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Pursuant to Iowa Code section 17A.6, the Iowa Administrative Code [IAC] Supplement is published biweekly.

The Supplement contains replacement pages to be inserted in the loose-leaf IAC according to instructions in the respective Supplement. Replacement pages incorporate amendments to existing rules or entirely new rules or emergency or temporary rules which have been adopted by the agency and filed with the Administrative Rules Coordinator as provided in sections 7.17, 17A.4 to 17A.6. [It may be necessary to refer to the Iowa Administrative Bulletin* to determine the specific change.] The Supplement may also contain new or replacement pages for "General Information," Tables of Rules Implementing Statutes, and Index.

When objections are filed to rules by the Administrative Rules Review Committee, Governor or the Attorney General, the context will be published with the rule to which the objection applies.

Any delay by the Administrative Rules Review Committee of the effective date of filed rules will also be published in the Supplement.

Each page in the Supplement contains a line at the top similar to the following:

IAC 9/24/86 Employment Services[341] Ch 1, p.7

*Section 17A.6 has mandated that the "Iowa Administrative Bulletin" be published in pamphlet form. The Bulletin will contain Notices of Intended Action, Filed Rules, effective date delays, Economic Impact Statements, and the context of objections to rules filed by the Committee, Governor, or the Attorney General.

In addition, the Bulletin shall contain all proclamations and executive orders of the Governor which are general and permanent in nature, as well as other materials which are deemed fitting and proper by the Committee.

INSTRUCTIONS

FOR

Updating Iowa Administrative Code
with Biweekly Supplement

NOTE: Please review the "Preface" for both the Iowa Administrative Code and Biweekly Supplement and follow carefully the updating instructions.

The boldface entries in the left-hand column of the updating instructions correspond to the tab sections in the IAC Binders.

Obsolete pages to IAC are listed in the column headed "Remove Old Pages." New and replacement pages in this Supplement are listed in the column headed "Insert New Pages." It is important to follow instructions in both columns.

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December 12, 1990, Biweekly Supplement

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*It is recommended that "Old Pages" be retained indefinitely in a place of your choice. They may prove helpful in tracing the history of a rule.

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*It is recommended that "Old Pages" be retained indefinitely in a place of your choice. They may prove helpful in tracing the history of a rule.

19.9(5) *New structure energy conservation standards.* Each utility providing gas service shall not provide such service to any structure completed after April 1, 1984, unless the owner or builder of the structure has certified to the utility that the building conforms to the energy conservation requirements adopted under Iowa Administrative Code subrule 661—16.800(3) as amended and updated by subrule 661—16.800(4). If this compliance is already being certified to a state or local agency, a copy of that certification shall be provided to the utility. If no state or local agency is monitoring compliance with these energy conservation standards, the owner or builder shall certify that the structure complies with the standards by signing a form provided by the utility. No certification will be required for structures that are not heated or cooled by gas service, or are not intended primarily for human occupancy.

This rule is intended to implement Iowa Code sections 476.1 and 476.2.

199—19.10(476) Purchased gas adjustment (PGA).

19.10(1) *Purchased gas adjustment clause.* Purchased gas adjustments shall be computed separately for each customer classification or grouping previously approved by the board. Purchased gas adjustments shall be separately calculated for each supplying pipeline. Purchased gas adjustments shall use the same unit of measure as the utility's tariffed rates. Purchased gas adjustments shall be calculated using factors filed in annual or periodic filings according to the following formula:

$$PGA = \frac{(C \times Rc) + (D \times Rd) + (N \times Rn) + (Z \times Rz)}{S} + E - K$$

PGA is the purchased gas adjustment per unit.

S is the anticipated yearly gas commodity sales volume for each customer classification or grouping.

C is the volume of applicable commodity purchased or transported for each customer classification or grouping required to meet sales, S, plus the expected lost and unaccounted for volumes.

Rc is the weighted average of applicable commodity prices or rates to be in effect September 1 corresponding to purchases C.

D is the total volume of applicable gas or transportation demand purchases required to meet sales, S, for each customer classification or grouping.

Rd is the weighted average of applicable demand rates to be in effect September 1 corresponding to purchases D.

N is the total quantity of applicable annual entitlement to meet sales, S, for each customer classification or grouping.

Rn is the weighted average of applicable entitlement rates to be in effect September 1 corresponding to annual entitlement quantity N.

Z is the total quantity of applicable storage service purchases required to meet sales, S, for each customer classification or grouping.

Rz is the weighted average of applicable storage service rates to be in effect September 1 corresponding to purchases Z.

E is the per unit overcollection or undercollection adjustment as calculated under subrule 19.10(7).

K is the base cost of gas as set forth in the utility's tariff.

The components of the formula shall be determined as follows for each grouping:

a. The actual sales volumes S for the prior 12-month period ending June 30, with the necessary degree day adjustments, and further adjustments approved by the board.

Unless a utility receives prior board approval to use another methodology, a utility shall use the same weather normalization methodology used in prior approved PGA and rate case.

b. The annual expected lost and unaccounted for factors shall be calculated by determining the actual difference between sales and purchases and deriving a five-year average.

c. The purchases C, D, N and Z which will be necessary to meet requirements as determined in 19.10(1).

d. The calculation of the rate factors Rc, Rd, Rn and Rz, to be in effect September 1, shall be exclusive of past take-or-pay charges, which may be recovered pursuant to subrule 19.10(5).

The purchased gas adjustments shall be adjusted prospectively to reflect the final decision issued by the board in an annual review proceeding.

19.10(2) *Annual purchased gas adjustment filing.* Each rate-regulated utility shall file on or before August 1 of each year, for the board's approval, a purchased gas adjustment for the 12-month period beginning September 1 of that year.

The annual filing shall restate each factor of the formula stated in subrule 19.10(1).

The annual filing shall be based on customer classifications and groupings previously approved by the board unless new classifications or groupings are proposed.

A separate annual filing shall be made for each supplying pipeline.

The annual filing shall include all worksheets and detailed supporting data used to determine the purchased gas adjustment volumes and factors including sales and purchase data from bills, invoices, internal reports and supplier and customer contracts. Information already on file with the board may be incorporated by reference in the filing.

19.10(3) *Periodic changes to purchased gas adjustment clause.* Periodic purchased gas adjustment filings shall be based on the purchased gas adjustment customer classifications and groupings perviously approved by the board. Changes in the customer classification and grouping on file are not automatic and require prior approval by the board.

