

IN THE MATTER OF AN ARBITRATION
BETWEEN:

MOHAWK COLLEGE

("the College")

and

ONTARIO PUBLIC SERVICE EMPLOYEES UNION

("the Union")

AND IN THE MATTER OF A CLASSIFICATION GRIEVANCE OF KEITH
BATES (# 2007-0241-0035)

ARBITRATOR: Ian Springate

APPEARANCES:

For the College: Daniel Michaluk, Counsel

For the Union: Mary Anne Kuntz, Senior Grievance Officer

HEARING: In Hamilton on February 17, 2010

AWARD

INTRODUCTION

The grievor is employed by the College as an Electrical and Computer Engineering Technologist. He provides technical support to faculty and students in the Electrotechnology Department at the College's Stoney Creek campus. This includes demonstrating proper procedures in labs and maintaining and repairing instructional resources. The grievor reports to Mr. Pierro Cherubini, Associate Dean of Motive Power and Stoney Creek programs.

The College rates the grievor's position at payband H. On November 1, 2007 the grievor submitted a grievance in which he contended that his position was incorrectly evaluated and that it should be at payband J.

The College's ratings for all eleven job factors identified in the job evaluation manual total 559 points, within the 520 to 579 point range for payband H. The ratings proposed by the Union would result in a total of 699 points, the very top of the 640 to 699 point range for payband J. The intervening payband I covers a range of 580 to 639 points.

The parties disagree on the proper ratings for five of the job factors. Each of these is addressed separately below.

The Union takes issue with certain portions of a position description form ("PDF") put forth by the College. As discussed below, prior to the hearing the College amended the PDF without discussing the changes with the Union, a move objected to by the Union.

THE FACTOR OF ANALYSIS AND PROBLEM SOLVING

The job evaluation manual notes that this factor measures the level of complexity involved in analyzing situations, information or problems of varying levels of difficulty and in developing options, solutions or other actions. The College rated the grievor's position at level 3 worth 78 points. The Union submits that the rating should be at level 4 worth 110 points. The job evaluation manual sets out the following factor level definitions:

3. Situations and problems are identifiable, but may require further inquiry in order to define them precisely. Solutions require the analysis and collection of information, some of which may be obtained from areas or resources which are not normally used by the position.

4. Situations and problems are not readily identifiable and often require further investigation and research. Solutions require the interpretation and analysis of a range of information according to established techniques and/or principles.

The job evaluation manual defines the term “established techniques and/or principles” used in the level 4 definition as follows:

Established techniques and/or principles – recognized guidelines and/or methods to accomplish a desired outcome. Can be defined as an individualized way of using tools and following rules in doing something; in professions, the term is used to mean a systematic procedure to accomplish a task.

The manual contains a note to raters designed to clarify the differences between levels 1, 2 and 3, although not the differences between levels 3 and 4. A description of the analysis at level 3 reads as follows:

AT level 3, the types of problems that are encountered are readily identifiable but the position must be able to identify when additional information is needed to clearly understand the problem or situation. In order to develop an appropriate solution, the position will gather more information. In many circumstances, this additional information or clarification will be readily available, but there will be times when the position will need to seek the additional information from a source it is unfamiliar with.

The Union did not take issue with three examples of regular and recurring duties involving analysis and problem solving listed in the PDF. The first is inventory control. The grievor indicated that he uses an Excel spread sheet to keep track of inventory requirements and levels. He said that purchases are made in bulk at the start of a year taking into account the number of projected students, the programs they are in and their breakdown in terms of basic, intermediate and advanced. He said that he initially obtains this information from Mr. John McDonald, the Faculty Co-ordinator, and at the start of the academic year he checks the numbers with “Anna” in scheduling. The

grievor indicated that he also checks course outlines to ascertain what supplies will be required and uses that information together with the number of students projected for each program to calculate the quantity of supplies likely required and then adds a “fudge factor” of 10%.

The grievor noted that although purchases are made in bulk at the start of each year due to a lack of storage space at the College the supplier forwards supplies as they are needed. He said that at certain times of the year he looks at inventory levels to ascertain what is left and what is required.

I am satisfied that the situations and problems facing the grievor with respect to inventory control are readily identifiable, namely a need to determine how much of different supplies should be ordered and when they will need to be delivered. The solution to the first of these issues requires collecting information from course outlines and projected student numbers from other staff, putting them together and then adding a buffer for safety. In terms of deliveries checks are done of inventory levels at set times to assess current supplies. The performance of these tasks does not involve the interpretation and analysis of “a range of information” which is required for a level 4 rating. Instead they meet the level 3 requirement of collecting and analyzing information.

