Electronic copy
of letterhead

STATE OF MISSOURI
Matt Blunt, Governor • Doyle Childers, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

Mr. Steven J. Kidwell
Manager, Environmental and Public Affairs
Lafarge Corporation - Sugar Creek Plant
2200 North Courtney Road
Sugar Creek, MO 64050

RE: Correction of New Source Review Permit Number 0897-019
Project Number: 2004-11-106; Installation ID Number: 095-0030

Dear Mr. Kidwell:

On September 30, 2002, the Missouri Air Pollution Control Program (APCP) received an application for the amendment of Permit Number 0897-019 and the construction of a crusher and miscellaneous activities. The application was divided into two separate permitting projects: Project Number 2003-01-056 for the amendment and Project Number 2002-09-156 for the construction of the crusher and miscellaneous activities. Due to the nature of the new construction and the affect it had on existing modeling reviews, the APCP required that prior to issuance of the new construction permit, a new modeling analysis be performed. Therefore, the amendment was reviewed and issued as Permit Number 0897-019C while the new construction permit remained in review as refined modeling was completed.

During the modeling review, Lafarge completed testing on the raw mill and preheater/precalciner rotary kiln system identified as EP 77 as required by Permit Number 0897-019. Upon completion of the testing, Lafarge was issued a notice of violation (NOV) for violating permit limits in Permit Number 0897-019, based on filterable and condensable particulate matter. Lafarge contends during the original construction permitting process emission estimates used in the Best Available Control Technology (BACT) analysis were based on performance guarantees which included filterable particulate matter only. Therefore, the PM_{10} emissions limit in Permit Number 0897-019 misrepresents actual intended operation of the kiln. To resolve the compliance issue, Lafarge proposed to re-evaluate the PM_{10} limit to include both filterable PM_{10} and condensables. APCP staff reviewed this request and this letter acts as notification to you the amendment request has been approved. The details of the revision to the Special Conditions of Permit Number 0897-019 approved under this amendment are provided below.

Revision to Permit Number 0897-019

Prior to this amendment, Special Condition 7 stated the raw mill and preheater/precalciner rotary kiln system identified as EP 77 must comply with a 22.02 pound per hour limit for PM_{10} on a 24-hour average period. During the original review, this limit did not take into consideration condensable particulate matter. As a result, the APCP is correcting the limit to account for both filterable and condensable particulate matter. The new limit is based on stack testing during roller mill on and off conditions. Six existing samples along with twelve additional tests were used to provide 18 one-hour test results. The new PM_{10} limit was determined using the statistical mean of the 18-point data set and adding two standard deviations to allow for variability in operational parameters. An annual testing requirement was added for consistency with permitting policy. In addition, a condition for the restriction of public access was included for compliance with the modeling analysis The original PSD review included a refined modeling

analysis of PM_{10}, sulfur dioxides (SO_X), nitrogen oxides (NO_X), and carbon monoxide (CO) emissions from the entire project. Since this limit correction only affects PM_{10} emissions, the refined modeling analysis for PM_{10} was re-evaluated for both the National Ambient Air Quality Standards (NAAQS) and the increment standards. The NAAQS compliance demonstration showed several violations of the PM_{10} standard. However, on an annual basis, Lafarge did not have a significant impact at any violating receptors. On a 24-hour basis, Lafarge did not have a significant impact on the same day as a violation receptor. For the increment standards, no violations were predicted. Therefore the modeling analysis was approved without further investigation. For further details on the modeling, please refer to the Ambient Air Quality Impact Analysis memo with the June 2004 Submittal Revision.

Enclosed with this letter are the amended pages for Permit Number 0897-019. Please replace the appropriate pages in the above referenced permit with these enclosed pages. The enclosed amended Special Condition pages will also replace the revisions that were previously approved under any prior amendments.

Operation in accordance with the new enclosed Special Condition pages (Permit Number 0897-019D) and in accordance with an amended operating permit submittal is necessary for continued compliance. In addition, you are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, and any other applicable federal, state, or local agency regulations.

