A new Subpart 220-3, Asphalt Pavement Manufacturing Plants is added as follows:

6 NYCRR Part 200

General Provisions

Express Terms Summary

Section 200.9, Table 1 is amended to update references to the Code of Federal Regulations found in Subpart 220-1.

6 NYCRR Subpart 220-1

Portland Cement Plants

Express Terms Summary

Subpart 220-1 is revised to align with federal rule 40 Code of Federal Regulations (CFR) Part 63 Subpart LLL, "National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry." The current particulate emission limit for kilns and clinker coolers in Subpart 220-1 will be lowered to match what is allowed by Subpart LLL. Subpart LLL requires a particulate monitor and has dropped the opacity requirement that is currently included in Subpart 220-1. Subpart 220-1 will be revised to reflect the appropriate particulate monitoring as defined in Subpart LLL, which requires the owner or operator of a kiln and clinker cooler subject to limitations on PM emissions to monitor performance through use of a PM continuous parametric monitoring system (PM CPMS).

Subpart 220-1 is also revised to remove the 40 CFR Part 75 NOx emissions monitoring and reporting requirements and replace them with 40 CFR Part 60 monitoring and reporting requirements. Part 75 monitoring is no longer appropriate because the federal program, the Clean Air Interstate Rule, that required it has been repealed and replaced by the Cross-State Air Pollution Rule (CSAPR) in 2015. CSAPR is a cap-and-trade program designed to reduce NOx emissions from power plants. Part 60 monitoring and reporting is a less expensive option that will

replace Part 75 and achieve the required NOx emissions monitoring from portland cement kilns.

6 NYCRR Part 212

Process Operations

Express Terms Summary

Repeal Subpart 212-4 and remove associated definitions and references to Subpart 212-4.

6 NYCRR Subpart 220-3

Asphalt Pavement Manufacturing Plants

Express Terms Summary

Applicability.

Subpart 220-3 applies to operations at an Asphalt Pavement Manufacturing Plant whose calculated annual production level of asphalt paving material is equal to or greater than 75,000 tons per year. Subpart 220-3 applies upon issuance of a new or modified permit for an Asphalt Pavement Manufacturing Plant or Reconstructed Asphalt Pavement Processing Unit, or three years from the effective date of Subpart 220-3 for existing facilities, whichever occurs first.

Recordkeeping and Work Practices.

Operators of an Asphalt Pavement Manufacturing Plant shall record information daily, as applicable, for each Asphalt Pavement Processing Unit during operation in a calendar year, including and identifying days when no asphalt paving material is being manufactured.

An annual tune-up on the dryer burner and on the hot oil heater is required. A plan must be submitted to the Department that details the methods utilized to reduce moisture content of the aggregate stockpile(s). An

annual Baghouse Inspection and Maintenance must be completed prior to operating for the season. All ductwork must be inspected for leaks and any necessary maintenance must be completed prior to operating during the asphalt production season. Annual records of baghouse and ductwork inspections shall be maintained for the life of the permit.

Emissions from Asphalt Cement Storage Tanks.

Within one year of becoming applicable to this Subpart, the owner shall install equipment to capture and control emissions of volatile organic compounds (VOCs) associated with the filling and heating of asphalt cement storage tanks. Each asphalt cement storage tank shall vent through a tank vent condenser, activated carbon filter, or suitable control device. Multiple tanks may vent through the same control device if properly sized and rated to adequately handle all the emitted VOCs. These control devices must remain in place and continue to operate, regardless of future calculated annual production levels.

Emissions from Aggregate Dryer.

Immediately upon becoming applicable to this Subpart, the owner or operator of an existing or new aggregate dryer shall comply with the respective emission limits specified in Table 1 for Batch Mix and Continuous Drum Mix processes.

The owner or operator of a rotary dryer that fires distillate fuel oil must meet the sulfur-in-fuel limits in 6 NYCRR Subpart 225-1 and Subpart 225-2 if firing waste oil.

Table 1 – Aggregate Dryer Emission Limits.

Fuel Type	**Air Contaminant**	**Existing Unit Emission Limits**	**New Unit Emission Limits**
Distillate Oil Or Waste Fuel	Particulate Matter (filterable) Plus Particulate Matter (condensable)	0.030 grains per dry standard cubic foot	0.015 grains per dry standard cubic foot
	Nitrogen Oxides (Distillate Oil)	< 135 parts per million @ 3% O_2 Or < 0.173 lbs/millionBtu*	< 90 parts per million @ 3% O_2 Or < 0.113 lbs/millionBtu*
	Nitrogen Oxides (Waste Oil)	< 200 parts per million @ 3% O_2 Or < 0.256 lbs/millionBtu*	< 90 parts per million @ 3% O_2 Or < 0.113 lbs/millionBtu*
Natural Gas Or Liquid Propane	Particulate Matter (filterable) Plus Particulate Matter (condensable)	0.030 grains per dry standard cubic foot	0.015 grains per dry standard cubic foot
	Nitrogen Oxides	< 80 parts per million @ 3% O_2 Or < 0.096 lbs/millionBtu*	< 40 parts per million @ 3% O_2 Includes NOx reduction technology with Flue Gas Recirculation Or < 0.048 lbs/millionBtu*

*British Thermal Units

Emissions from Asphalt Storage Silos, Drag Conveyors, Pug Mills, and Load-Out Process Operations.

The owner or operator of an existing Asphalt Pavement Processing Unit that emits blue smoke shall control emissions associated with the drag conveyor, and/or hot screens, pug mill and asphalt storage silo filling operations. These emissions must be captured and can either be returned to the drum mixer, controlled with coalescing filters or controlled with any other method acceptable to the Department, approved in writing, according to the following schedule:

Existing Asphalt Pavement Processing Units that have a calculated annual production level:

(1) ≥ 500,000 tons per year of asphalt paving material, must comply within one year of becoming applicable to this Subpart.

(2) 250,000 to 500,000 tons per year, must comply within three years of the effective date of this Subpart.

(3) ≥ 75,000 tons per year but less than 250,000 tons per year of asphalt paving material, must comply within five years of the effective date of this Subpart.

(4) New Asphalt Pavement Processing Units or Reconstructed asphalt Pavement Processing Units, regardless of annual production levels, must comply upon start-up.

Blue smoke emission control equipment is not required for load-out process operations where the silo or pug mill and load-out process operations are located within approximately 750 feet from the Asphalt Pavement Manufacturing Plant fence line.

Opacity Limits for Asphalt Pavement Manufacturing Plants.

No facility owner or operator shall cause or allow emissions to exceed an average opacity of 20 percent or greater during any six consecutive minutes from any process emission source or emission point.

Performance Requirements.

Emissions testing shall be conducted for all Asphalt Pavement Processing Units, while burning the worst-case fuel to verify compliance with the filterable and condensable particulate matter (PM) and Nitrogen Oxide (NO_x) limits, using the applicable emission test methods found in 40 CFR Part 60 Appendix A Method 5 and Method 202 and 40 CFR Part 60 Appendix A Method 7.

The owner or operator shall conduct a burner tuning procedure in accordance with the manufacturer's specifications to minimize NO_x and carbon monoxide (CO) emissions each year no later than June 15th of each year or within four (4) weeks after a start-up of the Asphalt Pavement Processing Unit.

Monitoring records shall be kept on site for the life of the permit and shall be made available to the Department upon request.

The Department may require the owner or operator of an asphalt pavement manufacturing plant to perform an air dispersion modeling analysis using procedures acceptable to the Department to evaluate the impacts of the facility on the surrounding community.

Fugitive Dust Control.

Fugitive dust must be reduced or controlled from site roadways and plant property, Asphalt Pavement Processing Units, storage piles, and vehicles. Dust on the site roadways and plant property shall be controlled by applications of water, calcium chloride or other acceptable and approved fugitive dust control compound. Application of dust suppressants shall be completed often enough to prevent dust emissions from leaving the plant property.

When corrective action needs to be taken, the permittee shall consider and use one or more of the following options: adjust the watering and/or sweeping frequencies; reduce drop distances; increase coverings; and/or take other appropriate actions to reduce fugitive dust emissions.

6 NYCRR Part 200, General Provisions

Express Terms

Sections 200.1 through 200.8 remain unchanged

Section 200.9, Table 1 is amended to read as follows:

220-1.6(b)	40 CFR Part 60, July 2021, pages 170-197, 237-243	*
	40 CFR 63.1349(b)(1), July 2021, pages 414-417	*
220-1.[7]6(d)(1)	40 CFR Part [75]60, Appendix F, July 1, 20[06]21, pages [204-466]797-801	*
220-1.[7]6(d)(2)	40 CFR Part [75]60, [Subpart]Appendix F, July 1, 20[06]21, pages [285-313]797-801	*
220-1.[7]6(d)(4)(ii)	40 CFR Part [75]60, [Subpart C]Appendix F, July 1, 20[06]21, pages [243-262]797-801	*
[220-1.7(d)(4)(iii)	40 CFR Part 75, Subpart D, July 1, 2006, pages 262-279	*
220-1.7(d)(5)	40 CFR Part 75, Subpart F, July 1, 2006, pages 285-313	*
	40 CFR Part 75, Subpart G, July 1, 2006, pages 313-323	*]
220-1.[7]6(d)(5)(iii)('f')	40 CFR Part [75]60, Appendix [A]F, July 1, 20[06]21, pages [353-390]797-801	*
	[40 CFR Part 75, Appendix B, July 1, 2006, pages 390-406	*]
220-2.4(c)(1)	40 CFR Part 60, Appendix A, July 1, 2006, pages 5-626	*
	40 CFR Part 60, Appendix B, July 1, 2006, pages 627-697	*
	40 CFR Part 60, Appendix F, July 1, 2006, pages 698-709	*
220-2.4(c)(4)(iv)	40 CFR Part 60, Appendix F, July 1, 2006, pages 698-709	*

220-2.4(c)(5)	40 CFR Part 60, Appendix A, July 1, 2006, pages 5-626	*
	40 CFR Part 60, Appendix F, July 1, 2006, pages 698-709	*
220-2.4(c)(5)(iii)(‘f’)	40 CFR Part 60, Appendix F, July 1. 2006, pages 698-709	*
220-3.9(a)	40 CFR Part 51, Appendix M, July 1, 2021, pages 499-517	*
	40 CFR Part 60, Appendix A, July 1, 2021, pages 170-197, 267-273	*

(Existing section 200.10 through section 200.16 remains unchanged.)

Express Terms

6 NYCRR Subpart 220-1 Portland Cement Plants

220-1.1 Definitions.

(a) For the purpose of this Subpart, the general definitions of Part 200 of this Title apply.

(b) For the purpose of this Subpart, the following definitions also apply:

(1) 'Dry process plant'. A portland cement plant where the raw material kiln feed entering the kiln in a powder form has a moisture content of one percent or less by weight.

(2) 'Feed to the kiln'. The weight of all materials, excluding fuels and uncombined water, introduced into the kiln during the time when a stack sample is being taken to determine compliance with sections 220-1.2 and 220-1.3 of this Subpart.

(3) 'Clinker'. The product of a portland cement kiln from which finished cement is

manufactured by milling and grinding.

(4) 'Portland cement kiln'. A system, including any solid, gaseous, or liquid fuel combustion equipment, used to calcine and fuse raw materials (including limestone and clay) to produce clinker.

(5) 'Portland cement plant'. Any facility manufacturing portland cement by either the wet or dry process.

(6) 'Wet process plant'. A portland cement plant where the raw material kiln feed enters the kiln in the form of a water slurry of approximately 30 to 40 percent water by weight.

(7) 'Reconstruction'. The replacement of components of an affected source to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source.

220-1.2 [Particulate] E[e]missions from [existing] kilns and clinker coolers.

Upon adoption of this Subpart, kilns and clinker coolers may not exceed the emission limits found in 40 CFR Part 63, Subpart LLL, "National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry."

(a) Existing kilns and clinker coolers are those constructed before the adoption of this Subpart.

(b) New or reconstructed kilns and clinker coolers are those constructed on or after the adoption of this Subpart.

[Except as provided in section 220-1.3 of this Subpart, no person shall cause or allow emission of particulates to the outdoor atmosphere from a portland cement kiln or clinker cooler in excess of the following emission rates:

(a) for process weight per hour less than or equal to 100,000 pounds, $E = 0.024P^{0.665}$ where E is the emission rate in pounds per hour and P is the process weight per hour; or

(b) for process weight per hour in excess of 100,000 pounds, 0.05 grains per standard cubic foot of gas on a dry basis.

220-1.3 Particulate emissions from new or modified kilns and clinker coolers.

No person will cause or allow emission of particulates to the outdoor atmosphere in excess of 0.30 pounds per ton of feed to the kiln from a portland cement kiln, portland cement kiln with in-line raw mill, and/or related air cleaning device which commenced construction or modification after August 17, 1971.