The second duty listed in the PDF is repairing malfunctioning equipment during or after a lab. In a supplementary brief the College asserted that this constitutes only a minor part of the grievor’s job. It contended that because electrical equipment is becoming both more complex and cheaper it is becoming more common to simply replace a part or order new equipment. The grievor, however, indicated that he currently spends some 30 to 40 percent of his time on this function. He said that a large number of students in technician programs are fresh out of high school and since many high schools no longer have shop programs the students tend to be “gorillas” when using tools. He further indicated that although equipment such as fire and burglary alarms and nurse call stations are intended to be installed only once, because of heavy use by students damage to the equipment is an ongoing problem and the College cannot afford to keep buying new equipment or have repairs done by the manufacturer.

The grievor noted that schematic diagrams are not available to assist him in the repair of certain equipment, including nurse call stations, because they are viewed as proprietary. He indicated that he generally can do repairs without a schematic diagram although its absence may make the work more difficult and time consuming.

The grievor said that there is a procedure he uses when working on a piece of equipment. He indicated that he first checks to ensure that the power supply is working correctly and then he breaks down the problem into its logical components. He gave the

example of checking the voltage points on a fire alarm and then because fuses often blow finding out which of three or four fuses had blown. At several points during the hearing the grievor noted that when performing repairs he draws on his training as an electronics technician and his extensive experience.

In addition to repairing lab equipment the grievor noted that he performs repairs on computer equipment used in a lab. He referred to a situation where network printing from two computers had been intermittent. He said that because the problem had been intermittent it took him some time to locate the difficulty. He also said that he discovered that the drivers on the computers had been changed and he resolved the problem by downloading the correct drivers. In addition, he referred to a situation where he only learnt about a computer problem shortly prior to the start of a lab but was able to solve the problem in time after determining that someone had improperly changed a cable.

The grievor indicated that repair work is made more difficult by the volume of work involved and the fact that repairs may need to be done quickly.

It is apparent that repair work is an important aspect of the grievor's position and he brings to the task considerable training, experience and judgement. One of the key determinants between a level 3 or a level 4 rating, however, is the extent to which situations and problems are readily identifiable. In the grievor's case the basic problem is identifiable, namely that equipment is not working or not working correctly. Further inquiry is required to define the precise nature of the problem, which is contemplated by the criteria for a level 3 rating. It appears that the information gained during the inquiry into the problem will generally also be used in determining a solution. There is not a need to interpret and analyze "a range of information" in order to reach a solution as is required for a level 4 rating. Accordingly, the grievor's repair work justifies a level 3 rating.

The third duty involves performing lab set ups. The grievor said that by reading a course outline he can determine what a planned experiment will be about, what equipment and parts will be needed and the type of wire required. He indicated that there is not a lot of analysis involved in this task but he does have to know and understand different wire sizes and colours.

The grievor indicated that he has modified pieces of lab equipment as a way of protecting them from repeated student use. He gave the example modifying equipment so that students need no longer repetitively tighten and loosen a screw and thereby strip the screw.

The grievor noted that faculty have asked that he acquire and assemble equipment, at times placing them in a box. He indicated that this can be a time consuming function in terms of locating who sells the equipment and suitable boxes and obtaining prices. He indicated that he obtains the required information from the internet, catalogues and distributors. He described a search for an oil filled capacitor as having been particularly difficult and time consuming, in part because the manufacturer had been taken over by another firm and the equipment in issue was now being referred to by a different name.

When performing the functions discussed above the situation or problem is readily identifiable. Certain lab materials are needed, screws are being stripped by constant use or new pieces of equipment must be located and priced. There is a need to collect and analyze information. In terms of locating particular equipment the process can be very time consuming and may involve obtaining information from resources not usually used by the grievor. Solutions, however, do not require the interpretation and analysis of a range of information.

Having regard to the foregoing I conclude that this factor was properly rated at level 3.

INDEPENDENCE OF ACTION

The job evaluation manual states that this factor measures the level of independence or autonomy in a position. It says that consideration is given to the types of decisions the position makes; what aspects of the tasks are decided by the position on its own or what is decided by, or in consultation with, someone else, such as the supervisor; and also the rules, procedures, past practice and guidelines that are available to provide guidance and direction.