A separate filing shall be made for each supplying pipeline. Periodic filings shall include all worksheets and detailed supporting data used to determine the amount of the adjustment.

Changes in factors S or C may not be made in periodic purchased gas filings except to recognize changes between pipeline and nonpipeline purchases. A change in factors D, N, or Z may be made in periodic filings and will be deemed approved if it conforms to the annual purchased gas filing or if it conforms to the principles set out in 19.10(5) and 19.10(6).

The utility shall implement automatically all purchased gas adjustment changes which result from changes in Rc, Rd, Rn, or Rz equal to or greater than .5 cents per ccf or therm immediately with concurrent board notification with adequate information to calculate and support the change. Purchased gas adjustment changes of less than .5 cents per ccf or therm shall be required with concurrent board notification if the last purchased gas adjustment change occurred 30 days or more prior to the change. The purchased gas adjustment shall be calculated separately for each customer classification or grouping.

Unless otherwise ordered by the board, a rate-regulated utility's purchased gas adjustment rate factors shall be adjusted as purchased gas costs change and shall recover from the customers only the actual costs of purchased gas and other currently incurred charges associated with the delivery, inventory or reservation of natural gas.

If a supplier's entitlement charge is zero, the same percentage of current demand charges shall be allocated to each customer class or grouping as the average of demand charges allocated during the last 12-month period for which entitlement rates were not zero. "Current demand charges" means the amount (D × Rd) used in computing the formula set out in 19.10(1).

19.10(4) *Roll-in of purchased gas costs to base rates.* The purchased gas adjustments must be reduced to zero with the August 1 filing to become effective September 1. The purchased gas adjustment as determined in subrule 19.10(1) shall be incorporated in the utility's gas portion of the base tariff rates and the total shall become the "K" factor for the prospective 12-month period.

19.10(5) *Take-or-pay adjustment.*

a. Pipeline supplier charges to the utility based upon take-or-pay payments or settlements may be recovered from customers through a separate adjustment. This excludes those charges allocated by the pipeline on a total through-put basis and billed to the utility as part of the commodity costs and to the transportation customers as part of the transportation rate.

b. The adjustment shall be applicable to all gas sales commodity volumes and to all gas transportation commodity volumes.

c. The calculation for the take-or-pay adjustment shall be according to the following formula:

$$TPA = \frac{P}{(St + T)}$$

TPA is the take-or-pay adjustment per unit of anticipated gas sales and transportation commodity volumes. The board will determine for each company whether the TPA will be set on a total company basis or by customer class.

P is the total amount of annualized take-or-pay charges allowed by the board for all groupings or customer classifications as determined in 19.10(5)*"a."*

St is the total anticipated yearly gas sales commodity volumes of all groupings or customer classifications as determined in 19.10(1).

T is the total anticipated yearly gas transportation commodity volumes based upon the prior 12-month period ending June 30 plus such additional gas commodity volumes as may be expected to be transported based upon transportation contracts or agreements executed prior to September 1.

The take-or-pay adjustment formula, TPA = P/(St + T), shall include an E factor where E will be the per-unit overcollection or undercollection adjustment as calculated under subrule 19.10(7).

d. The TPA may be added to the PGA for purposes of billing for all groupings or customer classifications to which a PGA is applied and shall be billed as a separate line item for customers utilizing transportation service pursuant to transportation tariffs approved by and on file with the board.

e. The TPA shall be filed by August 1 concurrent with the rate-regulated utilities annual PGA filing pursuant to 19.10(1) and may be adjusted as part of the periodic filings pursuant to 19.10(1)*"a."*

f. The TPA filing shall include all worksheets and detailed supporting data adequate to support a determination of the amount of actual pipeline take-or-pay charges for the 12-month period ending June 30 to be recovered by the TPA.

19.10(6) *Allocations of changes in contract demand obligations.* Any change in contractual demand obligations to pipelines or other gas suppliers serving Iowa must be reported to the board within 30 days of receipt. The change must be applied on a pro rata basis to all customer classifications or groupings, unless another method has been approved by the board. Where a change has been granted as a result of the utility's request based on the needs of specified customers, that change may be allocated to the specified customers. Where the board has approved anticipated sales levels for one or more customer classifications or groupings, those levels may limit the pro rata reduction for those classifications or groupings.

19.10(7) *Reconciliation of underbillings and overbillings.* The utility shall file with the board on or before October 1 of each year a purchased gas adjustment reconciliation for the 12-month period which began on September 1 of the previous year. This reconciliation shall be the actual net invoiced costs of purchased gas less the actual revenue billed through its purchased gas adjustment clause net of the prior year's reconciliation dollars for each customer classification or grouping. Actual net costs for purchased gas shall be the applicable invoice costs from all appropriate sources associated with the time period of usage.

Negative differences in the reconciliation shall be considered overbilling by the utility and positive differences shall be considered underbilling. This reconciliation shall be filed with all worksheets and detailed supporting data for each particular purchased gas adjustment clause. Penalty purchases shall only be includable where the utility clearly demonstrates a net savings.

The take-or-pay reconciliation shall be the actual net invoiced costs of take-or-pay less the actual revenue billed through its take-or-pay factors for each customer class or grouping. Actual net costs for take-or-pay shall be the applicable invoice costs from all appropriate sources associated with the time period of usage.

a. Any underbilling determined from the reconciliation shall be collected through ten-month adjustments to the appropriate purchased gas adjustment. The underbilling generated from each purchased gas adjustment clause shall be divided by the anticipated sales volumes for the prospective ten-month period beginning November 1 (based upon the sales determination in subrule 19.10(1).

The quotient, determined on the same basis as the utility's tariff rates, shall be added to the purchased gas adjustment for the prospective ten-month period beginning November 1.

Any underbillings determined from the take-or-pay reconciliation shall be collected through ten-month adjustments to appropriate take-or-pay adjustment. The underbilling shall be divided by the anticipated sales volumes or transport volumes for the prospective ten-month period beginning November 1 (based upon the volumes determined in subrule 19.10(5).

The quotient, determined on the same basis as the utility's tariff rates, shall be added to the take-or-pay factor for the prospective ten-month period beginning November 1.

b. Any overbilling determined from the reconciliation shall be refunded to the customer classification or PGA grouping from which it was generated. The overbilling shall be divided by the annual cost of purchased gas subject to recovery for the 12-month period which began the prior September 1 for each purchased gas adjustment clause and applied as follows:

(1) If the net overbilling from the purchased gas adjustment reconciliation exceeds 5 percent of the annual cost of purchased gas subject to recovery for a specific PGA grouping, the utility shall refund the overbilling by bill credit or check for the time period beginning November 1 of the current year to the date of refunding.

