



**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

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March 23, 2023

Colonel Travis J. Rayfield  
Kansas City District  
U.S. Army Corps of Engineers  
635 Federal Building  
601 East 12<sup>th</sup> Street  
Kansas City, MO 64106-2824

RE: GP-41/NWK-2007-02078/CEK004650, Statewide

Dear Colonel Travis J. Rayfield:

The Missouri Department of Natural Resources' Water Protection Program has reviewed your request for Clean Water Act (CWA) Section 401 Water Quality Certification (WQC) to accompany the U.S. Army Corps of Engineers' (USACE) Permit for NWK-2007-02078 in which the USACE Kansas City District (NWK-2007-02078), St. Louis District (MVS-2022-00007), Rock Island District, Little Rock District, and Memphis District (MVM-2007-00588) are proposing to reissue Regional General Permit 41 (GP-41) for flood recovery activities in waters of the United States within the state of Missouri and Kansas. This permit is currently referred to as Region Permit 35 Missouri in the USACE's Rock Island District, but is anticipated to be changed to GP-41 for this reissuance.

GP-41 authorizes the discharges of dredged or fill material in conjunction with the permanent protection and/or repair of flood damaged structures, damaged land areas, and/or damaged fills in waters of the United States throughout Missouri that are declared flood disaster areas by the Governor of Missouri and/or the President of the United States. Project proponents include the public and local, state, and federal agencies to repair damages to federal, state, and private properties.

This WQC is being issued under Section 401 of Public Law 95-217, the CWA of 1977 and subsequent revisions. Pursuant to Section 121.7(d), this office certifies the proposed project will comply with Missouri water quality requirements, provided the following conditions are met:

1. Programmatic WQC is denied for any project on a water that is listed for a sediment-related impairment, aquatic habitat alteration, channelization, or unknown impairment as listed in the most current Water Quality Report (Section 305(b) Report) at <https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/impaired-waters>. Although intended to result in minimal impacts, GP-41 authorizations in these waters may contribute to impairments and result in noncompliance with Missouri's



general water quality criteria requiring waters be free from physical, chemical, and hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)] or exceedances of Missouri Water Quality Standards specific criteria [10 CSR 20-7.031(5)]. Since WQC conditions cannot be established to address all concerns from the variety of impairments and activities authorized by GP-41, individual review for WQC will be required. Requirements for individual WQC will be determined on a case-by-case basis based on the specific impairments, and additional testing, design, disposal, or Best Management Practice (BMP) considerations may be required.

To determine the location of waters noted above, the Department's geospatial data is available upon request, and all published data is available on the Missouri Spatial Data Information Services website at <https://msdis.missouri.edu/>. Additional information to identify the project location, including stream reaches with listed impairments or special water designations, may be viewed online at <https://modnr.maps.arcgis.com/apps/webappviewer/index.html?id=87ebef4af15d438ca658ce0b2bbc862e> or obtained from the Department's Water Protection Program at 573-522-4502.

2. Programmatic WQC is denied for any project on a water designated as an outstanding state or national resource water as found in Tables D and E of Missouri Water Quality Standards [10 CSR 20-7.031(1)(T) and (U)]. These waters are provided a Tier 3 level of protection in the Missouri antidegradation policy and are subject to no lowering of water quality [10 CSR 20-7.031(3)(C)]. In order to comply with the Missouri Antidegradation Implementation Procedure, any discharge to an outstanding state or national resource water requires an individual WQC to ensure that impacts will be temporary and the public can participate in the decision [10 CSR 20-7.031(3)(D)].

To determine the location of waters noted above, the Department's geospatial data is available upon request, and all published data is available on the Missouri Spatial Data Information Services website at <https://msdis.missouri.edu/>. Additional information to identify the project location, including stream reaches with listed impairments or special water designations, may be viewed online at <https://modnr.maps.arcgis.com/apps/webappviewer/index.html?id=87ebef4af15d438ca658ce0b2bbc862e> or obtained from the Department's Water Protection Program at 573-522-4502.

3. Missouri Water Quality Standards antidegradation requirements dictate all appropriate and reasonable BMPs related to erosion and sediment control, project stabilization, and prevention of water quality degradation are applied and maintained [10 CSR 20-7.031(3)(D)]; for example, preserving vegetation, streambank stability, and basic drainage. Special care shall be taken to select BMPs that protect and maintain the existing water quality. Appropriate BMPs shall be selected to provide effective erosion and sediment controls to minimize the discharge of pollutants. BMPs shall be properly installed prior to conducting authorized activities and maintained, repaired, and/or replaced as needed during all phases of the project to limit the

amount of discharge of water contaminants to waters of the state. The project shall not involve more than normal stormwater or incidental loading of sediment caused by project activities so as to comply with Missouri's general water quality criteria [10 CSR 20-7.031(4)].