The College rated this factor at level 3 worth 78 points. The Union contends that a level 4 rating worth 110 points would be more appropriate. The relevant factor level and word definitions are as follows:

3. Position duties are completed according to general processes. Decisions are made following general guidelines to determine how tasks should be completed.
4. Position duties are completed according to specific goals or objectives. Decisions are made using industry practices and/or departmental policies.

Guideline – a statement of policy or principle by which to determine a course of action.

Process – a series of activities, changes or functions to achieve a result.

Industry practice – technical or theoretical method and/or process generally agreed upon and used by practitioners to maintain standards and quality across a range of organizations and settings.

Policies – broad guidelines for directing action to ensure proper and acceptable operations in working towards the mission.

The manual contains the following note which forms part of a discussion relating to the differences between a level 2 and a level 3 rating:

Level 3 – Specific results or objectives that must be accomplished are pre-determined by others. The position has the ability to select the process(es) to achieve the end result, usually with the assistance of general guidelines. The position has the autonomy to make decisions within these parameters.

The manual also contains the following discussion respecting a level 4 rating which forms part of a note to raters designed to clarify the differences between levels 4 and 5:

Level 4. - The only parameters or constraints that are in place to guide the position's decision-making are "industry practices" for the occupation and/or departmental policies. The position has the autonomy to act within these boundaries and would only need to consult with the supervisor (or others) on issues that were outside these parameters.

The grievor noted that he has had a number of immediate supervisors, the current one being Acting Associate Dean Sharon Estock. He described Mr. Cherubini as being above Ms. Estock. Mr. Cherubini said that he used to manage the grievor and still talks to him about twice a week, primarily in connection with the grievor obtaining his signature. He said there is a procurement process that the grievor fills out and the grievor then sees either him or Ms. Estock for a signature. The grievor indicated that normally he advises Ms. Estock of what he is obtaining and she signs for it. He further

indicated that Mr. Cherubini's signature is only necessary when larger amounts are involved.

Neither Ms. Estock nor Mr. Cherubini assigns individual tasks to the grievor. The grievor said that no one reviews his work although if he should make a mistake faculty would complain about it.

As touched on above, course outlines prepared by others determine what supplies the grievor will order and what must be on hand for any particular lab. Also, faculty will at times ask the grievor to acquire and assemble equipment. The College's written brief includes a repair request form that was used by faculty prior to September 2009 to alert the grievor to items in need of repair as well as the details of a red tag-out system in place since that time whereby an instructor identifies a malfunctioning piece of equipment with a red tag to alert the grievor to the problem.

The grievor noted that he follows industry standards in that everything he does and the materials he orders must be in accordance with the Electrical Code. He noted that he also adheres to the Occupational Health and Safety Act and the Building Code. He said he had developed a lock-out and tag-out procedure similar to what is used in industry. He also noted that he had brought to the Department's attention the requirement that students use category III meters.

The Union representative contended that a level 4 rating is appropriate since the grievor makes decisions using industry practices and his duties are completed according to specific goals and objectives. With respect to this latter point she submitted that course syllabuses have specific goals and objectives for students and accordingly the grievor is involved with specific goals and objectives.

It is apparent that the grievor does adhere to industry practices. The note respecting a level 4 rating, however, states that at this level "the only parameters or constraints to guide decision-making" are industry practices and departmental policies. There are parameters other than industry practices that guide the grievor's decision making. These include faculty alerting him to items that need repair or advising him of equipment that they want obtained. In terms of repairing equipment the grievor decides how he will do the repair. This fits within the note for a level 3 rating with results and objectives being pre-determined by others (i.e. the grievor being assigned the task of repairing equipment) but with him having the ability to select the processes to achieve the end result.

Having regard to the foregoing, I conclude that a level 3 rating is appropriate.

SERVICE DELIVERY

This factor looks at the service relationship that is an assigned requirement of a position. It considers how a request for service is received and the degree to which the position is required to design and fulfil the service requirement.

The College rated this factor at level 2 worth 29 points. The Union contends that it should be at level 3 worth 51 points. The relevant level definitions and applicable word definition are as follows:

2. Provide service according to specifications by selecting the best method of delivering service.
3. Tailor service based on developing a full understanding of the customer's needs.

Tailor - to modify or adapt with special attention in order to customize it to a specific requirement.

