Classification Appeal Decision
Under section 5112 of title 5, United States Code

Appellant: [Name of appellant]

Agency classification: Chemist
GS-1320-11

Organization: [Appellant’s organization/work location]
Department of the Navy

OPM decision: Chemist
GS-1320-12

OPM decision number: C-1320-12-03

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Kevin E. Mahoney
Acting Deputy Associate Director
Center for Merit System Accountability

June 29, 2007

Date
As provided in section 511.612 of title 5, Code of Federal Regulations, this decision constitutes a certificate that is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the Government. The agency is responsible for reviewing its classification decisions for identical, similar, or related positions to ensure consistency with this decision. There is no right of further appeal. This decision is subject to discretionary review only under conditions and time limits specified in the Introduction to the Position Classification Standards, appendix 4, section G (address provided in appendix 4, section H).

Since this decision changes the classification of the appealed position, it is to be effective no later than the beginning of the fourth pay period after the date of this decision (5 CFR 511.702). The servicing human resources office must submit a compliance report containing the corrected position description and a Standard Form 50 showing the personnel action taken. The report must be submitted 30 days from the effective date of the personnel action to the OPM office that accepted the appeal.

Decision sent to:

[Appellant’s mailing address]

[Address of appellant’s servicing human resources office]
Department of the Navy

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Introduction

On November 30, 2006, the San Francisco Field Services Group of the U.S. Office of Personnel Management (OPM) accepted a classification appeal from [name of appellant]. On January 24, 2007, we received the agency’s complete administrative report. The appellant’s position is currently classified as Chemist, GS-1320-11. However, he believes it should be graded at the GS-12 level. The appellant works at the [appellant’s organization/work location], Department of the Navy. We have accepted and decided this appeal under section 5112(b) of title 5, United States Code (U.S.C.).

General issues

The appellant makes various statements about the classification review process conducted by his agency. In adjudicating this appeal, our responsibility is to make our own independent decision on the proper classification of this position. By law, we must make that decision solely by comparing his current duties and responsibilities to OPM position classification standards and guidelines (5 U.S.C. 5106, 5107, and 5112). Therefore, we have considered the appellant’s statements only insofar as they are relevant to making that comparison. Because our decision sets aside all previous agency decisions, the appellant’s concerns regarding the agency’s classification review process are not germane to the classification appeal process.

Position information

Both the appellant and his supervisor have certified to the accuracy of the appellant’s official position description (PD) [number]. The appellant conducts complex chemical, physical, and failure analysis on a wide range of known and unknown materials. His duties include utilizing the Gas Chromatograph, Inductively Coupled Plasma Spectrometer, Tensile Tester, and X-Ray Spectrograph to identify materials and support environmental impact and engineering systems analysis on the Navy’s submarine fleet based in [name of state]. The appellant’s analyses assist in determining the identity of materials and wastes being leaked into their environment, as well as their origin. The analyses also assist engineers in determining which systems have failed/malfunctioned by tracking materials to their logical source and comparing them with where they were found in the system. The appellant also occasionally serves on a temporary basis as the Lead Chemist and the Chemical Hygiene Officer.

In reaching our classification decision, we have carefully reviewed all information furnished by the appellant and his agency, including the official PD which we find sufficient for purposes of classification and incorporate it by reference into this decision. In addition, to help decide the appeal we conducted separate telephone interviews with the appellant and his first-level supervisor.

Series, title, and standard determination

The agency has classified the appellant’s position in the Chemistry Series, GS-1320, titling it Chemist, and the appellant does not disagree. We concur with the agency’s title and series determination. Positions in the GS-1320 series are graded by application of the Job Family
Position Classification Standard (JFS) for Professional Work in the Physical Science Group, GS-1300. Therefore, we have applied the grading criteria in the GS-1300 JFS in the evaluation that follows.

**Grade determination**

The GS-1300 JFS describes, in a narrative format, grade-level criteria for evaluating non-supervisory positions from GS-5 through GS-15. Work at various grade levels of professional physical scientist positions is described in terms of the typical types of assignments and level of responsibility. Work illustrations at each grade level are provided to show the nature of assignments and responsibility in specific occupations and work situations.

Physical scientists at the GS-11 level plan and execute complex studies, which usually involve intensive investigations into one or more recognized phenomena. The work typically involves conventional methods and techniques, though going beyond clear precedents, and requires adapting methods to the problems at hand and interpreting findings in terms of their scientific significance. Finished products are reviewed for adequacy of conclusions and soundness of the procedures and methods used. Assignments generally do not involve radical departures from past practices or require the development of new, novel or innovative approaches, methods or techniques.

A work illustration of a chemist at the GS-11 level describes serving as a specialist in the area of spectroscopy and the analysis of metals, metal alloys, and related products in an installation's quality assurance laboratory, where the primary activities are ship maintenance, repair and overhaul, including the manufacture of metal parts and equipment. The employee independently plans and completes the work, analyzing difficult, complex, and unusual chemical samples received in the laboratory, and modifies established methods and practices as necessary to complete the work. Work is reviewed from an overall standpoint for feasibility and effectiveness in meeting the requirements of assignments.