(2) If the net overbilling from the purchased gas adjustment reconciliation does not exceed 5 percent of the annual cost of purchased gas subject to recovery for a specific PGA grouping, the utility may refund the overbilling by bill credit or check for the time period beginning November 1 of the current year to the date of refunding, or the utility may refund the overbilling through ten-month adjustments to the particular purchased gas adjustment from which they were generated. This adjustment shall be determined by dividing the overcollection by the anticipated sales volume for the prospective ten-month period beginning November 1 as determined in subrule 19.10(1) for the applicable purchased gas adjustment clause.

The quotient, determined on the same basis as the utility's tariff rates, shall be a reduction to that particular purchased gas adjustment for the prospective ten-month period beginning November 1.

Any overbilling determined from the reconciliation shall be refunded to the customer classification of TPA grouping from which it was generated. The overbilling shall be divided by the anticipated sales volumes or transport volumes for the prospective ten-month period beginning November 1 (based upon the volumes determined in subrule 19.10(5). The 5 percent refund rule described in 19.10(7)*"b"*(1) and (2) shall also apply to the take-or-pay reconciliation.

The quotient, determined on the same basis as the utility's tariff rates, shall be a reduction to that particular take-or-pay adjustment for the prospective ten-month period beginning November 1.

c. When a customer has reduced or terminated system supply service and is receiving transportation service, any liability for overcollections and undercollections shall be determined in accordance with the utility's gas transportation tariff.

19.10(8) *Refunds from gas suppliers.*

a. The utility shall refund to customers by bill credit or check an amount equal to any refund received from a supplier, plus accrued interest, if the refund exceeds $5 per average residential customer under the applicable PGA clause. The utility may retain undistributed refund amounts in special refund retention accounts for each customer classification under the applicable PGA clause until such time as additional refund obligations or interest cause the average residential customer refund to exceed $5. Any obligations remaining in the retention accounts on September 1 shall become a part of the annual PGA reconciliation.

Within 30 days of receipt of a refund from a supplier, the utility shall file with the board the following information:

(1) A statement of reason for the refund.

(2) The amount of the refund with support for the amount.

(3) The balance of the appropriate refund retention accounts.

(4) The amount due under each purchased gas adjustment clause.

b. If the supplier refund will result in a refund distribution, the utility shall also file within 30 days:

(1) The intended period of the refund distribution.

(2) The estimated interest accrued for each supplier refund through the proposed refund period, with complete interest calculations and supporting data as determined in 19.10(8)*"e."*

(3) The total amount to be refunded, the amount to be refunded per customer classification or PGA grouping, and the refund per ccf or therm.

c. Within 30 days of receipt of a refund from a supplier which will result in a refund retention, the utility shall also file with the board for its approval a refund retention report which shall include the following information:

(1) The estimated interest accrued for each refund received and for each amount in the refund retention accounts through the date of the filing with complete interest calculation and support as determined in 19.10(8)*"e."*

(2) The total amount to be retained, the amount to be retained per customer class or PGA grouping, and the level per ccf or therm.

(3) The calculations demonstrating the retained balance is less than $5 per average residential customer with supporting schedules for all factors used.

d. The refund to each customer shall be determined by dividing the amount in the appropriate refund retention account, including interest, by the total ccf or therm of system gas consumed by affected customers during the period for which the refundable amounts are applicable and multiplying the quotient by the ccf or therms of system supply gas actually consumed by the

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the survey letter is mailed to the customer. The ballots shall not be counted for three days following the survey ballot return date to allow all return cards to clear the post office. Results of the survey shall be provided to the board within 15 days of the return date.

b. Ballot by return postcard. The postage-paid, company-addressed return postcard included with the customer survey letter should contain the following information:

(1) A statement explaining the EAS proposal being voted on as set out in the customer survey letter.

(2) A place for the customer to indicate whether he or she favors or is opposed to the discontinuance of EAS.

(3) Lines designated for the customer's signature, telephone number and date.

c. The return ballot shall be retained by the company for at least two years and shall be available for review by the board staff during that time. After two years, the ballot may be destroyed; provided, however, a record showing the results of the survey as recorded from the return ballots shall be maintained for a period of five years.

d. If the customers approve discontinuance of two-way EAS to another exchange and concurrence in that discontinuance cannot be obtained from the customers of the second exchange, consideration may be given to continuance of one-way EAS by that second exchange. The same basic survey procedure shall be followed as provided herein, but the customer survey letter shall also include a statement indicating that the neighboring exchange or its customers have voted to discontinue two-way EAS and that this survey is being taken to determine interest in one-way calling.

199—22.9(476) Terminal equipment. Terminal equipment is deregulated. Customers may secure terminal equipment through any provider.

199—22.10(476) Standards of competition. In areas of telephone service where customer provision of terminal equipment or new inside station wiring is permissible or required, a telephone utility's practices and actions shall be fair.

22.10(1) In order to promote fair treatment of customers, the telephone utility shall observe the following practices:

a. A telephone utility shall inform, in writing, all employees who may handle customer complaints, requests for information and communication services or equipment items which may be provided by customers, of the provisions of 22.3(6), 22.3(13), 22.4(1)*"a"*(2), 22.9(476) and 22.11(476).

b. Telephone utility personnel shall provide applicable rates and charges or any other information contained in the utility tariff, to answer inquiries as to the absence or presence of telephone utility equipment or services at a specified location, and to provide specifications which will permit customer-provided terminal equipment and new inside station wiring to gain access to the telephone network.

**c.* Upon the individual customer's request, each telephone utility shall perform a service check up to the demarcation point, without charge to the customer, and all costs for the service check up to the demarcation point will be assigned to the regulated services of the utility. However, as an exception, if the customer requests that the utility locate or repair any difficulty on the customer's side of the demarcation point, all costs and charges, if any, associated with the service on both the customer's side and the utility's side of the demarcation point will be assigned to the deregulated services of the utility.

*Effective date delayed 70 days from 12/5/90 by the Administrative Rules Review Committee at its 11/14/90 meeting.