A note to raters states that the term "customers" refers to the people or groups of people who receive the services delivered by a position. Another note to raters includes the following comments designed to clarify the differences between levels:

Level 2 - service is provided by determining which option would best suit the needs of the customer. The incumbent must know all of the options available and be able to explain them to the customer. The incumbent selects or recommends the best option based on the customer's need. There is no, or limited, ability for the incumbent to change the options. For example, positions working in the Financial Aid area would need to fully understand the various student loan programs that are available and based on a student's unique situation select or recommend the program that would best address the student's financial situation. The incumbent doesn't have the ability to change the funding programs, which are established by an external agency.

Level 3 refers to the need to "tailor service". This means that in order for the position to provide the right type of service, he/she must ask questions to develop an understanding of the customer's situation. The customer's request must be understood thoroughly. Based on this understanding, the position is then able to customize the way the service is delivered or substantially modify what is delivered so that it suits the customer's particular circumstances.

The grievor said that he provides services to students, particularly those in technician programs, because it is difficult for faculty to deal with all the students. He said that he goes around and keeps an eye on the students and many times they come to him with questions. He indicated that he will demonstrate the best way for a student to handle a tool such as a hack saw or a knife and also how to put a plug on a wire. In terms of tailoring services he said that a female with less strength might have to use a hacksaw differently than a male. He also said that he ensures that when handling conduit both females and males who have long hair tie it back and that no one is wearing loose clothing or jewellery.

The grievor referred to situations when faculty have requested that he put together new equipment. He described this as a collaborative process. He gave the example of faculty deciding to no longer use old relay boards and asking him to acquire new relay boards that would last and which students would be able to observe operating. He indicated that he had located a number of relays which fit these requirements and asked the supplier to send him a sample of each which he then showed to the instructors. He indicated that he subsequently looked at some chassis which the relays could be mounted on. He said that the faculty had been happy with the result.

The grievor referred to making modifications to equipment by adding on an attachment so that students repeatedly loosening a screw would only strip the attachment. He also said that to reduce the stripping of screw heads he removes aluminum and brass screws that come on electrical panels and replaces them with metal screws.

I am satisfied that the grievor's role in assisting students does not involve him developing a full understanding of their needs or situation. Instead he addresses a specific current issue. The same is true when he adds an attachment to equipment in order to reduce the damage from stripping or replaces aluminium or brass screws on panels for the same reason. This involves the modification of equipment to take into account its heavy usage by students. The grievor does not need to develop a full understanding of a customer's needs.

The situation with the relay boards involved the putting together customized equipment for faculty members, who in this case were the customer. The level 3 definition and the note respecting level 3 indicate that to qualify for a level 3 rating the tailoring of a service must involve asking questions to understand the customer's situation. With this example, however, the faculty members appear to have been quite specific as to what they wanted. There was no suggestion that the grievor had to ask questions of them in order to develop an understanding of their situation. Having obtained samples of relays that met the faculty requirements he showed them to the faculty, presumably so that they could consider the samples and reach a decision with

respect to which they felt would be most appropriate. This does not involve the type of tailoring of services on the part of the grievor contemplated by a level 3 rating. Having regard to these considerations I confirm a level 2 rating.

COMMUNICATION

This factor measures the communication skills required for a position. It takes into account communication to provide advice, guidance, information or training; interaction to manage necessary transactions; and interpersonal skills to obtain and maintain commitment and influence the actions of others. The manual indicates that an individual's communications with their supervisors is not to be taken into account.

The College rated the grievor's position at level 2 worth 46 points. The Union argues for a level 3 rating worth 78 points.

The relevant factor levels and term definitions are as follows:

2. Communication involves the exchange of information that requires explanation and/or interpretation.
3. Communication involves explaining and/or interpreting information to secure understanding. May involve communicating technical information and advice.

Exchange – reciprocal giving and receiving

Explain – provide details or examples to help others better understand the information.

Interpret – explain or tell the meaning of; translates; convey the meaning of something.

A note to raters aimed at clarifying the difference between a level 2 and level 3 rating contains the following statements:

“Explain” and “interpretation” in level 2 refers to the fact that it is information or data which needs to be explained or clarified. The position exchanges basic technical or administrative information as the normal course of the job and may be required to deal with minor conflicts or complaints. This level may

also include exchanges that are of a more complex technical nature, where all the parties to the communication are technically competent. That is, for those people the communication is relatively basic as they share a vocabulary and understanding of the concepts.

