STATE OF WISCONSIN PERSONNEL COMMISSION

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JAMES A. MILLER et al.,
(Peter Pagel, James Quinlan, Kenneth Stiemke, Lynita Docken, Daniel Kraft, James Wehinger, and James Zickert),

Appellants,

v.

Secretary, DEPARTMENT OF EMPLOYMENT RELATIONS,

Respondent.

Case Nos. 92-0122-PC
92-0143-PC
92-0144-PC

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FINAL ORDER

This matter is before the Commission following the promulgation of a proposed decision and order by the hearing examiner pursuant to §227.46(2), Stats.. The parties have filed written objections thereto and engaged in oral argument before the Commission.

The proposed decision concludes that appellants have failed to sustain their burden of proof of establishing that respondent erred in denying their request for the reclassification of their positions from Plumbing Plan Reviewer 2 to Environmental Engineer - Senior, or (in the case of appellant Miller) Environmental Engineer - Advanced 1. The issue of whether appellants satisfy the requirement set forth in the Environmental Engineer "inclusions" section that: "[t]his series encompasses professional engineering positions" has generated a substantial amount of debate. The proposed decision finds that these positions (with the exception of appellant Miller's) do not engage in professional engineering practice the majority of the time. In making this finding, the proposed decision considered the definition of professional engineering set forth in §443.01, Stats., as appellants requested, but found appellants do not function the majority of the time at this level.[1]

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[1] The proposed decision concludes that this definition in Chapter 443 is more appropriate for use in defining "professional engineer" in the class specification than the approach respondent urges -- reliance on the definition of "professional employe," found in §111.81(15), Stats. -- but noted that the two definitions were not mutually exclusive.

Appellants object to the interpretation of §443.01 used in the proposed decision.

Before addressing appellants' contentions concerning the interpretation of §443.01, the Commission notes that it does not follow that a definition found in a statute intended to regulate professional engineering, which was enacted by the state "to protect the public welfare and to safeguard the life, health and property of its citizens," State ex rel Wis. Registration Bd. of Architects and Professional Engineers v. T.V. Engineers of Kenosha, 30 Wis. 2d 434, 438, 141 N.W. 2d 235 (1966), is necessarily controlling with respect to the interpretation of the term "professional engineering" found in a class specification used to determine salary structures in the state civil service. The state may decide to use definitions of a certain character and reach for purposes of facilitating its interests in protecting public safety in ways that are not coterminous with the purposes of the classification system.[2] For example, two positions could be engaged in activities which would have the same potential effect on public safety, but not be comparable with respect to other factors relevant to the job classification system.

In the instant case, the proposed decision's interpretation of §443.01 results in a definition that comports with generally-accepted definitions of this term. For example, in T.V. Engineers, the Court held:

> We therefore determine that the word "engineer" is used to describe persons of various learning and skills while "professional engineer" connotes and identifies a person with a high degree of

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[2] The general purpose of the classification system is set forth in §230.09, Stats., as follows:

> **Classification.** (1) The secretary shall ascertain and record the duties, responsibilities and authorities of, and establish grade levels and classifications for, all positions in the classified service. Each classification so established shall include all positions which are comparable with respect to authority, responsibility and nature of work required. Each classification shall be established to include as many positions as are reasonable and practicable. In addition, each class shall:
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> (b) Be designated by the same official generic title. The official titles of classes so established shall be used in all reports and payrolls and in all estimates requesting the appropriation of money to pay employes.
>
> (c) Be so constituted that the same evaluated grade level within a pay schedule can be applied to all positions in the class under similar working conditions.
>
> (d) Where practical, be included in a series to provide probable lines of progression.

> learning, experience, and competence in mathematics, physics and chemistry. The word "engineer" and the term "professional engineer" as they are thus [statutorily] defined and commonly understood are not synonymous. id. (emphasis added) 30 Wis. 2d at 442.

BLACK'S LAW DICTIONARY 1089 (5th Ed. 1979) defines "profession" as: "[a] vocation or occupation requiring special, usually advanced, education and skill." While, as mentioned above, the Commission agrees with the proposed decision's interpretation of §443.01, if the interpretation appellants have advanced through the course of this matter were indeed correct, this would call into question the appropriateness of using this statute to apply the class specification, because the resulting formulation is at odds with the commonly accepted definition and the use of the term in the class specification. This point is illustrated by the excerpts from Mr. DuPont's opinion set forth in the proposed decision. In his position paper, he states that the "regulation of the design, installation, alteration and operation of plumbing in Wisconsin is in fact the practice of professional engineering," Proposed decision, p. 14. On cross examination at the hearing, he testified as follows with respect to the statutory exemption of master plumbers from registration as professional engineers:

> According to the statutes, it's because historically, plumbers have been practicing professional engineering in the design of plumbing systems ... They are practicing professional engineering when they are designing a plumbing system. id., at 18.

If it indeed follows that under Chapter 443, all activities requiring the application of engineering principles where the public health or welfare is involved constitutes the practice of professional engineering, including all plumbing plan preparation work by master plumbers, the result would be manifestly in conflict with the intent of the Environmental Engineer class specification.[3] Under these circumstances, it would have to be concluded that there is a dichotomy between the state's purpose in utlizing the term "practice of professional engineering" in §443.01, and its purpose in using it in the class specification, and the former is of little or no use in the interpretation of the latter.

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[3] For example, the Environmental Engineer class specification statement of required qualifications includes a bachelor's degree in engineering, registration as a professional engineer or eligibility therefore, certification as an engineer in-training, or equivalent work experience.

Turning to the analysis of §443.01, Stats., the proposed decision relies primarily on subsections (6) and (7), which provide:

> (6) "Practice of professional engineering" includes any professional service requiring the application of engineering principles and data, in which the public welfare or the safeguarding of life, health or property is concerned and involved, such as consultation, investigation, evaluation, planning, design, or responsible supervision of construction, alteration, or operation, in connection with any public or private utilities, structures, projects, bridges, plants and buildings, machines, equipment, processes and works. A person offers to practice professional engineering if the person by verbal claim, sign, advertisement, letterhead, card, or in any other way represents himself or herself to be a professional engineer; or who through the use of some other title implies that he or she is a professional engineer; or who holds himself or herself out as able to practice professional engineering.
>
> (7) 'Professional engineer' means a person who by reason of his or her knowledge of mathematics, the physical sciences and the principles of engineering, acquired by professional education and practical experience, is qualified to engage in engineering practice as defined in sub. (6).

The proposed decision concludes that this statutory framework "associates with the practice of professional engineering a 'knowledge of mathematics, the physical sciences and the principles of engineering, acquired by professional education and practical experience' ... the knowledge, even if gleaned from a source other than formal education, must be of the nature and level that would be associated with a professional education." pp. 9-10. The proposed decision cites State ex rel Wis. Registration Bd. of Architects and Professional Engineers v. T.V. Engineers of Kenosha, 30 Wis. 2d 434, 442, 141 N.W. 2d 235 (1966), in support of this proposition.

In their objections to the proposed decision, appellants argue that the proposed decision confuses the statutory definition of professional engineering and the requirements for registration or identification as a professional engineer. The Commission cannot agree with this contention. Section 443.01(6) defines the practice of professional engineering as "any professional service requiring the application of engineering principles and data, in which the public welfare or the safeguarding of life, health or property is concerned and involved...." (emphasis added) It is insufficient for inclusion under this subsection that a person is applying engineering principles and data in some activity that involves public health or safety. That person must also be providing a professional service involving those

activities. According to appellant's interpretation, anyone carrying out any of the enumerated activities in §443.01(6), where the public welfare or the safeguarding of life, health or property is involved, and who is using engineering principles and data at any level, could be considered to be engaging in the practice of professional engineering. The hearing in this matter was replete with a great deal of testimony that many trades whose activities affect public health and safety require the use of engineering principles and data at some level. Appellants' approach fails to provide a means of distinguishing the large body of technical and paraprofessional work from professional engineering per se. For example, in Howarth v. Gilman, 365 Pa. 50, 73 A. 2d 655, 658 (1950), the Court discussed the difference between the terms "profession of engineering" and "engineering" as follows: "The result [of utilizing the concept of "profession"] is a distinguishing of the type of engineering work which the legislature sought to regulate and that work of an engineering nature performed by technicians or artisans who are commonly designated skilled laborers."

Appellants also contend that the proposed decision misinterprets State ex rel Wisconsin Registration Bd. of Architects and Professional Engineers v. T.V. Engineers of Kenosha, 30 Wis. 2d 434, 141 N.W. 2d 235 (1966):

> Reference to State ex rel. Wisconsin Registration Board of Architects and Professional Engineers v. TV Engineers of Kenosha, 30 Wis. 2d 434 (1966), is appropriate only insofar as that case may contribute to the Commission's understanding of the definition of the "practice of professional engineering". However, the Proposed Decision focuses largely on the way in which the case interprets the statutory definition of "Professional Engineer". TV Engineers focuses on considering whether the word "Engineer" is synonymous with the term "Professional Engineer". The case does not focus on interpreting whether any particular activity may constitute "Professional Engineering" as that term is defined in the statutes. (Appellants' objections, pp. 4-5).