(b) No person will cause or allow emission of particulates to the outdoor atmosphere in excess of 0.10 pounds per ton of feed to the kiln from a portland cement clinker cooler and/or related air cleaning device which commenced construction or modification after August 17, 1971.]

220-1.[4]3 Opacity limits for portland cement processes.

(a) Except as provided in subdivision (b) of this section, no person will cause or allow emissions to the outdoor atmosphere of any material that has an average six-minute opacity of 20 percent or greater, except uncombined water, from a portland cement kiln, portland cement kiln with in-line raw mill, clinker cooler, or any other confined process at a portland cement plant.

(b) No person will cause or allow emissions to the outdoor atmosphere of any material that has an average six-minute opacity of 10 percent or greater, except uncombined water, from a clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor

transfer points, bagging and bulk loading and unloading systems which commenced construction or modification after August 17, 1971.

(c) Any person who owns or operates an area, parking lot, clinker gallery, railcar loading shed, conveyor tunnel, access road, stockpile, building opening or refuse disposal area, at a portland cement plan that has the potential to emit visible emissions for one continuous hour or longer, must apply corrective measures to eliminate such potential.

220-1.[5]4 Particulate emissions from dust dumps.

(a) The owner or operator of any portland cement dust dump will operate such dust dump in a manner which will minimize the horizontal dimensions of the working face.

(b) In cases where the dump is within 1,500 feet of any receptor, the owner and/or operator must seal the dust dump either by crusting or backfill twice yearly.

(c) If dumping procedures do not provide adequate protection from dust re-entrainment, the owner and/or operator must install a windbreak. If visible emissions still reach the property line, the owner and/or operator must precondition the waste dust.

220-1.[6]5 Gaseous emissions from kiln stacks.

(a) The owner or operator of a portland cement kiln may purchase and use fuel with sulfur content exceeding the fuel sulfur limitations required by Subpart 225-1 of this Title, provided that the burning of such fuel will not result in emissions of sulfur compounds (expressed as sulfur dioxide) to the outdoor

atmosphere at a rate greater than would result through the use of fuels otherwise mandated by Subpart 225-1.

(b) The owner or operator of a portland cement kiln must submit a reasonably available control technology (RACT) analysis to the department for emissions of oxides of nitrogen (NO_x) from the kiln that proposes a RACT emission limit(s), and identifies the procedures and monitoring equipment to be used to demonstrate compliance with the proposed RACT emission limit(s). The RACT emissions limit(s) shall be expressed in pounds of NO_x per ton of clinker produced.

(1) By December 1, 2010 the owner or operator of a portland cement kiln that was in operation prior to the effective date of this Subpart must submit a RACT analysis, and an application for a permit modification in accordance with the provisions of Subpart 201-6 of this Title unless the existing NO_x control equipment and emission limit(s) are determined to be RACT. RACT, as approved by the department, must be implemented by July 1, 2012.

(2) The owner or operator of a portland cement kiln that was not in operation prior to the effective date of this Subpart must submit a RACT analysis prior to start-up of the kiln. RACT, as approved by the department, must be implemented upon start-up.

(3) RACT analyses must include the available NO_x control technologies, the projected effectiveness of the technologies considered, the costs for installation and operation for each of the technologies, and the technology and the appropriate emission limit(s) selected as RACT considering the costs for installation and operation of the technology. For a portland cement kiln that was in operation prior to the effective date of this Subpart and for which the existing NO_x control equipment has been determined to not be RACT, the RACT analysis must also include a schedule for installation of control equipment.

(4) Approved RACT determinations will be submitted by the department to the United States Environmental Protection Agency for approval as separate State Implementation Plan revisions.

[(c) The owner or operator of a portland cement kiln may opt to comply with subdivision (b) of this section and section 220-1.7(c) of this Subpart by shutting down the kiln. An owner or operator choosing this option shall submit an application for a federally enforceable permit modification by December 1, 2010 wherein the owner or operator commits to permanently shut down the kiln by July 1, 2012.]

220-1.[7]6 Source monitoring, recordkeeping, and reporting.

(a) The owner or operator of a portland cement kiln or clinker cooler must maintain a file of daily clinker production rates, kiln feed rates, and any particulate emission measurements. The production and feed rates must be summarized monthly. The records and summary must be retained for at least five years following the date of such records and summaries and must be made available for inspection by the department during normal business hours.

(b) [The owner or operator of a portland cement kiln at a dry process plant or clinker cooler at either a dry or wet process plant, subject to section 220-1.4(a) or (b) of this Subpart, must install, maintain, calibrate daily, and operate a device, approved by the department, for continuously measuring and recording the opacity of emissions from such kiln or clinker cooler. If two or more kilns are vented through a single stack, an opacity monitor in the common stack would satisfy the requirements of this subdivision. Records of opacity must be retained for at least five years following the date on which they are made.]

PM emissions tests. The owner or operator of a kiln and clinker cooler subject to limitations on PM emissions shall demonstrate initial compliance by conducting a performance test using Method 5 or Method 5I in appendix A-3 of 40 CFR Part 60. The owner must also monitor performance through use of a PM continuous

parametric monitoring system (PM CPMS), in accordance with 40 CFR 63.1349(b)(1).

(c) The owner or operator of a portland cement kiln shall demonstrate compliance with the NO_x RACT emission limit(s) established in section 220-1.6(b) of this Subpart by measuring NO_x emissions with a continuous emissions monitoring system (CEMS). The CEMS shall comply with the requirements of subdivision (d) of this section or with equivalent requirements approved by the department. Any approved equivalent CEMS requirement will be submitted by the department to the United States Environmental Protection Agency for approval as separate State Implementation Plan revisions.

(d) 'CEMS requirements'.

(1) The owner or operator of a portland cement kiln shall install, calibrate, evaluate, operate, and maintain a CEMS, in accordance with the provisions of 40 CFR part [75]60, Appendix F for measuring NO_x at locations approved in the CEMS certification protocol under paragraph (3) of this subdivision, and shall record the output of the system.

(2) As part of its application for a permit or permit modification, the owner or operator of a portland cement kiln shall submit for department approval a CEMS monitoring plan that complies with the provisions of 40 CFR part [75]60, [subpart]Appendix F.

(3) The owner or operator of a portland cement kiln shall submit for department approval a CEMS certification protocol at least 60 days prior to CEMS certification testing. The certification protocol shall include the location of and specifications for each instrument or device, as well as procedures for calibration, operation, data evaluation, and data reporting.

(4) The procedures in subparagraphs (i) through (v) of this paragraph shall be used for determining compliance with the NO_x RACT emission limit established under [section] subdivision 220-1.6(b) of this Subpart.

(i) The owner or operator of a portland cement kiln shall determine compliance daily on a 30 day rolling average basis. The 30 day rolling averages shall be calculated by dividing 30 day total NOx emissions by 30 day total clinker production. Only days when the kiln operates shall be included in the 30 day rolling averages.

(ii) Along with any specific additional data requirements mandated by the department for a particular portland cement kiln, annual re-certifications, quarterly accuracy, and daily calibration drift tests shall be performed in accordance with 40 CFR part [75, subpart C]60, Appendix F.

[(iii) When NOx emissions data are not obtained because of CEMS downtime, or for periods when no valid CEMS data is available, the owner or operator of portland cement kiln shall use 40 CFR part 75, subpart D, data substitution procedures.]

(5) [In addition to the requirements of subparagraphs (i) through (iii) of this paragraph, the owner or operator of a portland cement kiln shall comply with the CEMS recordkeeping and reporting requirements of 40 CFR part 75, subparts F and G.]

(i) The owner or operator of a portland cement kiln shall notify the department of the planned initial start-up date of any new CEMS.

(ii) Emissions, monitoring, and operating parameter records or measurements required by this Subpart

and any additional parameters required by the department shall be maintained for at least five years and made available to the department upon request.

(iii) On a semi-annual basis, the owner or operator of a portland cement kiln shall tabulate and summarize applicable emissions, monitoring, and operating parameter measurements recorded during the preceding six months, and submit these records to the department. These records shall be submitted in a format acceptable to the department and shall include:

('a') the 30 day rolling average NOx emissions as specified under paragraph (4) of this subdivision;

('b') identification of the operating hours when NO_x emissions data are not included in a calculation of the 30 day rolling average emissions and the reasons for not including that data;

('c') a comparison of the NOx emissions to the NO_x RACT emissions limit(s);

('d') type and amount of fuel burned on a daily basis and the as burned heat content of the fuel;

('e') the total daily NOx emissions and total daily clinker production; and

('f') the results of CEMS accuracy assessments as required by 40 CFR part [75]<u>60</u>, [appendix A and B] <u>Appendix F</u> and any additional data quality information required by the department.

(e) Protocols, reports, summaries, schedules, and any other information required to be submitted to the department under provisions of this Subpart must be sent (in either hardcopy or electronically) as follows:

(1) one copy to the Division of Air Resources, New York State Department of Environmental Conservation, 625 Broadway, Albany, New York 12233; and

(2) one copy to the regional air pollution control engineer at the appropriate regional office of the department.

Section 220-1.7 Severability.

Each provision of this Subpart shall be deemed severable. In the event that any provision of this Subpart is held to be invalid, the remainder of this Subpart shall continue in full force and effect.

Sections 220-2.1 through 220-2.4 remain unchanged.

Section 220-2.5 is added as follows:

Section 220-2.5 Severability.

Each provision of this Subpart shall be deemed severable. In the event that any provision of this Subpart is held to be invalid, the remainder of this Subpart shall continue in full force and effect.

Revised PART 212

PROCESS OPERATIONS

SUBPART 212-1

GENERAL PROVISIONS

Section 212-1.1 remains unchanged.

Sections 212-1.2 is revised as follows:

Section 212-1.2 Definitions.

(a) For the purpose of this Part, the general definitions in Part 200 of this Title apply.

(b) For the purpose of this Part, the following definitions also apply:

[(1) ‘Aggregate.’ Any hard, inert material used for mixing in graduated particles or fragments. Includes sand, gravel, crushed stone, slag, rock dust or powder.]

[(2)] (1) ‘Animal Oncogenes.’ Chemicals for which oncogenicity has been demonstrated in at least one mammalian species.

[(3)] (2) 'Carcinogenic to Humans’. Chemicals where there is convincing epidemiological evidence of a causal association between human exposure and cancer as described by the United States Environmental Protection Agency Guidelines for Carcinogen Risk Assessment**.**

[(4)] (3) ‘Criteria Air Contaminant.’ Particulate matter, ground-level ozone, carbon monoxide, sulfur oxides, nitrogen dioxide. Elemental lead is a criteria air contaminant as well as a federal Hazardous Air Pollutant: elemental lead and lead compounds are also treated as a High Toxicity Air Contaminant.

[(5)] (4) ‘Guideline Concentrations.’ Ambient air concentrations that are listed in the Division of Air Resource’s Annual and Short-term Guideline Concentrations (AGC/SGC) Tables.

[(6)] (5) ‘Genotoxic Chemicals’. Chemicals that have been shown to damage DNA or chromosomes in in-vitro and/or in-vivo short-term tests.

[(7) ‘Hot mix asphalt.’ Paving material that is produced by mixing hot dried aggregate with heated asphalt cement.]

[(8) ‘Hot Mix Asphalt Production Plant.’ A facility comprised of process operations to produce paving material manufactured by mixing hot dried aggregate with heated asphalt cement.]

[(9)] (6) ‘High Toxicity Air Contaminants (HTACs).’ Chemicals that are carcinogenic to humans; or likely to be carcinogenic to humans; or chemicals that are known to cause adverse outcomes in humans for reproductive and developmental effects; or chemicals that elicit irreversible or progressive detrimental effects that have been observed in humans; or chemicals meeting the definition of Persistent and Bioaccumulative in this section; or any chemicals meeting the following LC_{50} or LD_{50} values:

‘(i)’ LD_{50} (dermal) is equal or less than 200 mg/kg; or

‘(ii)’ LC_{50} (inhalation) is equal or less than 200 ppm; or

‘(iii)’ LD_{50} (oral) is equal or less than 50 mg/kg.

[(10) 'Low NO_x burner.' A burner designed to reduce flame turbulence by the mixing of fuel and air and by establishing fuel-rich zones for initial combustion, thereby reducing the formation of nitrogen oxides (NO_x).]

[(11)] (7) 'Lethal Dose Fifty or Lethal Concentration Fifty (LD_{50} or LC_{50}).' The median administered dose that will kill 50 percent of a tested mammalian species.

[(12)] (8) 'Likely to be Carcinogenic in Humans.' Chemicals with evidence indicating oncogenicity in two mammalian species; or one mammalian species, independently reproduced; or one mammalian species, to an unusual degree with respect to incidence, latency period, site, tumor type or age at onset; or one mammalian species, supported by positive results in short-term tests which are indicative of potential oncogenic activity.

