

Certification of Hydrogeologists

08/06/2009

Position Paper

Subjects

Certification of hydrogeologists, groundwater resource assessment, groundwater, monitoring

Audience

Governmental officials, managers of hazardous waste facilities, managers of manufacturing facilities

Background

“The adequacy of an owner/operator's groundwater monitoring program hinges, in large part, on the quality and quantity of the hydrogeologic data the owner/operator used in designing the program.” So states the first sentence of U.S. EPA's RCRA Ground-Water Monitoring Technical Enforcement Guidance Document.

The Office of Technology Assessment in the 1984 report, "Protecting the Nation's Groundwater from Contamination," listed the following as factors that tended to increase the uncertainty in investigations of groundwater contamination:

- Complex hydrogeologic environments
- Lack of historic information about sources of contamination
- Substances that do not move with groundwater
- Changing patterns of groundwater use
- Inexperienced or untrained individuals designing investigations and collecting and analyzing hydrogeologic information.

Currently, several national organizations offer certification programs for professional geologists, hydrologists, and hydrogeologists. Sixteen states require some form of certification or registration for individuals conducting geologic investigations in their states. Additionally, for decades there has been a well-organized national program for licensing professional engineers.

Issue

Are current efforts adequate to assure a minimum level of knowledge and expertise for those performing hydrogeologic investigations?

Position

The National Ground Water Association supports recognition, through certification or some other means, of the unique qualifications necessary to perform hydrogeologic investigations.

Some of the licensing and certification programs mentioned in the background section are simply not designed to be selective enough to sort out those professionals qualified to conduct groundwater investigations from those who are not. Reliance on professional engineers or individuals certified in an allied field without a determination as to their knowledge of groundwater science is not a justified position.

Our ability to generate adequate groundwater data has a direct correlation to our ability to make sound decisions regarding groundwater protection and remediation. Therefore, measures that can be taken to assure that groundwater data is of the best quality should be promoted.

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References

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Dates

Originally adopted by the NGWA Board of Directors April 22, 1988, NGWA issue briefs are updated as needed to reflect changes in information, as noted here: technical amendments made August 7, 1991 and February 1992; brief reformatted August 2009.

The National Ground Water Association is a not-for-profit professional society and trade association for the groundwater industry. Our 14,000 members from all 50 states include some of the country's leading public and private sector groundwater scientists, engineers, water well contractors, manufacturers, and suppliers of groundwater-related products and services. The Association's vision is to be the leading groundwater association that advocates the responsible development, management, and use of water.