

SPECIAL CONDITIONS FOR P-2259

1. If any part of the authorized work is performed by a contractor, before starting work the permittee shall discuss the terms and conditions of this permit with the contractor; and, the permittee shall give a copy of this entire permit to the contractor. The permittee shall maintain a copy of this permit at the worksite for the duration of the permit.
2. The permit may be revoked or a stop work order issued if the State of Missouri notifies us that the permitted activities are not being performed in conformance with the MDNR's Section 401 Water Quality Certification issued for this permit.
3. The permittee shall conduct no activities that alter the physical presence or function of the site's jurisdictional waters of the United States until all other required federal and state environmental authorizations are obtained that are necessary to construct and operate the harbor, quarry, and cement plant. The purpose of this condition is to ensure that no unnecessary impacts occur in jurisdictional areas until other permitting agencies have thoroughly analyzed and approved actions that are outside of the direct regulating authority of the USACE (eg. air, upland land reclamation, storm water permits). After all other federal and state authorizations are obtained, this U.S. Army Corps of Engineers (USACE) authorization limits the permittee to a ten (10) year period to complete the proposed excavation and fill activities within jurisdictional waters of the United States. Wetland mitigation and stream enhancement activities may commence prior to issuance of other federal and state permits, or at minimum, concurrent with project construction activities. The permit's timeframe to initiate and conduct quarry related activities is limited to 100 years. If other federal and state authorizations are delayed for extended periods, the USACE may consider altering the stated expiration date of this permit to coincide with required 100-year quarry life.
4. Any required maintenance dredging to be completed from within the inland harbor limits shall be accomplished by hydraulic dredging methods, or other approved USACE methods. Associated discharge material shall be placed in a non-jurisdictional upland disposal site approved by the USACE. After inland harbor construction, periodic maintenance dredging within the inland harbor shall not remove more than 65,000 cubic yards per year. Maintenance dredging performed within the inland harbor is authorized by this Department of the Army permit for a period of ten (10) years. Any maintenance dredging deemed necessary after 10 years from the date of this permit shall require notification by submitting a Department of the Army permit application to the St. Louis District Regulatory Branch and the Missouri Department of Natural Resources Water Pollution Control Program for subsequent permit review.
5. The permittee shall not dispose of dredged materials below the ordinary high water mark of any waters of the United States or at any location where the dredged materials could be introduced into the immediate or adjacent waters of the United States as a result of runoff, flooding or other natural forces, unless the discharge complies with applicable MDNR stormwater permit requirements.
6. This permit does not include any form of authorization for dredging within the fleeting area or other direct portions of the Mississippi River.
7. The permittee shall investigate for water supply intakes for other activities that may be affected by suspended solids and turbidity increases caused by work in the Mississippi River (i.e., installation of mooring cells) and give sufficient notice to the owners of affected activities to allow preparation for any temporary changes in water quality. The permittee shall furnish the USACE with a copy of any written notification provided in accordance with this condition.

8. The permittee shall store all construction materials, equipment, and/or petroleum products, when not in use, above anticipated high water levels. The permittee shall develop and maintain a contingency plan for the prevention and control of any spills of fuel, oils, or other hazardous materials. The permittee shall maintain a copy of the contingency plan at the worksite for the duration of the permit. The contingency plan shall be maintained on board the towboat kept at the fleeting/harbor facilities while the facility is in use with barges. All personnel shall be familiar with the plan.

9. The permittee shall monitor streambed and stream bank erosion for 250 linear feet upstream, starting at the upstream termination point, of each jurisdictional intermittent stream's impact location for a period not less than two years following completion of applicable stream mitigation. In addition, the permittee shall monitor erosion below all sedimentation and attenuation basins, and for 250 linear feet both upstream and downstream of Isle du Bois Creek, starting at the location where the sedimentation basin discharges water into Isle du Bois Creek. The permittee shall be responsible for correcting any erosion problems attributed to the project. Therefore, a photographic record of the monitored downstream and upstream reaches shall be required to document existing conditions and for monitoring purposes. If erosion from the project is noted within the two-year monitoring periods, then additional corrective measures and monitoring will be required. An annual erosion monitoring report shall be submitted to the St. Louis District, Regulatory Branch no later than 31 December of each year, following the initiation of activities in jurisdictional waters. Monitoring and any corrective measures shall be the responsibility of the permittee. This responsibility cannot be assigned to any other individual or entity without express written approval from the USACE.