4. After avoidance and minimization for the proposed project, all unavoidable, adverse impacts shall be mitigated appropriately based on type and extent of impacts to ensure compliance with the Missouri Water Quality Standards antidegradation requirement that waters of the state shall be maintained and protected [10 CSR 20-7.031(3)] and Missouri Clean Water Law, which provides the Department authority to adopt remedial measures to prevent, control, or abate pollution [Section 644.026.1(9), RSMo] and approval authority for compensatory mitigation used in connection with any WQC [Section 644.026.1(26), RSMo]. Unless the Department agrees to an alternative, mitigation for loss of aquatic resources shall be in conformance with compensatory mitigation guidance currently approved for use in Missouri, including guidance provided by the Missouri Stream Mitigation Method, the Missouri Wetland Mitigation Method, and/or Missouri guidance regarding compensatory wetland mitigation ratios. Compensatory mitigation shall be within the state of Missouri. Mitigation guidance documents can be located online at [www.nwk.usace.army.mil/Missions/RegulatoryBranch/StateofMissouri](http://www.nwk.usace.army.mil/Missions/RegulatoryBranch/StateofMissouri).
5. Channelization of streams is not allowed under this WQC. Channelization includes but is not limited to reducing the length of the channel, widening the channel for increased water storage or flow, and/or construction of hard structures which concentrate flow. Unless necessary for a stream crossing associated with infrastructure projects and contained within an associated right-of-way, bank stabilization activities only along one bank of a stream are permitted, including, but not limited to, bank sloping and riprapping. The redirection of flow by excavation of the opposite bank or a streambed is considered a channel modification and is prohibited. This will ensure compliance with the Missouri Water Quality Standards general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
6. Unless returning to pre-flood conditions, a stream channel shall not be relocated, straightened, cut-off, shortened, widened, or otherwise modified. A stream channel is defined as the area between the high banks of the creek where water is flowing, or in the case of a dry stream where water would flow after a rain event. This will ensure compliance with the Missouri Water Quality Standards general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
7. A stream returned to a pre-flood location as part of an authorized project shall incorporate natural channel design features relative to a morphologically stable and appropriate stream channel [dimension (cross-section), pattern (sinuosity), profile (slope)] and incorporate measures (grade control, in-stream habitat, riparian plantings, etc.). Relocations resulting in a reduced channel length generally require additional mitigation to replace net losses of stream channel. This will ensure compliance with the Missouri antidegradation requirement that

waters of the state shall be maintained and protected [10 CSR 20-7.031(3)] under Missouri Clean Water Law, which provides the Department authority to adopt remedial measures to prevent, control, or abate pollution [Section 644.026.1(9), RSMo] and approval authority for compensatory mitigation used in connection with any WQC [Section 644.026.1(26), RSMo].

8. A stream's pattern, profile, and dimension, including but not limited to sinuosity, slope, and channel width, shall be maintained as much as practicable. Streambed gradient shall not be adversely impacted during project construction. No project shall accelerate bed or bank erosion. This will ensure compliance with the Missouri Water Quality Standards general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
9. Only clean, nonpolluting fill shall be used. The following materials are not suitable where contact with water is expected and shall not be used due to their potential to cause violations of the general criteria of Missouri's Water Quality Standards [10 CSR 20-7.031(4)]:
  - a. Earthen fill, gravel, and broken concrete where the material does not meet the Suitable Material specifications stated in the "Missouri Nationwide Permit Regional Conditions" (<https://usace.contentdm.oclc.org/digital/collection/p16021coll11/id/2662/>) in locations where erosive flows are expected to occur on a regular basis, such as streambanks and/or lake shorelines.
  - b. Asphalt.
  - c. Concrete with exposed rebar.
  - d. Tires, vehicles or vehicle bodies, and construction or demolition debris are solid waste and are excluded from placement in the waters of the state. Properly sized, broken concrete without exposed rebar is allowed.
  - e. Liquid concrete, including grouted riprap, if not placed in forms as part of an engineered structure.
  - f. Any material that would result in violation of Missouri Water Quality Standards general criteria [10 CSR 20-7.031(4)] or specific criteria [10 CSR 20-7.031(5)].
10. Waste concrete or concrete rinsate shall be disposed of in a manner that does not result in any discharge to the jurisdictional water ways. This will ensure compliance with the Missouri Water Quality Standards general criteria requiring waters be free from unsightly bottom deposits [10 CSR 20-7.031(4)(A)]; substances resulting in toxicity to human, animal, or aquatic life [10 CSR 20-7.031(4)(D)]; and physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
11. Culverts shall be sized and placed appropriately and shall not impact aquatic habitat or create an impediment to the passage of aquatic organisms and/or sediment. Culverts shall be constructed so that it does not cause future scouring. This will ensure compliance with the Missouri Water Quality Standards general criterion requiring waters to be free from physical or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)]. "General Guidelines for Stream Crossings" can be found in the "2017

