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November 8, 2021

Ms. Jessica Senk, Director
Office of Standards, Regulations, and Variances
Mine Safety and Health Administration
210 12th Street South
Suite 4E
Arlington, VA 22202-5452

Electronic submission zzMSHA-comments@dol.gov

Re: Comment from Portland Cement Association to Proposed Rule *Safety Program for Surface Mobile Equipment,* Docket No. MSHA 2018-0016 (Federal Register, Vol. 86, No. 172, September 9, 2021)

Dear Ms. Senk:

The Portland Cement Association (PCA) and its members appreciate the opportunity to provide comment to the Mine Safety and Health Administration's (MSHA) proposed rule (PR), "Safety Program for Surface Mobile Equipment."

Founded in 1916, PCA is the premier policy, research, education and market intelligence organization serving America's cement manufacturers.[1] PCA represents companies that operate cement manufacturing and storage facilities in all fifty states and Puerto Rico. Membership also includes businesses that provide equipment, machinery and services to manufacturers. PCA's members represent more than seventy percent of clinker production in the U.S. cement industry. PCA is proud it participates in an alliance with the Mine Safety and Health Administration (MSHA) to protect and promote miner safety and health for U.S. cement industry workers.

PCA supports MSHA's agreement with *[all]* commenters who proposed, "a flexible approach to reducing hazards and risks . . . would be more effective since mine operators would be able to develop and implement safety programs that work, for their operation, mining conditions, and miners."[2] As PCA stated in its response to MSHA's request for information (RFI)[3], "our members tailor training programs to their operations

[1] See https://www.cement.org/about
[2] Federal Register, Vol. 86, No. 172, p 50498, September 9, 2021
[3] Federal Register, Safety Improvement Technologies for Mobile Equipment at Surface Mines, and for Belt Conveyors at Surface and Underground Mines, Federal Register, Vol. 83, No. 123, June 26, 2018

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and staff, often sharing ideas through PCA's Occupational Health and Safety Committee."[4] Moreover, PCA responded in its comments to the RFI, "Belt conveyors, which should be separate from *powered haulage [and]* conveyor belt safety does not appear to fit neatly with the rest of the RFI."[5] Therefore, PCA agrees with MSHA in its determination that, "No belt conveyor is covered under this proposed rule."[6]

PCA's comments will focus on how to change the PR to facilitate and streamline its implementation into the mining industry. With deletions to MSHA's proposal, it has the potential to reduce the number of powered haulage accidents that occur at mines. These comments expand the following key points to provide a rational and reasonable strategy for implementing safety programs to reduce/eliminate powered haulage accidents, miners, mine operators, and all stakeholders will benefit.

- Remove or revise the requirement contained in § 56.23002(b)[7], which defines *Responsible person* as, "a person with authority and responsibility to evaluate and update a written safety program for surface mobile equipment."

- The requirement to train miners to identify, address and avoid hazards related to surface mobile equipment duplicates that which is currently required in annual refresher training[8] provided to miners under Part 46 and Part 48.

- The elements in § 56.23003(a) (1 – 3) are present in alternative standards contained in Title 30 Code of Federal Regulations (Title 30 CFR) or are within the scope of mining research and analysis conducted by the National Institute for Occupational Safety and Health (NIOSH).

- The Federal Mine Safety and Health Act of 1977[9] (the Mine Act) does not exempt any coal or other mine from statutory requirements based on the number of employees.

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[4] PCA Response to MSHA Request for Information: Safety Improvement Technologies for Mobile Equipment at Surface Mines, and for Belt Conveyors at Surface and Underground Mines, RIN 1219-AB91, p 2, December 24, 2021
[5] Ibid, p 7
[6] Federal Register, Vol. 86, No. 172, p 50498, September 9, 2021
[7] This document will use Part 56 as the example for all standards the PR contains, including those in Parts 56, 57 and 77
[8] Title 30 Code of Federal Regulations Part 46 – Training and Retraining of Miners Engaged in Shell Dredging, or Employed at Sand, Gravel, Surface Stone, Surface Clay, Colloidal Phosphate, or Surface Limestone Mines
[9] The Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by the Mine Improvement and New Emergency Response Act of 2006, Public Law 95-164

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- ❖ MSHA's economic analysis of the projected reduction in fatalities, lost-days injuries and no lost-day injuries calculates large benefits based on *potentially* unrealistic effectiveness assumptions, making costs to the mining sector look relatively low. (See Appendix 1).