In T.V. Engineers, the Court was concerned with whether a corporation should have been enjoined from: "using 'engineers' in its corporate name as tending to convey the impression that it is engaged in the practice of professional engineering, or that it may offer to practice professional engineering, or may furnish professional engineering service." 30 Wis. 2d at 436. The Court concluded first that:

> We therefore determine that the word "engineer" is used to describe persons of various learning and skills while "professional engineer" connotes and identifies a person with a high degree of learning, experience, and competence in mathematics, physics and chemistry. The word "engineer" and the term "professional engineer" as they are thus defined and commonly understood are not synonymous. 30 Wis. 2d at 442.

The Court then concluded: "Whether the use of the word 'engineer' or 'engineering' in a business title tends to convey the impression of practicing or offering to practice professional engineering must then be determined as a matter of fact by the circumstances of the case under consideration." 30 Wis. 2d at 443. Contrary to appellants' assertion that the decision "does not focus on interpreting whether any particular activity may constitute "Professional Engineering' as that term is defined in the statutes," (appellants' objections, p. 5), the Court went on to scrutinize the business activities of the corporation:

> The defendant's business is primarily the sale, installation and service of television sets and other electrical appliances. The overwhelming emphasis of the rather voluminous advertising is the sale of appliances. In none of the advertising is professional engineering service advertised as such. Nor has the defendant corporation practiced any professional engineering, unless repairing can be considered as such. id.

The Court then discussed the nature of television repair work, noting that it required some knowledge of math or physics and that improper repair could be fatal to a member of the public, but that television repair persons did not need to be registered with the board, and did not appear to fit into any category of professional engineer utilized by the board. Thus the Court engaged in the consideration of whether the activities engaged in by the corporation fit into the definition of professional engineering as part of its decision of the case.[4]

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[4] The Supreme Court of Connecticut cited T.V. Engineers in a decision taking a similar approach in connection with a very similar statutory framework, holding that a corporation had not engaged in the illegal practice of professional engineering by the preparation of an environmental analysis, because the preparation of the report "did not require 'knowledge of mathematics, the physical sciences and the principles of engineering, acquired by professional education and practical experience.' [General Statutes (Rev. to 1981)] §20-299." E.I.S. v. Conn. Bd. of Registration, 200 Conn. 145, 149, 509 A. 2d 1056, 1059 (1986).

A substantial part of appellants' objections to the proposed decision involves matters related to the foregoing discussion of the meaning of "professional engineering," and will not be specifically addressed.

Many of appellants' other objections involve contentions that different weight should have been given to certain evidence or different inferences drawn from the evidence. The Commission has considered these contentions and does not perceive a basis for changing these findings.[5]

Appellants also contend the proposed decision incorrectly finds that Mr. Miller's duties and responsibilities were not subject to a logical and gradual change. It is contended that there were many changes in his duties and responsibilities that occurred after he was given the leadworker assignment. However, as noted in the proposed decision, it is impossible to separate these changes from his overall responsibilities as leadworker. The record repeatedly related the most complex aspects of Mr. Miller's work to his role as leadworker -- e.g., consulting with the other plan reviewers concerning the moxt complex problems. When Mr. Miller was asked whether his responsibility for consulting with the other reviewers on the more complex plans was something that had come with the assignment of leadworker status, he answered affirmatively.

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[5] With respect to the dicta in the proposed decision concluding that, assuming arguendo that appellants established they should be included in the Environmental Engineer series, they have not established that their positions should be at the advanced versus a lower level, it is noted that there are no position descriptions in the record for lower level positions, which compounds the difficulty of reaching a conclusion their positions should be at the senior versus the journey level.

ORDER

The proposed decision and order, a copy of which is attached hereto and incorporated by reference as if fully set forth, with the correction of certain typographical or other minor errors, is adopted as the Commission's final disposition of these appeals, and they are dismissed.

Dated: May 5, 1994

STATE PERSONNEL COMMISSION

LAURIE R. McCALLUM, Chairperson

DONALD R. MURPHY, Commissioner

JUDY M. ROGERS, Commissioner

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NOTICE
OF RIGHT OF PARTIES TO PETITION FOR REHEARING AND JUDICIAL REVIEW
OF AN ADVERSE DECISION BY THE PERSONNEL COMMISSION

Petition for Rehearing. Any person aggrieved by a final order may, within 20 days after service of the order, file a written petition with the Commission for rehearing. Unless the Commission's order was served personally, service occurred on the date of mailing as set forth in the attached affidavit of mailing. The petition for rehearing must specify the grounds for the relief sought and supporting authorities. Copies shall be served on all

parties of record. See §227.49, Wis. Stats., for procedural details regarding petitions for rehearing.

Petition for Judicial Review. Any person aggrieved by a decision is entitled to judicial review thereof. The petition for judicial review must be filed in the appropriate circuit court as provided in §227.53(1)(a)3, Wis. Stats., and a copy of the petition must be served on the Commission pursuant to §227.53(1)(a)1, Wis. Stats. The petition must identify the Wisconsin Personnel Commission as respondent. The petition for judicial review must be served and filed within 30 days after the service of the commission's decision except that if a rehearing is requested, any party desiring judicial review must serve and file a petition for review within 30 days after the service of the Commission's order finally disposing of the application for rehearing, or within 30 days after the final disposition by operation of law of any such application for rehearing. Unless the Commission's decision was served personally, service of the decision occurred on the date of mailing as set forth in the attached affidavit of mailing. Not later than 30 days after the petition has been filed in circuit court, the petitioner must also serve a copy of the petition on all parties who appeared in the proceeding before the Commission (who are identified immediately above as "parties") or upon the party's attorney of record. See §227.53, Wis. Stats., for procedural details regarding petitions for judicial review.

It is the responsibility of the petitioning party to arrange for the preparation of the necessary legal documents because neither the commission nor its staff may assist in such preparation.

Pursuant to 1993 Wis. Act 16, effective August 12, 1993, there are certain additional procedures which apply if the Commission's decision is rendered in an appeal of a classification-related decision made by the Secretary of the Department of Employment Relations (DER) or delegated by DER to another agency. The additional procedures for such decisions are as follows:

1. If the Commission's decision was issued after a contested case hearing, the Commission has 90 days after receipt of notice that a petition for judicial review has been filed in which to issue written findings of fact and conclusions of law. (§3020, 1993 Wis. Act 16, creating §227.47(2), Wis. Stats.)

2. The record of the hearing or arbitration before the Commission is transcribed at the expense of the party petitioning for judicial review. (§3012, 1993 Wis. Act 16, amending §227.44(8), Wis. Stats.

STATE OF WISCONSIN PERSONNEL COMMISSION

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(Peter Pagel, James Quinlan, Kenneth Stiemke, Lynita Docken, Daniel Kraft, James Wehinger, and James Zickert),

Appellants,

v.

Secretary, DEPARTMENT OF EMPLOYMENT RELATIONS,

Respondent.

Case Nos. 92-0122-PC, 92-0143-PC & 92-0144-PC

PROPOSED DECISION AND ORDER

These cases were heard on a consolidated basis over an eleven day period. The stipulated issues for hearing, as set forth in the July 31, 1992, prehearing conference report, are as follows:

1. Case No. 92-0143-PC (Appellants Peter Pagel, James Quinlan and Kenneth Stiemke) and Case No. 92-0144-PC (Appellants Lynita Docken, Daniel Kraft, James Wehinger and James Zickert

   Whether respondent's decision to deny appellants' request to reclassify their positions from Plumbing Plan Reviewer 2 to Environmental Engineer-Senior was correct.

2. Case No. 92-0122-PC (James Miller)

   Whether respondent's decision to deny appellant's request to reclassify his position from Plumbing Plan Reviewer 2 to Environmental Engineer-Advanced 1 was correct.

The positions involved in these appeals are classified as Plumbing Plan Reviewer 2 (PPR2) and are in two sections in the Safety and Buildings Division, Bureau of Building Water Systems, Department of Industry, Labor and Human

Relations (DILHR) -- the General Plumbing, Fire Sprinkler and Licensing Section, and the On-Site Sewage Section. The Commission will address the latter group of positions first.

The On-Site Sewage Section positions in question are in the On-Site Sewage Plan Review Unit and are occupied by appellants Pagel, Quinlan and Steimke. They currently report to Ben Burks, an Environmental Engineer Supervisor 5, who is the On-Site Sewage Section Chief, and function highly independently. These positions would report to the unit chief, an Environmental Engineer Supervisor 4, but this position has been vacant.

The position descriptions for these positions reflect goals of 40% for plan review and related work with respect to on-site sewage systems; 10% for plan review and related work with respect to large on-site sewage systems (large systems are those receiving more than 8,000 gallons per day); 10% for review of petitions for variance; 25% for consultation with owners, contractors, plumbers, architects, etc., regarding issues related to the design and installation of on-site sewage systems, and other related issues, including conducting training, preparing and administering plumbing examinations, and researching and developing code changes; 10% for utilization of environmental engineering knowledge, theories and practice (this item, which is actually a statement of required skills and knowledge, was mistakenly listed as a goal); and 5% for development of standards, codes and publications. The foregoing statement of goals and percentages is an accurate summary of the duties and responsibilities of these positions, except as noted with respect to engineering knowledge.