A copy of this letter and the replaced pages from both the original permit and the previous amendment should be kept at the installation and be made available to Department of Natural Resources' personnel upon request. If you have any questions regarding this amendment, please contact Emily Wilbur at the Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102 or you may telephone at (573) 751-4817. Thank you for your time and cooperation.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

original signed by Kyra L. Moore

Kyra L. Moore
Permits Section Chief

KLM: ewk

Enclosures

c: Mr. Jon Knodel, U.S. EPA Region VII
Kansas City Regional Office
PAMS File: 2004-11-106

1. Best Available Control Technology (BACT) for particulate matter less than ten microns in diameter (PM_{10}) emissions is the use of water sprays and enclosures on the conveyor transfer points identified as emission point (EP) 58. However, the moisture content of the material at EP 58 has been demonstrated by Lafarge to be greater than 1.5% by weight which should be equivalent to the usage of water sprays. Therefore, the installation shall conduct a moisture content test at least once every five (5) years in accordance with Condition 1(A) of this permit to affirm continued compliance with this claim.
   A. The installation shall conduct the above moisture content test in accordance with the test methods and procedures prescribed in the *American Society for Testing Materials (ASTM), Designation D-2216 Standard Test Methods for Laboratory Determination of Water (moisture) Content of Soil or Rock,* ASTM C-566, *Standard Test Method for Total Moisture Content of Aggregate by Drying* or other moisture content testing method(s) approved by the Director. Test samples should be obtained immediately prior to Emission Point 58 unless an alternate sampling location is approved by the Director, and
   B. The usage of water sprays for Emission Point 58 are no longer required as moisture content testing has been completed that satisfactorily demonstrates that the material associated with EP 58 currently has a moisture content of greater than 1.5% by weight.

2. BACT for PM_{10} emissions is the use of partial enclosures or wind guards on the following emission sources:
   a. Aggregate storage piles identified in EP 97, 100, 101, and 102;
   b. The solid fuel stockpile identified in EP 63;
   c. The limestone stockpile identified in EP 60; and
   d. Raw material truck unloading to hoppers, raw material crushing, and bin unloading to the raw material conveyor identified as EP 61; and
   e. Truck unloading to clinker/gypsum hopper identified as EP 84.

3. BACT for PM_{10} emissions is the use of baghouses designed to reduce PM_{10} emissions by at least 99% on the following emission sources:
   a. Raw material transfer to silos identified as EP 62;
   b. Limestone transfer to silo identified as EP 64;
   c. Raw material reclaim to tunnel conveyor transfer identified as EP 65;
   d. Raw material tunnel conveyor transfer to raw material conveyor identified as EP 66;
   e. Raw mill air separators unloading to homogenization silo identified as EP 67;
   f. Kiln feed mixing chamber identified as EP 68;
   g. Unloading to cement kiln dust (CKD) bin from baghouse identified as EP 69;
   h. Kiln feed air lift identified as EP 70;
   i. Solid fuel conveyors identified as EP 72;
   j. Solid fuel surge bin number 1 identified as EP 74;
   k. Solid fuel surge bin number 2 identified as EP 75;
   l. Pulverized solid fuel day bin identified as EP 76;
   m. Clinker elevator and hot clinker silo identified as EP 79;

n. Clinker unloading from clinker/gypsum conveyor or clinker elevator to clinker silo identified as EP 80;
o. Clinker/gypsum conveyor unloading to gypsum silo identified as EP 81;
p. Clinker/gypsum conveyor transfer point identified as EP 85;
q. Clinker and gypsum unloading to finish mill conveyor identified as EP 86;
r. Cement transfer to silo headhouse and interstice identified as EP 89;
s. Cement silo headhouse and interstice identified as EP 90;
t. Cement unloading to cement silos 1, and 2 identified as EP 91;
u. Cement unloading to cement silos 3, and 4 identified as EP 92;
v. Cement unloading to cement loading distribution box identified as EP 93;
w. Cement return to interstice identified as EP 94;
x. Cement recycle to finish mill identified as EP 95; and
y. Cement truck loadout #1 and #2 identified as EP 96 and EP 97.