10. During movement/placement of vessels and barges, the permittee shall comply with all U.S. Coast Guard, State of Missouri, and USACE regulations concerning the prevention of navigation obstructions in navigable waters of the United States. The permittee shall conduct operations in the river such that there will be no unreasonable interference with navigation by the existence or use of the activities/structures authorized herein.

11. The permittee understands and agrees that, if future operation by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the USACE, to remove, relocate, or alter the structural work obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration. Subject to USACE approval, the permitted structures and/or work may be reinstalled upon completion of the United States Government action.

12. The United States Government shall not be held liable for any changed conditions resulting from the installation of weirs, dikes, revetment, and other similar structures.

13. The permittee shall comply with all lightings or other conditions required by the United States Coast Guard to mark the permitted structures, including the fleeting area. The United States Coast Guard, Marine Safety Office, can be contacted at 1222 Spruce Street, St. Louis, Missouri 63103-2832 for further information.

14. In-river barge fleeting shall be limited to two (2) locations; The North Fleet shall contain no more than sixty (60) barges, to be located along the right descending bank of the Mississippi River, with the upper portion of the fleet beginning at approximate river mile 139.2. The North Fleet shall typically hold empty cargo barges for cycling into the inland harbor for subsequent cement loading operations or typically hold barges shipped in with secondary materials for offloading within the inland harbor. The North Fleet shall be arranged in a maximum configuration consisting of twelve (12) barges long and five

(5) barges wide, not counting deck barges that may be used to facilitate fleet mooring. At full configuration, the outermost, riverward row of barges, shall not extend greater than 275 feet from the site's Mississippi River low water reference line. At most, two 40-foot-diameter head cells and twelve, 19-foot-diameter breasting supports shall be installed to support North Fleet mooring activities. Head cell and mooring cell locations are depicted in USACE Public Notice P-2259, Sheet 4 of 10. The South Fleet shall be located along the right descending bank of the Mississippi River, starting at approximate river mile 138.4. The South Fleet shall contain no more than twenty-three (23) barges, with a maximum configuration consisting of nine (9) barges long and widths ranging from three (3) barges wide in the upper five (5) rows and two (2) barges wide in the lower four (4) rows, not counting deck barges that may be used to facilitate mooring. At full configuration, the outermost, riverward row of barges, shall not extend greater than 205 feet from the site's low water reference line on the Mississippi River. The southern fleet will typically hold loaded barges preparing for river shipment. At most, one (1) 40-foot-diameter head cell and nine, 19-foot-diameter breasting supports shall be installed to support the South Fleet mooring activities. Head cell and breasting cell locations are depicted in USACE Public Notice P-2259, Sheet 4 of 10. Stern anchoring will be installed if the U.S. Coast Guard and/or the USACE determine that additional fleet stabilization is required. The maximum fleeting capacity for both in-river sites combined is 83 barges. At no time shall there be more than 83 barges, loaded or empty, fled. And each fleet shall not exceed its permitted width and length. Any expansion beyond the permitted configuration may not be accomplished without prior approved permit authority.

15. The permittee shall construct the approximate 300-foot-wide inland harbor entrance along the right descending bank of the Mississippi River, at approximate river mile 138.6 (as shown on USACE public notice P-2259, sheet 4 of 10). The inland harbor, consisting of approximately 47 acres of land and open water, typically shall support a 30-barge fleet for loading and offloading operations. Approximately five (5) permanent deck or work barges shall support these operations.

16. The permittee shall excavate the inland harbor in accordance with best management practices, in addition to following practicable techniques to minimize discharge of disturbed sediment materials into the Mississippi River or other waters of the United States. The permittee shall ensure special operational care is taken during final excavation activities to connect the harbor with the Mississippi River to minimize the discharge of suspended materials.

17. Fleet widths may be restricted by adverse high or low water conditions as deemed necessary by the United States Coast Guard.

18. A towboat of sufficient power shall be kept at the fleeting/harbor facilities on a 24-hour basis while barges are present.

19. Barges of this fleeting facility shall contain the commodities that were indicated by the permittee. The commodities may include cementitious materials, coal, petroleum coke, fly and bottom ash, clay, gypsum, silica and other MDNR and/or EPA permitted fuels and non-hazardous raw materials commonly used at cement manufacturing facilities. Additionally, during construction and subsequent operations, the fleeting and harbor facilities may be utilized as necessary to receive equipment, vehicles, machinery, and other similar items.