[(13)] (9) 'Low Toxicity Air Contaminant'. Chemicals that can cause irritation or reversible effects to sensitive members of the population, and which do not meet the criteria for classification as a High Toxicity or Moderate Toxicity Air Contaminants.

[(14)] (10) 'Moderate Toxicity Air Contaminants'. Chemicals that are animal [oncogens] oncogenes; or chemicals that are known to cause adverse outcomes in animal species for reproductive and developmental effects; or genotoxic chemicals; or chemicals that when inhaled have caused significant chronic adverse effects in test animals, or any chemicals meeting the following LC_{50} or LD_{50} values:

'(i)' LD_{50} (dermal) is greater than 200 mg/kg but less than 1,000 mg/kg; or

'(ii)' LC_{50} (inhalation) is greater than 200 ppm but less than 2,000 ppm; or

‘(iii)’ LD_{50} (oral) is greater than 50 mg/kg but less than 500 mg/kg.

(11) ‘Oncogenicity’. The capability of inducing tumor formation.

[(15)] (12) ‘Overall removal efficiency.’ The total reduction of VOC emissions considering the efficiency of both the capture system and of the subsequent destruction and/or removal of these air contaminants by the control equipment prior to their release into the outdoor atmosphere.

[(16)] (13) ‘Persistent and Bioaccumulative.’ Where chemicals that are emitted to the air persist in the environment, and are estimated to have a half-life of greater than or equal to six months in water or soil or sediments; or where chemicals have the ability to bioconcentrate or biomagnify in the food chain and have bioconcentration factors (BCFs) greater than 1,000 in fish or shellfish.

[(17)] (14) ‘Persistent and Bioaccumulative (PB) Trigger.’ A yearly mass emission limit equaling 10 times the mass emission listed in [S]section 212-2.2 of this Part for all corresponding persistent and bioaccumulative air contaminants emitted from the facility.

[(18)] (15) ‘Process operation.’ Any industrial, institutional, commercial, agricultural or other activity, operation, manufacture or treatment in which chemical, biological and/or physical properties of the material or materials are changed, or in which the material(s) is conveyed or stored without changing the material(s) if the conveyance or storage system is equipped with a vent(s) and is non-mobile, and that emits air contaminants to the outdoor atmosphere. A process operation does not include an open fire, operation of a combustion installation, or incineration of refuse other than by-products or wastes from a process operation(s).

[(19)] (16) ‘Process Emission Source.’ Any apparatus, contrivance or machine, including any appurtenant exhaust system or air cleaning device capable of causing emissions of any air contaminant to the outdoor atmosphere from a process operation.

[(20)] (17) ‘Toxic - Best Available Control Technology (T-BACT).’ The maximum degree of reduction or the emission limitation for each non-criteria air contaminant that the department determines is achievable for a process operation on a case-by-case basis. The department will determine an achievable degree of reduction or emission limitation using the following parameters:

(i) process, fuels and raw material available [and] to be used;

(ii) engineering aspects of the application of various types of control technology which have been adequately demonstrated;

(iii) process and fuel changes;

(iv) respective costs of the application of all such control technologies, process changes, alternative fuels, etc.; and the

(v) toxicity of the air contaminant.

[(21)] (18) ‘Toxic Impact Assessment (TIA).’ An inhalation risk assessment that is supported by a protocol describing the procedures to be used to predict maximum offsite ambient air concentrations.

[(22) ‘Tune-up.’ Adjustments made to a burner in accordance with procedures supplied by the manufacturer (or an approved specialist) to optimize the combustion efficiency.]

Section 212-1.3 remains unchanged.

Subdivisions 212-1.4 (a) through (q) remain unchanged.

Subdivisions 212-1.4 (r) through (t) are revised as follows:

(r) process emission sources with respect to emissions of NO_x produced by catalytic or thermal oxidizers used as air pollution control equipment; [and]

(s) gasoline dispensing sites and transport vehicles that are subject to Part 230 of this Title; and

(t) process emission sources at asphalt pavement manufacturing facilities subject to Subpart 220-3 of this Title for all air contaminants.

Subdivisions 212-1.5 (a) through (e) remain unchanged.

Subdivision (f) is revised as follows:

(f) Facility owners or operators whose process operations emit NOx or VOCs and meet the applicability requirements of Subpart 212-3 [or Subpart 212-4] of this Part are not subject to the control provisions in Subpart 212-2 of this Part for NOx or VOCs. However, if an individual air contaminant, as a component of total VOCs, is assigned an environmental rating of A, that individual air contaminant must meet the control requirements of Subpart 212-2 of this Part.

Subdivision 212-1.5 (g) remains unchanged.

Sections 212-1.6 through 212-1.7 remain unchanged.

Subparts 212-2 and 212-3 remain unchanged.

Subpart 212-4 is repealed.

[SUBPART 212-4

CONTROL OF NITROGEN OXIDES FOR HOT MIX ASPHALT PRODUCTION PLANTS

Section 212-4.1 Control of nitrogen oxides for hot mix asphalt production plants

(a) The owner or operator of a hot mix asphalt production plant must comply with the following requirements:

(1) Beginning in calendar year 2011, a tune-up must be performed on the dryer burner on an annual basis at any hot mix asphalt production plant that is in operation during that calendar year.

(2) A plan must be submitted to the department by March 1, 2011 that details the introduction or continuation of methods by which to reduce the moisture content of the aggregate stockpile(s). Such methods must be implemented that year, or the first subsequent year the plant is in operation.

(b)(1) Beginning January 1, 2012, the owner or operator of a hot mix asphalt production plant must analyze the economic feasibility of installing a low NO_x burner when it comes time for the current burner to be replaced. This economic analysis must follow an approach acceptable to the department.

(2) By January 1, 2020, all owners or operators of active plants must have submitted the economic feasibility analysis for the installation of a low NO_x burner. A low NO_x burner must be installed for that operating year in all instances in which it proves feasible.

(3) Hot mix asphalt production plants that are in a state of inactivity on January 1, 2020 and have not otherwise complied with the requirements of this subdivision by that date must do so prior to continued operation.

(4) A similar analysis must be submitted for subsequent burner replacements.

(5) A low NO_x burner is required at any new hot mix asphalt production plant.

(c) For major stationary sources, approved RACT determinations will be submitted by the department to the EPA for approval as separate State Implementation Plan revisions.]

A new Subpart 220-3, Asphalt Pavement Manufacturing Plants is added as follows:

6 NYCRR Subpart 220-3

Asphalt Pavement Manufacturing Plants

Section 220-3.1 Applicability.

(a) Subpart 220-3 applies to operations at an Asphalt Pavement Manufacturing Plant whose calculated annual production level of asphalt paving material is equal to or greater than 75,000 tons per year as follows:

(1) for emissions from Asphalt Cement Storage Tanks, Storage Silos, Drag Conveyors, and Pug Mills, and Load-Out Process Operations, in accordance with the schedules identified in sections 220-3.4, 220-3.6 and 220-3.7.

(2) upon issuance of a new or modified permit for an Asphalt Pavement Manufacturing Plant or Reconstructed Asphalt Pavement Processing Unit; or three years from the effective date of Subpart 220-3 for existing facilities, whichever occurs first.

(b) Asphalt Pavement Processing Units whose calculated annual production level of asphalt paving material is less than 75,000 tons per year are not subject to the provisions of this Subpart.

(c) Any emission limitation or other requirements in the permit prior to the effective date of this Subpart shall remain in effect until issuance of a modified permit or permit renewal.

Section 220-3.2 Definitions.

(a) For the purpose of this Subpart, the general definitions of Part 200 and Part 201 of this Title apply.

(b) For the purpose of this Subpart, the following definitions also apply:

(1) 'Aggregate.' Any hard, inert material used for mixing in graduated particles or fragments, including sand, gravel, crushed stone, slag, recycled asphalt, rock dust or powder.

(2) 'Asphalt Cement.' A material that is used to bind aggregate into asphalt paving material, as defined in this Subpart. Asphalt cements can be modified to meet different criteria, such as, but not limited to, hot and warm mix applications.

(3) 'Asphalt Cement Storage Tank and Heater.' A storage tank where asphalt cement is stored and heated before it is transferred to the mixer.

(4) 'Asphalt Pavement Manufacturing Plant.' A facility comprised of one or more Asphalt

Pavement Processing Units used to produce asphalt paving material, including but not limited to storage silos, asphalt cement tanks, etc.

(5) ‘Asphalt Pavement Processing Unit.’ A continuous or batch aggregate dryer, including, but not limited to, a baghouse, drag conveyor, storage silo and/or a hot screen pug mill assembly with truck load out. An Asphalt Pavement Processing Unit can be either stationary or portable.

(6) ‘Asphalt Paving Material.’ The mixture of hot, dried aggregate, with or without recycled asphalt paving material, and heated asphalt cement; or cold mix paving material produced using aggregates and asphalt emulsion at ambient temperatures.

(7) ‘Asphalt Storage Silo.’ A structure that receives heated, mixed asphalt paving material from either a drum dryer or pugmill and stores it before loading it into trucks.

(8) ‘Batch Mix Process.’ An Asphalt Pavement Processing Unit that heats the aggregate, screens out the oversized aggregate, and stores the hot aggregate prior to blending the asphalt cement and the aggregates in a mixer.

(9) ‘Blue Smoke.’ Emissions of semi-volatile organic hydrocarbon compounds and inorganic particulate matter, classified as Polycyclic Organic Matter (POM), that condenses at atmospheric temperatures. These compounds can diffract light and create an associated air emission with blueish color.

(10) ‘Calculated Annual Production Level.’ A calculated value determined by taking the average of the three highest manufacturing calendar years of asphalt paving material from the previous five most recent calendar years at an Asphalt Pavement Processing Unit, looking back from the effective date of this Subpart, and

continued on a rolling basis thereafter. Once an Asphalt Pavement Processing Unit exceeds a threshold for requiring controls, those controls must remain in place and continue to operate regardless of future calculated production levels.

(11) 'Continuous Drum Mix Process.' An Asphalt Pavement Processing Unit that heats aggregate and mixes it with asphalt cement in the drum dryer.

(12) 'Drag Slat Conveyor.' A conveyor commonly used in a continuous mix facility to transport hot mix from a drum mixer to storage silos. Drag slat conveyors are sometimes called by other names such as slat conveyor and drag conveyors.

(13) 'Existing Asphalt Pavement Manufacturing Plant.' An asphalt pavement manufacturing plant that has had process operations in any calendar year prior to the effective date of this Subpart.

(14) 'Hot Mix Asphalt.' Asphalt paving material that is produced by mixing heated aggregate with asphalt cement and generally maintained at temperatures above 300 degrees Fahrenheit.

(15) 'Low NO_x Burner.' A burner designed to emit nitrogen oxides (NO_x) at or below the limits specified in section 220-3.5 of this Subpart.

(16) 'New Asphalt Pavement Manufacturing Plant.' An Asphalt Pavement Manufacturing Plant where a permit application for the construction of the plant was received by the department after January 1, 2023. Units meeting the definition of Reconstructed Asphalt Pavement Processing Units shall be considered new units.

(17) ‘Pug Mill.’ An apparatus used for mixing the ingredients of hot and warm mix asphalt paving material. Typical units contain shafts with mixing paddles that rotate. Hot, dry materials enter from above and a spray bar injects asphalt cement into the mill. These components are mixed prior to being loaded into a transport vehicle.

(18) ‘Reclaimed or Recycled Asphalt Pavement (RAP).’ Asphalt paving material reclaimed from roads, parking lots, or other sources that is then reprocessed either by itself or with virgin feed.

(19) ‘Reconstructed Asphalt Pavement Processing Unit.’ The replacement of components of an existing unit to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source.

(20) ‘Warm Mix Asphalt.’ Asphalt paving material that is produced by mixing heated aggregate with asphalt cement and manufactured at temperatures below 300 degrees Fahrenheit. The asphalt cement includes additional binding materials and additives, including but not limited to wax, emulsions and zeolites for easier pouring and spreading at reduced temperatures.

Section 220-3.3 Recordkeeping and Work Practices.

(a) Owners or operators of an Asphalt Pavement Manufacturing Plant shall record the following information daily, as applicable, for each Asphalt Pavement Processing Unit during operation in a calendar year, including and identifying days when no asphalt paving material is being manufactured:

(1) Tons produced of asphalt paving material;

(2) RAP used in tons of material;

(3) Recorded hours of burner operation;

(4) Baghouse differential pressure;

(5) Warm mix tons produced;

(6) Amount of fuel consumed;

(7) Type of fuel consumed;

(8) Instantaneous visual stack opacity reading by a Method 9 certified employee;

(9) Average hourly stack temperature;

(10) RAP moisture content – minimize and monitor; and

(11) Maintain annual records of Visible Emissions (Opacity) Training.

