

# Missouri Department of Transportation Job Description

**Job Title:** Intermediate Materials Inspector

**Title Code:** R05771

**Salary Grade:** 8

**Exemption Status:** Non-Exempt

**Supervisory Responsibilities:** Lead Worker

**District/Division:** District Offices - Materials

**Effective Date:** 05-01-2025

**Replaces (Effective Date):** 07-01-2022

## **General Summary**

The intermediate materials inspector performs inspection, sampling, and testing of materials used in state highway construction and maintenance to ensure that materials supplied by contractors and producers meet standards and comply with specifications. Responsibilities are performed under moderate supervision.

## **Minimum/Required Qualifications**

- Bachelor's degree in engineering from an ABET-accredited college or university curriculum.
- Certification to operate nuclear gauges may be required.
- Two years of experience in highway or transportation engineering.
- OSHA 10-Hour Certification required within 90 days.
- Successful completion of a work simulation examination and a medical-physical examination.

## **Special Working Conditions/Job Characteristics**

- Job requires moderate physical activity.
- Job requires exposure to physical hazards, health and safety risks, and/or adverse or otherwise undesirable characteristics in the environment.
- Job may require operation of vehicles to plow snow and spread ice control materials.
- A postsecondary degree is the best measure to ensure candidates possess required engineering knowledge, including in applied physics and mathematics, drafting, engineering processes and procedures, project management, industry ethical standards, and analyzing and modeling data.

## **Examples of Work**

1. Samples and tests general construction materials such as steel, pipe, paint, asphalt, signal and lighting materials, guard rail, bridge bearings, cement, and prestressed and precast concrete; determines if materials conform to specifications and approves/rejects material for intended use.
2. Performs or provides technical supervision of sampling and testing of all types of aggregates and bases for quality and gradation; determines if materials conform to specifications and approves/rejects materials for intended use.
3. Performs inspections or provides technical supervision of inspections at bituminous plants and determines if the material produced conforms to specifications; approves or rejects the use of the material.
4. Reviews, processes, and reports contractor's proposed concrete and asphalt mix designs and quality control plans by checking computations and adherence to department specifications.
5. Calibrates portland cement concrete and bituminous mix equipment.
6. Performs inspections of prestressed or precast concrete and special sampling and testing of materials required on federal aid projects.
7. Reviews or supervises the review of manufacturer's and supplier's quality control procedures and the sampling of products to ensure compliance with the department's pre-acceptance list requirements.
8. Sets up contracts in site manager; prepares records and reports of materials inspected and maintains records of test results, production records and reports of general materials and aggregates approved for each project or for maintenance use; records summaries of materials used on each project.
9. Performs lead worker responsibilities, which may include providing general instruction, assigning and reviewing work, coaching and training, providing guidance and instruction in the proper and most efficient methods of accomplishing tasks, and providing input to the direct supervisor on staffing decisions and performance management.
10. Performs other responsibilities as required or assigned.