



Bob Holden, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

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2002 NOV 27 PM 2:10

NOV 13 2002

Mr. Eric Ervin
Holcim Incorporated
16401 Swingley Ridge Road, Suite 330
Chesterfield, MO 63017

Ste. Genevieve County
P-2259

Dear Mr. Ervin:

The Missouri Department of Natural Resources' (the Department's) Water Pollution Control Program has reviewed your request for Water Quality Certification for the Holcim, Inc. Lee Island Project (Public Notice No. P-2259 and subsequent modifications). This office certifies, based on the information provided, that the ongoing activities will not cause the general or numeric criteria to be exceeded nor impair beneficial uses established in Water Quality Standards, 10 CSR 20-7.031, provided the enclosed conditions and provisions (see Attachment A) are met.

As you know, the Governor of Missouri has requested that an Environmental Impact Statement (EIS) be prepared for this project. The Department continues to support the Governor's position that an EIS be completed. Any water quality concerns raised in an EIS should be addressed by the applicant prior to initiation of the project in order to maintain certification. The proposed project entails numerous federal and state permitting decisions that need to be addressed collectively through the process provided for in the National Environmental Policy Act (NEPA). The NEPA process is the most appropriate way to evaluate the potential cumulative environmental impacts of the project, including impacts to wetlands, floodplains, unique ecological areas, cultural resources and air quality. The issuance of a Section 404 permit on a project of this magnitude would certainly constitute a major federal action which is likely to have a significant impact on the quality of the human environment.

The jurisdictional impacts arising from this project will occur throughout a period of more than 100 years. As an example, 50 years after the project begins, approximately 8,000 linear feet (1.51 mi.) of jurisdictional stream will be impacted. No more than 200 acres of quarry will be open at any one time, with the initial restoration of the areas first excavated occurring 8-10 years after mining has begun. The project and operations will require a Land Reclamation Permit, NPDES Stormwater Prevention Permit, Air Pollution Control permit and potentially a dam safety permit from the Department of Natural Resources. These permits will include, among other things, requirements for control of stormwater runoff from quarry areas and restoration of quarried areas.

Integrity and excellence in all we do

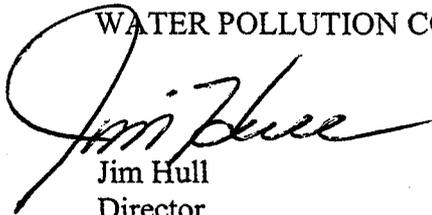
Holcim Incorporated (P-2259)

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If you have any questions, please contact me at (573) 751-6721, e-mail at nrhullj@dnr.state.mo.us or by mail to Missouri Department of Natural Resources, Water Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176.

Sincerely,

WATER POLLUTION CONTROL PROGRAM

A handwritten signature in cursive script, appearing to read "Jim Hull".

Jim Hull
Director

JH:shd

Enclosure

c: Tom Hermann, Missouri Clean Water Commission
✓ Chuck Frerker, Army Corps of Engineers, St. Louis District
Gerald Ross, Missouri Department of Conservation
Missouri Department of Natural Resources, St. Louis Regional Office

Holcim (US) Inc., Lee Island Project (P-2259)
Water Quality Certification
Amended Conditions and Provisions

Issued by the Missouri Department of Natural Resources
November 13, 2002

The original public notice addressed a request to construct a cement kiln, a quarry operation, an access road, a railroad spur; a slack water harbor and fleeting area, two overburden disposal areas and two creek crossings. The original plan would have impacted jurisdictional waters and approximately 13.8 acres of wetlands for the harbor construction, approximately 1.5 acres of wetlands for the plant site and railroad spur, 0.14 acre of wetlands and 3.4 stream miles for the quarry operation, and 1.4 acres of wetlands for the haul road.

The impacts of this project to jurisdictional waters have been reduced since the original issuance of the public notice. The impacts to the Isle du Bois Creek crossings have been withdrawn. The cement plant and railroad spur will be relocated to avoid 1.5 acres of wetland impacts. Portions of the preferred haul road location have been modified to avoid direct impacts to wetlands. Both Hickory and North Hollows are no longer proposed to be used as overburden disposal areas and stormwater detention, reducing 0.27 mile of impacts to jurisdictional streams. The overall impacts to jurisdictional streams for this project are now 3.2 miles, and the overall impacts to jurisdictional wetlands total approximately 14.2 acres.