(b) Owners or operators of an Asphalt Pavement Manufacturing Plant are required to adhere to the following work practices:

(1) As of the effective date of this Subpart, an annual tune-up must be performed on the dryer burner of any Asphalt Pavement Processing Unit that is in operation during that calendar year.

(2) As of the effective date of this Subpart, an annual tune-up must be performed on the hot oil heater located at any Asphalt Manufacturing Plant that is in operation during that calendar year.

(3) As of the effective date of this Subpart, a plan must be submitted to the department that details the introduction or continuation of methods utilized to reduce the moisture content of the aggregate stockpile(s). Such methods must be implemented that year, or the first subsequent year the plant is in operation. A new plan does not need to be submitted if an adequate plan is already on file with the department.

(4) Annual Baghouse Inspection and Maintenance prior to operating for the season.

(i) Perform an annual visual inspection of baghouse tubesheet and internal structure. Record findings and any corrective actions. These records shall be maintained for the life of the permit.

(ii) Replacement bags for the baghouse shall be kept on site with the minimum capability of at least a 20% bag change out. Record changed bag locations on baghouse tube map.

(5) Inspect all ductwork for leaks and perform needed maintenance prior to operating during the asphalt production season.

(6) Maintain annual records of baghouse and ductwork inspections. These records shall be maintained for the life of the permit.

Section 220-3.4 Emissions from Asphalt Cement Storage Tanks.

(a) Asphalt Pavement Processing Units, with a calculated annual production level equal to or greater than 75,000 tons per year of asphalt paving material, must comply with the following:

(1) Within one year of becoming applicable to this Subpart the owner or operator shall capture and control emissions of volatile organic compounds (VOCs) associated with the filling and heating of asphalt cement storage tanks. Each asphalt cement storage tank shall vent through a tank vent condenser, activated carbon filter, or suitable control device. Multiple tanks may vent through the same control device if properly sized and rated to adequately handle all the emitted VOCs. Once installed, these control devices must remain in place and continue to operate, regardless of future calculated annual production levels.

(2) Plant operators shall oversee the filling of asphalt cement storage tanks to ensure that they are loaded at a rate that allows for proper functioning of the associated tank vent condenser, activated carbon filter, or suitable control device.

Section 220-3.5 Emissions from Aggregate Dryer.

(a) Owners or operators subject to the requirements of this Subpart are no longer permitted to install parallel-flow aggregate dryer units where the aggregate and hot gas stream flow in the same direction.

(b) Upon becoming applicable to this Subpart in accordance with section 220-3.1(a)(2), the owner or operator of an existing or new aggregate dryer shall comply with the respective emission limits specified in Table 1 for Batch Mix and Continuous Drum Mix processes.

Table 1 – Aggregate Dryer Emission Limits.

Fuel Type	**Air Contaminant**	**Existing Unit Emission Limits**	**New Unit Emission Limits**
Distillate Oil Or Waste Fuel	Particulate Matter (filterable) Plus Particulate Matter (condensable)	0.030 grains per dry standard cubic foot	0.015 grains per dry standard cubic foot
	Nitrogen Oxides (Distillate Oil)	< 135 parts per million @ 3% O_2 Or < 0.173 lbs/millionBtu*	< 90 parts per million @ 3% O_2 Or < 0.113 lbs/millionBtu*
	Nitrogen Oxides (Waste Oil)	< 200 parts per million @ 3% O_2 Or < 0.256 lbs/millionBtu*	< 90 parts per million @ 3% O_2 Or < 0.113 lbs/millionBtu*
Natural Gas Or Liquid Propane	Particulate Matter (filterable) Plus Particulate Matter (condensable)	0.030 grains per dry standard cubic foot	0.015 grains per dry standard cubic foot

	Nitrogen Oxides	< 80 parts per million @ 3% O_2 Or < 0.096 lbs/millionBtu*	< 40 parts per million @ 3% O_2 Includes NOx reduction technology with Flue Gas Recirculation Or < 0.048 lbs/millionBtu*

* British Thermal Unit

(c) (1) The owner or operator of a rotary dryer that fires distillate fuel oil must meet the sulfur-in-fuel limits in 6 NYCRR Subpart 225-1.

(2) The owner or operator of a rotary dryer that fires waste oil must meet the applicable requirements of 6 NYCRR Subpart 225-2.

Section 220-3.6 Emissions from Asphalt Storage Silos, Drag Conveyors, and Pug Mills.

(a) The owner or operator of an existing Asphalt Pavement Processing Unit that emits blue smoke shall control emissions associated with the drag conveyor, and/or hot screens, pug mill and asphalt storage silo filling operations. These emissions must be captured and can either be returned to the drum mixer, controlled with coalescing filters or controlled with any other method acceptable to the department, approved in writing, according to the following schedule:

(1) Existing Asphalt Pavement Processing Units that have a calculated annual production level equal to or greater than 500,000 tons per year of asphalt paving material, must comply within one year of becoming applicable to this Subpart.

(2) Existing Asphalt Pavement Processing Units that, have a calculated annual production level equal to or greater than 250,000 tons per year but less than 500,000 tons per year of asphalt paving material, must comply within three years of the effective date of this Subpart.

(3) Existing Asphalt Pavement Processing Units that have a calculated annual production level equal to or greater than 75,000 tons per year but less than 250,000 tons per year of asphalt paving material, must comply within five years of the effective date of this Subpart.

(4) New Asphalt Pavement Processing Units or Reconstructed asphalt Pavement Processing Units, regardless of annual production levels, must comply upon start-up.

Section 220-3.7 Emissions from Load-Out Process Operations.

(a) The owner or operator of an existing Asphalt Pavement Processing Unit that emits blue smoke shall submit a plan to the department that minimizes blue smoke emissions associated with load-out operations. Blue smoke emissions from this process operation must be directed to a dedicated control device or controlled with any other method acceptable to the department, approved in writing, according to the following schedule:

(1) Existing Asphalt Pavement Processing Units that have a calculated annual production level equal to or greater than 500,000 tons per year of asphalt paving material, must comply within one year of becoming applicable to this Subpart.

(2) Existing Asphalt Pavement Processing Units that have a calculated annual production level equal to or greater than 250,000 tons per year but less than 500,000 tons per year of asphalt paving material, must comply within three years of the effective date of this Subpart.

(3) Existing Asphalt Pavement Processing Units that have a calculated annual production level equal to or greater than 75,000 tons per year but less than 250,000 tons per year of asphalt paving material must comply within five years of the effective date of this Subpart.

(4) New Asphalt Pavement Processing Units or Reconstructed Asphalt Pavement Processing Units, regardless of annual production levels, must comply upon start-up.

(b) Blue smoke emission control equipment is not required for load-out process operations where the silo or pug mill and load-out process operations are located within approximately 750 feet from the Asphalt Pavement Manufacturing Plant fence line.

Section 220-3.8 Opacity Limits for Asphalt Pavement Manufacturing Plants.

(a) No facility owner or operator shall cause or allow emissions to exceed an average opacity of 20 percent or greater during any six consecutive minutes from any process emission source or emission point.

Section 220-3.9 Performance Requirements.

(a) Emissions testing shall be conducted once per permit term, or at least once every ten years, for all Asphalt Pavement Processing Units subject to this Subpart. These tests should be done while burning the worst-case fuel to verify compliance with the filterable and condensable particulate matter (PM) and Nitrogen Oxide (NO_x) limits found in section 220-3.5.

(1) PM (filterable and condensable) shall be measured using the emission test methods found in 40 CFR part 60 Appendix A Method 5 and Method 202, or any other method acceptable to the department.

(2) NO_x shall be measured using the emission test methods found in 40 CFR part 60 Appendix A Method 7, or any other method acceptable to the department.

(b) The owner or operator of an Asphalt Pavement Manufacturing Plant shall comply with the following requirements:

(1) Within one hundred eighty (180) calendar days of the commencement of operation of any modified, new or Reconstructed Asphalt Pavement Processing Unit at the respective site, the owner or operator shall perform an emission test to demonstrate compliance with the filterable and condensable PM and NO_x emission limits specified in section 230-3.5 of this Subpart.

(2) At least thirty (30) calendar days prior to commencing an emission test, a test protocol shall be submitted to the department for review and approval.

(3) A complete test report shall be submitted to the department no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program. A complete test report shall include a summary of the emission results, clearly indicating if each pollutant measured is within permitted limits. The testing methods shall meet the acceptable procedures found in 6 NYCRR 202-1.3 to determine compliance.

(c) The owner or operator shall conduct a burner tuning procedure in accordance with the manufacturer's specifications to minimize NO_x and carbon monoxide (CO) emissions each year. The owner or operator shall conduct each annual tune-up no later than June 15th of each year or within four (4) weeks after a start-up of the Asphalt Pavement Processing Unit, excluding cold patch operations.

(1) Monitoring records stating the following information shall be kept on site for the life of the permit and shall be made available to the department upon request.

(i) The date of the tuning procedure;

(ii) The name of the servicing company and technician;

(iii) The production rate (tons/hr) or load before and after tuning;

(iv) The NO_x and CO concentrations (ppmvd @ 3% O_2) before and after tuning; and

(v) The percent O_2 before and after tuning.

(d) The department may require the owner or operator of an Asphalt Pavement Manufacturing Plant to perform an air dispersion modeling analysis using procedures acceptable to the department to evaluate the impacts of the facility on the surrounding community.

Section 220-3.10 Fugitive Dust Control.

(a) Site Roadways and Plant Property.

(1) Dust on the site roadways and plant property shall be controlled by applications of water, calcium chloride or other acceptable and approved fugitive dust control compound. Application of dust suppressants shall be completed often enough to prevent dust emissions from leaving the plant property.

(2) All paved areas shall be swept, as needed, with water to reduce emissions.

(3) Any material spillage on site roads shall be cleaned up immediately.

(4) The potential for dust to be tracked out to public roadways shall be minimized by implementing the procedures cited in paragraph (1) of this subdivision, along with any other reasonably available procedure(s).

(b) Asphalt Pavement Processing Units.

(1) The drop distance at each transfer point must be reduced to the minimum that the equipment can achieve and allow for proper operation to comply with the opacity requirements in section 220-3.8 of this Subpart.

(2) The transfer point where the belt feeder transfers aggregate or RAP from its bin onto a belt conveyor to the aggregate dryer shall be equipped with an enclosed chute.

(c) Storage Piles.

(1) Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.

(d) Vehicles

(1) Vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping.

(2) Trucks shall always be tarped unless loading and unloading.

(3) A speed limit sign of 15 miles-per-hour or lower shall apply to onsite traffic and be posted so that it is visible to truck operators.

(e) Fugitive Dust Corrective Actions.

(1) When corrective action needs to be taken, the permittee shall consider and use one or more of the following options: adjust the watering and/or sweeping frequencies, reduce drop distances, increase coverings, and/or take other appropriate actions to reduce fugitive dust emissions.

Section 220-3.11 Severability.

Each provision of this Subpart shall be deemed severable. In the event that any provision of this Subpart is held to be invalid, the remainder of this Subpart shall continue in full force and effect.

Job Impact Statement

6 NYCRR Subpart 220-1 Portland Cement Plants

6 NYCRR Subpart 220-3 Asphalt Pavement Manufacturing Plants

6 NYCRR Part 212 Process Operations

NATURE OF IMPACT

Existing Subpart 220-1, which regulates portland cement plants, will be updated to reflect current Federal particulate emission standards and nitrogen oxide (NO_x) monitoring and reporting requirements. Subpart 220-2, glass plants, will remain unchanged.

The Division of Air Resources (DAR) currently regulates air emissions from Asphalt Pavement Manufacturing Plants (APMP) under 6 NYCRR Subpart 212-4. As Part 212 is currently written, owners and operators of APMPs must navigate through several sections of the regulation to determine which control requirements are necessary to achieve compliance. DAR is proposing to repeal Subpart 212-4 and create a new APMP regulation under Subpart 220-3. Subpart 220-3 will require new and existing facilities to install control equipment that represents the best achievable industry standards. These changes will reduce air emissions and streamline compliance. Repeal of Subpart 212-4 will require subsequent changes within Part 212 for compatibility, most notably, the definition section.

CATEGORIES AND NUMBERS OF JOBS AFFECTED

The proposed regulation changes affect one portland cement manufacturing plant under Subpart 220-1 and approximately one-hundred and fifty asphalt paving manufacturing plants under Subpart 220-3. Subpart 220-1 revisions are being proposed to align Federal and state regulations and is not expected to have an impact on the

number of jobs or employment opportunities in New York State (NYS). The introduction of Subpart 220-3 is not expected to have an impact on the number of jobs or employment opportunities at affected APMPs in NYS. The intent of Subpart 220-3 is to normalize the industry standards with neighboring states by adding appropriate air pollution control equipment.

Job opportunities will likely increase for construction companies needing to build and install new air control equipment over several years based on the regulation's proposed applicability schedule.