4. BACT for PM_{10} emissions from the clinker and hot clinker loadouts identified as EP 82 and EP 83 is the use of a telescoping chute and a baghouse.

5. BACT for PM_{10} emissions from paved roads is water flushing followed by vacuum sweeping. A high efficiency recirculative air sweeper may be used in lieu of the above as long as it is operated in accordance with manufacturer's specifications to obtain the highest efficiency possible (90 to 95%).

6. BACT for PM_{10} emissions from unpaved roads is the use of an emulsion at the manufacturer's specified application rate.

7. BACT for PM_{10} emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is an emission rate not to exceed 164.15 pounds per hour while the roller mill is not in operation and 49.95 pounds per hour while the roller mill is in operation. This limit is for total PM_{10}, consisting of both condensable and filterable fractions. The installation shall demonstrate compliance with this limit through compliance demonstrations once every 30 months, consisting of three 1-hour runs.

8. Within 60 days of reaching full production, but in no case later than 180 days after initial startup, a performance test shall be conducted to verify PM_{10} emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77. The stack test shall determine the emission rate in pounds per hour. A completed Proposed Test Plan Form (enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting emissions testing.

9. The results of the performance test required in Condition 8 shall be reported to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 30 days of completion of the test.

10. BACT for PM_{10} emissions from the clinker cooler system identified as EP 78 is an emission rate not to exceed 11.74 pounds per hour, 24-hour average.

11. Within 60 days of reaching full production, but in no case later than 180 days after initial startup, a performance test shall be conducted to verify PM_{10}

emissions from the clinker cooler system identified as EP 78. The stack test shall determine the emission rate in pounds per hour. A completed Proposed Test Plan Form (enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting emissions testing.

12. The results of the performance test required in Condition 11 shall be reported to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 30 days of completion of the test.

13. BACT for PM_{10} emissions from the finish mill and cement air separation identified as EP 87 is an emission rate not to exceed 3.46 pounds per hour, 24-hour average.

14. Within 60 days of reaching full production, but in no case later than 180 days after initial startup, a performance test shall be conducted to verify PM_{10} emissions from the finish mill, finish mill screen/weigh hopper, and cement air separation identified as EP 87. The stack test shall determine the emission rate in pounds per hour. A completed Proposed Test Plan Form (enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting emissions testing.

15. The results of the performance test required in Condition 14 shall be reported to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 30 days of completion of the test.

16. BACT for emissions of oxides of sulfur from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is an emission rate not to exceed 477.3 pounds per hour, 3-hour average.

17. Within 60 days of reaching full production, but in no case later than 180 days after initial startup, a performance test shall be conducted to verify emissions of oxides of sulfur from the raw mill and preheater/precalciner rotary kiln system identified as EP 77. The stack test shall determine the emission rate in pounds per hour. A completed Proposed Test Plan Form (enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting emissions testing.

18. The results of the performance test required in Condition 17 shall be reported to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 30 days of completion of the test.

19. BACT for emissions of oxides of nitrogen from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is an emission rate not to exceed 1,894.8 tons in any consecutive 12-month period.

20. BACT for carbon monoxide emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is an emission rate not to exceed 842 tons in any consecutive 12-month period.

21. Continuous Emission Monitors (CEMs) shall be installed, operated, and calibrated to monitor carbon monoxide and oxides of nitrogen emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77. Monthly records shall be kept providing the 12-month rolling totals of carbon monoxide and oxides of nitrogen emissions to verify compliance with the emission limitations of Condition Number 19 and Condition Number 20.

22. CEM certification protocols shall be submitted to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, at least 30 days prior to the certification date.

23. BACT for organic hazardous air pollutant (HAP) emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is the use of good combustion practices.

24. BACT for heavy metal HAP emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is the use of a fabric filter baghouse.

25. BACT for hydrogen chloride emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is the inherent alkali environment of the preheater/precalciner rotary kiln.

26. BACT for sulfuric acid mist emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is the inherent dry scrubbing of the preheater/precalciner rotary kiln system.