There is no degree requirement for these positions, but plumbing inspector and soil tester certifications are required. None of these incumbents have advanced engineering degrees. Mr Pagel has a B.S. in environmental health, and Mr. Quinlan and Mr. Steimke are master plumbers. All have had continuing education seminars and other training in their fields.

Since at least 1984 there has been a substantial and significant change in the codes governing on-site sewage systems. The codes have moved away from more or less a "prescriptive" approach which set forth design and material specifications in a relatively rigid fashion, to a more or less "performance" based approach. The performance-oriented approach gives much more leeway to the plan designer, since the focus is more on whether the system meets performance requirements rather than whether the system meets specific design and material criteria or specifications. This change has

resulted in a significant change in the nature of the work appellants perform. Under the more performance-oriented code, plan review requires the plan reviewer to analyze the plans from basically the same perspective as the designer to determine whether the plan has been designed properly, will function effectively, and will in fact satisfy the performance requirements in question. Essentially, the reviewer must go through the same design process as the designer, and the reviewer must have a greater knowledge of the scientific principles underlying the code than was the case in the past.

In addition to these code-related changes, during the same period the on-site sewage area has undergone significant technological changes involving the development of more complex and technologically-advanced means of dealing with on-site sewage, requiring more knowledge of soil morphology, new plumbing products, etc., and an emphasis on creating engineered systems as opposed to using more or less stock plans. As a result of both the code and the technological developments, the appellants have had to function at a higher level in terms of scientific and engineering-related knowledge and skills than had previously been the case.

The on-site sewage plan review unit has positions in La Crosse and Shawano which have been filled by Gerard Swim and Keith Wilkinson, respectively. These positions are essentially the same as appellants. They were in an engineering classification and were included in the engineering survey which DER conducted. Appellants' positions, which were in the PPR2 classification, were not included in the survey. As a result of the survey, the Swim and Wilkinson positions were reallocated to the Environmental Engineer (EE)-Journey classification. Mr. Wilkinson appealed this transaction, and DER approved an EE-Senior level classification, based largely on the representation of DILHR personnel (by Dale Bartz) that his position was very similar to an EE-Advanced position occupied by David Russell in the Large Systems/Plats Unit in the On-Site Sewage Section. Mr Wilkinson then appealed the EE-Senior reallocation, contending that his position should have been reallocated to EE-Advanced 1. In auditing his position following this appeal, DER learned that Mr. Wilkinson had no final decision authority with respect to large projects, that being Mr. Russell's responsibility. DER also concluded that Mr. Wilkinson's position more closely resembled appellants' positions than it did Mr. Russell's position, and since it had recently denied their request for

reclassification from PPR2 to EE-Senior, DER reallocated the positions of Mr. Wilkinson and Mr. Swim to PPR2.[1]

Mr Russell's position is essentially accurately described in his position description (Respondent's Exhibit 52). This position is responsible for the review of plans for large private sewage systems, except to the extent that Mr. Russell assigns a small percentage of these matters to appellants as demanded by his workload. Mr. Russell has retained approval authority for the great majority of the plans so assigned to appellants. This position is also responsible for the program involving the platting of unsewered subdivisions, for review of petitions for private variance for existing private sewage systems, and for review of experimental systems. Appellants have no responsibilities for either experimental systems or the unsewered subdivisions program. The breakdown of time percentages for the goals of Mr. Russell's position is 30% for plan review of large on-site sewage systems, 30% for the unsewered subdivisions program, 20% for experimental systems, 10% for consultation with owners, plumbers, designers, architects, etc., 5% for training and 5% for other plan review. This position reports directly to Mr. Burks (EE Supervisor 5), the On-Site Sewage Section Chief. The PD does not contain a statement of required knowledge, skills or registration. Mr. Russell has an engineering degree and relied on his work in this position in obtaining licensure as a professional engineer (P.E.).

As mentioned above, DER conducted a survey of state engineering positions over an extended period of time resulting in the development of new class specifications for the engineering classifications, and the reallocation of the affected positions in June 1990. DILHR had requested that the PPR positions involved in this appeal be included in the survey. DER had declined to do so, based on the conclusion that the positions were insufficiently engineering related for inclusion in the survey.

DILHR personnel then undertook a "mini-survey" of these positions (as well as the other positions involved in these appeals in the General Plumbing, Fire Protection and Licensing Section) on a delegated basis from DER. After several months, DILHR decided to discontinue this "mini-survey" in favor of seeking reclassification of all these positions into the Environmental Engineer series.

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[1] DER also reallocated two other positions in DILHR occupied by Stan Davies, Jr. and Harold T. Stanlick from EE-Entry and EE-Senior, respectively, to PPR2.

DILHR personnel subsequently recommended reclassification of these positions (as well as the general plumbing positions) to the Environmental Engineer series, in a series of memos from Mr. Bartz dated June 11, 1994 (Appellants' Exhibit 11) and July 24, 1991 (Appellants' Exhibits 12 and 13). DER denied the recommendations in memos from Jean Hale dated February 7, 1992 (Appellants Exhibits 7, 8 and 9), and these appeals ensued.

The issue to be decided with respect to these positions is whether respondent DER's decision to deny the request for reclassification of these positions from PPR2 to EE-Senior was correct.

The PPR class specification (Respondent's Exhibit 1) contains the following statement of inclusions and class definition:

> B. Inclusions
>
> This series encompasses technical plan reviewer positions responsible for ensuring Federal and State laws and regulations relating to general plumbing and private sewage systems. Duties include: reviewing and approving plans and specifications for mound systems, pressure distribution systems, experimental systems and conventional systems; reviewing and approving plans and specifications for general plumbing installations and limited products; consulting and providing technical assistance to plumbers, designers, engineers and plumbing inspectors.
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> * * *
>
> PLUMBING PLAN REVIEWER 2
>
> This is objective level plan and specification review and approval work for general plumbing or private sewage system to ensure compliance with Federal and State laws and regulations. Employes in this class independently review plumbing plans, sanitary sewer specifications, drain, waste and vent design and sizing for code compliance; consult with general public, architects, plumbers, designers, engineers, inspectors, attorneys and legislators regarding plan review procedures and applicable statutes and codes. Work is performed under general direction of the Plumbing Supervisor.

The EE class specification (Respondent's Exhibit 18) contains the following statement of inclusions, definitions, representative positions, and qualifications:

> B. Inclusions
>
> This series encompasses professional engineering positions. These positions devote the majority of their time and are

primarily responsible for providing engineering expertise in their assigned program area (building water supply, building drain and vent systems, drinking water and waste water treatment products, private sewage systems, platting, large on-site waste water infiltration systems, and ground water protection). These positions regulate the design, construction, installation and operation of systems governed under Chapters 145, 160, and 236, Wis. Statutes.

Environmental Engineer-Journey

This is journey level environmental engineer work. Employes at this level are responsible for more varied and complex work assignments than at lower levels, including more difficult design reviews. Work typically involves the evaluation of several constant factors as well as a limited number of variables requiring more extensive interpretation and application of engineering principles. Assignments at this level are generally long-term and are stated in broad general terms. Both routine and difficult assignments are completed without specific direction and work is reviewed for completeness and adherence to policy. Positions at this level independently conduct meetings with outside consultants and engineers on a regular basis and may be given assignments which cross program lines. More sensitive and independent decisions are continually made and work is performed under general supervision.

Representative Position

Large On-Site Sewage Systems DILHR - Examine and evaluate hydrologic reports, engineering analysis data, and design specifications for proposed large on-site sewage systems to determine compliance with code and statutory requirements. This function involves the broad application of related engineering principles. Provide related consultative services to architects, engineers, plumbers, owners, general public, and other parties concerning code compliance issues. Review petitions for variance for existing systems.

Environmental Engineer-Senior

This is Senior level environmental engineering work involving difficult technical assignments which include consideration of complex variables and issues, unusual conditions, or unique circumstances not typically dealt with at lower levels. Positions at this level differ from lower level positions in that most objectives are broadly defined in relation to the position's total assignments. Examples of work performed include complex plan examinations, product examinations and inspections; reviews of precedence [sic] -- setting petitions for variance and plans for experimental systems; and complex code interpretations and code change draft preparation. Positions at this level independently deal with contractors, consultants, and other agency staff. Work is performed under general supervision.

Representative Position

Large On-Site Sewage Systems DILHR [2] - In addition to large private sewage system plan reviews performed by positions at the Journey level, review plans for proposed unsewered subdivisions to determine the accuracy of submitted reports and data and to determine their compliance with code and statutory requirements. This work requires a more extensive knowledge and understanding of related engineering principles than is required at lower levels. Perform additional complex functions, including review of plans for experimental systems, evaluation of complex or precedence - setting variance requests, participation in complex code interpretation issues, and monitoring local inspection programs. Provide highly technical consultative services, involving a wider variety of complex issues than at the journey level.

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III. QUALIFICATIONS

The general qualifications for all positions included in this Environmental Engineer series are graduation from an accredited collect [sic] or university with a Bachelor's degree in engineering; or possession of an engineer-in-training certification; or registration as a professional engineer by the Wisconsin Examining Board of Architects, Professional Engineers, Designers and Land Surveyors or eligibility therefore (Eligibility therefore is defined as registration in another jurisdiction in which the requirements for licensure are of a standard now lower than those in Wisconsin); or equivalent work experience.