20. The USACE shall remain as the immediate point of contact. The USACE shall be allowed to inspect any portion of the project area at irregular intervals to assure that conditions of this permit are in compliance. At the discretion of the USACE, the failure to comply with permit conditions may result in enforcement actions by the USACE. Enforcement actions may include a stop work order or permit revocation.

21. Pursuant to the signed MOA between the permittee, the MDNR-SHPO and the USACE, cultural resources at the project site shall be handled properly under the requirements of the National Historic Preservation Act and state regulations. The permittee shall conduct a Phase III data recovery operation at Site 23SG1, prior to such site being impacted by the project. Data recovery operations shall be conducted in accordance with a plan attached to the MOA. The permittee shall ensure that Phase III operations are carried out by trained archaeologists, who would conduct a field investigation and excavation, in accordance with standard Department of the Interior procedures to collect all significant cultural artifacts and deposits. All recovered material shall be returned to a laboratory where it would be washed, sorted and cataloged. As appropriate, some of the material shall be tested or analyzed using specialized techniques such as radiocarbon dating. A report shall be provided within 12 months following the Phase III investigation to the MDNR-SHPO and the USACE. All recovered material and records shall be permanently curated at the Division of American Archaeology, University of Missouri, Columbia, or approved alternate location.

22. In the event any additional item(s) are encountered that could be historically significant, the permittee shall halt all disturbance activities within the immediate vicinity of the discovery and contact the MDNR-SHPO.

23. The permittee shall abide by all reasonable and prudent measures and terms and conditions, including conservation measures, that were incorporated under the Incidental Take Statement in the U.S. Fish and Wildlife Service's 23 April 2003 Biological Opinion. In addition, the permittee shall notify the USACE of any anticipated in-river dredging, particularly within the authorized fleeting areas, to ensure potential pallid sturgeon effects are coordinated and addressed.

24. The permittee shall maintain the approximate 2,200-acre buffer (as shown on the permittee's submitted project area maps) in its undisturbed state, except for certain beneficial management activities described in the permittee's conservation measures, for the duration of this permit, or, until plant and quarry operations cease. Any subsequent actions in the buffer area may require review of applicable laws in place at that time. The permittee's conservation measures are those incorporated under the Incidental Take Statement in the U.S. Fish and Wildlife Service's 23 April 2003 Biological Opinion, and also include the establishment of a tall grass prairie habitat in the southwest corner of the buffer area.

25. If the permittee's actions are determined by the USACE to be the cause of an adverse effect on any adjacent landowner's water supply, corrective measures shall be required of the permittee. In addition, prior to the permittee's development of the proposed production well, the permittee shall conduct further testing to ensure the production well shall not impact any local resident wells. If the USACE determines the permittee caused impacts to local resident wells, the permittee shall adequately mitigate those impacts, and/or use an alternative water supply. Modifications to the permittee's subsequent site operation may be evaluated by the USACE accordingly.

26. The permittee, under the direction of the USACE, shall investigate the feasibility of relocating select amphibian and reptile species, as described in the permittee's Amphibian and Reptile Relocation Study. In accordance with this requirement, the permittee shall investigate the carrying capacity of proposed habitat for on-site and off-site relocation options, select the best option if relocation is determined

feasible, and supply a detailed pilot relocation plan to the USACE within one year prior to initiation of quarry operations. The USACE shall make the final determination on the feasibility, success and necessity to continue relocation efforts, and will require relocation if determined feasible.

27. Following each phase of progressive quarry operations, the permittee shall reconstruct, to the extent practicable, similar rugged upland topography at lower elevations and replace 3.2 miles of jurisdictional intermittent streams on-site at a 1:1 mitigation ratio, to the extent practicable, using fluvial

geomorphology and state-of-the-art methods and practices, to be further discussed in the required submittal of a detailed mitigation and management plan. Reclaimed areas shall be seeded and planted with native vegetation species, as defined in vegetative and plant community assessments, to re-establish the forest and provide a range of habitats. Small ponds shall be created to provide additional upland aquatic habitat. A lake, with vegetated fringes, shall cover approximately the eastern one-third of the quarry. In addition, before quarry operations impact jurisdictional waters, the permittee shall initiate a portion of the stream mitigation for Isle du Bois Creek's riparian corridor and the Lee Island slough. These actions shall be further discussed in the permittee's submittal of a required detailed mitigation and management plan, to supplement the permittee's existing mitigation plan.