27. All existing quarrying operations present prior to the activities outlined in this permit shall only be conducted within the underground limestone mine. If an equipment malfunction occurs which requires the short-term reinstatement of above ground surface quarrying activities, the Permittee shall report, following the procedures of 10 CSR 10-6.050, *Start-Up, Shutdown, and Malfunction Conditions*, the occurrence to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 15 days of said occurrence.

28. The cumulative 12-month total throughput for the limestone stockpile identified as EP 60 shall not exceed 1,336,900 tons.

29. The Permittee shall maintain an accurate monthly record of the throughput for the limestone stockpile identified as EP 60. These records shall include monthly and rolling 12-month totals. These records shall be kept on-site for the most recent sixty (60) month period of operation and be made immediately available to Department of Natural Resources' personnel upon request.

30. The Permittee shall preclude public access to property that is considered within the non-ambient air zone with respect to the air quality impact analysis conducted for this permit. Installation and maintenance of a fence or other physical barrier shall be the means to preclude public access. A map showing property boundary (precluded areas) can be found in Appendix C of the Ambient

Air Quality Impact Analysis modeling memo. The Permittee shall submit documentation to demonstrate preclusion to the Air Pollution Control Program for review and approval.

The original PSD review included a refined modeling analysis of PM_{10}, sulfur dioxides (SO_X), nitrogen oxides (NO_X), and carbon monoxide (CO) emissions from the entire project. Since this limit correction only affects PM_{10} emissions, the refined modeling analysis for PM_{10} was re-evaluated for both the National Ambient Air Quality Standards (NAAQS) and the increment standards. The NAAQS compliance demonstration showed several violations of the PM_{10} standard. However, on an annual basis, Lafarge did not have a significant impact at any violating receptors. On a 24-hour basis, Lafarge did not have a significant impact on the same day as a violation receptor. For the increment standards, no violations were predicted. Therefore the modeling analysis was approved without further investigation. For further details on the modeling, please refer to the Ambient Air Quality Impact Analysis memo with the June 2004 Submittal Revision.

Enclosed with this letter are the amended pages for Permit Number 0897-019. Please replace the appropriate pages in the above referenced permit with these enclosed pages. The enclosed amended Special Condition pages will also replace the revisions that were previously approved under any prior amendments.

Operation in accordance with the new enclosed Special Condition pages (Permit Number 0897-019D) and in accordance with an amended operating permit submittal is necessary for continued compliance. In addition, you are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, and any other applicable federal, state, or local agency regulations.

A copy of this letter and the replaced pages from both the original permit and the previous amendment should be kept at the installation and be made available to Department of Natural Resources' personnel upon request. If you have any questions regarding this amendment, please contact Emily Wilbur at the Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102 or you may telephone at (573) 751-4817. Thank you for your time and cooperation.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kyra L. Moore
Permits Section Chief

KLM: ewk

Enclosures

c: Mr. Jon Knodel, U.S. EPA Region VII
Kansas City Regional Office
PAMS File: 2004-11-106

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

31. Best Available Control Technology (BACT) for particulate matter less than ten microns in diameter (PM_{10}) emissions is the use of water sprays and enclosures on the conveyor transfer points identified as emission point (EP) 58. However, the moisture content of the material at EP 58 has been demonstrated by Lafarge to be greater than 1.5% by weight which should be equivalent to the usage of water sprays. Therefore, the installation shall conduct a moisture content test at least once every five (5) years in accordance with Condition 1(A) of this permit to affirm continued compliance with this claim.
    C. The installation shall conduct the above moisture content test in accordance with the test methods and procedures prescribed in the *American Society for Testing Materials (ASTM), Designation D-2216 Standard Test Methods for Laboratory Determination of Water (moisture) Content of Soil or Rock,* ASTM C-566, *Standard Test Method for Total Moisture Content of Aggregate by Drying* or other moisture content testing method(s) approved by the Director. Test samples should be obtained immediately prior to Emission Point 58 unless an alternate sampling location is approved by the Director, and
    D. The usage of water sprays for Emission Point 58 are no longer required as moisture content testing has been completed that satisfactorily demonstrates that the material associated with EP 58 currently has a moisture content of greater than 1.5% by weight.

