

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Division of Environmental Permits, Region 4

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May 5, 2021

Mr. Aaron Kelsey  
Holcim (US), Inc.  
PO Box 3  
Ravena, NY 12143  
Letter sent via email: [aaron.kelsey@lafargeholcim.com](mailto:aaron.kelsey@lafargeholcim.com)

Re: Department Initiated Modification  
Air Title V Permit  
DEC Permit No. 4-0124-00001/00112  
Holcim Ravena Cement Plant  
1916 Route 9W  
Ravena, NY 12143

Mr. Kelsey,

This letter is to inform you that the New York State Department of Environmental Conservation (DEC or the Department) has determined to modify the above-referenced Air Title V Permit (the Permit) for Holcim's cement plant located in Ravena, New York (the Facility). The specific modification and justification for the modification are outlined below.

The Permit currently authorizes the installation of a mid-kiln injection system and associated conveyance and mixing air fan equipment for tire-derived fuel (TDF) and the use of TDF to replace up to 20% of the fossil or solid fuel heat input in the Facility's cement kilns (the TDF Project), provided several specific conditions are satisfied, including the condition that the TDF Project shall be "constructed and operated in strict accordance" with the following supporting documentation: an Environmental Assessment Form dated July 19, 2005; a Technical Memorandum Visual Assessment Summary dated July 2004; a Beneficial Use Determination dated November 22, 2004 (#797-4-01); a revised permit application dated May 3, 2005; a revised application for mid-kiln firing of TDF dated January 2005; a series of plans for parking, storage, and haul road handling and feed drawings dated as of various dates between September 23, 2005 and April 14, 2006; a letter from DEC to Holcim's predecessor dated June 28, 2005; and a letter from Holcim's predecessor to DEC dated June 21, 2004.

The revised application for mid-kiln firing of TDF that is incorporated into the Permit expressly acknowledged that the TDF Project must comply with applicable requirements prior to initiation

of construction or operation and that there would be no lapse in construction activities for the TDF Project exceeding 18 months.

Since the time DEC conditionally authorized the TDF Project in 2006, neither Holcim nor Holcim's predecessor commenced or completed the TDF Project. For the reasons set forth below, the conditions and supporting documentation upon which DEC approved the TDF Project are no longer current. Accordingly, Holcim is not authorized to proceed with the TDF Project. In the event Holcim elects to pursue the TDF Project in the future, new DEC review and a new determination would be necessary in order to properly consider Holcim's recent modernization projects at the Facility and to determine compliance with currently applicable statutory and regulatory requirements, including but not limited to all applicable requirements of the New York State Climate Leadership and Community Protection Act.

At the time of DEC's original conditional approval of the TDF Project in 2006, Holcim's predecessor had prepared calculations to estimate the maximum actual annual rate of emissions of oxides of nitrogen, sulfur dioxide, carbon monoxide, particulate matter, total suspended particulate, and volatile organic compounds that were expected to be emitted from the old kilns over the 10 years following the completion of the TDF Project. In preparing those calculations, Holcim's predecessor conducted a series of stack tests using the Facility's old kiln system and applied a proration factor to the emission rates based upon the highest two-year average production level from the prior 10-year period as required by EPA's New Source Review reform rules (i.e., the period of 1998-1999 was used as the highest two-year average production level). Holcim's predecessor then used the estimated baseline of actual emissions, compared it to the projected actual emissions from the TDF Project, and calculated the net emissions increase from the TDF Project.

Since 2006, however, the Department understands that Holcim has completed modernization projects at the Facility that have included the complete replacement of the old kilns with a new kiln system. In addition, DEC does not have current information on whether the stack test results and emission rate proration factors that were used in 2006 remain accurate. Notwithstanding any potential assumptions that may be drawn from the Facility's modernization projects, DEC does not have current data (i) to verify that the new kiln system will result in actual emission rates from the use of TDF that are equally or more protective of human health and the environment as compared to the data compiled before 2006, or (ii) to reasonably determine whether the projected net emission increases from the time of the original application remain accurate or whether any adjustments (upward or downward) are warranted.