REGIONS OF ADVERSE IMPACT

Part 220 revisions are not expected to have disproportionate adverse impacts on jobs or employment opportunities in NYS. Currently, there is one portland cement plant operating in eastern New York. Revised Subpart 220-1 would reduce redundant Federal and state requirements. APMPs are located throughout NYS to accommodate road paving, repair, parking lot installation/maintenance, etc. and are not expected to experience any adverse impacts as a result of this rule.

MINIMIZING ADVERSE IMPACT

Subpart 220-1 is designed to minimize redundant regulations and remove outdated requirements from the current express terms. Subpart 220-3 offers a phased in applicability concept to minimize impact to the regulated community and help spread out the timeframe for installing new control equipment. DAR has been engaged with the APMP community for a number of years while developing Subpart 220-3. The regulated entities have been aware of the proposed requirements and currently own and operate plants in neighboring states that have similar control equipment already in place. The rule offers ample time for facility owners to plan, design, and construct the pollution controls necessary to meet the requirements identified in the proposed Subpart 220-3 regulation.

SELF-EMPLOYMENT OPPORTUNITIES

Part 220 is not expected to have a measurable impact on opportunities for self-employment in New York State.

Rural Area Flexibility Analysis

6 NYCRR Subpart 220-1 Portland Cement Plants

6 NYCRR Subpart 220-3 Asphalt Pavement Manufacturing Plants

6 NYCRR Part 212 Process Operations

TYPES AND ESTIMATED NUMBERS OF RURAL AREAS AFFECTED

The proposed rule revisions are not expected to have a substantial adverse impact on rural areas in New York State (NYS). Rural areas are defined as rural counties in NYS that have populations of less than 200,000 people, towns in non-rural counties where the population densities are less than 150 people per square mile, and villages within those towns. The proposed rulemaking will apply statewide and thus all affected portland cement plants and asphalt paving manufacturing plants (APMP) throughout the state will be equally affected.

REPORTING, RECORDKEEPING AND OTHER COMPLIANCE REQUIREMENTS

Facility owners and operators of portland cement plants in NYS will not experience any additional reporting, recordkeeping or other compliance requirements. These requirements have either been reduced/removed or updated to reflect current particulate emission and nitrogen oxide (NO_x) monitoring and reporting requirements. The glass plants in NYS will not be affected by this rulemaking.

Owners of APMPs in NYS will be required to maintain an air permit or registration to operate. An emissions test will be required once per permit term or at least once every ten years to verify compliance with NO_x and particulate emission limits. A report documenting all procedures and results is required to be submitted to the Department upon completion of each test. Annual burner tune-ups are required under Subpart 220-3. Associated records related to the operating conditions during the tuning procedure shall be kept on site for the

life of the permit.

PROFESSIONAL SERVICES

Subpart 220-3 is being proposed with a staggered compliance schedule for installing equipment to capture and control blue smoke emissions. This is done to reduce the burden on industry and allow owners an adequate opportunity to locate suitable professional companies and services necessary to install blue smoke control equipment at their facilities. The industry itself is very resourceful and may be able to do much of the work in-house, however, specific aspects of the control and measurement equipment will need outside expertise.

COSTS

Facility owners and operators of portland cement plants will not experience additional costs to comply with revisions to this rule. There will likely be additional costs associated with the requirements of Subpart 220-3. These include the capital cost of installing new equipment and associated operating and maintenance costs for this equipment. Many of the incremental costs incurred will likely be passed along to customers and/or amortized over the life of the equipment. New equipment may include:

1. Asphalt cement storage tank vent condensers. A one-time purchase and installation cost of approximately $10,000 is expected at a site with (4) 25,000-gallon capacity storage tanks.
2. Silo and load-out controls. The Total Capital Investment for a new APMP or retrofitting an existing operation in NYS has been estimated to be between $150,000 to $400,000, depending on plant size and configuration. Operating costs require the increased power demand to run exhauster fans, and for the operation, maintenance, and replacement of the coalescing filter system. These costs are estimated to be

$15,000 per set of filters with an expected replacement rate of once per operating season.

MINIMIZING ADVERSE IMPACTS

The APMP industry in NYS is a mixture of small business owners, municipalities, and larger corporations. The impact on rural area owners has been mitigated by including an exemption for process equipment producing less than 75,000 tons of asphalt pavement per year. Units of this size represent facilities that are able to handle small projects or contract out to larger corporations, if needed.

RURAL AREA PARTICIPATION

As part of the rulemaking process, public and private interests in rural areas have an opportunity to participate in an initial stakeholder meeting where DAR presents the proposed rule and invites comments and feedback to help inform the process of developing or revising a rule. Public and private interests in rural areas also have an opportunity to submit comments during the public comment period and attend one of the public hearings that are held throughout the state once the rule is formally proposed.

Regulatory Flexibility Analysis for Small Businesses and Local Governments

6 NYCRR Subpart 220-1 Portland Cement Plants

6 NYCRR Subpart 220-3 Asphalt Pavement Manufacturing Plants

6 NYCRR Part 212 Process Operations

EFFECT OF RULE ON SMALL BUSINESSES AND LOCAL GOVERNMENTS

Currently, there is only one portland cement plant in New York State (NYS) and the plant is not considered a small business nor owned/operated by a local government. Existing Subpart 220-1, which regulates portland cement plants, will be updated to reflect current particulate emission and nitrogen oxide (NO_x) monitoring and reporting requirements. Subpart 220-2, glass plants, will remain unchanged.

There are approximately 150 Asphalt Pavement Manufacturing Plants (APMPs) in NYS and a portion of these plants are owned and operated by small businesses and municipalities. Those facilities that operate processing units generating 75,000 tons of asphalt paving material or more per year will be required to meet the requirements in Subpart 220-3.

Uncontrolled segments of the asphalt production process have the potential to release odors and visible emissions to the atmosphere that may initiate complaints from the surrounding community and cause adverse health effects. This rulemaking will require owners and operators of new APMPs to apply control equipment that represents the best achieved industry standards for criteria and non-criteria air contaminants. Both new and existing APMPs will require more stringent controls. Currently, the regulated APMP community, including small businesses and municipalities, must navigate several sections of Part 212 to determine the control requirements necessary for compliance. Part 212 does not succinctly address which air contaminants should be regulated from

this source category. Subpart 220-3 would consolidate the requirements for APMPs into a single regulation and reduce the amount of confusion related to compliance.

COMPLIANCE REQUIREMENTS

Facility owners/operators of portland cement plants are not expected to experience any additional compliance requirements. Facility owners of APMPs will be required to maintain an air permit or registration to operate in NYS. An emissions test will also be required once per permit term, or at least once every ten years, to verify compliance with NO_x and particulate matter limits. A complete report is required to be submitted to the Department upon completion of each test. Annual burner tune-ups will be required under Subpart 220-3. Associated records related to the operating conditions during the tuning procedure shall be kept on site for the life of the permit.

PROFESSIONAL SERVICES

The regulation proposes a staggered compliance schedule for installing equipment to capture and control blue smoke emissions generated from APMPs. The Department recognizes that construction materials and contractors may not be available to install the required control equipment on all the affected process operations at the same time. The staggered schedule is structured to help reduce the burden on industry and allow facility owners to locate suitable professional companies who can install equipment and complete projects in a more efficient manner. The industry itself is very resourceful and can do much of the work in-house, however, specific aspects of the control and measurement equipment will likely need to be completed with outside expertise.

COMPLIANCE COSTS

Facility owners and operators of portland cement plants will not experience additional costs to comply

with revisions to this rule. There will likely be additional costs associated with the requirements of Subpart 220-3. These include the capital cost of installing new equipment and associated operating and maintenance costs for this equipment. Many of the incremental costs incurred may be passed on to customers and/or amortized over the life of the equipment. New equipment may include:

1. Asphalt cement storage tank vent condensers. A one-time purchase and installation cost of approximately $10,000 to expected at a site with (4) 25,000-gallon capacity storage tanks.
2. Silo and load-out controls. The estimation for Total Capital Investment (TCI) at a new APMP for retrofitting an existing operation in New York State has been estimated to have a TCI of $150,000 to $400,000, depending on plant size and configuration. Operating costs require the increased power demand to run exhauster fans, and for the operation, maintenance, and replacement of the coalescing filter system. These costs are estimated to be $15,000 per set of filters with an expected replacement rate of once per operating season.

Based on data obtained from a local municipality, the difference between producing paving topcoat and purchasing paving topcoat is approximately $25 to $40 per ton. There is the potential for municipalities to claim that the additional operating costs will force them to purchase asphalt and not produce it themselves.

ECONOMIC AND TECHNOLOGICAL FEASIBILITY

Of the approximately 150 operating APMPs across New York State, a small number of these plants are owned and operated by municipalities which will incur costs from the proposed rule. Costs to the asphalt manufacturers will be sustained for the upgrade of equipment and hardware. Operating costs will be incurred for

the maintenance of the pollution control equipment installed. All other aspects of the plant operation will remain the same.

The proposed control technology is widely commercially available for installation at any size plant. Each APMP is unique but expected to be able to install the necessary equipment on existing conveyors and silos, along with any filtration system that may be required for capturing truck load-out emissions. Therefore, installing the required proposed control technology should be technologically feasible for small businesses and local governments.

Based on discussions with municipal APMP operators, the incremental cost increase of producing asphalt paving material with silo and load-out controls would be no more than $1 per ton, and this cost would be passed onto the user of asphalt paving material. Therefore, installing the required proposed control technology will be economically feasible for small businesses and local governments.

MINIMIZING ADVERSE IMPACTS

The APMP industry in NYS is a mixture of small business owners, municipalities, and larger corporations. The impact on small businesses has been mitigated by including an exemption in the regulation for processing equipment producing less than 75,000 tons of asphalt pavement per year. Units of this size represent facilities that are able to handle small projects or contract out to larger corporations and will not be required to install additional control equipment to comply with proposed Subpart 220-3.

SMALL BUSINESS AND LOCAL GOVERNMENT PARTICIPATION

As part of the rulemaking process, small businesses and local governments had an opportunity to participate in an initial virtual stakeholder meeting on October 8, 2021, where DAR presented the proposed rule and invited comments and feedback to help inform the process of developing a rule. The Department has engaged

with NY Materials from the start of this rulemaking. NY Materials is a non-profit Trade Association representing Hot Mix Asphalt industries across New York State. NY Materials develop, classify, and disseminate information concerning standards, specifications, and any other matters of concern and interest to its members, which would include notification of the proposed rule and its availability for public comment. Small businesses and local governments will also have an opportunity to submit comments during the 60-day public comment period and attend a public hearing that will be held after the rule is formally proposed.

Regulatory Impact Statement Summary

6 NYCRR Subpart 220-1 Portland Cement Plants

6 NYCRR Subpart 220-3 Asphalt Pavement Manufacturing Plants

6 NYCRR Part 212 Process Operations

INTRODUCTION

The Division of Air Resources (DAR) currently regulates air emissions from Asphalt Pavement Manufacturing Plants (APMPs) under 6 NYCRR Subpart 212-4, Control of nitrogen oxides for hot mix asphalt production plants. DAR is proposing to repeal Subpart 212-4 and create a new APMP regulation under Subpart 220-3. Subpart 220-3 will require new facilities to install control equipment that represents the best achieved industry standards. Existing facilities will be required to install similar controls on a scheduled reduction plan. These changes will reduce emissions and streamline compliance.

Subpart 220-1, which regulates portland cement plants, will be updated to reflect current particulate emission and nitrogen oxide (NO_x) monitoring and reporting requirements. Subpart 220-2, Glass Plants, will remain unchanged. The proposed repeal of Subpart 212-4 will require revisions to section 212-1.2, Definitions. Section 200.9, Referenced Material, will also need to be updated to include associated Subpart 220-1 revisions.

As required by the Clean Air Act, the Department will incorporate the revisions to Subparts 220-1, 220-3, and attendant revisions to Part 212 and Section 200.9 into New York's State Implementation Plan and provide this to U.S. Environmental Protection Agency for review and approval.

STATUTORY AUTHORITY

The statutory authority for this action is found in the Environmental Conservation Law (ECL), Sections 1-0101, 3-0301, 19-0103, 19-0105, 19-0301, 19-0303, 19-0305, and 19-0311.

LEGISLATIVE OBJECTIVES

Articles 1 and 3 of the ECL provide general authority to adopt and enforce measures to achieve clean, healthy air for the citizens of New York State by regulating stationary sources of air pollution.

Article 19 of the ECL was specifically adopted for the purpose of safeguarding the air resources of New York from pollution. To facilitate this purpose, the Legislature authorized the Department to formulate, adopt, amend, and repeal codes, rules, and regulations for preventing, controlling, or prohibiting air pollution.

This rulemaking furthers these statutory and public policy objectives by allowing the Department to control emissions of NO_x, particulate matter (PM), carbon monoxide (CO), volatile organic compounds (VOCs), and Polycyclic Organic Matter.

