SPECIAL NOTICE: WEB PAPER

The IMA Commission on New Minerals and Mineral Names: Procedures and guidelines on mineral nomenclature, 1998

ERNEST H. NICKEL^{1,*} AND JOEL D. GRICE^{2,†}

¹Division of Exploration and Mining, CSIRO, Wembley, W.A. 6014, Australia ²Mineral Sciences Division, Canadian Museum of Nature, P.O. Box 3443A, Station "D", Ottawa KIP 6P4, Canada

ABSTRACT

The Commission on New Minerals and Mineral Names (CNMMN) of the International Mineralogical Association (IMA) was established in 1959 for the purpose of controlling the introduction of new minerals and mineral names, and of rationalizing mineral nomenclature; thirty countries now have representatives on the CNMMN. This paper is a revised update of the procedures employed by the CNMMN and of general guidelines for mineral nomenclature.

New minerals and mineral names must be approved by the CNMMN before publication. The main criteria for establishing a new mineral species are chemical composition and structural crystallography, but data on physical and optical properties should also be provided. The type locality should be specified, and a type specimen should be deposited as permanent reference material in at least one major museum or nationally recognized mineral collection.

Factors to be taken into consideration in the establishment of a new mineral species include the possibility of human or other biological involvement in the creation of the substance, degree of crystal-linity, stability, polymorphic or polytypic relationships, size and chemical variation.

Guidelines are given to assist in choosing a suitable name for a new mineral, and special consideration is given to the nomenclature of rare-earth minerals, polymorphs, polytypes, interstratifications, homologous series, modulated structures, and solid-solution series; the use of prefixes, adjectival modifiers and extended Levinson suffixes is also considered.

Changes to existing mineral nomenclature, including the redefinition or discreditation of existing mineral species, the renaming of minerals, or the revalidation of discredited or obsolete mineral names, must also be approved by the CNMMN before publication.

Special subcommittees have been set up to make recommendations on large and complex mineral groups. Reports by subcommittees on pyrochlore, PGE minerals, pyroxenes, amphiboles, zeolites and micas have been published or are currently in press.

Also on the web site is a list of current CNMMN members is given as Appendix 1, and a list of nomenclature changes approved in the 1987–1998 period is given as Appendix 2.

The complete report is available on the *American Mineralogist* web site (http://www.minsocam.org/AmMin/ammin.html). Click on Special Features for the listing of IMA reports.