As acknowledged in the Responsiveness Summary dated February 15, 2006, which was incorporated into DEC's Record of Decision for the TDF Project, DEC considered certain

scientific literature, including but not limited to a comparative health risk assessment conducted for a California Cotton Plant in September 1999, a health consultation by the Agency for Toxic Substances and Disease Registry for a Cemex facility in Colorado in 2003, and a technical report cited in the *Journal of Environmental Quality* (Vol. 31, pgs. 1484-1490) from 2002 in conditionally approving the TDF Project. Because approximately two decades have now transpired since the publication of that scientific literature, during which time the Facility's old kiln system has since been replaced, and because DEC Division of Air's *Guidelines for the Evaluation and Control of Ambient Air Contaminants under 6 NYCRR Part 212* (DAR-1) has undergone subsequent iterations over the same time period, new review is required for DEC to reasonably conclude that permit requirements for the potential future use of TDF at the Facility are based upon the latest available scientific data and are consistent with DAR-1 and regulation at 6 NYCRR Part 212.

The Beneficial Use Determination dated November 22, 2004 that is incorporated into the Permit has since expired. Although potential future combustion of TDF at the Facility would be exempt from the requirement for a Beneficial Use Determination pursuant to regulation at 6 NYCRR Subpart 362-1.2(c), a new case-specific Beneficial Use Determination would be required for any potential future storage and handling of waste tires at the Facility. Any petition for a case-specific Beneficial Use Determination would need to include all applicable information set forth under regulation at 6 NYCRR Subpart 360.12(d) and would require a new determination from DEC that, among other things, any heavy metals or pollutants present in the waste tires are present at acceptable concentrations for the proposed product or use as determined by DEC and that the proposed use will not significantly adversely affect public health or the environment.

DEC acknowledged its "concern" in the above-referenced Responsiveness Summary "about the mercury emissions from the [Facility] as a result of the baseline stack test" for TDF, that DEC would require Holcim's predecessor to submit an analysis of the potential actions that could be taken to reduce mercury emissions from the Facility as part of the Permit's renewal process, and that DEC would make a final decision on the percent removal and permit conditions required for mercury emissions based on DEC's review of the analysis and the results from the Facility's TDF stack tests. To date, no TDF stack tests have been conducted at the Facility because neither Holcim nor its predecessor commenced or completed the TDF Project. Accordingly, DEC has not yet conducted a final analysis of potential mercury emissions for the TDF Project.

For the reasons stated above, DEC is hereby initiating a minor modification to the Permit pursuant to regulation at 6 NYCRR Subpart 621.3(a)(2) and (4) and Subpart 201-1.15 to require the inclusion of a new superseding permit condition that will require submission of a new application from Holcim for the TDF Project in the event Holcim elects to pursue it, which

application DEC will review and process in accordance with applicable requirements, and the removal from the Permit of current provisions conditionally authorizing the TDF Project. DEC intends to incorporate this modification into the pending Permit renewal process.

In accordance with regulation at 6 NYCRR Part 621.13(d), the modified Permit will take effect 15 calendar days from the date of this letter if Holcim does not submit a written statement to the undersigned at the above address giving reasons why the Permit should not be modified, or requesting a hearing, or both before that date. A written response must contain specific evidence to support Holcim's contentions. If such a written response or request for hearing is received before the 15-day deadline, the modified Permit will not take effect on that date and Holcim will be contacted by DEC to resolve the identified issues or arrange for a hearing, as applicable.

Please contact me at [kate.kornak@dec.ny.gov](mailto:kate.kornak@dec.ny.gov) or 518-357-2459 if you have any questions. Thank you for your anticipated cooperation in this matter.

Sincerely,



Kate Kornak  
Deputy Regional Permit Administrator

Ec: J. Snyder  
T. Berkman  
A. Luisi  
V. Schmitt  
B. Potter  
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K. Bretz, Holcim



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