"Explain" and "interpretation" in level 3 refers to the need to explain matters by interpreting policy or theory in such a way that it is fully understood by others. The position must consider the communication level/skill of the audience and be sensitive to their abilities and/or limitations. At this level, if the exchange is of a technical nature, then usually the audience is not fully conversant or knowledgeable about the subject matter. Unlike communicating with people who share an understanding of the concepts, in this situation the material has to be presented using words or examples that make the information understandable for non-experts or people who are not familiar with the intricacies of the information.

I note that a level 4 rating refers to communication which involves explaining and/or interpreting information to instruct or train others. From this it is apparent that a level 3 rating can be appropriate without there being any formal instruction or training.

Prior to the hearing the College removed certain PDF entries that had addressed this factor claiming they were inaccurate. At the hearing College counsel said that the College had decided to revise its PDF to one it was more comfortable with rather than argue that its PDF was wrong. At the hearing the grievor contended that the PDF entries in question had, in fact, been accurate. The Union spokesperson argued that the wording of the PDF had not been in dispute and it was not open to the College to change it. She contended that while the applicable collective agreement contemplates that an employee might challenge the accuracy of a PDF it does not provide for a College disagreeing with its own PDF. Given my conclusions below I need not make a determination with respect to the appropriateness of the College having amended the PDF prior to the hearing.

At the hearing the grievor referred to his dealings with suppliers once or twice a week. The Union spokesperson argued that these communications are at level 3 since the grievor must ensure that suppliers understand what it is he needs. It is not, however, apparent from the grievor's comments at the hearing that he must explain or interpret information in order to secure the suppliers' understanding. Presumably the suppliers are knowledgeable about the products they supply. The grievor did note that on one occasion he had engaged in a phone discussion with a company's North American manager during which he told the manager about a design flaw in certain meters the company had supplied to the College and the company agreed to repair them. This

conversation would likely have involved the grievor explaining information to ensure that the manager understood what he was saying. The conversation, however, appears to have been a one-time event and accordingly not an appropriate basis for assigning a rating.

At the hearing the grievor indicated that he is required to attend labs. He said that he attends to help faculty and to answer students' questions. Mr. Cherubini stated that faculty members are the ones who develop, deliver, supervise and evaluate shop activities. He noted that the College has a course on hand and power tools that addresses the use of equipment. He said that faculty members likely review the relevant material again prior to a lab. Mr. Cherubini noted that students are provided with lab work sheets which give detailed directions in terms of what they are expected to do during a lab. He said that the grievor is not responsible to interpret theory and not responsible for ensuring that students understand material.

In its brief the College said that it would expect that in a lab the grievor would convey the following types of messages to students, namely:

- "We keep pipe benders in the far cabinet."
- "Conduit fittings are in Cabinet A."
- "Please put your shop glasses on as you were instructed."
- "[Faculty member] is in the faculty office."

At the hearing the grievor gave other examples of the discussions he has with students, examples which the College did not challenge or contradict. The grievor said that students just out of high school are very weak in using tools. He said that he advises students that when using a hacksaw they should cut on the down stroke and not the upstroke and when cutting wire using a vice they should make the cut close to the vice. In addition, he said that he tells students how to properly strip wire. According to the grievor students will ask him what types of wire they should use for what they are doing and he tells them. The grievor said that he is not responsible to ensure that students understand what they were taught in class but also said that a student might say to him that they do not understand how a transistor works and he will provide an explanation.

One of the issues addressed during the hearing was whether students can be said to be "technically competent" as that term is used in the note respecting a level 2 rating or whether they are "not fully conversant or knowledgeable about the subject matter" as per the note respecting a level 3 rating. The grievor said that students at the basic level are not competent whereas students at the intermediate and advanced level are fairly competent. He also said that students in labs are supervised so that they do not hurt

themselves and a student is not allowed to have power on unless a faculty member is present.

In its brief the College suggested that students are “technically competent” in accordance with the note respecting a level 3 rating since all safety procedures have been taught to them in advance by faculty members. The brief further states that the grievor is not responsible for interpreting policy or theory or for ensuring that subject matter taught by faculty is fully understood, rather his communication in shop involves reinforcing and correcting behaviour for a safety related purpose. At the hearing counsel for the College contended that to be technically competent does not require that an individual be an expert. He said that students share an understanding of concepts since faculty have already introduced the relevant concepts to them in class. He contended that different types of wire and how to strip wire would also have been covered in class. He submitted that the grievor talking to students about how to cut with a hacksaw on the down stroke and to cut close to a vice involve communications at level 2. He noted that an explanation at level 3 is to secure understanding and contended that if a student in a lab does not understand something he should be redirected to his teacher.