22.10(2) All unfair or deceptive practices related to customer provision of equipment are prohibited. Any failure to provide information to customers or to deal with customers who provide their own terminal equipment or new inside station wiring or an alteration of the charges for or availability of equipment or services on that ground, unless specifically authorized by board order or rule and by the utility's tariff, shall constitute unfair or deceptive practices. In cases of equipment in compliance with federal communications commission registration requirements, telephone utility personnel are prohibited from making any statement, express or implied, to, or which will reach, a customer or prospective customer that terminal equipment in compliance with federal communications commission registration requirements cannot properly be attached to the telephone network. This does not apply to good faith efforts to amend the federal communications commission requirements.

The listing of unfair practices in this rule shall not limit the types of acts which may be found to be unfair nor shall those listed be used to establish decisional criteria operating to exempt any act otherwise unfair from the intent of this rule.

199—22.11(476) Existing and new inside station wiring.

22.11(1) *Treatment of existing and new inside station wiring.*

a. On and after the transition date, all telephone utilities shall, if new inside station wiring is offered, provide, sell or lease the new inside station wiring as nonutility functions. The repair and maintenance of existing and new inside station wiring shall be nonutility functions on and after the transition date. No telephone utility shall on and after the transition date be required to provide, sell, lease, install, maintain or repair new inside station wiring or maintain or repair existing inside station wiring. The costs and revenues associated therewith shall not be included in a telephone utility's revenue requirement for ratemaking purposes.

b. Each telephone utility shall be responsible for making all connections at the protector or providing a facility to permit connection with new inside station wiring at the demarcation point. Nothing contained in these rules shall require or necessitate changes or modifications to telephone utility connections with existing inside station wiring.

c. Each telephone utility shall maintain its accounting records to separately account for those costs and revenues associated with utility functions and those costs and revenues associated with nonutility functions. Identifiable costs and associated overheads will be directly assigned; common and joint costs will be allocated on a consistent basis between utility and nonutility functions. Each telephone utility shall have the burden of proof to establish that directly assigned and allocated costs are recorded in the appropriate accounts.

d. Each telephone utility shall within one hundred twenty (120) days after the effective date of these rules file a revised tariff which provides the utility will not be responsible for providing, repairing and maintaining new inside station wiring and repairing and maintaining existing inside station wiring.

22.11(2) *Suppliers.* New inside station wiring may be secured from a telephone utility if new inside station wiring is offered, or from any other supplier. Repair or maintenance for existing or new inside station wiring may be secured from a telephone utility, if repair or maintenance is offered, or from any other supplier.

22.11(3) *Amortization of existing inside station wiring.* Complete expensing of subaccounts 233:1 and 233:2 shall be accomplished through use of an amortization period commencing from the effective date of these rules. The amortization period shall be the depreciation period established in the last rate proceeding completed prior to January 1, 1982, for each telephone utility, or ten (10) years, whichever is less.

Existing inside station wiring, upon expiration of the amortization period for the respective subaccounts, shall be excluded from the utility's regulated books of account. No telephone utility shall be permitted to sell existing inside station wiring during the amortization period for the respective subaccounts, or at any time thereafter. No telephone utility shall be permitted to lease existing inside station wiring after the expiration of the amortization period.

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ECONOMIC DEVELOPMENT, IOWA DEPARTMENT OF[261]

[Created by 1986 Iowa Acts, chapter 1245]
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PART VI
DIVISION OF ADMINISTRATION, PLANNING, AND POLICY

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"Participating business" means one or more existing businesses which are parties to an agreement as provided in rule 6.10(73GA,ch220).

"Participating worker" means a person who prior to being accepted into a retraining program is an employee of the participating business and who the department determines is substantially at risk of becoming displaced within the following ten years, due to the retooling of the business.

"Retooling" means upgrading, modernizing, or expanding a business to increase the production or efficiency of business operations, including replacing equipment, introducing new manufacturing processes, or changing managerial procedures. Managerial procedures include those philosophies and techniques, such as statistical process control, total quality management, quality circles, just-in-time, and others. These management technologies are labor intensive and do not necessarily require capital outlay.

"Retraining" means the process designed to instruct participating workers in skills related to the retooled operation of the participating business and includes any of the following skills:

1. Basic academic skills, including fundamental skills of reading, computation of numbers, and written and verbal communication required to successfully function in the workplace.
2. Job-specific skills, including skills required to perform tasks of a specific employment position or cluster of employment positions.

"Retraining agency" means an area school or other public educational facility, private entity, or organization which provides retraining to workers.

261—6.3(73GA,ch220) Funding.

6.3(1) *Retraining fund.* An Iowa employment retraining fund which is administered by the department is established in the office of the treasurer of state. The fund is a revolving fund consisting of: funds appropriated to it; interest earned on appropriated funds; moneys collected from the repayment of loans, including the interest from loans or from other sources.

6.3(2) *Set-aside of retraining funds.* Each fiscal year the department will set aside for that fiscal year the moneys in the fund for each merged area to be used to provide the financial assistance for retraining proposals of businesses located in the merged area whose applications have been approved by the department. The financial assistance will be provided by the department from the amount set aside for that merged area.

6.3(3) *Formula.* Retraining funds will be set aside for the merged areas using the formula for the allocation of funds to merged areas for purchase of equipment from the jobs now capitals account of the lottery fund set out in rule 281—21.36(73GA,ch220) in effect on March 1, 1989.

6.3(4) *Unexpended or uncommitted funds.* If any portion of the moneys set aside for a merged area has not been used or committed by March 1 of the fiscal year, that portion is available for use by the department to provide financial assistance to businesses located in other merged areas. During fiscal year 1990, the department will reallocate funds based upon the potential need of each area based on information about projects in progress prior to March 1. After fiscal year 1990, reallocated funds will be awarded based on the total score received; funding the highest point totals until the funds are exhausted.

261—6.4(73GA,ch220) Allowable costs. Allowable program costs means all necessary and incidental costs of providing program services and includes, but is not limited to, the following services: jobs retraining; adult basic education and job-related instruction; vocational and skill-assessment services and testing; training facilities, equipment, materials, and supplies; administrative expenses for the jobs retraining program; subcontracted services with institutions governed by the board of regents, merged area schools, private colleges or universities, or other federal, state or local agencies; contracted or professional services; and for funded projects, precontract costs approved by the department. Allowable costs can be claimed from the date the application is submitted. Allowable precontract costs must be submitted in writing to the department prior to the execution of the contract. On-the-job training is not an allowable program service. Employee wages paid by a business for actual training time may be used to meet the business investment requirement of 6.8(4).