Remove or revise the requirement contained in § 56.23002(b), which defines *Responsible person* as, "a person with authority and responsibility to evaluate and update a written safety program for surface mobile equipment."

PCA recommends that "responsible person" and its definition be removed from the standard. Alternatively, MSHA should substitute "operator," and its meaning as defined in the Mine Act. The phrase "responsible person" will potentially convey the meaning that the individual is acting as the "agent" of the operator, and thereby increase legal liabilities to the person in that role. PCA believes the more appropriate entity to be referenced in the PR, if the agency feels strongly that an entity must be referenced, is operator.

Both operator and agent are defined in Section 3(d)[10] and 3(e)[11] respectively in the Mine Act, but the sole reference to "responsible official" *[or person]* is found in Section 109(d), which states, in summary, that the operator is required to designate a responsible official who oversees health and safety on a daily basis at the mine, and when the mine is in control of a person who is not there on a daily basis, then the operator is required to designate a principal official in charge of the safety and health program at the mine.[12] The designation for these individuals is made on the legal

[10] The Federal Mine Safety and Health Act of 1977 (the Mine Act), Section 3(d), "operator" means any owner, lessee or other person who operates, controls, or supervises a coal or other mine or independent contractor performing services or construction at such mine.

[11] The Mine Act, Section 3(e), "agent" means any person charged with responsibility for the operation of all or part of a coal mine or any other mine or the supervision of any coal or other mine.

[12] The Mine Act, Section 109(d) requires, "Each operator of a coal or other mine subject to this Act shall file with the Secretary the name and address of such mine and the name and address of the person who controls or operates the mine. Any revisions in such names or addresses shall be promptly filed with the Secretary. Each operator of a coal or other mine subject to this Act shall designate a *responsible official* at such mine as the principal officer in charge of health and safety at such mine, and such official shall receive a copy of any notice, order, citation, or decision issued under this Act affecting such mine. In any case where the mine is subject to the control of any person not directly involved in the daily operations of the coal or other mine, there shall be filed with the Secretary the name and address of such person and the name and address of a principal official of such person who shall have overall responsibility for the conduct of an effective health and safety program at any coal or other mine subject to the control of such person, and such official shall receive a copy of any notice, order,

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identity report that the operator is required to file with MSHA when the operator begins operations or when the officials change. The notification is made on MSHA Form 2000-7.[13]

In addition to the meaning of operator in the Mine Act, a review of Title 30 CFR Part 46, 48 and 50 reveals three more definitions. In § 46.2(l), "*Operator* means any production-operator, or any independent contractor whose employees perform services at a mine." In § 48.2(e), "*Operator* means any owner, lessee, or other person who operates, controls or supervises an underground mine; or any independent contractor identified as an operator performing services or construction at such mine." Similarly, in § 50.2(c), "Operator means (1) Any owner, lessee, or other person who operates, controls, or supervises a coal mine; or, (2) The person, partnership, association, or corporation, or subsidiary of a corporation operating a metal or nonmetal mine, and owning the right to do so, and includes any agent thereof charged with responsibility for the operation of such mine."

With multiple definitions in the Mine Act and Title 30 CFR, the term operator includes both individuals and groups which are responsible for mine safety and health programs. Furthermore, the operator's legal identity report (MSHA Form 2000-7), specifies the person at the mine who is in charge of health and safety and the person with *overall responsibility [emphasis added]* for a health and safety program at ALL of the operator's mines. All references to "responsible person" should be removed from the PR – i.e., in § 56.23001 and § 56.23003(b). These two facts, the statutory definition of operator and the filing of MSHA Form 2000-7, negate a need to define responsible person, or to have a reference to such, in the PR.

The requirement to train miners to identify, address and avoid hazards related to surface mobile equipment duplicates that which is currently required in several types of mandatory training, including annual refresher training and task training, provided to miners. Approved training plans must contain this provision.