Specific qualifications for a position will be determined at the time of recruitment. Such determinations will be based on an analysis of the goals and worker activities performed and by identification of the education, training, work or other life experience which provide reasonable assurance that the knowledge and skills required upon appointment have been acquired. Registration as a professional engineer may be required, on a case-by-case, for all positions classified at the Senior or Advanced 1 and 2 levels.

It is clear that appellants perform the activities set forth in the PPR2 definition. However, they also have responsibilities, such as the review of petitions for variance and code development that are not set forth in the PPR2 definition, but are referred to in the EE-Senior definition under the examples

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2 This is essentially Mr. Russell's position, which despite its identification here as a representative EE-Senior was reallocated to EE-Advanced 1.

of work performed. The key questions are first, whether appellants' work fits within the concept of "professional engineering" as set forth in the Environmental Engineer "inclusions" statement, and, if so, whether it fits within the level of complexity, independence, etc., required for the EE-Senior level, as opposed to a lower level.

The question of when work of this nature becomes advanced enough to be considered professional engineering can present a good deal of difficulty. This record makes it clear that the field of plumbing involves work at opposite extremes in terms of the degree of engineering knowledge required. There was testimony concerning plumbing-related work of a rudimentary nature performed by a Building Maintenance Helper. There also was testimony concerning the UW professor who was responsible for designing the plumbing system for the Sears Tower in Chicago, work which obviously involves the highest level of engineering knowledge and skills. In between these extremes, there is a continuum which includes, for example, master plumbers who may be designing relatively modest plumbing systems.

Another factor complicating this question is that the Environmental Engineer class specification does not contain a definition of "professional engineering," and the parties are not in agreement as to an appropriate definition.

Appellants assert the Commission should look to the definition of "practice of professional engineering", §443.01(6), Stats., which is contained in the chapter covering the licensure of professional engineering, and the associated rules contained in Ch. A-E 4, Wis. Adm. Code. Respondent relies on the definition of "professional employe," §111.81(15), Stats., contained in Subchapter V ("State Employe Relations"), Ch. 111, Stats.

In the Commission's opinion, it is appropriate to look to the chapter 443 definition, because it is logical to assume, in the absence of any definition in the class specification, that the reference in that class specification to "professional engineering positions" would be consistent with the statutory definition of professional engineering for regulatory purposes, which does not exempt state positions as such from regulation.[3] Also, this is a more specific definition than the definition of "professional employe" at §111.81(15). Furthermore, as appellants point out, the reference in the same section of the class specifica-

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[3] A state employe may be subject to one of the general exemptions from registration.

tions to the §111.81(13) definition of "management" suggests that if the intent of the specification had been to incorporate the §111.81(15) definition of "professional employe," it would have done so explicitly.[4]

Section 443.01(6) provides:

> "Practice of professional engineering" includes any professional service requiring the application of engineering principles and data, in which the public welfare or the safeguarding of life, health or property is concerned and involved, such as consultation, investigation, evaluation, planning, design, or responsible supervision of construction, alteration, or operation, in connection with any public or private utilities, structures, projects, bridges, plants and buildings, machines, equipment, processes and works. A person offers to practice professional engineering if the person by verbal claim, sign, advertisement, letterhead, card, or in any other way represents himself or herself to be a professional engineer; or who through the use of some other title implies that he or she is a professional engineer; or who holds himself or herself out as able to practice professional engineering.

This subsection is somewhat circular in that it incorporates in the definition of the "practice of professional engineering" (emphasis added) the term "any professional service requiring..." (emphasis added). However, §443.01(7) provides this definition of "professional engineer":

> 'Professional engineer' means a person who by reason of his or her knowledge of mathematics, the physical sciences and the principles of engineering, acquired by professional education and practical experience, is qualified to engage in engineering practice as defined in sub. (6).

This provision associates with the practice of professional engineering a "knowledge of mathematics, the physical sciences and the principles of engineering, acquired by professional education and practical experience." This does not mean a person has to have a particular type or level of formal education to have this level of knowledge. This point is illustrated by the provisions in §443.04(1) that permit an applicant for registration as a professional engineer to rely on practical experience in lieu of formal education. However, the knowledge, even if gleaned from a source other than formal education, must be of the nature and level that would be associated with

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[4] In any event, the Commission finds nothing in the definition of "professional employe" in §111.81(15) that is inconsistent with the §443.01 definition of professional engineering.

a professional education. This conclusion appears to be compelled by the language of the statute and was not disputed by appellants.[5]

Furthermore, this approach is consistent with State ex rel Wisconsin Registration Board of Architects and Professional Engineers v. T.V. Engineers of Kenosha, 30 Wis. 2d 434, 442, 141 N.W. 2d 235 (1966). That case involved an interpretation of §101.31, Stats., the predecessor to the current §443.01, which contained essentially the same language as is now found at §443.01(6) and (7), discussed above. The issue before the Court was whether the use of the word "engineers" by the corporation, which neither had registered professional engineers on its staff nor held itself out as offering professional engineering services per se, violated the statute. The Court's decision includes the following:

> Many job classifications in both public and private employment use the word "engineer" to designate types of employment that obviously do not require the same knowledge and special training in the fields of mathematics, physics and chemistry as is prerequisite to registration as a professional engineer.
>
> * * *
>
> We therefore determine that the word "engineer" is used to describe persons of various learning and skills while "professional engineer" connotes and identifies a person with a high degree of learning, experience, and competence in mathematics, physics and chemistry. The word "engineer" and the term "professional engineer" as they are thus defined and commonly understood are not synonymous.

In reviewing this record, the Commission must consider both the definition of "professional engineer" discussed above and the necessity to classify a position on the basis of the majority of its duties and responsibilities. Even if some of a position's activities are associated with a certain class level, there must be a majority at that level in order for the position to be so classified. See, e.g., Tiser v. DNR & DER, 83-0217-PC (10/10/84). Similarly, the inclusions statement for the Environmental Engineer series states: "This series encompasses professional engineering positions. The positions devote the majority of their time and are primarily responsible for providing

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[5] Mr. DuPont, the Director of the Bureau of Building Water Systems, who testified on behalf of appellants as an expert witness, agreed that the professional knowledge required by §443.01(7) includes knowledge of post-high school math and science.

engineering expertise in their assigned program area..." (emphasis added) (Respondent's Exhibit 18). Thus, classification of an employe's position in this series requires that the employe devote the majority of his or her time to professional engineering responsibilities.

Three of appellants' supervisors -- Mr. Burks, the section chief, Mr. DuPont, the bureau director, and Mr. Bucholz, the deputy division administrator -- offered their opinions that the work appellants perform is predominantly professional engineering in nature. Michael Witt, the Chief of the Industrial Waste Water Section in the Bureau of Wastewater Management in the Department of Natural Resources (DNR), who had some degree of first-hand knowledge of these positions, provided the opinion that their work was not professional engineering in nature. Jean Hale, a Senior Classification Analyst, DER, testified that in her opinion the duties and responsibilities of these positions, did not involve professional engineering. Dale Bartz, a Classification Analyst in DILHR personnel, testified that in his opinion the work of these positions did involve professional engineering.

While each of appellants' witnesses had his own point of view or perspective on this matter, their rationale for their opinions can be distilled to the following major points:

1. The changes in the codes and in the plumbing field mentioned above have resulted in more complexity in both plumbing design and in plan review. In reviewing the more complex plans and petitions for variance, appellants are essentially going through the same design process as the plan designers, who are frequently engineers.

2. Appellants are required to consult with plan designers, many of whom are engineers, to attempt to work out engineering solutions to problems encountered in the course of plan review, or to consult about potential problems prior to the plan review process, and in so doing are performing professional engineering work.

3. Appellants are involved in many of the activities set forth in the EE-Senior definition - e.g., "complex plan examinations...reviews of precedence [sic] - setting petitions for variance," etc.; and the enumeration of areas of engineering practice for purposes of P.E. licensure as set forth in §A-E 4.03, Wis Adm. Code - e.g., "evaluating

design impact on public health, safety and welfare...evaluating design solution for adherence to laws and codes," etc.

4. Appellants' positions compare favorably with other positions in the EE-Series -- primarily Mr. Russell's EE-Advanced 1 position in the On-Site Sewage section.

With respect to the third approach (comparing appellants' activities to the documents indicated), much of this exercise is of limited probative value. As discussed above, work in the plumbing area covers a broad spectrum of technical complexity. Many activities can be identified at either a higher or lower level class definition or work description when viewed in isolation. Whether they in fact are at the higher or lower level depends on their relative level of complexity.

For example, a master plumber who designs the plumbing for a single-family residence is probably going to be involved in "evaluating design and design methods...solving design problems...preparing designs...selecting materials and components," etc., as set forth in §A-E 4.03(2)(c) 4., 5., and 6., Wis Adm. Code, which lists areas of engineering practice which qualify as "satisfactory experience in engineering work" for P.E. registration. An engineer who is designing an engineered plumbing system for a fifty story building will also be involved in such activities. This does not mean that both are engaged in the practice of professional engineering. Similarly, the plan reviewer for the latter system is, literally, performing functions that can be described by the PPR2 class definition -- he or she is engaged in the "review [of] plumbing plans...for code compliance; consult[ing] with... engineers... regarding plan review procedures and applicable statutes and codes." (Respondent's Exhibit 1) Again, this is not dispositive as to the level of this work.