28. The permittee shall conduct wetland mitigation activities by creating or restoring, at minimum, 61.0 acres of wetlands to compensate for project-induced impacts upon approximately 14.0 acres of wetlands (primarily farmed). On southern Lee Island, the permittee's wetland mitigation actions shall create approximately 25.5 acres of new wetlands from non-jurisdictional cultivated fields and restore natural functions within approximately 12.8 acres of routinely disturbed farmed wetlands. The permittee shall create an approximate 3.6-acre vegetated buffer area between the southern Lee Island wetland mitigation site and the inland harbor. Approximately 13.2 acres of forested wetlands on Lee Island shall be preserved to form a contiguous high-quality wetland mitigation complex. The permittee shall perform wetland mitigation along Isle du Bois Creek, including the restoration of 22.8 acres of farmed wetlands to scrub shrub wetlands (ultimately transitioning to forested wetlands), and the preservation of 11.1 acres of emergent wetlands, 7.6 acres of scrub shrub wetlands, and 52.9 acres of forested wetlands. Mitigation work shall begin on southern Lee Island and along Isle du Bois Creek prior to or concurrent with the filling of any wetlands. Wetland mitigation activities consisting of site preparation and seeding in these areas shall be complete within 180 days after filling of any wetlands begins. Other plant materials as prescribed by the detailed wetland mitigation planting plan (e.g., bare root trees and shrubs, willow stakes, container grown plants) shall be installed as soon as possible, depending on commercial availability of the material and the appropriateness of the season. Comprehensive mitigation measures shall be further discussed in the required preparation and submittal of a detailed mitigation and management plan that the USACE will review for acceptance and final approval.

29. The permittee shall perform all mitigation, land reclamation, conservation measures, site preparation, construction/quarry operations, stormwater controls, and buffer management actions in a manner that fulfills the permittee's stated project effects and outcomes, as described in the permittee's submitted/referenced reports and studies. If the permittee's project actions fail to meet the previously stated levels of impact control, the USACE may hold the permittee accountable for such actions by applying potential corrective measures, additional mitigation, issuance of a compliance order, suspension, revocation of the permit, or administrative/judicial penalties if unacceptable impacts or the degree of Holcim's corrective measures are not found acceptable to the USACE.

30. The permittee shall supply a draft detailed mitigation and management plan to the St. Louis District, Regulatory Branch within six (6) months prior to commencing mitigation activities for review and approval of the following activities: wetland creation, restoration, enhancement and preservation; stream channel creation, enhancement and preservation; Lee Island slough enhancement, restoration and preservation; pond and lake creation and preservation; associated riparian corridor plantings (100-foot minimum width total wherever practicable or possible) to support wetland, stream, slough, pond and lake creation, restoration, enhancement and/or preservation activities. The draft detailed mitigation and management plan shall include, but not be limited to, applicable wetland and stream channel construction plans, preservation and maintenance plans, a detailed planting plan, and installation of stream channel dwell zones, core logs and pool/riffle habitat areas. These plans shall consist of drawings containing a plan view at 1-inch equals 100 feet, with 1- or 2-foot contour intervals, coupled with representative cross sectional views, showing pre- and post construction features of the wetland, stream, slough, pond and lake

mitigation areas. Upon submittal of this information and approval of the draft detailed mitigation and management plan, the St. Louis District, Regulatory Branch will prepare a Declaration of Covenants and Restrictions.

31. The permittee agrees to place a perpetual Declaration of Covenants and Restrictions on all wetland, stream, slough, pond and lake mitigation areas to guarantee their preservation for wetland, waterway, aquatic and wildlife resources. Acreage and location of the restricted areas shall be described in a document to be provided by the USACE entitled **DECLARATION OF COVENANTS AND RESTRICTIONS**. A registered land surveyor must prepare a legal description of each mitigation area. A certified copy of the survey must be submitted for inclusion into the Declaration of Covenants and Restrictions. A copy of the signed and notarized Declaration of Covenants and Restrictions and recordation record from the Jefferson and Ste. Genevieve County Recorder of Deeds Office is to be provided to the St. Louis District, Regulatory Branch prior to any project activity in jurisdictional waters of the United States. Upon completion of work in each mitigation area, the permittee shall be authorized to modify the legal description of those restricted areas in the Declaration of Covenants and Restrictions to conform to the as-built field acreage and location, provided such mitigation otherwise complies with the approved mitigation and management plan.