Subsection 56.23003(a)(4) would duplicate training requirements found in 30 CFR Parts 46 and 48 and in MSHA's policies located in the Program Policy Manual Volume III – 30 CFR Part 40 Through 50 and Parts 62 and 100. Repeating training

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citation, or decision issued affecting any such mine. The mere designation of a health and safety official under this subsection shall not be construed as making such official subject to any penalty under this Act."

[13]U.S. Department of Labor, Mine Safety and Health Administration, Legal Identity Report, MSHA Form 2000-7, U. S. GPO: 2000-509-451, Item 9 "Person at Mine in Charge of Health and Safety (Superintendent or Principal Officer, and Item 10, Person with Overall Responsibility for a Health and Safety Program at ALL of the Operator's Mines, if the Operator is not directly involved in the daily operation of the Mine: (Safety Director)

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requirements in a separate standard could create confusion in the mining stakeholder community, including among MSHA's inspectorate, mine operators, independent contractors and miners. *For example, in § 46.5(b)(2) and § 46.6(b)(2), corresponding to "New miner training" and "Newly hired experienced miner training" respectively, miners must receive, "Instruction on the recognition and avoidance of . . . hazards and other hazards present at the mine, such as traffic patterns and control, mobile equipment (e.g., haul trucks and front-end loaders) . . ."* In addition, § 46.8(c)[14] *recommends* training on the hazards of equipment with which most fatalities and serious injuries are associated, such as haulage and service trucks, front-end loaders and tractors. Finally, there are similar requirements in 30 CFR Part 48[15] for miners to receive instruction in tasks in which they have no experience.

MSHA's policy interpretation of § 46.8(b) is found in Program Policy Manual Volume III, wherein it states that, "The refresher training must include instructions on changes at the mine that could adversely affect the miner's health and safety."[16] Equally noteworthy, MSHA's current interpretation of the standard is that, "The flexibility of a performance-based approach of Part 46 allows production operators and independent contractors to determine the subjects to be covered in annual refresher training based on the needs of their workforce and their operations."[17]

Some provisions in § 56.23003(a) (1 – 3) are present in alternative standards contained in Title 30 Code of Federal Regulations (CFR) or are (partially) within the scope of mining technology research conducted by the National Institute for Occupational Safety and Health (NIOSH).

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[14] 30 CFR § 46.8(c) in total mandates, "Refresher training must also address other health and safety subjects that are relevant to mining operations at the mine. Recommended subjects include, but are not limited to: applicable health and safety requirements, including mandatory health and safety standards; information about the physical and health hazards of chemicals in the miner's work area, the protective measures a miner can take against these hazards, and the contents of the mine's HazCom program; transportation controls and communication systems; escape and emergency evacuation plans, firewarning and firefighting; ground conditions and control; traffic patterns and control; working in areas of highwalls; water hazards, pits, and spoil banks; illumination and night work; first aid; electrical hazards; prevention of accidents; health; explosives; and respiratory devices. *Training is also recommended on the hazards associated with the equipment that has accounted for the most fatalities and serious injuries at the mines covered by this rule, including: mobile equipment (haulage and service trucks, front-end loaders and tractors); conveyor systems; cranes; crushers; excavators; and dredges*. Other recommended subjects include: maintenance and repair (use of hand tools and welding equipment); material handling; fall prevention and protection; and working around moving objects (machine guarding).

[15] See § 48.7(a) and § 48.27(a)

[16] Mine Safety and Health Administration, Program Policy Manual Volume III, Interpretation, Application and Guidelines on Enforcement of 30 CFR, p. 28

[17] Id

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In proposed § 56.23003(a) (1 – 3), MSHA's plan elements, in some instances, are found in other regulations. In addition to the standards MSHA lists in the PR[18] the following standards would be applicable as well: § 56.14102 Brakes for rail equipment; § 56.14103 Operator stations; § 56.14104 Tire repair; § 56.14130 Rollover protective structures (ROPS) and seat belts; § 56.14131 Seat belts for haulage trucks; § 56.14200 Warnings prior to starting equipment; § 56.14207 Parking procedures for unattended equipment; and § 56.14208 Warning devices. As MSHA noted in the sectional analysis, the list is not all inclusive. A thorough review of MSHA's mandatory standards framework would likely add regulations for operators to include in their analyses, thereby making the program even more complex and difficult to manage.