In a supplementary brief the Union argued that the College’s claim that students are technically competent effectively undermines the important role of the Technologist and confers an unrealistic level of competence on students who are in the process of learning their trade. The Union also posed the question: if the Technologist is not responsible for ensuring that theory taught by faculty is fully understood, then who is responsible?

The note respecting a level 2 rating indicates that this level applies to the exchange of basic technical or administrative information. This includes situations where although the exchange is of a more complex technical nature all those involved are technically competent and accordingly for them the communication is relatively basic. Although students have taken a course on hand and power tools and continue to attend classes the grievor’s evidence concerning the nature of the advice he provides and the questions put to him suggests that not all students are fully knowledgeable about the relevant subject matter, particularly those who are at a basic level. When communicating with them the grievor must take this into account.

The manual discusses the concept of regular and recurring as follows:

“Regular & recurring” may not be readily identified as a quantitative amount of time. If a specific task occurs daily or weekly, it is easily identifiable as “regular & recurring”. However, a specific task that occurs once or twice a year, every year, and takes up about 25% of the work year should also be

recognized as “regular & recurring”. Any task or responsibility that is an integral part of the position’s work and is expected or consistently relied on should be considered “regular and recurring”.

The grievor’s involvement with basic level students during lab periods and when answering students’ questions represent tasks or responsibilities that are an integral part of his work and appear to be expected or consistently relied on. Accordingly, I find a level 3 rating on a regular and recurring basis to be appropriate.

WORKING ENVIRONMENT

The manual notes that this factor looks at the environment in which work is performed and the extent to which there exist undesirable or hazardous elements. The College rated the grievor’s position at level 2 on a regular and recurring basis, worth 38 points, as well as a level 3 rating on an occasional basis worth 9 additional points. The Union contends that the appropriate rating is level 3 on a regular and recurring basis, the highest rating possible, worth 69 points. The two level definitions are as follows:

2. Working conditions involve:
 - difficult weather conditions
 - smelly, dirty or noisy environment(s)
 - exposure to very high/low temperatures
 - verbal abuse
 - working in isolated or crowded situations
 - travel

3. Working conditions involve
 - exposure to extreme weather conditions
 - handling of hazardous substances
 - dealing with abusive people who pose a threat of physical harm
 - accessing crawl spaces/confined spaces
 - other conditions which may pose a risk to personal safety.

In support of its contention that a level 3 rating is appropriate on a regular and recurring basis the Union relied on three different activities. One was the grievor’s work with electricity, which the Union described as a hazardous substance. The second was that the grievor is exposed to and works with “cutting fluids” which the Union described as a hazardous liquid and known carcinogen. The third activity advanced by the Union was that the grievor works in confined spaces. When asked about this issue,

however, the grievor said it was not really something that he does. From this I infer that he rarely if ever works in confined spaces.

In terms of his exposure to electricity the grievor referred to two different functions. One was his role in replacing blown fuses in electrical panels, which he does three or four times per week. The grievor initially described the panels as being “live”. In response to subsequent questions from College counsel, however, the grievor acknowledged that opening a panel door serves to automatically “kill” power in the area. It is apparent that changing fuses does not meet any of the criteria for a level 3 rating.

The second matter raised by the grievor was testing equipment after performing repair work. Mr. Cherubini described the applicable policy as being that “we” do not work on anything live. According to the grievor, however, the only way to test equipment is with live electricity. He referred in particular to checking fire alarm systems. Mr. Cherubini said that Mr. McDonald had advised him that the power in a fire alarm is reduced to 30 volts, which is considered a low voltage. This assertion was challenged by the Union spokesperson on the basis that Mr. McDonald, a faculty member, was not present to be questioned about his statement. For his part the grievor said that the power which enters a fire alarm system is at 120 volts and must be checked when live.

Although repair work should be performed with the power off, logic suggests that testing equipment after it has been repaired can only be done using live electricity. In the circumstances I am satisfied that when doing the testing the grievor works with live electricity. Depending on whether or not a repair has correctly resolved a problem the electrical current might prove to be hazardous and pose a risk to the grievor’s personal safety.