NEEDS AND BENEFITS

Subpart 220-1 – Portland Cement Plants

DAR is proposing to revise Subpart 220-1 to align with federal rule 40 Code of Federal Regulations (CFR) Part 63 Subpart LLL, "National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry." The particulate emission limit for kilns and clinker coolers will be lowered to match what is allowed by Subpart LLL. Subpart LLL also requires a particulate monitor and a lower opacity limit. Subpart 220-1 will be revised to reflect the appropriate particulate monitoring as defined in Subpart LLL, which requires the use of a PM continuous parametric monitoring system.[1]

DAR intends to remove the 40 CFR Part 75 NO_x emissions monitoring and reporting requirements and replace them with 40 CFR Part 60 monitoring and reporting requirements. Part 75 monitoring is no longer appropriate because the federal program, the Clean Air Interstate Rule, that required it was repealed and replaced

[1] 40 CFR 63.1349(b)(1) Performance testing requirements under the Monitoring and Compliance Provisions.

by the Cross-State Air Pollution Rule (2015). Part 60 monitoring and reporting is a less expensive option that will replace Part 75 and achieve the required NO_x emissions monitoring from portland cement kilns.

Subpart 220-3 – Asphalt Pavement Manufacturing Plants

This rulemaking will require owners and operators of new APMPs to apply control equipment that represents the best achieved industry standards for criteria and non-criteria air contaminants. Existing plants will be required to address odors and visible smoke emissions by using low-sulfur diesel fuel and control devices on asphalt cement storage tanks and silos. Both new and existing APMPs will require more stringent controls. Subpart 220-3 would consolidate the requirements for APMPs into a single regulation and streamline the parameters for achieving compliance.

This rule proposes to reduce:

- VOCs from asphalt cement storage tanks,
- Particulate and NO_x emissions from the rotary aggregate dryer,
- Visible blue-smoke emissions from asphalt storage silos, drag conveyors, pug mills, and truck load-out process operations.

Plant Stockpiles

The biggest consumer of energy at an asphalt plant is the dryer burner, which is why stockpiles play a substantial role in saving money. A report by the National Asphalt Pavement Association (NAPA) states for every 1% of moisture increase in aggregate stockpiles, energy use increases by 10% and production speed decreases by 10 – 20%.[2] Thus, at a nominal moisture content of 5%, aggregate moisture accounts for almost

[2] https://www.asphaltpavement.org/uploads/documents/M2M-Aggregate-Stockpiles.pdf

50% of the energy required to dry and heat aggregates for asphalt mix production. From a carbon reduction standpoint, a 1% reduction in moisture equates to a global warming potential reduction of 1.1 kg CO2e per ton of mix produced.[3]

Covering aggregates with a structure is the best way to prevent moisture from collecting. If that is not an option, sloping the stockpiles properly at an ideal 4% slope will also help, with water draining towards the north.

COSTS

The Department determined that APMPs with a maximum facility-wide asphalt production of less than 75,000 tons per year will comply with Subpart 212-2.3(b) – Table 4, and do not need to address toxic air contaminants any further. These facilities are typically small, and/or do not operate very often. They can be issued an Air Facility Registration and will need to comply with the New Source Performance Standards found in 40 CFR Part 60, which contains a standard for emitting particulate matter (0.04 gr/dscf) and a limit on opacity (20%).

A small number of APMPs are owned and operated by municipalities which will incur costs from the proposed rule. Based on data obtained from a local municipality, the difference between producing and purchasing paving topcoat is approximately $25 to $40 per ton.

The types of controls necessary to reduce odors, blue-smoke (condensable particulate, polycyclic aromatic hydrocarbons & heavy hydrocarbons) and VOCs are:

[3] https://www.asphaltpavement.org/uploads/documents/Climate/NAPA_Case_Study_MI_Paving.pdf

1. Asphalt cement storage tank vent condensers. A manufacturing representative of condensers quoted the price of $10,000 to install vent condensers at a site with (4) 25,000-gallon capacity storage tanks.

2. Silo and load-out controls. The estimation for Total Capital Investment (TCI) at a new APMP with nine silos is $500,000 to $700,000. Retrofitting an existing operation in New York State, which is typically smaller than stated above, has been estimated to have a TCI of $150,000 to $400,000,[4] depending on plant size and configuration. Operating costs require the increased power demand to run exhauster fans, and for the operation, maintenance, and replacement of the coalescing filter system. These costs are estimated to be $15,000 per set of filters with an expected replacement rate of once per operating season.

Based on discussions with municipal APMP operators, the incremental cost increase of producing asphalt paving material with silo and load-out controls would be approximately $1 per ton, and this cost would be passed onto the user of asphalt paving material.

3. Use of low-sulfur fuel oil. Any combustion source located at an affected facility will be required to meet the sulfur-in-fuel limits found in Subpart 225-1, Fuel Composition and Use-Sulfur Limitations. There is not expected to be a cost increase based on fuel oil consumed. Low sulfur fuel oil is currently being sold and used by affected facilities. There will likely not be other options available on the market to purchase.

LOCAL GOVERNMENT MANDATES

[4] Mike Butler, Butler-Justice, Inc. Blue Smoke and Odor Control

This rulemaking is not expected to result in any additional recordkeeping, reporting, or other requirements for any local government entity.

PAPERWORK

The proposed changes to Subpart 220-1 will not create additional paperwork for facilities currently subject to the requirements of this rule. The facilities subject to Subpart 220-3 will be required to maintain records related to work practices.

DUPLICATION

These regulations do not duplicate, overlap, or conflict with any other State or federal requirements.

ALTERNATIVES

An alternative to this action includes not repealing Subpart 212-4. This would retain the current requirements and require adding new requirements to control other air contaminants within the existing Subpart, in addition to NO_x. Expanding Subpart 212-4 may be confusing and difficult to follow for the regulated community. The 2015 revision of Part 212 has highlighted the need to evaluate potential toxic emissions from the APMP industry. Although it is possible to address air contaminants under Subpart 212-4, it would require additional regulatory citations to clarify what is covered by other sections of Part 212 and which process emission sources are only covered by Subpart 212-4. Failure to address Subpart 212-4 is not a prudent option.

Another non-regulatory option is to revise the guidance document for Part 212, DAR-1, to specifically address this source category when implementing Part 212. The Department believes that it is more effective and enforceable to develop a new regulation for APMPs to properly address, in detail, the requirements necessary to reduce air pollution from each component of these sources.

FEDERAL STANDARDS

These rules do not result in the imposition of requirements that exceed any minimum standards of the federal government for the same or similar subject areas.

COMPLIANCE SCHEDULE

The Department proposes to promulgate Part 220 in 2023. The provisions of this rule will take effect based on the promulgation date of the regulation.

Regulatory Impact Statement

6 NYCRR Subpart 220-1 Portland Cement Plants

6 NYCRR Subpart 220-3 Asphalt Pavement Manufacturing Plants

6 NYCRR Part 212 Process Operations

INTRODUCTION

The Division of Air Resources (DAR) currently regulates air emissions from Asphalt Pavement Manufacturing Plants (APMPs) under 6 NYCRR Subpart 212-4. Currently under Part 212, owners and operators of APMPs must navigate several sections of the regulation to determine the control requirements necessary to achieve compliance. DAR is proposing to repeal Subpart 212-4 and create a new APMP regulation under Subpart 220-3. Subpart 220-3 will require new facilities to install control equipment that represents the best achieved industry standards. Existing facilities will be required to install similar controls on a scheduled reduction plan. These changes will reduce emissions and streamline compliance. Also, existing Subpart 220-1, which regulates Portland cement plants, will be updated to reflect current particulate emission and nitrogen oxide (NO_x) monitoring and reporting requirements. Subpart 220-2, Glass Plants, will remain unchanged. The proposed repeal of Subpart 212-4 will also require certain revisions to ensure compatibility with new Subpart 220-3, including revisions to the definition section of Part 212. Section 200.9, Referenced Material, will be updated to include associated revisions in Subpart 220-1.

As required by the Clean Air Act (CAA), the Department will incorporate the revisions to Subparts 220-1, 220-2, 200-3, and attendant revisions to Part 212 and Section 200.9 into New York's State Implementation Plan (SIP) and provide the revised SIP to the U.S. Environmental Protection Agency (EPA) for review and approval.

STATUTORY AUTHORITY

The statutory authority for this action is found in the Environmental Conservation Law (ECL), Sections

1-0101, 3-0301, 19-0103, 19-0105, 19-0301, 19-0303, 19-0305, and 19-0311.

ECL Section 1-0101 makes it the policy of New York State to conserve, improve and protect natural resources, the environment, and control air pollution in order to enhance the health, safety, and welfare of the people of New York State and their overall economic and social wellbeing and coordinate the State's environmental plans, functions, powers and programs with those of the federal government and other regions and manage air resources. This section also makes it the policy of the State to foster, promote, create and maintain conditions for air resources that are shared with other states.

ECL Section 3-0301 states that it shall be the responsibility of the Department to carry out the environmental policy of the state. In furtherance of that mandate, Section 3-0301(1)(a) gives the Commissioner authority to "[c]oordinate and develop policies, planning and programs related to the environment of the state and regions thereof..." Section 3-0301(1)(b) directs the Commissioner to "[p]romote and coordinate management of air resources to assure their protection, enhancement, provision, allocation, and balanced utilization consistent with the environmental policy of the state and take into account the cumulative impact upon all of such resources in making any determination in connection with any license, order, permit, certification or other similar action or promulgating any rule or regulation, standard or criterion."[1] Pursuant to ECL Section 3-0301(1)(i), the Commissioner is charged with promoting and protecting the air resources of New York State by providing for the prevention and abatement of air pollution. Section 3-0301(2)(a) authorizes the Commissioner to adopt rules and regulations "to carry out the purposes and provisions" of the ECL. Section 3-0301(2)(g) allows the Commissioner to enter and inspect sources of air pollution and to verify their compliance with applicable regulations. Section 3-0301(2)(m) gives the Commissioner authority to "[a]dopt such rules, regulations, and procedures as may be necessary, convenient, or desirable to effectuate the purposes of this chapter."

[1] Internal citations omitted.

ECL Section 19-0103 declares that it is the policy of New York State to maintain a reasonable degree of purity of air resources, which shall be consistent with the public health and welfare and the public enjoyment thereof, the industrial development of the State, and to that end to require the use of all available practical and reasonable methods to prevent and control air pollution in the state.

ECL Section 19-0105 declares that it is the purpose of ECL Article 19 to safeguard the air resources of New York State under a program that is consistent with the policy expressed in Section 19-0103 and other provisions of Article 19.

ECL Section 19-0301 declares that the Department has the power to promulgate regulations for preventing, controlling or prohibiting air pollution and shall include in such regulations, provisions prescribing the degree of air pollution that may be emitted to the air by any source in any area of the state.

ECL Section 19-0303 provides that the terms of any air pollution control regulation promulgated by the Department may differentiate between particular types and conditions of air pollution, various air contamination sources, and particular areas of the state.

ECL Section 19-0305 authorizes the Department to enforce the codes, rules and regulations established in accordance with Article 19.

ECL Section 19-0311 directs the Department to establish an operating permit program for sources subject to Title V of the CAA. Section 19-0311 specifically requires that complete permit applications must include, among other things, compliance plans and schedules of compliance. This section further expresses that any permits issued must include, among other things, terms setting emissions limitations or standards, terms for

detailed monitoring, record keeping and reporting, and terms allowing Department inspection, entry, and monitoring to assure compliance with the terms and conditions of the permit.

LEGISLATIVE OBJECTIVES

Articles 1 and 3 of the ECL set out the overall state policy of reducing air pollution and providing clean, healthy air for the citizens of New York. These Articles provide general authority to adopt and enforce measures to achieve this goal, including the regulation of stationary sources of air pollution.

In addition to the general powers and duties of the Department and Commissioner to prevent and control air pollution found in Articles 1 and 3 of the ECL, Article 19 of the ECL was specifically adopted for the purpose of safeguarding the air resources of New York from pollution. To facilitate this purpose, the Legislature authorized the Department to formulate, adopt, amend, and repeal codes, rules, and regulations for preventing, controlling, or prohibiting air pollution. The legislative policy, as set forth in the Article 19, is to maintain a reasonable degree of purity of air resources which is consistent with public health and welfare, industrial development of the state, propagation and protection of flora and fauna, and the protection of physical property and other resources, while integrating sound environmental practices.

This rulemaking furthers these statutory and public policy objectives by allowing the Department to control emissions of NO_x, particulate matter (PM), carbon monoxide (CO), volatile organic compounds (VOCs), and Polycyclic Organic Matter (POM). Regulating these pollutants helps protect New York's air, as well as the health and welfare of the public.