261—6.5(73GA,ch220) Type of financial assistance available.

6.5(1) *Limit on award.* The department shall not provide more than $50,000 of financial assistance for a retraining proposal.

6.5(2) *Financial assistance.*

a. The department may award financial assistance composed of grants, loans, forgivable loans, or a combination of grants and loans.

b. The financial assistance awarded to a participating business must be based on the actual cost of retraining participating workers under the retraining program.

c. To ensure the accountability of the business, before providing a grant, the department shall consider the feasibility of providing a forgivable loan.

d. Financial assistance shall not include a grant or forgivable loan unless the result of retooling creates, at the business production site subject to the retooling, one of the following:

(1) A net increase in the number of employment positions; or

(2) A net increase in the quality of the employment positions held by participating workers; or

(3) A net increase in the wages paid to participating workers.

261—6.6(73GA,ch220) Retraining application.

6.6(1) *Application by business.*

a. Eligible applicants. A business may apply for retraining assistance under this chapter by completing an application under the supervision of the area school serving the merged area in which the business proposes to retrain workers. The area school shall provide the applicant with all assistance necessary in completing the application. The area school shall submit the completed application on behalf of the business. The application shall be on forms provided by the department.

b. Joint applications. A group of businesses may submit a single application where the most efficient solution to a problem requires mutual action.

c. Multiple applications from same applicant. A business may submit more than one application. If the department is reviewing more than one application from a business, the department may request the business to prioritize the applications.

6.6(2) *Application forms.* Application forms are available from the division of job training. Applicants who have submitted information to the department for another IDED program, which is identical to that requested on the retraining program application, may request the division to accept the previously submitted documents.

6.6(3) *Submittal.* Completed application forms shall be submitted to: Division of Job Training, Iowa Department of Economic Development, 200 East Grand Avenue, Des Moines, Iowa 50309; telephone (515) 281-4219. Applications must be received by the department by the close of business on the fifteenth day of the month to be considered for funding the following month.

6.6(4) *Incomplete or ineligible applications.* The department will not review and rate an ineligible or incomplete application. An application may be determined to be incomplete or ineligible if:

a. The applicant does not meet the eligibility requirements of the program;

b. The project proposal does not meet program guidelines; or

c. The application contains information which is insufficient or inadequate so that the department is unable to determine whether the proposal complies with program guidelines.

6.6(5) *Contents of application.* Each application shall include, but not be limited to, the following information:

a. Business information. The department's application requires information about the business applying for retraining funds. The application requests information in the following general categories:

(1) The impact of implementing the applicant's retraining proposal on competing businesses in the state.

(2) The employees at the business production site and their employment positions, with specific emphasis on those employees and positions affected by the retraining program.

(3) The financial condition of the business, including balance sheets (three years historical and three years projected) or a current credit ratings report from a generally accepted credit service. Three years historical financial information is required even if a current credit ratings report is submitted as evidence of the business's projected financial condition.

(4) The retooling operations in place or planned to be in place at the project site.

(5) The union or affiliate representing the employees of the business.

(6) The type of goods or services to be produced by retooling.

(7) Information about other state or federal programs under which the business has applied for assistance.

b. Retraining proposal. Each application shall contain a retraining proposal. The retraining proposal shall include the following:

(1) A description of the qualifications and services to be provided by the retraining agency to service the business.

(2) Information about the jobs resulting from retraining including numbers, positions, wage levels and benefits, part-time or full-time status, turnover rate, and number of other similar positions in the area.

(3) A description of the involvement of other federal and state programs under which the business may be seeking, or has received, funding for the proposed project.

(4) A description of the coordination of the retraining program with other state or federal training programs in which the business is involved.

(5) A description of the system to monitor and evaluate the retraining program.

(6) The need of the applicant's business for the retraining assistance.

(7) A description of the degree to which the product made by the business's retooling operation is new, creates new market opportunities, or diversifies the state's economy.

(8) A description of the degree to which the business's retooling operation introduces new manufacturing processes into state industry.

(9) A narrative of the past performance of the proposed retraining agency.

(10) A description of the market demand for the proposed retraining.

(11) An assessment of the impact of the retraining proposal on competing businesses.

(12) The anticipated beginning and ending dates of the proposed retraining.

(13) An explanation of the type of retooling operations in place or planned to be in place at the project site.

(14) An explanation of the need for retraining as it relates to the company's retooling operations at the project site.

The department may also request any other information deemed to be relevant by the department regarding the business's application.

c. Evaluation of retraining proposal. The department may request an evaluation of the retraining proposal by the area school serving the merged area in which the retrained workers are to be employed. If an evaluation is requested, it shall include the elements identified in 1989 Iowa Acts, chapter 220, section 4(4).

6.6(6) *Open records.* Information submitted to the department is subject to Iowa Code chapter 22, the public records law. Applications for retraining funds submitted to the department are generally available for public examination. Information which: the business believes contains trade secrets recognized and protected as such by law; or if released would give an advantage to competitors and serves no public purpose; or meets other provisions for confidential treatment as authorized in Iowa Code section 22.7 will be kept confidential.

The department has adopted, with certain exceptions described in 261—Chapter 100, the rules of the Governor's Task Force on Uniform Rules of Agency Procedure relating to public records and fair information practices. The uniform rules are printed in Volume I of the Iowa Administrative Code. Uniform rule X.5 describes how a person may request a record to be treated as confidential and withheld from public examination. Businesses requesting confidential treatment of certain information submitted to the department shall follow the procedures described in the uniform rule. The department will process such requests as outlined in uniform rule X.5 and 261—Chapter 100.

261—6.7(73GA,ch220) Approval process.

6.7(1) *In-house review committee.* Completed applications from eligible applicants will be reviewed by an in-house review committee composed of department staff. The department may also request representatives of other appropriate state agencies with applicable expertise to participate on the review committee. In reviewing an application, staff will consider the contents of the application, including the business information and retraining proposal.

6.7(2) *Scoring and ranking.* The department shall approve, deny, or defer applications and award financial assistance based on the evaluation criteria outlined in rule 261—6.8(73GA,ch220). The review committee will score and rank each eligible application. To be considered by the committee for recommendation to the director for funding, an application must receive a minimum of 130 points.