32. The draft detailed mitigation and management plan shall include, but not be limited to addressing the following for USACE review and approval:

- At minimum, a 75% survival rate of all planted vegetation in the created, restored and enhanced wetland, slough, pond, lake and phased stream mitigation areas shall occur after five (5) growing seasons, with dead material replaced annually by the permittee;
- A 100-foot-wide riparian corridor, where practicable and currently void, shall be planted along the 3.2 miles of created streams and along undisturbed portions of the Mississippi River and Isle du Bois Creek. The 100-foot-wide corridor represents the combined planting of a 50-foot-wide wooded corridor on both sides of the waterways, where practicable and void;
- Riparian corridor and wooded wetland tree plantings shall be established on 15 to 20-foot centers, pending variety of selected species and tree size at the time of planting;
- Specific wetland, slough, channel monitoring and management requirements shall be established;
- If hydrology, elevation or selected plant species are indicating mitigation failure after the first two (2) years of establishment, the permittee shall initiate corrective measures;
- Installation of stream structures, where practicable, shall be incorporated into stream mitigation measures – i.e., dwell zones, core logs, pool/riffle habitat areas;
- The permittee shall analyze expected watershed areas prior to each reclamation effort to hydrologically correlate appropriately sized replacement stream channels;
- Stream channel mitigation activities shall be conducted to create a functional stream system that shall establish a contiguous and dominant riparian corridor, pooling and riffle habitat areas, and stabilized banks;
- The dominant vegetation along each created stream channel's riparian corridor shall contain a 75% stand of the tree species to be approved by the USACE;
- The 75% dominant vegetation stand shall be determined by total stem density within the first five (5) years after each mitigation and phased riparian corridor planting. In the event that the contiguous and dominant plant community is not established after the first two (2) years of wetland mitigation or phased stream mitigation activities, then additional physical plantings and/or other manipulations will be required. Vegetation monitoring will occur for a minimum of five (5) years;
- After the first year of establishment of each created stream channel, if the necessary stabilization measures and stream dynamics are not being achieved, approved corrective measures must be designed and implemented by the permittee;
- The permittee shall be responsible to ensure that the vegetation fully establishes itself and that the

stream channel does not erode or cause downstream sedimentation/erosion. Hydrological and bank stabilization monitoring in the mitigation areas shall occur for a minimum of five (5) years after each phase of stream channel mitigation.

33. After the first 8-10 years of quarry operation, the permittee shall perform all quarry related stream mitigation measures in a progressive manner as reclamation proceeds. These measures shall ensure related environmental impacts will be mitigated in an ongoing process as quarry operations proceed. The permittee shall ensure that no more than approximately 200 acres will be quarried at any time. The permittee shall notify the USACE if quarry progression rates are altered from the originally submitted plan. The USACE reserves the right to re-evaluate and/or coordinate proposed quarry progression rate alterations with other federal and state resource agencies.

34. If, at any time, the permittee determines it necessary to cease business/quarry operations prior to the expiration of this permit, the permittee shall perform all remaining reclamation and stream mitigation activities in the impacted quarry areas.

35. If, at any time, the permittee does not comply with the requirements of a USACE approved Wetland and Stream Mitigation Plan, the USACE may issue a compliance order, suspend or revoke the permit, increase mitigation acreage or seek administrative or judicial penalties.

36. To minimize adverse effects on neotropical migratory birds, the permittee shall maintain the approximate 2,200-acre buffer as required by Condition 28, and apply the permittee's conservation measures incorporated under the Incidental Take Statement in the U.S. Fish and Wildlife Service's 23 April 2003 Biological Opinion, including the establishment of a tall grass prairie habitat on the southwest corner of the buffer area.

37. The permittee shall comply with the USACE established permit review schedule. The permit reviews shall consist of on-site meetings between the USACE, interested agencies and the permittee to evaluate permit status and compliance. The permit review timetable shall be based on reasonable intervals related to the anticipated progress of the project. A formal review shall be conducted at the end of five years, 10 years, and every 10 or 20 years thereafter. At the end of the first five years, the harbor and fleeting area, as well as the wetland mitigation construction and planting work shall be reviewed. At the end of 10 years, the progress of the quarry, commencement of reclamation activities, and effectiveness of wetland mitigation shall be reviewed. Thereafter, quarry progress, reclamation, and stream mitigation shall be reviewed at the end of each 10-year or 20-year increment of the quarrying, for the life of the authorized project.

38. The permittee shall contact the USACE, Regulatory Branch, at the initiation of construction in jurisdictional waters, and at the end of all such construction.

39. The USACE may, either on its own, at the request of the permittee, or at the request of a third party, reevaluate the circumstances and conditions of the permit at any time, and initiate action to modify, suspend, or revoke the permit/conditions as determined necessary by USACE considerations of the public interest.