NEEDS AND BENEFITS

<u>Subpart 220-1 – Portland Cement Plants</u>

As part of this rulemaking, DAR is planning to revise Subpart 220-1 to align with federal rule 40 Code of Federal Regulations (CFR) Part 63 Subpart LLL, "National Emission Standards for Hazardous Air Pollutants

from the Portland Cement Manufacturing Industry." The current particulate emission limit for kilns and clinker coolers in Subpart 220-1 will be lowered to match what is allowed by Subpart LLL. Subpart LLL also requires a particulate monitor and has dropped the opacity requirement that is currently included in Subpart 220-1. Therefore, Subpart 220-1 will be revised to reflect the appropriate particulate monitoring as defined in Subpart LLL, which requires the owner or operator of a kiln and clinker cooler subject to limitations on PM emissions to monitor performance through use of a PM continuous parametric monitoring system (PM CPMS)[2]. A parametric monitoring system measures a parameter (or multiple parameters) that is a key indicator of system performance. The parameter is generally an operational criteria of the process or the air pollution control device (APCD) that is known to affect the emissions levels from the process or the control efficiency of the APCD. Examples of parametric monitoring include temperature, pressure, and flow rate.

Additionally, DAR intends to remove the 40 CFR Part 75 NO_x emissions monitoring and reporting requirements and replace them with 40 CFR Part 60 monitoring and reporting requirements. Part 75 monitoring is no longer appropriate because the federal program, the Clean Air Interstate Rule, that required it was repealed and replaced by the Cross-State Air Pollution Rule (CSAPR) in 2015. CSAPR is a cap-and-trade program designed to reduce NO_x emissions from power plants. Part 60 monitoring and reporting is a less expensive option that will replace Part 75 and achieve the required NO_x emissions monitoring from portland cement kilns.

Subpart 220-3 – Asphalt Pavement Manufacturing Plants

As stated above, DAR plans to repeal Subpart 212-4 and create a separate source category under Subpart 220-3 to regulate APMPs. Uncontrolled segments of the asphalt pavement production process have the potential to generate odors and visible air emissions that can elicit complaints from the community. This rulemaking will require owners and operators of new APMPs to apply control equipment that represents the best achieved industry standards for criteria and non-criteria air contaminants. Existing plants will be required to address odors and

[2] 40 CFR 63.1349(b)(1) Performance testing requirements under the Monitoring and Compliance Provisions.

visible smoke emissions by using low-sulfur diesel fuel and control devices on asphalt cement storage tanks and silos. Both new and existing APMPs will be required to install more stringent controls. Currently, the regulated community of APMPs must navigate several sections of Part 212 to determine the control requirements necessary for compliance. Industry representatives and public stakeholders have expressed confusion regarding the regulatory requirements for the APMP industry. Part of this confusion is that the control requirements for various air contaminants emitted from this source category are located within several Subparts. Part 212 does not succinctly address which air contaminants should be regulated from APMPs. Subpart 220-3 will consolidate the requirements for APMPs into a single regulation and reduce the amount of confusion related to achieving compliance. With the removal of Subpart 212-4, a series of definitions will need to be repealed in Subpart 212-1 for consistency.

AIR CONTAMINANTS AND SOURCES TARGETED FOR EMISSION REDUCTIONS:

(1) Reduction of VOCs from Asphalt Cement Storage Tanks

Subpart 220-3 will reduce VOCs from liquid asphalt cement storage tanks. Liquid asphalt is made up of asphaltenes, resins, and oils. The three constituents are mutually dissolved in each other. The asphaltenes give asphalt its hardness; the resins give it its cohesion; and these two in combination give asphalt its cementing, preserving, and waterproofing properties. The oils give asphalt mobility and plasticity, making it workable for all uses.[3] Liquid asphalt must be kept heated to maintain a proper viscosity. Liquid asphalt cement storage tanks need to be vented, which allows the release VOCs into the atmosphere.

From EPA document[4] 2.2.3 Storage Tanks:

[3] H.C. Offutt, Liquid Asphalts and Their Uses, Ohio Oil Company
[4] USEPA PREFERRED AND ALTERNATIVE METHODS FOR ESTIMATING AIR EMISSIONS FROM HOT-MIX ASPHALT PLANTS Final Report July 6, 1996. Prepared by Eastern Research Group

Storage tanks are used to store fuel oils, heated liquid asphalts, and asphalt cement at Hot Mix Asphalt (HMA) plants, and may be a source of VOC emissions. Storage tanks at HMA plants are usually fixed roof (closed or enclosed) due to the smaller size of the tanks, usually less than 30,000 gallons (Fore, 1995; Patterson, 1995). Emissions from fixed-roof tanks (closed or enclosed) are typically divided into two categories: working losses and breathing losses. Working losses refer to the combined loss from filling and emptying the tank. Filling losses occur when the VOC contained in the saturated air are displaced from a fixed-roof vessel during loading. Emptying losses occur when air drawn into the tank becomes saturated and expands, exceeding the capacity of the vapor space. Breathing losses are the expulsion of vapor from a tank through vapor expansion caused by changes in temperature and pressure. Because of the small tank sizes and fuel usage, total VOC emissions would typically be less than 1 ton per year. Emissions from tanks used for No. 5 or 6 oils or for asphalt cement may be increased when they are heated to control oil viscosity. Emissions from asphalt cement tanks are particularly low, due to its low vapor pressure.

Section 2.4.3 VOC (including HAP) control "Periodic burner tune-ups may reduce VOC emissions by about 38 percent (Patterson, 1995a). Burner combustion air can be optimized to reduce emissions by monitoring the pressure drop across induced draft burners with a photohelic device tied to an automatic damper that adjusts the exhaust fan (Patterson, 1995a).

Organic vapors from heated asphalt cement storage tanks can be reduced by condensing the vapors with air-cooled vent pipes. In some cases, tank emissions may be routed back to combustion units. Organic emissions from heated asphalt storage tanks may also be controlled with carbon canisters on the vents or by other measures such as condensing precipitation or stainless steel shaving condensers (Wiese, 1995). Although not common, organic emissions from truck-loading of asphaltic concrete can be controlled by venting into the dryer (EPA, 1995a). This is usually practiced in non-attainment areas.

Storage tanks are also a source of odors and potential complaints from nearby residents. A medium to large asphalt pavement manufacturing plant could potentially receive several deliveries a day to meet the demand for asphalt cement. Each load displaces hydrocarbon laden air, where if not captured, has the potential to release VOCs and create odors which may travel beyond site boundaries.

(2) Reduction of Particulate Emissions from the Rotary Aggregate Dryer

Dry fabric filter dust collector baghouses are currently the predominant method of particulate control utilized in the asphalt production industry. The current filterable PM limit for drum and batch mix plants is 0.04 grains per dry standard cubic foot, as required in 40 CFR Part 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities. Part 212 has included a permissible emission rate of 0.030 grains per dry standard cubic foot of undiluted exhaust gas on dry basis for many years. Modern day baghouses are routinely meeting these requirements and controlling PM to lower emission levels without any special provisions. Therefore, the Department is proposing to require:

- A maximum emission limit of 0.030 grains per dry standard cubic foot for existing aggregate drum dryers.
- A maximum emission limit of 0.015 grains per dry standard cubic foot for any new aggregate drum dryer.

PM Filterable particulates shall be measured by using the emission testing method found in 40 CFR part 60 Appendix A-3 Method 5, determination of particulate matter emissions from stationary sources, and Method 202 for condensable particulate matter. The Method 5 and Method 202 results shall be summed to calculate the total PM concentration and emission rate.

The Department is also proposing that facility operators be required to maintain and inspect the baghouse dust collectors on an annual basis.

This will include:

- performing a visual inspection of the baghouse tube sheet and internal structure;
- keeping replacement bags on site with the capability of a minimum of at least a 20% bag change out; and
- recording of changed bag locations on baghouse tube map.

(3) Reduction of Nitrogen Oxides (NO_x) from the Rotary Aggregate Dryer

Low NO_x burners are designed to control air and fuel mixing during combustion inside of a rotary dryer, creating a larger and more dispersed flame. This reduces the peak flame temperature and lowers the amount of NO_x formed in the process. Approximately half of the 150 asphalt plants in New York State utilize a low NO_x burner in the aggregate drying drums at their facilities. The remaining facilities employ an older style burner which produces higher NO_x emissions. NO_x rates from older style burners can be on the order of 20% greater than that of low-NO_x burners. On average, the lifespan of an aggregate dryer burner is approximately 10-20 years, depending primarily on the production levels at each individual facility.

The Department proposes the following NO_x limits:

Existing aggregate dryers (low NO_x burners):

- Distillate oil: <135 ppm @ 3% O2, or <0.173 lbs/mmBtu;
- Natural gas or liquid propane gas: <80 ppm @ 3% O2, or <0.096 lbs/mmBtu;
- Waste Oil: <200 ppm @ 3% O2, or 0.256 lbs/mmBtu

New aggregate dryers (ultra-low NO_x burners);

- Distillate oil or waste fuel: <90 ppm @ 3% O2, or <0.113 lbs/mmBtu;
- Natural gas or liquid propane gas: <40 ppm @ 3% O2, or < 0.048 lbs/mmBtu[5]

The Department has collected guarantees from various manufacturers to support the required NO_x rates listed above, as well as stack test data from APMPs in northeast states utilizing modern low-NO_x burners. New

[5] Low NO_x Burner with Flue Gas Recirculation, MassDEP Drum Mix Asphalt Plant stack test report.

aggregate dryer rates for natural gas and liquid propane gas includes NO_x reduction technology with Flue Gas Recirculation.

(4) Reduction of Visible Blue-Smoke Emissions from Asphalt Storage Silos, Drag Conveyors and Pug mills

Blue smoke is a visible aerosol emission capable of traveling long distances before dissipating sufficiently to become invisible. It is an industry-wide concern for several reasons. These include regulatory limitations, organized opposition, community concerns, and control equipment requirements.

Blue smoke systems can include both incineration and collection options. Such systems generally involve ducting smoke from silo tops to the burner and loadout zone emissions to a collection device.

The Department is proposing to require that owners or operators control emissions associated with the drag conveyor, and/or hot screens, pugmill and asphalt storage silo filling operations. These emissions must be captured and can either be returned to the drum mixer, controlled with coalescing filters or by any other method acceptable to the Department. The Department recognizes that construction materials and contractors may not be available to install the required control equipment on all the affected process operations at the same time. Therefore, the Department is proposing to stagger the timeframe for requiring control equipment based on the size of the APMP. APMPs with the largest calculated annual production levels[6] (greater than 500,000 tons per year) will be required to have acceptable control equipment installed and operational no later than one year after the effective date of this Subpart. Existing APMPs with a calculated annual production level between 250,000 to 500,000 tons per year of asphalt paving material, will be allowed an additional 2 years (must comply within three years of the effective date of this Subpart). Existing APMPs with a calculated annual production level between

[6] Determined by taking the average of the three highest manufacturing years of asphalt paving material from the previous five years, starting at applicability to the Subpart and on a rolling basis thereafter.

75,000 tons per year and 250,000 tons per year of asphalt paving material, will be allowed an additional 2 years (must comply within five years of the effective date of this Subpart).

Advancements in warm mix asphalt (WMA) technologies have demonstrated significant reductions (or possible elimination) of blue smoke emissions generated during the production and transfer of asphalt pavement. In situations where an APMP can commit to only producing WMA, at all times, consideration may be made by the Department, on a case-by-case basis, to not require silo and/or load-out blue smoke control devices for such a facility. This assumes that controls are not necessary in situations where blue smoke emissions are not generated and emitted to the atmosphere from a facility.

(5) Reduction of Visible Blue-Smoke Emissions from Truck Load-out Process Operations

Blue smoke formation at the loadout zone is problematic for both continuous mix and batch plants. Collection involves surrounding the discharge gate on three sides with horseshoe-shaped intake hoods. Automatic dampers synchronized with the discharge gates regulate the air flow through the intake hoods. The air volume captured at the loadout zone limits control options. Burner excess air limits generally rule out incineration. Thus, smoke from the loadout is typically routed to an alternate control device.

It is estimated that emissions from silo filling are about 3 times higher than truck load out.[7] Fugitive hydrocarbon emissions from HMA facilities are insignificant in comparison to emission sources from non-HMA facilities. For example, take a plant producing 400 tons of mix per hour. Assuming an asphalt volatility of 0.5 percent (suggested value from AP-42 in absence of a Material Safety Data Sheet - MSDS) and a mix temperature of 300°F, the expected hydrocarbon emissions from silo filling are 2.60 lb./hr. The condensable hydrocarbon

[7] ASTEC, T-143 Hot Mix Blue Smoke Emissions, Catherine L. Sutton

emissions from silo filling and product loadout are comprised of polycyclic aromatic hydrocarbons (PAH)[8] The truck loadout hydrocarbon emissions are 0.89 lb./hr. Hydrocarbon emissions from both operations total 3.49 lb./hr. PAHs are comprised of seven potential carcinogens and the reduction of emissions to the public is essential.

