealed or paved areas of the premises and which is likely to contain waste material drains into a slurry pit or settling pond; and
 - (d) any water removed from, or which might overflow from, a slurry pit drains into a settling pond.
- (2) An operator must ensure that no water used in concrete batching or cement product manufacturing is discharged from the premises until —
- (a) it has been —
 - (i) through a silt trap; or
 - (ii) contained in a settling pond for long enough to allow all particulate matter to settle out;and
 - (b) if the water is likely to contain hydrocarbons, it has been through an oil interceptor.

Slurry pits, settling ponds, silt traps and oil interceptors

12. (1) An operator must not allow settled material in a slurry pit to —
- (a) dry out (except when the pit is dried out to allow the settled material to be removed); or
 - (b) be higher than 30 cm below the top of the slurry pit walls.
- (2) An operator must ensure that a settling pond is large enough to contain all water which might drain into it for long enough to allow all particulate matter to settle out.

(3) An operator must ensure that slurry pits, settling ponds, silt traps and oil interceptors are maintained, and emptied or cleaned as often as necessary, to ensure their efficient operation.

Disposal of waste

13. An operator must ensure that all waste created during concrete batching or cement product manufacturing (including material removed from slurry pits, settling ponds, silt traps and oil interceptors) is —

- (a) recycled; or
- (b) disposed of at an appropriate landfill site or waste treatment facility the occupier of which holds a licence under Part V of the Act in respect of that site or facility.

Offences and penalties

14. A person who contravenes any of these regulations commits an offence.

Penalty: \$200.

Repeal

15. The *Clean Air (Control of Dust in Concrete Plants) Regulations 1982* are repealed.

Transitional

16. (1) Regulations 6(2), 7, 8 and 11 do not apply in relation to an existing facility until the day that is 6 months after the day on which these regulations come into operation.

(2) In subregulation (1) —

“existing facility” means —

- (a) a cement storage silo in which cement was being stored; or
- (b) a premises at which concrete batching or cement product manufacturing was being carried on,

immediately before the commencement day.

Recommended by a resolution of the Environmental Protection Authority at a meeting of the Authority on 17 April 1998.

B. K. BOWEN, Chairman.

By Command of the Governor,

M. C. WAUCHOPE, Clerk of the Executive Council.