The project is located in Sections 3, 4, 5, 8, 9, 10, 15, 16, 17, 18, 20 and 21, Township 39 north, Range 7 east in Ste. Genevieve County, Missouri, and in portions of Sections 4, 8 and 9, Township 39 north, Range 7 east in Jefferson County, Missouri. No impacts to jurisdictional waters will occur in Jefferson County.

1. The wetland mitigation areas identified in the "Wetland and Stream Mitigation Plan" submitted on March 26, 2002, conform with the "State of Missouri Aquatic Resources Mitigation Guidelines," with a minimum ratio of 2:1 for emergent wetlands to be filled, 3:1 for wooded wetlands, and 1:1 for farmed wetlands. These mitigation plans are of acceptable amount and location, but this document has not been identified by the Corps of Engineers (COE) in a 404 permit as the final mitigation plan. The final mitigation plan, as approved by the COE, must be submitted and receive approval from the Department prior to any impact to jurisdictional waters.

Mitigation shall be undertaken prior to or concurrent with the filling of any jurisdictional wetlands. All mitigation areas shall be protected by a permanent conservation easement. The conservation easement shall reserve the area for aquatic habitat and wetland protection and wildlife purposes exclusively, and shall be filed and recorded as a deed restriction on the property in perpetuity prior to first impacts to jurisdictional wetlands. If the Department does not approve the final mitigation plan, or if the mitigation proves to be unsuccessful, the Department shall review, suspend, modify or withdraw this certification.

2. The stream mitigation areas identified in the "Wetland and Stream Mitigation Plan" submitted on March 26, 2002, conform with the "State of Missouri Aquatic Resources Mitigation Guidelines," with a minimum ratio of 1:1. These mitigation plans are of acceptable amount and location, but this document has not been identified by the Corps of Engineers in a 404 permit as the final mitigation plan. Therefore, the applicant shall submit the final mitigation plan to the Department for review after the Corps has determined it to be the final mitigation plan. The final mitigation plan must receive approval from the Department prior to any impact to jurisdictional waters.

Mitigation shall be undertaken prior to or concurrent with the first impacts to jurisdictional streams so that the amount of jurisdictional channel restored is equal to or exceeds the amount impacted. All mitigation areas shall be protected by a permanent conservation easement. The conservation easement shall reserve the area for aquatic habitat and wetland protection and wildlife purposes exclusively, and shall be filed and recorded as a deed restriction on the property in perpetuity prior to first impacts to jurisdictional streams. The mitigation plan shall be implemented in accordance with the following:

- a. Improvements to Isle du Bois Creek will be allowed as mitigation only if at least 50 feet of riparian corridor is restored on both sides of the creek.
- b. Restoration of relict channels will be allowed for mitigation only if flow duration is not less than the flow duration of jurisdictional waters being impacted and does not impact other jurisdictional waters.
- c. On-site restoration or creation of stream channels will be allowed for mitigation only if restoration or creation has proven successful. The determination of success is defined in Condition 8.

If the Department does not approve the final mitigation plan or if the mitigation proves to be unsuccessful the Department shall review, suspend, modify or withdraw this certification.

3. The impacted riparian areas shall be restored to a stable condition to protect water quality immediately after disturbance. On-site inspections of these areas shall be conducted by the applicant to ensure successful revegetation and stabilization, and to ensure that erosion and deposition of soil into waters of the state is not occurring from this project. Planting with native vegetation, mulching and needed fertilization shall be within three days of final contouring or as seasonal timing permits. The native soil from the excavated stream areas shall be separated during storage and used as the topdressing for the recreated and restored waterways.
4. Best management practices shall be used during construction to minimize erosion. While excavating material that lies within the ordinary high water mark of jurisdictional tributaries, work shall be conducted in such a manner as to seal off the work area from flow while allowing stream flow to pass in a separate channel to eliminate or prohibit impacts to water quality. This technique is generally known as "fluming." Erosion control measures shall be placed as necessary to control sediment runoff. A stormwater pollution prevention plan shall be developed for the site and all provisions of that plan must be met.