Work assignments at the GS-12 level typically involve planning, executing, and reporting on original studies or ongoing studies requiring a fresh approach to resolve new problems. The complexity of assignments requires extensive modification and adaptation of standard procedures, methods, and techniques, and development of totally new methods and techniques to address problems for which guidelines or precedents are not substantially applicable. Assignments at this level typically include considerable breadth, diversity, and intensity; varied, complex features; and novel or obscure problems. By comparison, GS-11 scientists have complete responsibility for conventional projects where existing guidelines, approaches, and techniques are adequate or adaptable. At the GS-12 level, the work requires considerable initiative and resourcefulness. Completed work is reviewed primarily for general acceptability and feasibility in relation to the overall program. Scientific recommendations are normally accepted as sound without close review, unless matters of policy or program resources are involved. Study reports and scientific papers are considered to be authoritative scientific documents.
A work illustration of a chemist at the GS-12 level describes serving as an organic chemistry specialist in a physical science laboratory at a military installation that services maintenance and industrial shops, which support and overhaul aircraft, missiles, and aerospace ground equipment. The employee analyzes, identifies, and tests various organic substances, such as oils, fluids, solvents, and sealants, which require the development of laboratory tests or analytical methods using various instruments. He/she solves problems and improves the methods and processes carried out in the installation, which often require the development, adaptation, and modification of precedents, methods, and procedures. Completed work is accepted as being technically correct and is reviewed for effectiveness in meeting the program’s objectives.

The appellant’s position meets the GS-12 level. Like that level, he spends the majority of his time performing chemical analytical studies requiring a fresh approach to solve new problems. These have required that he significantly modify and adapt standard procedures to develop new techniques to address problems where guidelines and precedents are not substantially applicable. For example, he has spent over half his time planning, developing, and executing a new technique using the GAS Chromatograph (GC) to identify unknown oil types using simulated distillation (SIMDS) technology. The GC was originally designed to take samples of liquid or vapor and use gas to push the sample through for distillation. However, it does not chemically analyze them for purposes of identification. The appellant substantially modified SIMDS technology by developing a hardware/software package as an attachment to the GC which created the diagnostic properties (using the boiling range of an oil) to simultaneously identify the oil type and any contaminants present in oil samples taken from Trident submarines. These include vegetable, petroleum-based, and even synthetic oils. In performing this project, he went well beyond standard procedures by writing the basic programming language in C++ to complete the analysis, and is presently working to develop a chemical “tag” or “signature” for oils to enable future ease of identification. Prior to this development, there was no method for using the specialized equipment to identify and differentiate between similar oil types and identify contaminants at the same time. This project favorably compares to the GS-12 level work illustration previously mentioned where the chemist is assigned to a physical science laboratory at a military installation servicing maintenance and industrial shops supporting and overhauling military equipment. Like that work example, the appellant works in a laboratory on a military installation servicing industrial shops that perform major maintenance and overhaul of military equipment; i.e., submarines. He analyzes, identifies, and tests organic substances such as oil, fluids, and solvents, requiring the development, adaptation, and modification of various methods and procedures.

Pertinent information from the SIMDS project is being prepared by the appellant for distribution throughout the Navy and Department of Defense (DoD) with an emphasis on the identification of petroleum based oils. These techniques and standard operating procedures will be forwarded through the local command [name of local command] to Region Environmental, which is under Naval Facilities (NAVFAC). Ultimately, the intent is to forward these procedures to the Chief of Naval Operations (CNO), and from there throughout Navy and DoD. The appellant is also preparing a discussion of the analytical processes for publication in a petroleum trade journal.

In addition to the appellant’s work with SIMDS, most of his other projects favorably compare to the GS-12 level. For example, over half of the environmental material samples received by the
The appellant for chemical analysis and identification are initially totally unidentifiable and of unknown origin, thus requiring the design and implementation of new methods. Like the GS-12 level, using existing equipment such as the GC, the Inductively Coupled Plasma Spectrometer, the Tensile Tester, and X-ray Fluorescence Spectrograph, the appellant modifies and adapts standard methods and procedures and develops new techniques to address problems of material identification (e.g., properties of exotic metal alloys) for which guidelines are not substantially applicable. Chemical analysis and identification of these unknown samples requires innovative solutions and a mastery of scientific knowledge and expert professional training in order to make a thorough determination of their composition. This can involve experimenting with new procedures using various organic solvents to extract chemicals of interest, analyzing individual components as key ingredients in determining how they fit together to form the entire sample, or other novel methods to obtain identifying information. Contaminates taken from submarines can be as low as one part per trillion thus microscopic in size, and cover the complete range of types, e.g., oils, aqueous liquids/ heavy water, solids/metal alloys, and volatile organics. Findings from the appellant’s analyses are used by engineering staff to identify and correct engineering faults in the submarines.

Like the GS-12 level, the appellant performs his assignments with considerable initiative and resourcefulness. The record shows that the supervisor sets work priorities, but that the appellant carries out his duties under only general administrative supervision, and independently determines all technical methods and procedures. Completed work is reviewed for general scientific acceptability, meeting of administrative details, and achievement of overall project and program goals.

Based on the preceding analysis, we find that the appellant’s position is properly graded at the GS-12 level.

**Decision**

The appellant’s position is properly classified as Chemist, GS-1320-12.