With respect to the issue of cutting fluid the grievor said that this type of fluid is used when students cut pipe with a machine. He said that the pipe is clamped and the fluid comes out of a reservoir while a half-inch die cuts the pipe. He said that without the cutting fluid the die would burn out within a day. The grievor said that the cutting fluid gives off heat as well as a mist comprised partly of cutting fluid and partly of metal.

The grievor indicated that he is responsible for filling the reservoir but he performs this task only about once every two years since after its use the fluid flows back into the reservoir. He noted that a mesh serves to keep metal filings from also going into the reservoir. He said that at times students cut pipe by hand and when this occurs they squirt on the cutting fluid which results in there being cutting fluid all over the floor.

The grievor said that students work with cutting fluid six times per year, a week at a time. He acknowledged that students work right beside the cutting machine but said that he “could” be there watching them. In addition, he described his exposure to cutting fluid as cumulative. Mr. Cherubini responded that if the grievor is physically bothered by cutting fluid there is no need for him to be present since a faculty member is responsible for the class. Mr. Cherubini did not, however, suggest that the grievor had been told that he was not required to attend labs where cutting fluid is used.

The College’s PDF refers to cutting fluid in an entry respecting working conditions which reads as follows: “handling hazardous substances: cutting fluid – toxic – I” (i.e. infrequently). In its brief the College said that in preparation for the arbitration it did further research on cutting fluid and learned that it is not in fact toxic and not WHMIS controlled. In support of this position the College referred to printed material contained in its written brief headed up: “Material Safety Data Sheet” The material addresses “RIGID Dark Thread Cutting Oil”, which the brief indicates is the cutting fluid used at the College. The material indicates that the product is obtained from Ridge Tool Company of Elyria, Ohio. It further indicates that over 90% of the product consists of mineral oil although there is also a “sulfur additive package”. The material notes that the product might also contain additional non-hazardous or trade secret components. Other portions of the material safety data sheet read as follows:

EMERGENCY OVERVIEW:

This product is a liquid that is insoluble in water. Direct eye contact may cause minor, short term irritation. Short term skin exposure is not expected to be irritating. Inhalation and ingestion and not anticipated routes of exposure during normal conditions of use.

POTENTIAL HEALTH EFFECTS AND SYMPTOMS FROM SHORT TERM / ACUTE EXPOSURE:

Eye

This product is not expected to cause eye irritation under normal conditions of use. Symptoms of slight eye irritation may result when direct contact occurs, or when exposed to high mist levels in poorly ventilated areas.

Skin

Short term skin contact is not expected to cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness. In severe cases, prolonged or repeated contact may result in dermatitis accompanied by symptoms of irritation, itching, dryness, cracking and/or inflammation.

Inhalation

This product has low volatility and so is not expected to cause respiratory tract irritation during normal conditions of use. Exposure to high mist level in poorly ventilated areas may cause upper respiratory tract irritation and difficulty breathing.

...

ENGINEERING CONTROLS

Normal general ventilation is expected to be adequate. It is recommended that ventilation be designed in all instances to maintain airborne concentrations at lowest practicable levels. Ventilation should, at a minimum, prevent airborne concentrations from exceeding any exposure limits.

The user may wish to refer to 29 CFR 1910.1000(d) and the ACGIH “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices” (Appendix C) for the determination of exposure limits of mixtures. An industrial hygienist or similar professional may be consulted to confirm that the calculated exposure limits apply.

PERSONAL PROTECTIVE EQUIPMENT

Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA’s Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection

...

Respiratory Protection

A respirator may be worn to reduce exposure to vapours, dust or mist. Select a NIOSH/MSHA approved respirator appropriate for the type and physical character of the airborne material. A self-contained breathing apparatus is recommended for all situations where airborne contaminant concentration has not been confirmed to be below safe levels. Respirator use should comply with the OSHA Respirator Standard found in 29 CFR 1910.134

...

CARCINOGENICITY

This product is not listed as a known or suspected carcinogen by IARC, OSHA or the NTP.

...

CANADA

WHMIS Classification: Not controlled under WHMIS

DSL: The components of this product are listed on DSL inventory.