6.7(3) *Director's decision.* After staff have reviewed, scored and ranked the applications, the review committee will forward to the director a list of proposals recommended for funding. The director will review the committee's recommendations and make final funding decisions.

261—6.8(73GA,ch220) Evaluation criteria. Applications will be evaluated using the following criteria:

6.8(1) *Actual investment.* The total amount of dollars which have been invested in the business for the previous three years to increase productivity or efficiency, including capital improvements in retooling. 5 points.

6.8(2) *Planned investment.* The total amount of dollars planned to be invested in the business for the following three years to increase productivity or efficiency, including capital improvements in retooling. 5 points.

6.8(3) *Ratio: investment + profit compared to retraining dollars requested.* A ratio comparing the total dollars invested or to be invested pursuant to subrules 6.8(1) and 6.8(2) plus the amount of profit in dollars made by the business in the previous three years, to the amount of dollars proposed to assist the business in retraining. 10 points.

6.8(4) *Ratio: business investment in retraining costs compared to requested retraining funds.* A ratio comparing the total amount planned to be invested by the business at the project site in the actual costs of retraining to the amount of dollars being requested for retraining. This ratio shall indicate that the business's investment amount is at least equal to the amount requested, in which case the full 25 points will be awarded. If not, the application shall be denied. 25 points.

6.8(5) *Quality of jobs.* The quality of jobs resulting from the retraining proposal. "Job quality" means the value of an employment position to a business based on consideration of factors including, but not limited to, the following:

a. The dollar value of annual wages and benefits that a worker beginning in the position earns.

b. Whether the employment position is a permanent full-time, permanent part-time, temporary full-time, or temporary part-time position. If the position is other than permanent full-time, consideration of the value of the position shall include the number of hours demanded from the position each year.

c. The number of times in the last three years that the position has been occupied.

d. The number and type of similar employment positions in the area in which the business would reasonably employ workers. 30 points.

6.8(6) *Need.* The need of the applicant's business for retraining assistance. "Need" is not limited to financial need for purposes of this criterion, although it can include financial condition; it may also include the need of the business to improve quality of jobs, improve technology, remain competitive, etc. 20 points.

6.8(7) *New operation, market or diversification.* The degree to which the product made by the business's retooling operation is new, creates new market opportunities, or diversifies the state's economy. 20 points.

6.8(8) *New manufacturing processes.* The degree to which the business's retooling operation introduces new manufacturing processes into state industry. 20 points.

6.8(9) *Past performance of retraining agency.* The past performance of the proposed retraining agency in training persons, by considering the placement and retention of former trainees and employer satisfaction with former trainees. 5 points.

6.8(10) *Cost-benefit analysis.* The result of a cost-benefit analysis which measures the value of the proposed retraining based upon job-related calculations including, but not limited to, the number of workers participating in the proposal, the cost of retraining each worker, the dollar value of wages and benefits to be earned by each retrained worker, and the market demand for the proposed retraining. 10 points.

6.8(11) *Planned retraining evaluation procedure.* The procedure to evaluate the proposed retraining program and collect data required to make the evaluation, based on a procedure which monitors the retraining program, including accounting and auditing systems adequate to ensure the accuracy and reliability of expenditures recorded by the business and related to the proposed retraining. 5 points.

6.8(12) *Feasibility.* The feasibility of implementing the retraining proposal, including the relevance of the retraining proposal to the retooling efforts, a statement of the specified outcomes of the retraining proposal, the likelihood of the business to improve quality of jobs, improve technology, remain competitive and improve financial condition. 25 points.

6.8(13) *Viability of business.* An assessment of the viability of the business including a review of the financial condition of the business. 10 points.

6.8(14) *Impact on competing businesses.* An assessment of the impact of the retraining proposal on competing businesses. 10 points.

The following two factors shall be part of the evaluation process only when applicable:

6.8(15) *Number of businesses.* The number of businesses contained in the training proposal applying for combined assistance. 20 points.

6.8(16) *Union endorsement.* The endorsement of the labor union or affiliate which represents workers proposed to participate in retraining. 30 points.

6.8(17) *Small businesses.* Businesses with less than 250 employees and sales of less than $2,000,000. 30 points.

261—6.9(73GA,ch220) Notice to applicant. The applicant will be notified in writing of the department's final disposition of the application. Written notice will be mailed within 20 days of the department's final disposition of the application.

261—6.10(73GA,ch220) Retraining agreement.

6.10(1) *Agreements.* Following the department's approval of an application, the department and the applicant will enter into a retraining agreement on forms provided by the department.

6.10(2) *Parties.* Parties to a retraining agreement shall include the department and the participating business(es) named in the application's proposal, and may include any other entity approved by the department and named in the application, including a retraining agency or a labor union or affiliate representing participating workers.

261—6.11(73GA,ch220) Financial management.

6.11(1) *Audits.* All retraining agreements are subject to audit. Recipients shall be responsible for the procurement of audit services and for the payment of audit costs. Audits may be performed by the state auditor's office or by a qualified independent auditor.

6.11(2) *Monitoring.* The department shall monitor retraining programs, including the supervision of the accounting and auditing of retraining program funds, to assist participating businesses. The department may perform any review or field inspections it deems necessary to determine program compliance. In the event the review or inspection identifies compliance problems, the department may require that remedial action be taken.

6.11(3) *Record-keeping and retention requirements.* Financial records, supporting documentation, statistical records, and all other records related to the retraining agreement

shall be retained by the recipient. Records shall be maintained by the recipient for a minimum of three years beyond the termination date of the retraining agreement. The recipient shall maintain records for longer than three years if any audit, litigation or claim involving the records is initiated. In these instances, the records shall be preserved until the audit, litigation or claim is resolved.

6.11(4) *Access to records.* Representatives of the department and the state auditor's office shall have access to books, accounts, documents, and other records maintained by the recipient related to the receipt of assistance under these rules.

6.11(5) *Performance reports.* The department may required periodic performance reports about a funded project. Reports shall be submitted in the format specified by the department.

6.11(6) *Noncompliance or default.*

a. If the department determines that a recipient is not in compliance with the requirements of this chapter or the retraining agreement, it may direct the recipient to remedy the noncompliance.

b. Remedies for noncompliance may include penalties up to and including return of program funds to the department. Reasons for a finding of noncompliance include, but are not limited to the following: using funds for activities not described in its application or authorized by the department; failure to complete approved activities in a timely manner; failure to comply with applicable state rules or federal regulations; or the lack of a continuing capacity to carry out the approved program in a timely manner.

c. If, after notice by the department, a recipient fails to remedy a finding of noncompliance within the time frame specified in the notice, the department may refer the matter to the attorney general's office for appropriate action.