5. For Conditions 6, 7 and 8 that follow, the applicant shall submit a monitoring plan to the Department and must receive approval from the Department of said plan prior to the onset of quarry operations. The applicant shall submit to the Department for review any subsequent revisions to the monitoring plan and must receive approval from the Department of those revisions prior to their implementation.
6. The natural biological community within Isle du Bois Creek shall not be adversely impacted by the changes in flow regime caused by the proposed activity, nor shall it be adversely impacted by water contaminants from the proposed activity. The applicant shall conduct monitoring of the stream each year in accordance with the approved monitoring plan for any year in which the proposed activity is occurring within the Isle du Bois Creek watershed, and shall submit monitoring results to the Department of Natural Resources by January 1 of each year. If monitoring indicates impairment of the biological community of the creek caused by changes in flow regime or water contaminants from the proposed activity, the proposed activity in the watershed shall cease until the degradation of the resource is corrected, subject to determination by the Department.
7. The natural biological community within Wolf Hollow and Longs Hollow Seep shall not be adversely impacted by the changes in flow regime caused by the proposed activity, nor shall it be adversely impacted by water contaminants from the proposed activity until at least year 50 for Wolf Hollow and at least year 70 for Longs Hollow Seep, at which time quarry operations are scheduled to include these areas. The applicant shall conduct monitoring of the streams each year in accordance with the approved monitoring plan for any year in which the proposed activity is occurring within the respective watersheds and shall submit monitoring results to the Department by January 1 of each year. If monitoring indicates impairment of the biological communities of these areas caused by changes in flow regime or water contaminants from the proposed activity, the proposed activity in the watershed shall cease until successful mitigation is undertaken and approved by the Department, or the degradation of the resource is corrected, subject to determination by the Department.
8. Mitigation for the 3.2 miles of jurisdictional intermittent streams that will be disturbed by the project will require development of physical drainage structures in the reclaimed topography necessary for erosional stability and establishment of aquatic habitat (such as pool and riffle/chute complexes, native riparian vegetation plantings and other appropriate reclamation techniques). As reclamation proceeds, monitoring the reclaimed streams will be conducted to determine compliance with performance standards for: (1) hydrogeomorphic stability, (2) appropriate and successful revegetation using Missouri native ecotypes, and (3) development of aquatic macroinvertebrate communities with taxonomic structure and feeding function classes as good as or better than the 25th percentile of the applicable biological criteria from control streams (see below), provided the metric does not exceed the 50th percentile of the existing condition.

The applicable biological criteria shall be derived from sampling of control streams. Control streams shall be identified for two separate periods after mining is complete in an area. Control streams that are used shall be of similar size and selected from the same ecological drainage unit as referenced in the Biological Criteria for Wadeable/Perennial Streams of

Missouri, and may include Hickory Hollow, Wolf Hollow, and Longs Hollow provided their watersheds are not impacted by mining or other activities that diminish natural aquatic faunal communities. Control streams to be used for this project must be approved by the department as part of the monitoring plan. The requirements of 10 CSR 40-10.050(10) shall be met for all mitigation areas where surface mining has been completed in accordance with Holcim's approved reclamation plan regardless of the expiration/renewal status of the land reclamation permit.

- a) For the endpoint of three (3) years after reclamation requirements in 10 CSR 40-10.050(10) have been met for the reclaimed stream and its sub-watershed, the control streams are defined as (1) one or more intermittent streams in watersheds that are predominantly ungrazed grassland. Every effort will be made to establish groundcover immediately following completion of earth-moving activities to expedite stabilization of the newly formed land surface;
- b) For the endpoint of twenty years after reclamation requirements in 10 CSR 40-10.050(10) have been met for the reclaimed stream and its sub-watershed, the control streams are defined as one (1) or more intermittent streams in watersheds that are mixed woodland and grassland with functional riparian zones.

The applicant shall conduct monitoring of aquatic macroinvertebrate communities in restored streams in accordance with the approved monitoring plan throughout the life of the project to ensure the mitigation success of aquatic communities. The approved monitoring plan shall include a reporting frequency and period of time sufficient to determine compliance with performance standards and to identify remedial action. The applicant shall submit monitoring reports to the Department in accordance with the approved monitoring plan.