Sample calculation:

Estimated potential emissions per silo:

Hydrocarbon emissions from truck loadout = 0.89 lb./hr. x 12 hr./day x 250 days/yr. = 2,670 lbs./yr. = 1.3 tpy

The options to control blue smoke emissions from truck load out are discussed below.

Media-type filtration system: Smoke is pulled through a unit containing an assembly of disposable, pleated filter cartridges. Vaporized hydrocarbons and steam cool as the gas stream enters the unit. As smoke particles condense, some collect in a sump located in the expansion chamber. Filter cartridges collect the remaining particles as the gas stream flows through the unit. This device is designed to collect smoke particles only and is not suitable for high concentrations of fine dust particles.

Filter cartridge units consist of two filtration stages. The first stage involves preliminary filtration of condensed droplets via impingement filters. Primary filtration of the gas stream involves second stage oil mist filters. Oil collects on the preliminary and primary filters. These systems include their own high efficiency centrifugal fan that exhausts treated air into the air. Media-type filtration systems require routine filter replacement to ensure proper operation. The pressure drop across the filter media increases as condensates accumulate. Filter replacement is required when the differential pressure across the filters reaches a specified level. Replacement of the first stage system filters is generally sufficient to return the differential pressure to an acceptable level. However, replacement of all filters is required when changing the first stage filters fails to drop the differential

[8] Wang et al, Study on asphalt volatile organic compounds emission reduction: A state-of-the-art review, Journal of Cleaner Production 318 (2021) 128596

pressure sufficiently. The system manufacturer determines proper operating pressures according to unit size and smoke loading. First stage filters can often be replaced several times before replacement of all filters is required.

Fiber bed mist collector: These systems are currently used extensively in the roofing asphalt industry and employs three methods for collection: impaction, interception, and Brownian diffusion. Impaction involves the collision of blue smoke particles with a fiber filter. This method is effective for particles larger than 3 microns. Interception is used to collect smaller particles in the 1 to 3-micron range. Collection occurs as smoke particles graze the sides of the fiber filter while passing through the media pores.

Brownian diffusion is employed for the collection of sub-micron particles. Particles rotate and move along curved paths after colliding with air molecules, which move along a straight path between collisions. The random movement exhibited by the particles is known as Brownian motion. Air molecules are able to adeptly maneuver between the filter's fibers. The random movement of the smoke particles causes them to collide with the filter fibers, thus removing them from the gas stream.

As particles condense on the filters, they encounter other captured particles. Multiple particles unite to form large droplets. Gravity will cause these droplets to drain from the filters. The bottom of the filter housing is sloped to allow condensate to be drained via a piping system. Because the filters are designed for oil droplet collection, particulate matter pre-filters are required. They are positioned in the inlet expansion area of the unit. Collection efficiencies of over 99% have been achieved with these control units. Fiber bed mist collectors operate similarly to a particulate baghouse.

DAR staff investigated the possibility of not requiring load-out controls for APMPs where the truck load-out process operations are within a sufficient distance from the fence line, i.e., load-out operations located in a quarry and/or a plant operating in a remote region of the state. A distance was determined, using air dispersion modeling and specific plant specifications, in which predicted concentrations are less than the Annual Guideline

Concentration (AGC) for PAHs and still within the fence line. This distance was based on modeling at three New York State hot mix asphalt plants, and it is conservatively estimated to be approximately 750 feet.

Not requiring blue smoke controls at this distance from the property line may not relieve a significant amount of APMPs from installing control equipment at the silo load-out. The purpose of identifying this distance is to remove undue burden on facilities that operate loadout operations within a safe distance from off-site receptors. The Department has determined that installing controls on load-out operations at this distance will not have any significant impact on air quality beyond the APMP property.

Plant Stockpiles

The biggest consumer of energy at an asphalt plant is the dryer burner, which is why stockpiles play a huge role in saving money. A report by the National Asphalt Pavement Association (NAPA) states for every 1% of moisture increase in aggregate stockpiles, energy use increases by 10% and production speed decreases by 10 – 20%.[9] Thus, at a nominal moisture content of 5%, aggregate moisture accounts for almost 50% of the energy required to dry and heat aggregates for asphalt mix production. From a carbon reduction standpoint, a 1% reduction in moisture equates to a global warming potential reduction of 1.1 kg CO2e per ton of mix produced.[10]

Covering aggregates with a structure is the best way to help prevent moisture from even getting to the aggregates. If that is not an option, sloping the stockpiles properly at an ideal 4% slope will also help, with water draining towards the North.

[9] https://www.asphaltpavement.org/uploads/documents/M2M-Aggregate-Stockpiles.pdf
[10] https://www.asphaltpavement.org/uploads/documents/Climate/NAPA_Case_Study_MI_Paving.pdf

The aggregate loader operator should always aim to pick off of the south side of the stock piles because that's where the sun hits first, and helps dry out moisture. Moisture content could be reduced just by how the stockpiles are arranged.

As an example, if the average plant is producing about 150,000 tons of mix per year and spending around $300,000 to dry those aggregates for mix production. The plant could reduce those drying costs by 6% at a savings of approximately $18,000.

COSTS

Regulated Community

New and existing sources will face different potential costs from this APMP rulemaking. The regulation will be designed to require new sources to apply control equipment that represents the best achieved industry standards. Facilities undergoing a modification and meeting the definition of *reconstruction* as defined in 40 CFR Part 60 Subpart A, 60.15 will be reviewed as a new source. 40 CFR 60.15(b) defines reconstruction as the replacement of components of an existing facility to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility. In the express terms of Subpart 220-3, the Department includes this language in the definition of 'Reconstructed Asphalt Pavement Processing Unit' to help ensure consistency and clarify intent when considering the relocation of various plant equipment between facilities and associated regulatory requirements.

Currently, NYS has approximately 150 individual facilities operating an APMP emission source in varying capacities and operational settings. The majority of these facilities operate under a State Facility Permit, while approximately 45 operate under Air Facility Registrations, and there are no facilities with Title V permits. The Department analyzed various scenarios to determine the level of asphalt production that would generate toxic air contaminants below emission guidelines established in 6 NYCRR Part 212. Based on AP-42 emission factors and worst-case modeling, the Department determined that APMPs with a maximum facility-wide asphalt

production of 75,000 tons per year or less will comply with Subpart 212-2.3(b) – Table 4, and do not need to address toxic air contaminants any further. These facilities are typically small, and/or do not operate (produce asphalt) very often. They can be issued an Air Facility Registration and will need to comply with the New Source Performance Standards (NSPS) found in 40 CFR Part 60, which contains a standard for emitting particulate matter (0.04 gr/dscf) and a limit on opacity (20%).

There are many factors affecting the price of asphalt per ton. These include:

- Asphaltic cement (liquid asphalt) cost per ton;
- Aggregates cost per ton;
- Drying cost per ton;
- Labor cost per ton;
- Maintenance and repair cost per ton;
- Depreciation cost per ton;
- Land/property/site/lease cost per ton;
- Quality assurance/testing cost per ton;
- Power/electricity cost per ton;
- Air Pollution Control costs per ton; and
- Other equipment (bins, loaders, etc.) cost per ton.

State and Local Governments

Of the 150 operating APMPs, a small number of these plants are owned and operated by municipalities which will incur costs from the proposed rule.

Based on data obtained from a local municipality, the difference between producing paving topcoat and purchasing paving topcoat is approximately $25 to $40 per ton. There is the potential for municipalities to claim that the additional operating costs will force them to purchase asphalt and not produce it themselves.

Cost to produce topcoat: $52 per ton (Oswego County)

Cost to buy topcoat: $78 - $93 per ton (Onondaga County)

The types of controls necessary to reduce odors, “blue smoke” (condensable particulate, polycyclic aromatic hydrocarbons & heavy hydrocarbons) and VOCs are:

1. Asphalt cement storage tank vent condensers,
2. Silo and load-out controls, and
3. Low sulfur diesel (#2 oil)

1. Asphalt cement storage tank vent condensers

Asphalt pavement material is an engineered product composed of about 95 percent stone, sand, and gravel by weight, and about 5 percent asphalt cement, a petroleum product. Asphalt cement acts as the glue to hold the pavement together. A typical plant in New York State, rated at 360 tons of asphalt production per hour, can consume over 4,500 gallons of asphalt cement per hour and requires storage tank refills several times per day. When tanks are refilled, the displacement of air causes an escape of VOC emissions and potential odors. A manufacturing representative of condensers quoted the price of $10,000 to install vent condensers at a site with 4 25,000-gallon capacity storage tanks.

2. Silo and load-out controls

Silo controls capture blue smoke and VOCs as the finished paving asphalt is transferred from the drying drum and loaded into the top of the storage silo. The estimation for Total Capital Investment (TCI) at a new APMP with nine silos is $500,000 to $700,000. Retrofitting an existing operation in New York State, which is

typically smaller than stated above, has been estimated to have a TCI of $150,000 to $400,000,[11] depending on plant size and configuration. Operating costs require the increased power demand to run exhauster fans, and for the operation, maintenance, and replacement of the coalescing filter system. These costs are estimated to be $15,000 per set of filters with an expected replacement rate of once per operating season.

Not all APMPs use silos. Batch mix processes create individual batches of asphalt as needed. Emissions of blue smoke from these processes occur in the mixing zone prior to loadout. An option for controlling emissions from a batch mix process is to vent the blue smoke and VOCs back to the drying drum for incineration.

Load-out controls are located under the silos. As asphalt paving material is dropped into a receiving truck, hot oxidized gases from the asphalt paving material are captured and returned either to the drum or to coalescing filters. This type of control is included in the costs described above.

Based on discussions with municipal APMP operators, the incremental cost increase of producing asphalt paving material with silo and load-out controls would be no more than $1 per ton, and this cost would be passed onto the user of asphalt paving material.

3. Use of low-sulfur fuel oil

Any combustion source located at an affected facility will be required to meet the sulfur-in-fuel limits found in Subpart 225-1, Fuel Composition and Use - Sulfur Limitations. There is not expected to be a cost increase based on fuel oil consumed. Low sulfur fuel oil is currently being sold and used by affected facilities. There will likely not be other options available on the market to purchase.

LOCAL GOVERNMENT MANDATES

[11] Mike Butler, Butler-Justice, Inc. Blue Smoke and Odor Control

This rulemaking is not expected to result in any additional recordkeeping, reporting, or other requirements for any local government entity.

PAPERWORK

The proposed changes to Subpart 220-1 will not create additional paperwork for facilities currently subject to the requirements of this rule. The facilities subject to Subpart 220-3 will be required to maintain records related to work practices. This includes:

(1) Tons produced of asphalt paving material

(2) RAP used in tons of material

(3) Recorded hours of burner operation

(4) Baghouse differential pressure

(5) Warm mix tons produced

(6) Amount of fuel consumed

(7) Type of fuel consumed

(8) Visual stack opacity using Method 9

(9) Average hourly Stack Temperature

(10) RAP moisture content – minimize and monitor

DUPLICATION

These regulations do not duplicate, overlap, or conflict with any other State or federal requirements.

ALTERNATIVES

An alternative to this action includes not repealing Subpart 212-4. This would retain the current requirements for this source category and require adding new requirements to control other air contaminants within the existing Subpart. Currently, Subpart 212-4 only controls NO_x emissions. Expanding Subpart 212-4 may be confusing and difficult to follow for the regulated community. The 2015 revision of Part 212 has

highlighted the need to evaluate potential toxic emissions from the APMP industry. Although it is possible to address air contaminants under Subpart 212-4, it would require additional regulatory citations to clarify what is covered by other sections of Part 212 and which process emission sources are only covered by Subpart 212-4. Failure to address Subpart 212-4 is not a prudent option.

A non-regulatory option is to revise the guidance document for Part 212, DAR-1 to specifically address this source category when implementing Part 212.

The Department believes that neither of the above options are desirable. Therefore, the Department believes that it is more effective and enforceable, and clearer for the regulated industry, to develop a new regulation for APMPs in order to properly address, in detail, the requirements necessary to reduce air pollution from each component of these sources.

FEDERAL STANDARDS

These rules do not result in the imposition of requirements that exceed any minimum standards of the federal government for the same or similar subject areas.

COMPLIANCE SCHEDULE

The Department is proposing to promulgate Part 220 in 2023. The provisions of this rule will take effect based on the promulgation date of the regulation. Drag conveyor, storage silo, pug mill and load-out controls to addresses blue smoke emissions will be phased-in according to the Asphalt Pavement Processing Unit's calculated annual production level, as follows:

>500,000 tpy, within 1-year of effective date,

>250,000 to 500,000 tpy, within 3-years of effective date,

75,000 to 250,000 tpy, within 5-years of effective date.