Nationwide Permit Regional Conditions for Missouri” and at <https://www.nwk.usace.army.mil/Portals/29/docs/regulatory/NWP/2021/MO/MORC1Streams.pdf>.

12. Clearing of vegetation and trees shall be the minimum necessary to accomplish the activity except for the removal of invasive or noxious species and placement of ecologically beneficial practices. This will ensure compliance with the Missouri antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)].
13. All efforts shall be made to minimize exposure of unprotected soils. To the best of your or your contractor’s ability, project activity shall be conducted at times of little or no rainfall to limit the amount of overland flow as well as sediment disturbance and transport caused by heavy equipment. This will ensure compliance with the Missouri antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)] and general criteria [10 CSR 20-7.031(4)].
14. Disturbed riparian area, banks, etc., shall be restored to a stable condition to protect water quality as soon as possible. Seeding, mulching, and needed fertilization should be initiated immediately and completed within three days of final contouring. To ensure erosion of soil and deposition of sediment in waters of the state are not occurring from this project, on-site inspections of these areas should be conducted as necessary until successful revegetation and stabilization have been achieved. This will ensure compliance with the Missouri antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)].
15. Any stockpiled material shall be managed with appropriate BMPs or removed from the site and placed beyond the high bank on a non-wetland site. This will ensure compliance with the Missouri Water Quality Standards antidegradation requirement that waters of the state shall be maintained and protected [10 CSR 20-7.031(3)] and general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
16. No new or expanded wet stormwater retention basins or similar impoundment structures may be constructed unless they are located off-channel. In-channel dry stormwater detention basins are allowable if the stream channel is either temporarily or not adversely affected by the basin. This will ensure compliance with the Missouri Water Quality Standards general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
17. The quality of downstream water supplies shall not be adversely affected by this project. Any water supply intakes or other activities which may be affected by suspended solids and turbidity increases caused by work in the watercourse shall be investigated and sufficient notice given to the owners to allow preparation for any changes in water quality. The Department’s Water Protection Program’s Public Drinking Water Branch may be contacted by

phone at 573-526-0269 for the presence of drinking water supply intakes. This condition will ensure compliance with Missouri Safe Drinking Water Law [Section 640.100.1, RSMo] and Missouri's general water quality criteria [10 CSR 20-7.031(4)(A)-(H)].

18. Sand, gravel, or other dredged materials shall not be stockpiled within the channel, placed against the banks, or otherwise disposed of in a manner that will redirect erosive forces within the channel or threaten the stability of the channel or the bank lines. This will ensure compliance with the Missouri Water Quality Standards antidegradation requirement that waters of the state shall be maintained and protected [10 CSR 20-7.031(3)] and general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
19. Sand or gravel shall not be excavated below water elevation at the time of removal, except if the stream is dry at the time of excavation, excavation shall not occur deeper than the lowest undisturbed elevation of the stream bottom adjacent to the site. This will ensure compliance with the Missouri Water Quality Standards general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
20. Care shall be taken to keep machinery out of the water way as much as possible. If work in the water way is unavoidable, it shall be performed during low-flow conditions and in a way that minimizes the duration and amount of any disturbance to banks, substrate, and vegetation to prevent increases in turbidity. This will ensure compliance with the Missouri Water Quality Standards antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)] and general criteria [10 CSR 20-7.031(4)].
21. Fuel, oil and other petroleum products, equipment, construction materials, and any solid waste shall not be stored below the ordinary high water mark at any time or in the adjacent flood-prone areas beyond normal working hours. All precautions shall be taken to avoid the release of wastes or fuel to streams and other adjacent waters as a result of this operation. This will ensure compliance with the Missouri Water Quality Standards antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)] and Missouri Water Quality Standards general criteria requiring waters be free from substances preventing beneficial uses [10 CSR 20-7.031(3)(A)]; substances causing unsightly color or turbidity [10 CSR 20-7.031(4)(C)]; and physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
22. Petroleum products spilled into any water or on the banks where the material may enter waters of the state shall be cleaned up immediately and disposed of properly. Any such spills of petroleum shall be reported as soon as possible, but no later than 24 hours after discovery to the Department's Environmental Emergency Response phone line at 573-634-2436 or website at <http://dnr.mo.gov/env/esp/esp-eer.htm>. This will ensure compliance with Missouri Environmental Improvement Authority [Section 260.015, RSMo] to provide for the conservation of state water resources by the prevention of pollution and proper methods of