32. BACT for PM_{10} emissions is the use of partial enclosures or wind guards on the following emission sources:
    f. Aggregate storage piles identified in EP 97, 100, 101, and 102;
    g. The solid fuel stockpile identified in EP 63;
    h. The limestone stockpile identified in EP 60; and
    i. Raw material truck unloading to hoppers, raw material crushing, and bin unloading to the raw material conveyor identified as EP 61; and
    j. Truck unloading to clinker/gypsum hopper identified as EP 84.

33. BACT for PM_{10} emissions is the use of baghouses designed to reduce PM_{10} emissions by at least 99% on the following emission sources:
    z. Raw material transfer to silos identified as EP 62;
    aa. Limestone transfer to silo identified as EP 64;
    bb. Raw material reclaim to tunnel conveyor transfer identified as EP 65;
    cc. Raw material tunnel conveyor transfer to raw material conveyor identified as EP 66;
    dd. Raw mill air separators unloading to homogenization silo identified as EP 67;

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

ee. Kiln feed mixing chamber identified as EP 68;
ff. Unloading to cement kiln dust (CKD) bin from baghouse identified as EP 69;
gg. Kiln feed air lift identified as EP 70;
hh. Solid fuel conveyors identified as EP 72;
ii. Solid fuel surge bin number 1 identified as EP 74;
jj. Solid fuel surge bin number 2 identified as EP 75;
kk. Pulverized solid fuel day bin identified as EP 76;
ll. Clinker elevator and hot clinker silo identified as EP 79;
mm. Clinker unloading from clinker/gypsum conveyor or clinker elevator to clinker silo identified as EP 80;
nn. Clinker/gypsum conveyor unloading to gypsum silo identified as EP 81;
oo. Clinker/gypsum conveyor transfer point identified as EP 85;
pp. Clinker and gypsum unloading to finish mill conveyor identified as EP 86;
qq. Cement transfer to silo headhouse and interstice identified as EP 89;
rr. Cement silo headhouse and interstice identified as EP 90;
ss. Cement unloading to cement silos 1, and 2 identified as EP 91;
tt. Cement unloading to cement silos 3, and 4 identified as EP 92;
uu. Cement unloading to cement loading distribution box identified as EP 93;
vv. Cement return to interstice identified as EP 94;
ww. Cement recycle to finish mill identified as EP 95; and
xx. Cement truck loadout #1 and #2 identified as EP 96 and EP 97.

34. BACT for PM_{10} emissions from the clinker and hot clinker loadouts identified as EP 82 and EP 83 is the use of a telescoping chute and a baghouse.

35. BACT for PM_{10} emissions from paved roads is water flushing followed by vacuum sweeping. A high efficiency recirculative air sweeper may be used in lieu of the above as long as it is operated in accordance with manufacturer's specifications to obtain the highest efficiency possible (90 to 95%).

36. BACT for PM_{10} emissions from unpaved roads is the use of an emulsion at the manufacturer's specified application rate.

37. BACT for PM_{10} emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is an emission rate not to exceed 164.15 pounds per hour while the roller mill is not in operation and 49.95 pounds per hour while the roller mill is in operation. This limit is for total PM_{10}, consisting of both condensable and filterable fractions. The installation shall demonstrate compliance with this limit through compliance demonstrations once every 30 months, consisting of three 1-hour runs.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

38. Within 60 days of reaching full production, but in no case later than 180 days after initial startup, a performance test shall be conducted to verify PM_{10} emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77. The stack test shall determine the emission rate in pounds per hour. A completed Proposed Test Plan Form (enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting emissions testing.

39. The results of the performance test required in Condition 8 shall be reported to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 30 days of completion of the test.

40. BACT for PM_{10} emissions from the clinker cooler system identified as EP 78 is an emission rate not to exceed 11.74 pounds per hour, 24-hour average.

