

**SEG Position Statements Concerning Public Outreach and Governmental Policies
(adopted by SEG Council on 3 November 2003)**

PROCESS FOR ADOPTION OF POSITION STATEMENTS

The Council shall use the following process for the adoption of position statements concerning public outreach and governmental policies.

Any Council member may propose a position statement that represents a policy of the Society of Economic Geologists. The form of the proposal will be a motion, duly seconded by another Council member, to adopt the position statement itself. In addition, but not part of the motion, the written proposal should include sufficient justification to explain why the statement is needed and how it fits the mission of SEG, and proposed methods for SEG to implement the position statement. The wording of the justification and implementation plan may be changed by the Executive Director or Executive Committee, without formal approval by the Council.

Unless otherwise indicated, each position statement will remain in force for three years from the date of adoption. At that time, the position statement will lapse, unless the Council agrees to readopt it, with or without modifications.

Position statements should be adopted by general consensus, or, in case of differences in opinion, by a super majority. Council may choose to delay voting and open discussion of what it believes may be controversial position statements to comments from the membership through e-mail solicitation or an article in the *SEG Newsletter*.

If the vote on a proposed position statement is taken at a regular meeting of Council, the motion must be approved by at least a $\frac{3}{4}$ majority vote of the Council members (15 of 19 voting members on issues requiring a $\frac{3}{4}$ vote).

If the vote is taken electronically, there must be at least two weeks time allocated for discussion via e-mail, all Council members must vote (either for, against, or abstain), and the policy or position statement must be approved by at least $\frac{3}{4}$ of the Council members (15 of 19 voting members on issues requiring a $\frac{3}{4}$ vote).

POSITION STATEMENT ON SUPPORT FOR COLLECTION AND PRESERVATION OF GEOLOGICAL INFORMATION (adopted unanimously by SEG Council on 3 November 2003): The Society of Economic Geologists supports the collection of geological information by the private sector, government, and academia and the preservation of geological information by museums, universities, and government-supported agencies.

JUSTIFICATION: Geologic maps, samples collected from key locations, and related data and information about the four-dimensional geologic framework of the Earth are critical to exploration and responsible development of mineral resources, key components of SEG's mission. Because the data and information have many broader applications in such areas as ensuring adequate supplies of energy and water, protecting the environment, and reducing risks from natural hazards, government has the leading role in funding the collection and preservation of geologic information at regional scales (including geologic maps generally at 1:10,000 and smaller scales). The private sector typically has the lead in project-specific exploration and development (generally at scales of 1:10,000 and larger).

IMPLEMENTATION PLAN: As needed, the SEG will write letters of support for funding of government programs that focus on the collection and preservation of geological information. These may include federal, state, and provincial geological surveys and university-based programs that receive funding from governments. As SEG members become aware of funding concerns for these government programs, they will alert the SEG Executive Director and President. In 2003, the SEG President wrote such letters in support of funding for the Colombian, Portuguese, and U.S. geological surveys. The position statement and justification will also be posted on the SEG website for the membership to use as reference in letters that individual members may choose to write in support of government programs.

POSITION STATEMENT ON THE NEED FOR EDUCATION ABOUT GEOLOGY AND MINERAL RESOURCES IN PUBLIC EDUCATION (adopted unanimously by SEG Council on 3 November 2003): The Society of Economic Geologists supports the inclusion of the science of geology and the importance of mineral resources to society in public education.

JUSTIFICATION: The science of geology is not universally taught in primary (generally ages 5 to 12) and secondary (generally ages 12 to 19) schools. As part of its mission, SEG supports the mineral-resource and related environmental requirements of society and the growth and application of the science of economic geology. A public that is educated on matters of geology and mineral resources will be better prepared to make decisions regarding the development of mineral resources than a public that is ignorant of geological processes and related aspects of the distribution of minerals resources and how they impact the environment. Some countries and local jurisdictions have developed standards and curricula for primary and secondary education that include aspects of geology and mineral resources.

IMPLEMENTATION PLAN: The position statement will also be posted on the SEG website for the membership to use as reference in letters that individual members may choose to write in support of adoption of science curricula in schools. Much work has been done by other organizations in this arena. For example, in the USA, the National Academy of Sciences has recommended science education standards that include principles of geology and appreciation for mineral resources, and several organizations, including the Mineral Information Institute and the Nevada Mining Association, have developed curricular materials for use in primary and secondary schools. The SEG website will show links to efforts throughout the world to promote the inclusion of geology and the importance of mineral resources in society in school curricula. The SEG Executive Committee will charge an ad hoc committee on education to identify appropriate Web links for the SEG website.

POSITION STATEMENT ON THE NEED FOR EARTH SCIENCE EDUCATION AT THE UNIVERSITY LEVEL, INCLUDING THE NEED FOR PROGRAMS IN ECONOMIC GEOLOGY (adopted unanimously by SEG Council on 3 November 2003): The Society of Economic Geologists supports the inclusion of Earth science education at all universities and the need for programs in economic geology at a sufficient number of universities to meet the demands for professionals in the field.

JUSTIFICATION: The Earth sciences contribute significantly to the base of knowledge and provide unique perspectives on scientific investigation (e.g., appreciation of long timeframes, wide range of rates of geological processes, multiple working hypotheses of how the Earth functions). Major societal issues, such as global climate change and sustainable development, are being addressed through multidisciplinary efforts involving natural and social scientists from many fields. Therefore, the Earth sciences should be a key component, along with physical sciences (physics, chemistry, astronomy) and biological sciences, of the natural sciences in all universities that strive for liberal educations of their students. Specialized training in economic geology, with career paths in industry, research, regulatory oversight, and teaching, is needed for thousands of professionals working throughout the world. SEG has a membership slightly less than 4,000, and we estimate that the total population of practicing economic geologists worldwide is in the range of 40,000 to 100,000. With an average career length of 40 years, this translates to an annual demand for 1,000 to 2,500 graduating economic geologists. Such a demand requires a substantial number of economic geology programs at universities worldwide. SEG's mission includes support of the professional and scientific needs of its members and for research on mineral resources and Earth and other sciences in general.

IMPLEMENTATION PLAN: The position statement will also be posted on the SEG website for the membership to use as reference in letters that individual members may choose to write in support of university programs. As needed, the SEG will write letters of support for Earth science and economic geology programs at universities throughout the world. When SEG members become aware of funding concerns for these programs, they will alert the SEG Executive Director and President.