Reviewing this record in the context of this definition, the Commission concludes that these appellants have established that some of their work is at the level of professional engineering, based primarily on the first two points enumerated above. The most complex plan review that involves the analysis of complex engineered systems and work with design professionals, including engineers, to analyze problems and to find solutions involve many of the same skills and knowledge those design professionals utilize in their design process. However, while some of their work can be characterized as the practice of

professional engineering, these appellants have not established that a majority of their work is at this level, and that their positions should be in the environmental engineer series.

Mr. Burks testified that the majority of the plans submitted are prepared by master plumbers. Mr. Quinlan testified that most of the designs submitted by master plumbers are rather simple or taken from stock plans. Plan review of these plans does not constitute the practice of professional engineering. However, Mr. Quinlan also testified that 60-70% of the plans he reviews fall into the more complex category. If the majority of plans submitted to the section are drafted by master plumbers, and the master plumbers for the most part submit rather simple plans, it is difficult to see how Mr. Quinlan, who was stipulated to be representative of the other appellants in the section, would have a workload consisting of 60-70% of the more complex plans. This conflict in appellants' evidence weighs heavily against a finding that a majority of their work involves professional engineering.

Another factor that weighs heavily against appellants' claim is the item in Mr. Russell's PD signed by Mr. Russell, Mr. Burks (the section chief) and Mr. Bartz (DILHR Personnel) in March and April, 1991, (Respondent's Exhibit 52) that: "[t]his position provides the necessary knowledge of hydraulics, pneumatics, and flow theories used in engineering for the plan review function of the section." This is a clear assertion that it is Mr. Russell who provides the necessary engineering acumen for the section. Obviously, if these appellants are practicing professional engineering, this statement would be inconsistent with their status. Mr. Quinlan's 1987 PD (Respondent's Exhibit 30) does not include this language. However, the PD he, Mr. Bartz and Mr. Rockweiler (then unit head) signed in July 1991 (Respondent's Exhibit 31), contains exactly the same statement, i.e.: "This position provides the necessary knowledge of hydraulics, pneumatics, and flow theories used in engineering for the plan review functions of this section."

It is necessary to exercise caution in deciding how much weight to assign to items in PD's, which often are essentially boilerplate, or represent rhetorical attempts at portraying positions in the best light for classification purposes. However, the conflict created by this part of Mr. Russell's PD cannot be ignored. The Commission cannot assume that the people who signed the PD would not have been aware of the significance of the statement that "[t]his position provides the necessary knowledge of hydraulics, pneumatics, and flow theories used in engineering for the plan review functions of the

section." If this was a correct statement at the time (March and April 1991), it could not have been the case that Mr. Quinlan also was providing this knowledge then, or three months later when his July 1991 PD (Respondent's Exhibit 31) was signed.

Another factor related to Mr. Russell's position is the difference between small and large systems. Mr. Russell does most of the large system work for the section and indeed is in a separate component of the section ("Large Systems/Plats"). While appellants do some of this work (this is a 10% goal in their PD's), Mr. Russell has retained almost all of the approval authority for these systems. Despite testimony from appellants' witnesses that both large and smaller systems involve the same basic knowledges and skills, they also agreed that the larger systems tended to be more complex. Also, Mr. Witt testified that there was a substantial difference between the complexity levels of large and small systems.

Another factor that must be considered relates to the definition of professional engineering, discussed above, and the requirement that the practice of professional engineering is associated with an advanced, professional level of knowledge of mathematics, the physical sciences, and the principles of engineering. These appellants have had no significant formal post-high school education in math and science. As discussed above, this would not be fatal to their contention that they are engaged in the practice of professional engineering, because they conceivably could have acquired this knowledge through on-the-job training and self-education. However, Mr. Quinlan[6] testified not only did he not have any post-secondary education in math, but also that he utilized only high school-level math in his work. There was testimony in this record that engineers from time-to-time use tables in their work and would not be using an advanced level of mathematics at all times, and Mr. Quinlan's testimony on this point can be squared with the notion that these appellants perform some professional-level engineering work. However, the fact that these appellants do not use any post-high school math in their work weighs substantially against a finding that they are engaged in professional engineering work a majority of the time.

Another consideration is that the opinion testimony of appellants' expert witnesses was debilitated to some extent by a failure to adequately

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6 It was stipulated that his position would be considered representative of all three positions.

differentiate between engineering and professional engineering as a basis for their opinions. For example, Mr. Bartz testified that he used the following definition of environmental engineering:

> [A]n application of the laws of physical nature as they're applied to practical applications of building structures or systems which are employed for practical purposes, as well as an application of mathematical computations and principles in order to design, review, or any other practical approach to the kinds of systems, in an environmental context.

While he also testified that in his opinion this definition is basically the same as that found in ch. 443, Stats., his definition pertains to engineering, and does not draw the distinction between engineering and professional engineering contained in the statutory definition and discussed in State ex rel Wis. Registration Board of Architects and Professional Engineers v. T.V. Engineers of Kenosha, Inc., 30 Wis. 2d 434, 442, 141 N.W. 2d 235 (1966).

While these appellants may well be doing engineering-related work, that is at a higher level than was anticipated when the PPR class specifications were drafted, this does not necessarily lead to the conclusion that this work is at the level of professional engineering. This point is illustrated by Mr. Bartz's testimony when asked how he distinguished appellants' engineering functions from plumbing functions:

> The distinction that I found was in the applications of these principles to the systems that they were required to review to determine whether compliance work, as opposed to the very straightforward, cut and dried type reviews of these positions, based on information that was clearly presented and which an in-depth analysis and application of these kinds of principles would not be required. Simply looking at an administrative code, determining if plans included all the specifications for that code, basically on a prescriptive basis, that is the type of situation that I was looking at as being more of a technical kind of application, a plumbing-related deal.

This further illustrates that Mr. Bartz's opinion on the proper classification of appellants' positions apparently relied on an overly simplified definition of the professional engineering inclusion in the EE class specifications.

The weight to be given Mr. DuPont's testimony also was reduced by similar considerations. In his July 10, 1992, position paper (Appellants' Exhibit 30), he states that the "regulation of the design, installation, alteration and operation of plumbing in Wisconsin is in fact the practice of professional engi-

neering." This conclusion is based primarily on the provisions of Chapter 443, Stats.:

> Thirdly, ss. 443.02(2) and 443.14, Stats., read in part as follows:
>
> "(2) No person may practice architecture or professional engineering in this state unless the person has been duly registered, **is exempted under s. 443.14** or has effect a permit under s. 443.10(1)(d)." (emphasis added)
>
> "**443.14 Exempt persons.** The following persons, while practicing within the scope of their respective exemptions, shall be exempt from this chapter..."
>
> "(6) Notwithstanding any other provisions of this chapter, contractors, subcontractors or construction material or equipment suppliers are not required to register under this chapter to perform or undertake those activities which historically and customarily have been performed by them in their respective trades and specialties, including, but not limited to, the preparation and use of drawings, specifications or layouts within a construction firm or in construction operations, superintending of construction, installation and alteration of equipment, cost estimating, consultation with architects, professional engineers or owners concerning materials, equipment, methods, and techniques, and investigations or consultation with respect to construction sites, provided all such activities are performed solely with respect to the performance of their work on buildings or with respect to supplies or materials furnished by them for buildings or structures or their appurtenances which are, or which are to be, erected, enlarged or materially altered in accordance with plans and specifications prepared by architects or professional engineers, or by persons exempt under subs. (1) to (5) while practicing within the scope of their exemption..."
>
> This statutory exemption applies to persons engaged in many activities related to plumbing and demonstrates recognition by the legislature that such activities consist of the "practice of professional engineering" as defined by s. 443.01(6), Stats. When the legislature wrote the exemption contained in s. 443.14, Stats., it was exempting individuals from registration, not narrowing the definition of the practice of professional engineering under s. 443.01(6), Stats.

This argument overstates the reach of these provisions. Section 443.14(6) can not be interpreted as meaning that all "contractors, subcontractors or construction material or equipment supplies" who are engaged in any activities involving "the preparation and use of drawings, specifications or layouts," etc., are engaged in the practice of professional engineering and

are exempt from registration. Rather, it means that notwithstanding that the particular activities they are engaged in may constitute the practice of professional engineering as defined by Ch. 443, they are exempted from registration. The appellants' interpretation is inconsistent with the definition of professional engineering abstracted from §§443.01(6) and (7), discussed above. The determination of whether an activity constitutes the practice of professional engineering depends on whether it involves a "professional service requiring the application of engineering principles and data, in which the public welfare or the safegarding of life, health or property is concerned," §443.01(6), as engaged in by someone who is qualified to engage in such engineering practice "by reason of his or her knowledge of mathematics, the physical sciences and the principles of engineering, acquired by professional education and practical experience," §443.01(7). Whether the preparation of plans and specifications, and consultation with architects and professional engineers, etc., constitutes the practice of professional engineering depends on whether the activity is carried out on a level consistent with the definitional language found in §§443.01(6) and (7). A master plumber who is designing and preparing specifications for the installation of a bathroom in a basement remodeling project undoubtedly is not practicing professional engineering, notwithstanding that this activity involves the preparation of plans and specifications.

