



Resource Typing Definition for the National Qualification System
Emergency Management

SCIENCE AND TECHNOLOGY ADVISOR

RESOURCE CATEGORY	Emergency Management
RESOURCE KIND	Personnel
OVERALL FUNCTION	The Science and Technology Advisor provides advice and informs decision-making for all science and technology-related incident activities.
COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"> 1. This position can be ordered as a single resource 2. Discuss logistics for this position, such as security, lodging, transportation, and meals, prior to deployment 3. The position typically works 12 hours per shift, is self-sustainable for 72 hours, and is deployable up to 14 days 4. Requestor may specify any additional qualifications necessary based on incident complexity and needs

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

COMPONENT	SINGLE TYPE	NOTES
DESCRIPTION	<p>The Science and Technology Advisor:</p> <ol style="list-style-type: none"> 1. Monitors incident operations and provides scientific and technical advice on matters relating to the integration of science and technology into incident response efforts 2. Enhances safety, assists in incident action planning, and informs decision-making for all science and technology-related incident activities 3. Consults with subject matter experts in the scientific and technological communities to gather information, serve as a liaison, and make recommendations to the incident command, Unified Command, or center director 4. Maintains an extensive network throughout the scientific community and draws from this resource as necessary to help inform incident operations 5. Ensures proper information management of scientific data acquired during incident operations and field testing 6. Disseminates technical information and training to all response personnel who may need special knowledge relating to incident planning and response activities 	Not Specified
EDUCATION	Bachelor of science degree, with knowledge across one or more fields of study, including chemistry, biology, physics, health and safety, engineering, and natural or environmental science	Not Specified



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COMPONENT	SINGLE TYPE	NOTES
TRAINING	Completion of the following: <ol style="list-style-type: none"> 1. IS-100: Introduction to the Incident Command System, ICS-100 2. IS-200: Incident Command System for Single Resources and Initial Action Incidents 3. IS-700: National Incident Management System, An Introduction 4. G0191: ICS/EOC Interface 	Not Specified
EXPERIENCE	<ol style="list-style-type: none"> 1. Successful completion of the National Qualification System (NQS) Position Task Book (PTB) for the National Incident Management System (NIMS) Science and Technology Advisor, or equivalent Authority Having Jurisdiction (AHJ) documentation 2. Experience in a science advisory role 	Not Specified
PHYSICAL / MEDICAL FITNESS	Performs duties under light circumstances characterized by working consecutive 12-hour days under physical and emotional stress for sustained periods of time	Not Specified
CURRENCY	Functions in this position during an operational incident, exercise, drill, or simulation at least once every five years	Not Specified
PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS	Not Specified	Not Specified



NOTES

Nationally typed resources represent the minimum criteria for the associated component and capability.

REFERENCES

1. FEMA, Position Task Book for Science and Technology Advisor
2. FEMA, National Qualification System Guide
3. FEMA, National Incident Management System (NIMS), pending publication
4. FEMA, National Response Framework, June 2016
5. FEMA, Emergency Responder Field Operations Guide (ER-FOG), October 2010
6. National Fire Protection Association (NFPA) 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2013
7. National Oceanic and Atmospheric Administration (NOAA), Scientific Support Coordinator Training Guidebook, September 2013
8. National Wildfire Coordinating Group (NWCG), National Incident Management System Wildland Fire Qualification System Guide, PMS 310-1, Physical Fitness Levels, October 2016