disposal and Missouri Water Quality Standards general criteria requiring waters be free from substances that prevent maintenance of beneficial uses; cause unsightly color, turbidity, or toxicity; and/or impair the natural biological community [10 CSR 20-7.031(4)(A), -(B) -(H)].

Land disturbance activities disturbing one or more acres of total area for the entire project or less than one acre for sites that are part of a common promotional plan of development or sale may require a stormwater permit. This will ensure compliance with CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Permit requirements under Missouri Clean Water Law [Section 644.026.1, RSMo]. Instructions on how to apply for and receive the online land disturbance permit are located at <https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting>; for technical assistance contact the ePermitting hotline at 573-526-2082 or toll free at 855-789-3889. Questions regarding permit requirements may be directed to the Department's Land Disturbance Permit Coordinator at 573-526-1139.

Many municipalities and some counties are covered under Municipal Separate Storm Sewer System Permit (MS4) NPDES permits with measures to control and possibly treat stormwater. The stormwater requirements of the Stormwater Management Plan and any related ordinances are not replaced or superseded by acquisition of a WQC. Prior to conducting any work, project proponents should consult with local authorities to determine any local requirements. This ensures compliance with CWA Section 402 National Pollutant Discharge Elimination System Permit requirements under Missouri Clean Water Law [Section 644.026.1, RSMo].

Acquisition of a WQC does not replace or supersede the requirements for other permits, including CWA Section 402 National Pollutant Discharge Elimination System Permits required under Missouri Clean Water Law [Section 644.026.1, RSMo]. Permits or any other requirements should remain in effect. If the activity includes piling dredged material on land, the applicant may need a general permit for return water and stormwater from the dredged material. Information regarding permit requirements and applications may be directed to the Department's Operating Permits Section by phone at 573-522-4502 (if in Central Field Operations area), Northeast Regional Office by phone at 660-385-8000, Kansas City Regional Office by phone at 816-251-0700, St. Louis Regional Office by phone at 314-416-2960, Southwest Regional Office by phone at 417-891-4300, or Southeast Regional Office by phone at 573-840-9750. A map of regional offices can be found at <https://dnr.mo.gov/about-us/division-environmental-quality/regional-office>.

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250, RSMo. To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Contact information for the AHC is: Administrative Hearing Commission, United States Post Office Building, Third Floor, 131 West High Street, P.O. Box 1557, Jefferson City, MO 65102; phone: 573-751-2422; fax: 573-751-5018; and website: <https://ahc.mo.gov>.

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This WQC is part of the USACE's permit. Water Quality Standards must be met during any operations authorized. If you have any questions, please contact Billy Hackett by mail: Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176; phone: 573-522-1131; and email: [billy.hackett@dnr.mo.gov](mailto:billy.hackett@dnr.mo.gov). Thank you for working with the Department to protect our aquatic resources.

Sincerely,

WATER POLLUTION CONTROL BRANCH



John Hoke  
Chief

JH:bhp

- c: Joe Bowdish, Northeast Regional Office
- Dustin Hampton, Southeast Regional Office
- Olivia Jackson, Kansas City Regional Office
- James C. Kelley, Jr., U.S. Army Corps of Engineers, Rock Island District
- Jason Kirkman, Southeast Regional Office
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- Robert D. McDermott, U.S. Army Corps of Engineers, Memphis District
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- David P. Meyer, U.S. Army Corps of Engineers, St. Louis District
- James Reenan, U.S. Army Corps of Engineers, Kansas City District
- David M. Rupe, U.S. Army Corps of Engineers, Little Rock District
- Terrie Williams, Kansas City Regional Office
- Randall Willoughby, Southwest Regional Office