A similar argument is made with respect to §§443.07(3) and (4), which provide:

> (3) Permits shall be granted, designated and limited to the fields and subfields of technology as are determined by the examining board and recognized in engineering design practice. Any person holding a permit may prepare plans and specifications and perform consultation, investigation and evaluation in connection with the making of plans and specifications, within the scope of the permit, notwithstanding that such activity constitutes the practice of architecture or professional engineering under this chapter.
> (4) A master plumber's license under ch. 145 shall be considered equivalent to the work experience and satisfactory completion of a written examination in the field of plumbing systems, and the holder of a master plumber's license shall be issued a permit as a designer of plumbing systems upon the making of an application and the payment of the permit fee.

Appellants appear to contend that the provision in §443.07(3): "notwithstanding that such activity [preparation of plumbing plans]

constitutes the practice of professional engineering under this chapter," leads to the conclusion that plumbing designing constitutes the practice of professional engineering. However, all that can be drawn from this language is that plumbing design may constitute the practice of professional engineering.[7] In the phrase "such activity constitutes the practice of professional engineering," (emphasis added), the underscored language can be interpreted as a reference either to the particular activity in which the designer is engaging, or to the preparation of plans, specifications, etc., in general. The former interpretation is consistent with the statutory definition of professional engineering, for the same reasons as discussed above.

Finally, Mr. DuPont testified as follows at the hearing with respect to the statutory scheme which exempts master plumbers from P.E. registration:

> According to the statutes, it's because historically, plumbers have been practicing professional engineering in the design of plumbing systems... They are practicing professional engineering when they are designing a plumbing system.

As discussed above, while plumbing design at a certain level may constitute the practice of professional engineering, not every plumbing design project is at this level.

Even if appellants could show that their positions fit into the professional engineering inclusion for the EE series, they still have not demonstrated on this record that their positions should be at the EE-Senior level. The EE-Senior class definition refers to "Senior level environmental engineering work involving difficult technical assignments which include consideration of complex variables and issues, unusual conditions, or unique circumstances not typically dealt with at lower levels [journey, developmental, entry]." (Appellants' Exhibit 1) Appellants have not demonstrated that their positions are at this level. Appellants frequently referred to their work as being more complex than the municipal plan inspectors, who are responsible for one and two family dwellings. However, it certainly has not been established that the municipal plan reviewers are performing professional engineering work, no

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[7] To the extent that respondent may have been perceived as having rested its position on these reclass requests on a general proposition that neither plumbing design nor plumbing design plan review can constitute the practice of professional engineering, this proposition did not enter into respondent's case at the hearing.

less at a level comparable to an EE-Journey. Nor are there other position comparisons in the record which would support an EE-Senior level for these positions.

Clearly the most significant comparison is the EE-Advanced 1 level position in the On-Site Sewage Section occupied by David Russell. Again, assuming that appellants' positions should be in the EE series, there is a substantial basis for concluding that Mr. Russell's position is at a higher level based on the criteria in the class definitions and the classification factors in the EE class specification. This position has responsibility for most of the large system work, and virtually all of the final authority for them. As discussed above, these tend to be more complex than smaller systems. In addition, it has exclusive authority for the unsewered subdivision program, which has a broader scope in many cases than the responsibility for individual projects. This position also has exclusive authority for the review of proposed experimental systems. If appellants' positions qualified for the EE series in general, it would be plausible to place their positions one pay range below Mr. Russell's -- i.e., at the EE-Senior level. However, it also would be plausible to place them two pay ranges below -- i.e., at the EE-Journey level.

The EE-Advanced 1 position held by Kenneth Bro in the Health Hazard Evaluation Unit, Division of Health, DHSS, Respondent's Exhibit 53, also was offered for comparison. This position is responsible for the "review of groundwater, hydrology and engineering data as it pertains to the ATSDA funded program to perform health risk assessments of Wisconsin's Superfund dumpsites." It has to "review...surface and groundwater quality modeling data to determine the confidence by which such data can be used to predict present and future human exposure to toxic substances in the environment." This position also has the responsibility to "review engineering plans developed to remediate contamination arising from chemical dumpsites to ensure that response measures are adequate to protect public health." While Mr. Bro does not have an engineering degree, he has a Ph.D. in land resources, an M.S. in water resources management, and a B.S. in biology, and he uses his advanced training, which includes courses in physics, chemistry, and mathematics in performing his duties. This position appears to be functioning at a significantly higher level than appellants', and it could not be concluded on this record that it is only one level higher.

The Wastewater Engineer Advanced 1 position in the Industrial Wastewater Section, Bureau of Wastewater Management, DNR, occupied by Brian Barbieur, "is responsible for the preparation of Wisconsin Pollution Elimination (WPDES) discharge permits; review of engineering plans and specifications, and the preparation of applicable portions of Environmental Impact Statements as these actions relate to industrial wastewater control, treatment and/or disposal systems." This position also has responsibility for the administration of the statewide General Permits Program and Water Treatment Additives Program. The incumbent has a B.S. in chemical engineering. This position has a substantially broader scope than appellants' positions and could be at classification level either one or two pay ranges higher.

The Water Supply Engineer Advanced 1 position in the Private Water Supply Section, Bureau of Water Supply, DNR, occupied by Robert Schaefer, is responsible for designing, managing and monitoring DNR's Water Treatment Device Program, for reviewing plans for school water supplies and sewage treatment plant water supplies, as well as other private water supplies and high capacity wells, and for the review of petitions for variance with respect to sewage construction siting in proximity to water supplies. The incumbent has a B.S. in Civil and Environmental Engineering, and is a registered P.E., although this is not a requirement of this position. This position has greater scope than appellants' positions. While this position is probably a better comparison to appellants' positions than either Mr. Bro's or Mr. Barbieur's, it is difficult to use this position as a point of demarcation for a one versus a two pay grade differentiation.

There were some matters which the parties addressed on the record, but which in the final analysis appeared to drop out as matters of contention. For example, appellants adduced testimony addressing the issue of whether the area of plumbing engineering is a recognized field of engineering. However, this did not appear to be a basis for respondent's decision, and respondent did not advance this contention in support of their case at the hearing.

Another apparent "non-issue" involved Ms. Burke's testimony that the EE class specification (Respondent's Exhibit 18) was afflicted by a typographical error in the failure to have a semi-colon to segregate "building water supply, building drain and vent systems, drinking water and waste water treatment products," from the rest of the enumeration of program areas, and that the class specification should require all three of these areas as a program

area for inclusion in the EE series. Again, this apparently did not enter into DER's decision and was not argued at the hearing.

Another argument that the Commission did not find persuasive and which does not enter into its decision was respondent's contention that appellant's case was fatally undermined by the fact that they are nonexempt under the Fair Labor Standards Act (FLSA). On this record, their FLSA status depends to a large extent on their classification, so respondent's reliance on this factor reflects a degree of circularity.

Turning to the positions in the General Plumbing, Fire Sprinkler and Licensing Section, the Commission first will address the general plan review positions and then Mr. Miller's "leadworker" position.

The general plan review positions have the following goals and percentages: plan review, 35%; consultation regarding plan review policies and procedures and other subjects related to the unit's functions, 25%; preparation of license examination material for Plumber's Licensing Council, 10%; review of petitions for variance, 10%; preparation of technical papers and code interpretations and the provision of assistance in the development of plumbing code revisions, 10%.

Mr. Wehinger's position is basically similar to the foregoing description, except that he has specialty areas of cross-connection controls and lead contamination, and he has consultation goals of 25% and 10% in these respective areas. His position also has a 10% goal for other consultation and field investigations, a 10% goal for plan review, 10% for training activities, 10% for petitions for variance, 10% for technical papers and code-related activities, and 10% for plumbing licensure activities.

These positions are under the general supervision of the Section Chief, Duane Strussman, a Plumbing Supervisor, who assigns and schedules work. Appellants' decisions are final and not reviewed by their supervisor. They make recommendations on petitions for variance, and do not have final approval authority for them.

These positions require state licensure as a master plumber or certification as a designer of plumbing systems, and all appellants satisfy this requirement. There is no requirement for an engineering degree or P.E. registration, and none of appellants have either. In addition to continuing education related to their work Mr. Wehinger has three years of college with a civil engineering major, and Ms. Docken has one year of college with an emphasis on life sciences, and an EEG technical college diploma.

Like the on-site sewage positions, these positions have been substantially affected both by changes in the plumbing code, commencing about in 1984, from a "prescriptive"-oriented code to a "performance"-oriented code, and advances in plumbing technology. As a result, their plan review work involves much more of an engineering process, as the appellants must go through an engineering analysis to determine if engineered plumbing systems will perform as predicted and required. In many of these cases, the appellants work closely with the design to assist in troubleshooting problems and identifying solutions. This involves work with master plumbers, registered plumbing designers, architects and engineers. Some of this consultation is done before the plans are submitted. In some cases, code interpretations are rendered at seminars and training sessions. These preliminary code interpretations are effectively binding on the agency.