The proposed requirement for operators to integrate existing processes addressing manufacturers' recommendations, such as those for maintaining brakes and steering components as well as pre-operational checks, into the safety program is of particular concern to PCA. PCA believes this is the first instance in which MSHA would require operators to provide access to MSHA for operator maintenance records. There are limited circumstances to which authorized representatives have access to records kept by mine operators, such as those required for accident and employment reporting,[19] training,[20] workplace examinations,[21] and others.

The proposed provision for mine operators to identify feasible technologies that can enhance safety at the mine is a decision that could be made by a partnership consisting of the mine operator, labor, and NIOSH's mining research division.[22] Furthermore, Sec. 102 of the Mine Act[23] authorizes the establishment of advisory

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[18] Federal Register, Vol. 86, No. 172, p 50500, September 2021
[19] Title 30 CFR Part 50, https://www.ecfr.gov/current/title-30/chapter-I/subchapter-I/part-50
[20] Title 30 CFR Parts 46, 48 https://www.ecfr.gov/current/title-30/chapter-I/subchapter-H/part-46 and https://www.ecfr.gov/current/title-30/chapter-I/subchapter-H/part-48

[21] See § 56.18002 Workplace examinations https://www.ecfr.gov/current/title-30/chapter-I/subchapter-K/part-56
[22] The NIOSH Mining Research Division's mission is to eliminate fatalities, injuries and illnesses through relevant research and impactful solutions. See website here https://www.cdc.gov/niosh/mining/researchprogram/index.html

[23] SEC. 102. (a)(1) The Secretary of the Interior shall appoint an advisory committee on coal or other mine safety research composed of--(A) the Director of the Office of Science and Technology or his delegate, with the consent of the Director;(B) the Director of the National Bureau of Standards, Department of Commerce, or his delegate, with the consent of the Director;(C) the Director of the National Science Foundation, or his delegate, with the consent of the Director; and(D) such other persons as the Secretary of the Interior may appoint who are knowledgeable in the field of coal or other mine safety research. The Secretary of the Interior shall designate the chairman of the committee. (2) The advisory committee shall consult with, and make recommendations to, the Secretary of the Interior on matters involving or relating to coal or other mine safety research. The Secretary of the

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committees, consisting of various government agencies employing science and technology officials, to consult with the (then) Secretary of the Interior and (then) Secretary of Health, Education and Welfare on research related to coal and other mine safety and health issues, and to make recommendations to the Secretaries on research grants and contracts for research.

The Mine Safety and Health Research Advisory Committee (MSHRAC) is the entity charged with evaluating research conducted by the NIOSH mining program. MSHRAC has a charter[24] that must be reviewed periodically for renewal, and is composed of ten members, six of whom are equally represented by labor and industry, including three from industry and three from labor. The remaining four consist of a chairperson and three *ex-officio* members., as shown on the current roster of members[25] who are appointed by the Secretary of Health and Human Services to three-year terms. The role of NIOSH and MSHRAC, as related to equipment or engineering systems evaluations, is to communicate the findings from technology research to mine operators about what they consider as economically feasible technology (with application to an operator's unique facilities or operations.

The NIOSH mining research division can test and evaluate new technologies during pilot projects at mine sites, carefully cataloguing what is successful at discrete, unique operations. Even though a particular technology is effective at reducing accidents at Cement Plant A, because of the unique characteristics at Cement Plant B, the technology may not be applied in the same way, or with the same positive results, at