In its brief the Union included information that the grievor had printed off from the internet respecting health hazards associated with the use of cutting fluids. The material is not identified in terms of its author although it lists a web address for the Department of Mechanical Engineering at Michigan Technical University. Portions of the material read as follows:

CUTTING FLUID HEALTH HAZARDS

... Since cutting fluids are complex in composition, they may be more toxic than their components and may be an irritant or allergenic even if the raw materials are safe [Bienkowski, 1993]. Also, both bacteria and fungi can effectively colonize the cutting fluids and serve as a source of microbial toxins [Thorne et. al., 1996]. Significant negative effects, in terms of environmental, health, and safety consequences, are associated with the use of cutting fluids. The health effects of exposure to the fluids have been studied for over 50 years, beginning with the concern that cutting fluid oil is a potential etiologic factor for occupational skin cancer [Epidemiological studies indicate that long-term exposure to metalworking fluids can lead to increased incidence of several types of cancer. The International Agency for Research on Cancer has concluded that there is sufficient evidence that mineral oils used in the workplace are carcinogenic.

...

Besides potential skin and eye contact, inhalation is also a way to occupational exposure. Mists are aerosols comprised of liquid particles less than 20m. During machine process, a considerable amount of heat generated may result cutting fluid arrive (sic) a temperature sufficiently higher than the saturation temperature as it impacting the cutting zone (sic). The vapour then is produced at the solid-liquid interface as a result of boiling. Vapor may also be generated at the liquid-air interface when the fluid vapour is less than the saturation pressure, namely as evaporation phenomena. Vapor generated then may condense to form mist. The non-aqueous components of the cutting fluid, such as biocide additives, then become an aerosol that can enter the workroom air.

...

The potential effects of exposure to cutting fluid mists have been the subject of epidemiological studies in the automotive industry [Hands et.al., 1996]. The mist droplets can cause throat, pancreas and prostate cancers, as well as breathing problems and respiratory illnesses [Mackerer, 1989]. One acute effect observed is mild and reversible narrowing of airways during exposure to cutting fluid mist [Kennedy, S.M. et al, Acute Pulmonary Responses Among Automobile Workers Exposed to Aerosols of Machining Fluids, American Journal of Industrial Medicine, vol.15, 1989, pp 627-641.]

The above material suggests that there may be serious issues respecting the safety of someone working in the vicinity of cutting fluids, particularly cutting fluid mist, and that long term exposure might lead to an increased incidence of cancer. The material in the College's brief, however, indicates that it relates specifically to the product used at the College rather than cutting fluids generally. There is no reason for me to doubt the statements in the Ridge Tool Company material that its product is not listed as a known or suspected carcinogen and that in Canada it is not controlled under the WHMIS system.

The material provided by the College does, however, raise potential issues respecting working with Rigid Dark Thread Cutting Oil. The material indicates that in some circumstances mist levels in poorly ventilated areas may cause upper respiratory tract irritation and difficulty breathing. It also refers to exposure limits, a matter not addressed in these proceedings. The material also discusses how a respirator might be worn to reduce exposure to vapors, dust or mist. Yet another relevant consideration is that the College in its PDF described cutting fluid as being toxic. In all the circumstances I am led to conclude that cutting fluid is a potentially hazardous substance and the grievor working in an area where cutting fluid mist develops, "may pose a risk to (his) personal safety" such as to meet the criteria for a level 3 rating.

The Union spokesperson contended that the grievor's exposure to dangerous working conditions in connection with live electricity and cutting fluid deserve the highest possible rating for this factor. Counsel for the College argued that any exposure on the grievor's part to live electricity and cutting fluid are infrequent and accordingly captured by the level 3 rating that the College assigned to this factor on an occasional basis. As noted above, the manual states that: "any task or responsibility that is an integral part of the position's work and is expected or consistently relied on should be considered 'regular and recurring' ". Both the grievor's on-going repair work as well as his presence in labs where cutting fluid is used six weeks per year are an integral aspect of his position. Further, given that this factor is meant to address the environment in which work is performed, it is appropriate to look at the two aspects of the grievor's job

together and in doing so I conclude that they justify a level 3 rating on a regular and recurring basis. Accordingly, I find a level 3 rating to be appropriate.

CONCLUSION

As noted above, the various ratings assigned by the College resulted in the grievor's position receiving a total of 559 points. The additional 32 points associated with a level 3 rating for communications and 22 more points for a level 3 rating on a regular and recurring basis for working environment raise the total to 613 points. This brings the position within payband I.

Having regard to the above, I find that the grievor's position should appropriately be rated at payband I. I retain jurisdiction to address any issues that might arise directly out of this award that the parties are unable to resolve.

Dated this 12th day of April 2010.

Arbitrator