41. Within 60 days of reaching full production, but in no case later than 180 days after initial startup, a performance test shall be conducted to verify PM_{10} emissions from the clinker cooler system identified as EP 78. The stack test shall determine the emission rate in pounds per hour. A completed Proposed Test Plan Form (enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting emissions testing.

42. The results of the performance test required in Condition 11 shall be reported to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 30 days of completion of the test.

43. BACT for PM_{10} emissions from the finish mill and cement air separation identified as EP 87 is an emission rate not to exceed 3.46 pounds per hour, 24-hour average.

44. Within 60 days of reaching full production, but in no case later than 180 days after initial startup, a performance test shall be conducted to verify PM_{10} emissions from the finish mill, finish mill screen/weigh hopper, and cement air separation identified as EP 87. The stack test shall determine the emission rate in pounds per hour. A completed Proposed Test Plan Form (enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting emissions testing.

45. The results of the performance test required in Condition 14 shall be reported to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 30 days of completion of the test.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

46. BACT for emissions of oxides of sulfur from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is an emission rate not to exceed 477.3 pounds per hour, 3-hour average.

47. Within 60 days of reaching full production, but in no case later than 180 days after initial startup, a performance test shall be conducted to verify emissions of oxides of sulfur from the raw mill and preheater/precalciner rotary kiln system identified as EP 77. The stack test shall determine the emission rate in pounds per hour. A completed Proposed Test Plan Form (enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting emissions testing.

48. The results of the performance test required in Condition 17 shall be reported to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 30 days of completion of the test.

49. BACT for emissions of oxides of nitrogen from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is an emission rate not to exceed 1,894.8 tons in any consecutive 12-month period.

50. BACT for carbon monoxide emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is an emission rate not to exceed 842 tons in any consecutive 12-month period.

51. Continuous Emission Monitors (CEMs) shall be installed, operated, and calibrated to monitor carbon monoxide and oxides of nitrogen emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77. Monthly records shall be kept providing the 12-month rolling totals of carbon monoxide and oxides of nitrogen emissions to verify compliance with the emission limitations of Condition Number 19 and Condition Number 20.

52. CEM certification protocols shall be submitted to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, at least 30 days prior to the certification date.

53. BACT for organic hazardous air pollutant (HAP) emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is the use of good combustion practices.

54. BACT for heavy metal HAP emissions from the raw mill and preheater/precalciner

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

rotary kiln system identified as EP 77 is the use of a fabric filter baghouse.

55. BACT for hydrogen chloride emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is the inherent alkali environment of the preheater/precalciner rotary kiln.

56. BACT for sulfuric acid mist emissions from the raw mill and preheater/precalciner rotary kiln system identified as EP 77 is the inherent dry scrubbing of the preheater/precalciner rotary kiln system.

57. All existing quarrying operations present prior to the activities outlined in this permit shall only be conducted within the underground limestone mine. If an equipment malfunction occurs which requires the short-term reinstatement of above ground surface quarrying activities, the Permittee shall report, following the procedures of 10 CSR 10-6.050, *Start-Up, Shutdown, and Malfunction Conditions*, the occurrence to the Air Pollution Control Program, Enforcement Section, PO Box 176, Jefferson City, MO 65102, within 15 days of said occurrence.

58. The cumulative 12-month total throughput for the limestone stockpile identified as EP 60 shall not exceed 1,336,900 tons.

59. The Permittee shall maintain an accurate monthly record of the throughput for the limestone stockpile identified as EP 60. These records shall include monthly and rolling 12-month totals. These records shall be kept on-site for the most recent sixty (60) month period of operation and be made immediately available to Department of Natural Resources' personnel upon request.

60. The Permittee shall preclude public access to property that is considered within the non-ambient air zone with respect to the air quality impact analysis conducted for this permit. Installation and maintenance of a fence or other physical barrier shall be the means to preclude public access. A map showing property boundary (precluded areas) can be found in Appendix C of the Ambient Air Quality Impact Analysis modeling memo. The Permittee shall submit documentation to demonstrate preclusion to the Air Pollution Control Program for review and approval.