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Interior shall consult with, and consider the recommendations of, such committee in the conduct of such research, the making of any grants, and the entering into of contracts for such research.(3) The chairman of the committee and a majority of the persons appointed by the Secretary of the Interior pursuant to paragraph (1)(D) shall be individuals who have no economic interests in the coal or other mining industry, and who are not operators, miners, or officers or employees of the Federal Government or any State or local government.(b)(1) The Secretary of Health, Education, and Welfare shall appoint an advisory committee on coal or other mine health research composed of--(A) the Director, Bureau of Mines, or his delegate, with the consent of the Director;(B) the Director of the National Science Foundation, or his delegate, with the consent of the Director;(C) the Director of the National Institutes of Health, or his delegate, with the consent of the Director; and(D) such other persons as the Secretary of Health, Education, and Welfare may appoint who are knowledgeable in the field of coal or other mine health research. The Secretary of Health, Education, and Welfare shall designate the chairman of the committee.(2) The advisory committee shall consult with, and make recommendations to, the Secretary of Health, Education, and Welfare on matters involving or relating to coal or other mine health research. The Secretary of Health, Education, and Welfare shall consult with, and consider the recommendations of, such committee in the conduct of such research, the making of any grants, and the entering into of contracts for such research.

[24] See charter here https://www.cdc.gov/faca/committees/pdfs/mshrac/mshrac-charter-508.pdf
[25] See roster here https://www.cdc.gov/faca/committees/pdfs/mshrac/mshrac-roster-508.pdf

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the second location. Thorough testing requires a partnership with mine operators, their employees and researchers cooperating to achieve safety for employees.

The Federal Mine Safety and Health Act of 1977 (the Mine Act) does not exempt any coal or other mine from statutory requirements based on the number of employees at the mine.

To PCA's knowledge, the PR is the first instance in which the agency would exempt a class of mining facilities from a regulation based on the number of miners and other employees at the operation. The Occupational Safety and Health Administration (OSHA) *partially* exempts employers with ten or fewer employees[26] as well as employers falling within specific industrial and employment categories[27] from the requirement to keep injury and illness records, unless OSHA contacts the employers to produce the information.

Table 1 in the PR[28] details the number of miners and mines affected by excluding operations with five or fewer miners from the proposal. Fifty-nine percent of mines would be exempt from regulation, affecting twelve percent of all miners. PCA believes the percentages are too great to justify excluding a majority of mines and almost twenty thousand miners.

MSHA's economic analysis of the projected reduction in fatalities, lost-days injuries and no lost-day injuries calculates large benefits based on *potentially* unrealistic effectiveness assumptions, making the costs to the mining sector look relatively low. (See Appendix 1).

The justification for the safety program for surface mobile equipment rests on the forecast for fatalities, injuries resulting in lost workdays, and non-lost workday injuries. Relative to MSHA's baseline trend forecast, the rule is expected to reduce these incidents by 80% annually beginning in the second year after implementation. MSHA then translates the success of the PR reducing incidents into a monetized benefit to

[26] 29 CFR § 1904.1(a)(1) If your business establishment is classified in a specific industry group listed in appendix A to this subpart, you do not need to keep OSHA injury and illness records unless the government asks you to keep the records under § 1904.41 or § 1904.42. However, all employers must report to OSHA any workplace incident that results in an employee's fatality, in-patient hospitalization, amputation, or loss of an eye (see § 1904.39).
[27] 29 CFR 1904.2(a)(1) If your business establishment is classified in a specific industry group listed in appendix A to this subpart, you do not need to keep OSHA injury and illness records unless the government asks you to keep the records under § 1904.41 or § 1904.42. However, all employers must report to OSHA any workplace incident that results in an employee's fatality, in-patient hospitalization, amputation, or loss of an eye (see § 1904.39).
[28] Federal Register, Vol. 86, No. 172, p 50501, September 9, 2021

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perform a break-even point analysis, and the review calls into question a sustained reduction in incidents if industry adopts the PR.

In summary, MSHA should revise the PR by decreasing the number of provisions with which operators would comply.

- MSHA should remove "responsible person" from the regulation, or alternatively, replace the term with "mine operator" or "operator." The person responsible for mine safety and health is required to be listed when filing the legal identification report.

- Similarly, the provisions addressing "miners and other persons" training should be removed. The training provision is duplicated in comprehensive training miners receive when hired and annually thereafter.