These positions involve the same kinds of issues as the on-site sewage positions concerning whether they fall within the EE specification inclusion of "professional engineering," and, if so, whether they are at the EE-Senior level. Again, these are complicated issues. The key question is whether a majority of appellants' work involves reliance on the "knowledge of mathematics, the physical sciences, and the principles of engineering acquired by professional education and practical experience," §443.01(7), Stats. The record supports a conclusion that when appellants are reviewing and consulting regarding the more complex engineered plumbing systems, they are drawing on this type of knowledge. When they are working on the simpler plans, they are not functioning at this level. The question is whether they are performing the more complex work a majority of the time.

The testimony of appellants' supervisors that appellants are practicing professional engineering,[8] while entitled to some weight, must be evaluated in light of the fact that their concept of professional engineering was rather broad, and gave little if any emphasis to the requirement that the practice of professional engineering must be associated with a professional or advanced level knowledge of math, science and engineering principles, §§443.01(6), (7), Stats., or a "higher degree of learning, experience, and competence in mathematics, physics and chemistry," State ex rel Wis. Registration Board of Archi-

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[8] Mr. Strassman's testimony actually was couched in terms of the practice of engineering or plumbing engineering, rather than professional engineering. Engineering or plumbing engineering which falls short of professional engineering would not qualify for inclusion in the EE series.

tects and Professional Engineers v. T.V. Engineers of Kenosha, Inc., 30 Wis. 2d 434, 442, 141 N.W. 2d 235 (1966). This area has been discussed above, and that discussion is essentially applicable here.

Turning to the more specific factual issues presented by this record, the Commission must consider Mr. Miller's role in the unit. Mr. Miller's PD signed on June 11, 1991 (Appellants' Exhibit 3), includes the following 20% goal:

> 20% C. Analyze and evaluate the most highly complex plumbing plan submittals and engineered plumbing systems. Perform the necessary associated functions as the result of the plan examination, such as writing letters, telephone discussions, personnel interviews, follow ups, etc. Understand chemical principles involved in the process and theory of plumbing design.

Also, goal B includes the following:

> 25% B. Special duties and assignments
>
> B1. Serve as section's expert in interpreting the Wisconsin Plumbing Code, Chapter ILHR 82.
>
> B2. Be the primary individual in conducting high level contacts with state agencies, federal agencies, engineers, architects, plumbing designers, plumbers, legislators, local officials, inspectors, manufacturers, retailers and the general public.
>
> B3. Respond to the most complicated telephone inquiries regarding code application and administrative procedures.
>
> B4. Analyze and evaluate the most highly complex and precedent setting technical petitions for variance and prepare a written recommendation for action by the section chief. Respond to the submitting party in writing within the established time limits for review, request more information or advise of options....

If only the more complex plan review and related consultation constitutes the practice of professional engineering, and if Mr. Miller has a 20% allocation for handling the most complex reviews, it is difficult to understand how the other plan reviewers can qualify as professional engineers on the basis of their plan review and related activities. Appellants presented testimony at the hearing that Mr. Miller does little if any actual plan review, and that this activity (plan review) actually describes his consultation with the other plan

reviewers, whose work includes the most complex plan reviews, and who consult with Mr. Miller regarding difficulties as they arise. This testimony cannot be squared with Mr. Miller's PD which clearly calls for 20% in actual plan review as to the most complex plans and 30% consultation to the other employes in the unit. It is also inconsistent with Mr. Miller's Job Content Questionaire (Appellants' Exhibit 11).

A similar observation may be made with respect to petitions for variance. Mr. Strassman testified there are about 100-150 filed annually, only about 10% are precedent-setting, and about 60-70% are more or less repetitive. If Mr. Miller is responsible for the analysis and evaluation of "the most highly complex and precedent setting technical petitions for variance," as set forth above, this leaves little if any of this work for the other plan reviewers. Again, while there was similar testimony that all the plan reviewers handle the most complex petitions for variance, and Mr. Miller consults when there are problems or questions, this simply can not be reconciled with the documentary evidence referred to above.

It may be that these jobs have changed since Mr. Miller's PD was signed on June 11, 1991, and that the most highly complex plan reviews and petitions for variance are spread more equally among the plan reviewers. However, these appeals concern the status of these positions as they existed prior to the effective date of DER's decision (June 30, 1991), and the Commission cannot consider any changes which may have occurred since then.

Most of the consultation and other work appellants perform is related to code review, and does not provide a significant basis for a conclusion that they are performing the practice of professional engineering. The majority of their activities in training and manual preparation is oriented to plumbers.

The record with respect to Mr. Wehinger's areas of specialization (cross-connection control and lead contamination) does not support a finding that these areas are so complex as compared to the other plan review work that there should be a different result for his position. While Mr. Wehinger's testimony established these are complex areas, the calculations and analysis involved were not shown to be any more complex than the other areas of plumbing design and plan review for which the other appellants are responsible. Also, the supervisors who testified that appellants were performing professional engineering work did not differentiate Mr. Wehinger's areas of specialization as being at a higher level than the other complainants.

Ms. Docken testified that her work has become much more research-oriented than plan review-oriented, with as much as 80% of her time involved in research recently. However, this degree of research is not reflected in her PD which she signed on June 28, 1991 (Respondent's Exhibit 37), and the Commission must assume that if the orientation of her position was changing in 1991, the period of time prior to the June 1991 effective date of the reclassification denial decision is accurately reflected in this PD.

While the Commission reaches the conclusion that these appellants are not performing professional engineering work a majority of the time, it notes that it did not rely on respondent's contention that an engineering classification for appellants would be inconsistent with their status of being supervised by a Plumbing Supervisor (Mr. Strassman). First, this argument is somewhat circular, as the classification of his position relies to some extent on the classification of his subordinates' positions. Second, this did not stop DER from classifying Ms. LeCount's position, which is also subject to Mr. Strassman's supervision, as a Civil Engineer.

Even if it could be concluded that these positions were involved in professional engineering the majority of the time, the record does not support a conclusion that they should be at the EE-Senior level, which is defined as: "[s]enior level environmental engineering work involving difficult technical assignments which include consideration of complex variables and issues, unusual conditions, or unique circumstances not typically dealt with at lower levels [journey, developmental, and entry]." Appellants' Exhibit 1. The discussion of this issue with respect to the on-site sewage positions also applies to a large extent to these positions and will not be reiterated here.

More specific to these positions is the comparison to the Civil Engineer-Senior position in the section held by Lynn LeCount, which involves the review and approval of fire sprinkler systems. While some of appellants' witnesses testified that this position compared favorably to appellants, the Commission is reluctant to attach too much weight to this testimony. This is partially because of some of the reasons discussed above, primarily the tendency to give inadequate consideration to the distinction between the practice of engineering and the practice of professional engineering.

In addition, there are only sketchy descriptions of Ms. LeCount's work, appellants did not call her as a witness, and did not offer in evidence either her PD or the civil engineer class specifications. Also, Mr. Bartz of DILHR personnel, who testified on behalf of appellants, never drew this comparison.

He stated that he was not too familiar with her position, and limited his opinion to the proposition that there was no reason why appellants' positions should not be in the same classification series.[9]

Mr. Bartz also testified in a conclusory fashion that these positions were appropriately classified at the EE-Senior level and compared favorably to other EE-Senior positions, including some at DILHR, none of which were identified. He also said that the majority of engineering positions were reallocated to the senior level. In the Commission's opinion, this testimony was too general to be given much weight.

With respect to Mr. Miller's position, the primary difference between it and the other plan reviewers' positions in the unit is that he functions as the lead worker and chief technical expert with respect to plumbing plan review. As was discussed above to some extent, there is a significant conflict between his PD and some of the testimony concerning how much of his time is devoted to actual review of plans and petitions for variance, as opposed to acting as a consultant to the other plan reviewers in these areas. The Commission places greater weight on the PD, at least for purposes of the period in question -- i.e., prior to June, 1991. This PD, dated June 11, 1991 (Respondent's Exhibit 26), reflects the following goal percentages: 30%, consultation to the plan examination unit; 25%, special duties and assignments, which included analyzing the most highly complex and precedent-setting petitions for variance and making recommendations to the section chief, serving as the primary individual for high-level contacts with engineers, architects, plumbers legislators, etc., serving as the section expert in interpreting the plumbing code, serving in code research and development capacities, and representing the bureau as the contact person regarding the Lead Contamination Control Act; 20%, conducting plan review for the most highly complex plan submittals; 15%, acting as the primary resource person in the development and presentation of training regarding plumbing design; and 10%, providing education and consultant services regarding the plumbing and plumbing inspector programs within the bureau.