Restoration of existing streams on-site is paramount to the Department. Successful restoration of streams on-site must be accomplished to the greatest extent possible. If monitoring results show that appropriate aquatic macroinvertebrate communities (as defined by the 25th percentile of the applicable biological criteria from control streams - see above) are not developing or if any other requirement set forth in this condition has not been fulfilled, the applicant shall implement corrective measures immediately in consultation with the Department. If the Department considers the corrective measures to be ineffective, the applicant shall submit an off-site mitigation plan for department approval. Quarrying of jurisdictional streams' watershed shall cease until such approval. Such approval shall not be unreasonably withheld or delayed. Should the Department determine that continued efforts towards on-site mitigation will be unsuccessful, the applicant shall proceed with an off-site mitigation plan approved by the Department. If the Department determines the off-site mitigation plan is not acceptable, quarrying of the jurisdictional streams' watershed shall cease until an acceptable off-site mitigation plan is submitted and approved. The applicant shall receive credit for all successful mitigation performed on-site. These procedures do not relieve the applicant from its duty to comply with all other federal, state and certification requirements. Nothing in this condition precludes the applicant from attempting later on-site mitigation even if earlier on-site mitigation was unsuccessful, subject to Department approval.

9. Care shall be taken to keep machinery out of the waterways. Fuel, oil, other petroleum products, equipment and any solid waste shall not be stored below the ordinary high water mark at any time or in the adjacent floodway beyond normal working hours. All precautions shall be taken to avoid the release of wastes, fuel or any toxic or harmful material to streams and other adjacent waterbodies as a result of this operation. Petroleum products spilled into any waterbody or on the banks where the material may enter waters of the state shall be immediately cleaned up and disposed of properly. Spills of petroleum must be reported as soon as possible to the Missouri Department of Natural Resources' 24-hour Environmental Emergency Response number at (573) 634-2436 and in accordance with federal and state laws and rules regarding petroleum products. If these requirements are not met, the Department shall review, suspend, modify or withdraw this certification.
10. Clearing of vegetation shall be the minimum necessary to accomplish the activity, and shall be done in a manner outlined in the NPDES Stormwater Protection Plan so as to minimize erosion.
11. No material dredged from the Mississippi River shall be deposited into jurisdictional waters. Best management practices shall be employed to avoid deposition of sediments into the Mississippi River or other jurisdictional waterbodies.

If the applicant does not comply with any of the conditions of this certification the Department shall review, suspend, modify, or withdraw this certification.

This certification is being issued under Section 401 of the Clean Water Act. This certification does not relieve the applicant from its duty to comply with all other federal, state or local laws, regulations or permits. For this certification to remain effective, the applicant must obtain all necessary permits required under federal and state law. This certification is only valid for impacts as expressly described above. If there should be modification of this project that may have water quality impacts, including any failure to successfully mitigate as described in the application, this certification shall be reviewed, suspended, modified or withdrawn.

This department may review this certification every 5 years to assure that the project has not caused and apparently will not cause the general or numeric criteria to be exceeded nor impair beneficial uses established in Water Quality Standards, 10 CSR 20-7.031. This review may include but is not limited to on-site inspections, document reviews and requests for additional information to be provided by the applicant as necessary to make this determination.

Outside resource agencies, including the Missouri Department of Conservation (MDC) may assist in reviewing the information relevant to this project. If MDC or any other resource agency should reveal information that this project may adversely affect water quality, including the natural biological community, the Department shall review, suspend, modify or withdraw the certification. Information, including any information acquired from an EIS, that the proposed activity may adversely impact water quality shall also result in the Department reviewing, suspending, modifying or withdrawing the certification.

Pursuant to the Missouri Clean Water Law, RSMo Section 644.052.9, this 401 water quality certification shall be valid only upon payment of a fee of seventy-five dollars (\$75.00). The

enclosed invoice contains the necessary information on how to submit your fee. Payment must be received within ten (10) days of receipt of this certification. Upon receipt of the fee, a copy of the certification will be mailed to the applicable office of the Corps of Engineers to inform them the certification is now in effect.

Water Quality Standards must be met during any operations authorized by these permits. If compliance with Water Quality Standards, as defined by current law and regulations, is not maintained, you will be notified and the certification shall be reviewed, suspended, modified or withdrawn.