- Requiring operators to formally list repair procedures and schedules that are already in place in manufacturers' written instructions and guidelines as well as in MSHA standards creates unnecessary responsibilities. Like the training requirement in the PR, the provisions to analyze hazards, to develop and maintain procedures for maintenance, and to identify available, feasible technologies that can enhance safety are *partially* found in alternative regulations and, if not, require combined effort in the form of a partnership that involves all stakeholders, including industry, labor, government and academia.

- The Mine Act does not set a threshold for how many miners must be employed at a mine for that mine to be subject to a standard. As such, there should not be an exclusion for operators with five or fewer miners.

- The economic analysis from MSHA calculates large benefits based on *potentially* unrealistic assumptions.

Thank you for the opportunity to share PCA's perspectives on the proposed rule for safety programs.

Sincerely,

Thomas Harman

Appendix 1 – An Analysis of the Costs and Benefits Associated with "Safety Program for Surface Mobile Equipment"

The proposed rule, "Safety Program for Surface Mobile Equipment," from the Mine Safety and Health Administration (MSHA) would add $167.4 million in compliance costs to the mining sector over the next 10 years. A sizable share of the estimated costs ($56.7 million) would occur in the first year after regulation is adopted. This comes in the context of supply tightness not only in the cement industry, but many other mined commodities as well as the broader urgency to expand capacity for rare earth elements and hard rock mining.

The justification for this safety program rests on the forecast for fatalities, injuries resulting in lost workdays, and non-lost workday injuries involving surface mobile equipment. Relative to MSHA's baseline trend forecast, the rule is expected to reduce fatalities and injuries by 80% annually beginning in its second year. While there seems to be significant modeling associated with the baseline forecast – i.e., how many fatalities and injuries would occur in the next 10 years with no additional regulation – the fatality and injury reductions resulting from regulation seem unsupported by a model consisting of real-world data, which MSHA may possess, from past events. Instead, the tailoring of safety programs for surface mobile equipment to the specific equipment and conditions at mines and MSHA's willingness to provide guidance and outreach to maximize compliance effectiveness are cited as reasons for the reduction in adverse mining events. In the Preliminary Regulatory Impact Analysis (PRIA) document, "*MSHA's previous special initiatives have, in the Agency's experience, resulted in increased effective compliance and reduced injuries and fatalities through heightened enforcement and increased outreach, during enforcement inspections, regarding effective compliance strategies,"* is cited as additional support for the reduction assumption. However, Portland Cement Association (PCA) has not been able to document a historical equivalent reduction in fatalities or injuries resulting from a single program. Moreover, the assumption that fatalities, injuries resulting in lost workdays, and non-lost workday injuries would all fall at the same proportion seems unlikely based on injury and fatality statistics kept by the MSHA.

Appendix 1 – An Analysis of the Costs and Benefits Associated with "Safety Program for Surface Mobile Equipment"

When large benefits are calculated based on potentially unrealistic effectiveness assumptions, costs can look relatively low in comparison, even when the economic burden is considerable. MSHA translates the success of its proposed rule reducing fatalities and injuries into a monetized benefit to perform break-even point analysis. "According to the break-even calculations for this proposal, even if the fatalities and injuries are not reduced as forecasted, the reduction of fatal and nonfatal injuries would have a positive net benefit as long as those injuries are reduced by more than 27.1 percent; at 27.1 percent, the net benefits at a 7 percent discount rate would equal zero."[1] Given the 80% reduction assumptions' benefits would far outweigh costs, the break-even net cost-benefit reduction of 27.1% seems to be more grounded in real world precedent. A sustained annual reduction in fatalities and injuries of 27% is a goal all of us in the mining industry will work to achieve. Even if half of this effectiveness were realized, it would imply compliance costs associated with the rule would need to be decreased nearly $23 million at a 7% discount rate so that costs would not outweigh benefits.

Brian Schmidt

Senior Regional Economist[2]

Portland Cement Association

[1] Federal Register, Vol. 86, No. 172, p 50507, September 9, 2021

[2] Brian Schmidt is a senior regional economist and member expert of Portland Cement Association's award-winning economics team based in Skokie, Illinois. Analyses and forecasts conducted by PCA's economics department are routinely cited in national media outlets, economic policy-setting entities, academic institutions and private and public companies. See here https://www.cement.org/economics/meet-the-experts