These rules are intended to implement 1989 Iowa Acts, chapter 220.

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p. Educational assistance and compensation payments to veterans and other eligible persons under the following chapters of Title 38 of the U.S. Code:

Chapter 11—Compensation for service-connected disability or death
Chapter 13—Dependency and indemnity compensation for service-connected deaths
Chapter 31—Training and rehabilitation for veterans with service-connected disabilities
Chapter 32—Post-Vietnam era veterans' educational assistance
Chapter 34—Veterans' educational assistance
Chapter 35—Survivors' and dependents' educational assistance
Chapter 36—Administration of educational benefits

q. Payments received under the Trade Act of 1974
r. Payments received on behalf of foster children
s. Child support payments
t. Cash payments received pursuant to a state plan approved under the Social Security Act:

Title II—disability insurance payments
Title IV—aid to families with dependent children
Title XVI—supplemental security income for the aged, blind, and disabled

u. Payments received under the Black Lung Benefits Reform Act of 1977 (Public Law 95-239)
v. Assets drawn down as withdrawals from a bank
w. Proceeds from the sale of property, a house, or car
x. Tax refunds
y. Other one-time and limited unearned income

8.3(5) *Local sponsor.* Each applicant must secure participation from a local sponsor.

8.3(6) *Automatic eligibility.* Cash welfare recipients (AFDC, general assistance, refugee assistance, etc.) or applicants which are JTPA eligible are automatically eligible to apply for a SELP loan.

8.3(7) *Experience.* An applicant must have successfully completed a business training program including, but not limited to, programs such as SEID, WEDGE, Drake's Minority Business Venture, and Kirkwood Community College's Rural Development Center; or be able to demonstrate a basic knowledge of business strategy and planning documented by previous successful business management or ownership; or be willing to enroll in a business training program; or agree in writing to accept and utilize ongoing technical assistance.

261—8.4(15) Application procedure. Application materials are available from the IDED division of job training.

8.4(1) *Submittal.* Completed applications shall be submitted to: SELP, Division of Job Training, Iowa Department of Economic Development, 200 East Grand Avenue, Des Moines, Iowa 50309.

8.4(2) *Review.* Applications will initially be reviewed by the IDED staff. IDED staff may request additional information from the applicant prior to committee review. A review committee will score each application. The scores will be averaged and the applications receiving a minimum of 10 points out of a total of 19 will be considered by the committee for recommendation for funding. The committee's recommendation for funding will include the amount of the loan (not to exceed $5,000), the amount of the interest to be charged (not to exceed 5 percent), and other terms and conditions. The IDED director will review the recommendations and make a final decision based on various factors including geographical distribution, economic impact, etc.

8.4(3) *Evaluation factors.* In scoring and reviewing applications, the following factors to be considered include but are not limited to: budget factors, business design, demonstrated need of applicant, feasibility of plan, creditworthiness, and previous business experience. In addition, the review committee will take into consideration an applicant's: inability to secure a loan from conventional sources (e.g., bank, savings and loan) for the business venture; personal debt level; and lack of personal financial resources to adequately finance the business venture.

261—8.5(15) Loan agreement. Upon award of a loan the IDED staff will prepare a loan agreement which will include loan conditions, a repayment schedule, and default provisions.

261—8.6(15) Monitoring and reporting.

8.6(1) *Monitoring.* The IDED reserves the right to monitor the recipient's records to ensure compliance with the terms of the loan.

8.6(2) *Reporting.* Loan recipients shall submit to the IDED reports in the format requested by the department. The department retains the authority to request information on a more frequent basis.

261—8.7(15) Default procedures.

8.7(1) Delinquency on a loan begins on the tenth day after the due date of the first missed payment not later made. A loan is in default when a borrower exceeds 90 days of delinquency.

8.7(2) If a payment is not made in a timely manner, the department will send written notices of delinquency or collection letters to the last known address of the borrower. The notice will notify the borrower of the amount past due and request prompt payment of that amount.

8.7(3) If there is no response to written notices of delinquency or collection letters or if payment is not made, the department will send a Notice to Cure to the borrower. The Notice to Cure identifies the terms and conditions necessary to cure the delinquency and allows 20 days for the account to be resolved. The notice will notify the borrower that if the delinquency is not cured and results in default, the department may report the default to a credit reporting bureau and may bring suit against the borrower to compel repayment of the loan.

8.7(4) In the event the borrower does not comply with the Notice to Cure, a Final Demand letter will be sent to the borrower and a separate Final Demand letter will be sent to the cosigner.

8.7(5) Once a loan is in default and an account remains unresolved after the time period stated in the Final Demand letter, the department will refer the matter to the Iowa attorney general's office for appropriate action.

These rules are intended to implement Iowa Code section 15.241.

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261—10.6(99E) Grant period and amount of grants.

10.6(1) The maximum grant award for the 1987-88 program year for areawide labor-management committees and industry-specific labor-management committees is $25,000 per committee. The maximum amount for in-plant committees is $5,000 per committee. In subsequent program years the grant award limitations for each category shall be stated in the request for proposal.

10.6(2) For the first program year, funding will terminate on June 30, 1988. A grant may be extended beyond June 30, 1988, depending upon satisfactory performance by the grantee and conditioned upon continued state appropriations for the program. Future projects will operate on a 12-month program year beginning July 1 and ending June 30. All funded projects shall submit an application package annually for funding consideration. Funded projects are not automatically guaranteed future funding.

261—10.7(99E) Match requirements.

10.7(1) A newly formed labor-management committee shall provide at least 10 percent of the total program's operating costs.

10.7(2) For an existing labor-management committee, the committee shall provide 25 percent of the toal program's operating costs.

10.7(3) Matching funds may include cash contributions or in-kind services such as donated office space, clerical support, equipment, postage, etc. Matching funds may come from state or local government sources or private sector contributions. Funds generated by labor-management grant program funds are considered "project income" and may not be used for matching purposes. Preference will be given to proposals that include cash contributions.

10.7(4) It is the intent of the state labor management council that the committees funded through this program become self-sufficient within a three-year period.