Like the other appellants, Mr. Miller's job has been very significantly affected by the changes in the plumbing code since 1984, as well as by contin-

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[9] He testified that Ms. LeCount's position was classified as EE-Senior, although his memo recommending reclassification of Mr. Miller's position (Appellants' Exhibit 11) referred to it as a CE-Senior.

uing changes in technology. Summarized briefly, these changes have resulted in much more of an emphasis in plumbing design on engineered systems and the concomitant need for the plan (or petition for variance) reviewer to essentially replicate the design process to ensure that the design will meet the predicted and required goals, instead of a more checklist-oriented type of approach. This process also involves intensive work with the design professionals, including engineers, to find solutions for the problems perceived in the design, as well as trouble-shooting consultation before the plan submittal stage to develop solutions to design problems. Mr. Miller also has significant and complex related duties involving his role as the chief expert in plumbing engineering for the section -- e.g., consultation, training and plan development.

Mr. Miller's background includes a one-year degree in architectural drafting and an associate degree in architectural technology, from Madison Area Technical College, and certifications as a plumbing designer, plumbing inspector, as well as various continuing education training.

As discussed above, the more complex end of the plumbing design spectrum involves the practice of plumbing engineering at the level of professional engineering, and plan review of the most complex nature, in the current code and technological environment, involves the reviewer in the same kinds of design and analytical activities in which the designer engages. Because Mr. Miller is handling the most complex issues for his unit in the areas of plan review, petitions for variance, consultation, research, code development, and training, it can be concluded on this record that he is performing professional engineering work the majority of the time. While on this record Mr. Miller's formal training is probably somewhat short of providing what would be considered a professional level of knowledge of "mathematics, the physical sciences, and the principles of engineering, " §443.01(7), Stats., he has had approximately 16 years of experience in the field of plumbing engineering, and the record supports a conclusion that he has acquired through both "professional education and practical experience" (emphasis supplied), id., the professional knowledge of these disciplines needed for the practice of professional engineering.

Although the Commission concludes that Mr. Miller's position is eligible for classification in the Environmental Engineer series, the issue in this case is limited to "[w]hether respondent's decision to deny appellant's request to reclassify his position from Plumbing Plan Reviewer 2 to Environmental

Engineer-Advanced 1 was correct." Conference Report dated July 31, 1992. Mr. Miller has the burden of proof to establish by a preponderance of the evidence that his position fits within the EE-Advanced 1 definition, as opposed to a lower level -- i.e., entry, developmental, journey, or senior.

The Advanced 1 definition is:

> This is advanced level environmental engineering work involving very complex technical design review and consultation duties. Positions at this level differ from lower level positions in that the range of assignments is broader, more complex, and continually requires the incumbent to use independent judgment in making difficult professional engineering decisions. Assignments typically involve the review of highly complex plans and systems requiring broad application of engineering principles and assessment of the over-all impact of decisions made. Work is performed under general supervision.

The record in this case does not provide a basis to conclude that this position is more properly classified at this level than, for example, the senior level ("work involving difficult technical assignments which include consideration of complex variables and issues, unusual conditions, or unique circumstances not typically dealt with at lower levels"), or journey level ("responsible for more varied and complex work assignments than at lower levels, including more difficult design reviews."). It is impossible to conclude from merely looking at Mr. Miller's position that it should be placed at the Advanced 1 level. As is frequently the case in this type of series, the determination of an issue like this depends on position comparisons. However, the position comparisons in this record do not support an Advanced 1 classification for Mr. Miller's position.

The most obvious classification comparison for Mr. Miller's position is the other plan reviewers in the unit for whom he serves as lead worker. If their positions had been established as properly classified at the EE-Senior level, this would support an EE-Advanced 1 level position for Mr. Miller's position, but as discussed above, the record does not support this conclusion.

The next most obvious comparison is to Ms. LeCount's Civil Engineer-Senior position in appellant's unit, which is in the fire sprinkler system area. In Mr. Bartz's writeup of Mr. Miller's reclass request (Appellants' Exhibit 11) he states that Ms. LeCount's position is similar to Mr. Miller's in terms of knowledge of building systems, chemical reactions, mathematical formulas, engineering principles, and laws of physics, but that "Mr. Miller's position has

broader applications to entire building plumbing systems and therefore, represents a broader scope than Ms. Le Count's position." Mr. Bartz does not state explicitly that Mr. Miller's position is at a higher level than Ms. LeCount's, and since he only rates it more advanced on one of the factors he mentions, such a conclusion cannot be inferred from his statement. Furthermore, Mr. Bartz testified at the hearing that he was not that familiar with her position, and he did not draw a comparison with respect to class level between the two positions, although he did say he did not see a justification for having plaintiffs in a different series -- i.e., presumably in a non-engineering series. In light of these limitations on Mr. Bartz's testimony concerning Ms. LeCount's position comparison, as well as the other factors discussed above -- the absence of both the PD for her position and the class specification for the Civil Engineer series, and the fact that she did not testify -- the Commission cannot conclude that Mr. Miller's position is at a higher level than Ms. LeCount's position.

Another comparison is with Loretta Trapp's EE-Advanced 2 position in the Plumbing Product Review and Support Section. In his recommendation for the reclassification of Mr. Miller's position (Appellants' Exhibit 11), Mr. Bartz states that a "comparison of the Composite Position Summaries for each of these positions clearly indicates numerous similarities in the types of knowledges required as well as the corresponding complexity, scope, and impact factors. I have enclosed copies of these two composites[10] for your reference." Again, however, Ms. Trapp did not testify and neither the PD nor the composite for her position were made part of the record. Furthermore, in his testimony at the hearing Mr. Bartz did not express any opinion regarding the comparative class levels of these positions, but limited his opinion to the conclusion that there was no justification for a different classification series for appellants' positions. All in all, the record lacks an adequate basis for a finding that Mr. Miller's position should be one class level below Ms. Trapp's position, as opposed to two or three.

Another problem with Mr. Miller's case is that a reclassification requires that there have been a "logical and gradual change to the duties or responsibilities of a position," §ER 3.01(3), Wis. Adm. Code. Respondent did not cite the absence of a logical and gradual change as a reason for denial of re-

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10 The copy of Mr. Bartz's memo (Appellants' Exhibit 11), that was made part of this record had attached a copy of Mr. Miller's composite, but not Ms. Trapp's.

classification in its original decision (Appellants' Exhibit 7). However, appeals of this nature are heard on a de novo basis, see Ratchman v. UW-Oshkosh & DER, 86-0219-PC (11/18/87) ("the Commission does not simply review the classification decision on the basis of the evidence that was before the analyst at the time of the decision, but it allows both parties to present at the hearing whatever evidence is relevant to the classification question."); Werth v. DP, 81-0130-PC (8/05/81) ("The Commission conducts a de novo hearing at which the parties can make a completely new evidentiary record, and the Commission then determines whether the reallocation was correct under statutory guidelines based on the evidence presented at the hearing." (citations omitted)); 73A C.J.S. Public Administrative Law and Procedure §170 (scope of review on administrative appeal is normally de novo unless otherwise provided by statute). Mr. Miller testified that in 1985 the bureau director assigned him the lead-work role because of his knowledge and expertise and because he was willing to accept the responsibility. Clearly this was not a "logical and gradual" change as required by the code.

Mr. Miller also testified that he was not relying on his leadworker activities to support his claim. However, there is no way this role can be separated from those aspects of his job that are critical to distinguishing it from his fellow plan reviewers. This point is illustrated by Appellants' Exhibit 27, which includes copies of a January 6, 1988, memo from section chief Duane Strassman which includes the following:

> The lead worker position is the position within the Section of General Plumbing that addresses code questions for the plumbing plan reviewers, plumbing consultants, and the local government plumbing inspectors. This position also is responsible for the review of the more complex plumbing drawings and engineered plumbing systems which are innovative methods of plumbing design based on plumbing hydraulics.

This also reflected in Mr. Strassman's follow-up February 23, 1988, memo: "The lead plan reviewer position as stated in the original request will examine the more complex plumbing plan submittals and the engineered plumbing systems."

In conclusion with respect to all these cases, the Commission emphasizes that its decision is based solely on the material record evidence relating to these classification transactions. The voluminous record in this case contain-

ed a number of references to generalized comparisons to the various groups of positions, as well as concerns about pay equity, retention problems, etc., which have not entered into this decision.[11] The Commission also observes that the Plumbing Plan Reviewer series appears to be outmoded for these appellants, in light of the changes discussed above, which have made their positions more engineering-oriented than appears to have been contemplated by the PPR class specification. While the appellants were unable to establish on this record that DER should have reclassified their positions to the Environmental Engineer-Senior or Environmental Engineer-Advanced 1 classifications, rather than having retained their positions in the PPR 2 classification, it does appear that the development of a new classification should be considered for these positions.

ORDER

Respondent's actions denying these reclassification requests are affirmed and these appeals are dismissed.

Dated:_____, 1993 STATE PERSONNEL COMMISSION

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LAURIE R. McCALLUM, Chairperson

AJT:dkd

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DONALD R. MURPHY, Commissioner

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JUDY M. ROGERS, Commissioner

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[11] These kinds of issues are usually addressed through the survey process, and the development of new class specifications, or by the assignment of classifications to salary ranges (which is a bargainable subject, §11.91(1)(a), Stats.). However, the Commission's scope of review on a appeals of this nature is limited to consideration of the existing class specifications, see e.g., Zhe v. DHSS, 80-0285-PC (11/19/81); affirmed, Dane Co. Cir. Ct., 81-CV-6492 (11/02/82)).