261—10.8(99E) Reporting requirements. A committee receiving funding under the labor-management program shall submit to the IDED a quarterly report outlining the goals and objectives which have been achieved by the committee during the previous quarter. This report shall specify if the major milestones identified by the committee in its application package are being met according to the timetable provided. An explanation shall be included in the report if these milestones are not being met as outlined in the grantee's proposal.

261—10.9(99E) Monitoring. The IDED reserves the right to monitor and evaluate the activities of any committee receiving funding under this program.

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CHAPTER 11
PRODUCTIVITY AND QUALITY ENHANCEMENT

DIVISION 1
GRANTS TO COMMUNITY COLLEGES

261—11.1(15) Purpose. The 1989 Iowa Code Supplement section 15.251 provides that the department may charge community colleges 1 percent of the bonds sold under Iowa Code chapter 280B to defray administrative costs of the department and support other efforts by the community colleges related to productivity and quality enhancement training.

261—11.2(15) Allowable activities. Allowable activities include training for businesses in quality and productivity enhancement techniques by individual or consortia of community colleges and purchase of training materials/packages to increase the capacity of community colleges to provide quality and productivity enhancement training to businesses. Special consideration shall be given to small and rural businesses in the provision of such services.

261—11.3(15) Allocation of funds.

11.3(1) An amount, determined in consultation with the community college economic developers, depending on funding availability in any given fiscal year, will be divided equally among the 15 community colleges to provide quality and productivity enhancement training to businesses within their community college area.

11.3(2) The balance of funds remaining, after administrative costs and funds identified in 11.3(1) have been deducted from the funds available during any given fiscal year, shall be used for grants to consortia of community colleges to jointly purchase and receive training in techniques of quality and productivity enhancement to build the capacity of the community colleges to deliver such training to businesses in their area.

261—11.4(15) Application procedures.

11.4(1) To apply for funds identified in 11.3(1), each community college must submit to the department a plan describing the training it will conduct, how businesses will access the training, and how the training will be evaluated. Based upon the approved plan, a contract will be developed between the department and each community college. As specific companies are identified to receive the training, the community college will notify the department of the specific company, provide the training identified, and submit a request for reimbursement of funds to receive payment for the training provided. All funds must be expended during the fiscal year in which they are awarded.

11.4(2) To apply for funds identified in 11.3(2), two or more community colleges shall jointly submit an application to the department for review by the department in conjunction with the Iowa quality coalition. If approved, a contract will be developed between the department and the community colleges involved in the joint application which will detail contract conditions and payment provisions. All funds must be expended during the fiscal year in which they are awarded.

261—11.5(15) Reporting requirements. An annual report shall be submitted by the community college or consortia of community colleges for each contract received through 1 percent funding. The report shall include a final financial statement of actual expenses incurred, training programs provided, number of companies and employees trained, and a summary of training evaluations.

261—11.6(15) Limit on use of funds. During fiscal year 1991, funds available through 1 percent funding will be utilized to continue productivity and quality grants to community col-

leges funded during fiscal year 1990 by the Iowa quality coalition, with consultation of the department, and fund additional grants to community colleges not previously funded.

DIVISION 2
IOWA QUALITY COALITION

261—11.7(73GA,ch1262) Purpose. The 1990 Iowa legislature appropriated funds to the Iowa department of economic development to establish a program to increase Iowa's capacity to provide training to Iowa firms, especially smaller businesses in rural areas of the state, designed to improve the quality of their products and services and to increase their productivity.

261—11.8(73GA,ch1262) Definitions.

"Coalition" means the Iowa quality coalition described in 261—11.8.

"IDED" means the Iowa department of economic development.

"Fiscal agent" means the entity chosen by the Iowa quality coalition and approved by IDED to assist in the administration of the productivity enhancement activities.

261—11.9(73GA,ch1262) Quality coalition. The Iowa quality coalition is composed of representatives of private business, government, labor, and education and is established to provide policy guidance, review and recommend grant awards, recognize Iowa firms for their excellence in continual improvement of the quality of products and services, promote and provide training, coordinate resources, and provide technical assistance to local quality committees.

261—11.10(73GA,ch1262) Fiscal agent. Funds for Iowa quality coalition activities shall be administered by the coalition or a fiscal agent chosen by the Iowa quality coalition and approved by IDED.

261—11.11(73GA,ch1262) Allowable activities. Allowable activities shall include executive awareness sessions, training sessions to expand the capacity of the community colleges to deliver quality and productivity enhancement training to small businesses, technical assistance to government and businesses to implement quality and productivity enhancement programs, promotional videos and brochures to increase participation in and awareness of quality and productivity enhancement techniques, and other activities which will increase Iowa's productivity and quality of products and services to remain competitive in a global economy.

261—11.12(73GA,ch1262) Funding. Funding will be provided to the coalition directly or to its fiscal agent provided funds are available to IDED for such purposes.

261—11.13(73GA,ch1262) Reporting requirements.

11.13(1) The coalition or its fiscal agent shall submit monthly financial reports of actual costs incurred and a monthly request for funds. The coalition or its fiscal agent shall also submit a final financial report covering actual expenses for the full fiscal year.

11.13(2) The coalition or its fiscal agent shall submit quarterly reports detailing tasks accomplished during the quarter, compared to the annual work plan, and an annual report detailing all activities accomplished plus a copy of any videos, brochure or other products produced.

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CHAPTER 12
Reserved

After the applications are screened for the five mandatory items, three persons designated by the director of the Iowa department of economic development will independently score each application using a 100-point system. The three scores will then be averaged and the applications ranked from highest to lowest average score. The applications receiving the highest scores will be awarded contracts for a summer program of the Iowa Conservation Corps. A maximum of 25 points will be given for budget factors (includes accuracy of budget calculations, budget detail provided, allowability of costs, firm commitments of local match, etc.); 50 points for program design factors (includes variety and quality of work projects, quality of environmental program, comprehensiveness of health and safety program, equitability and fairness of recruiting and selection system, completeness of responses, etc.); and 25 points for training and education; degree to which the proposal provides enrollees with work skills, job retention skills, job search techniques and work ethics.

14.3(4) *Youth served.* To be eligible for the summer employment program youth shall be at least 15 years of age as of June 1 of the year they wish to participate in the program and no older than 18 years of age as of August 31 of the year they wish to participate in the program and be able to participate in strenuous physical activity.

14.3(5) *Project period.* Projects will be funded for all or part of the three-month period beginning June 1 and ending August 31 of each year.

14.3(6) *Local contribution.* Thirty-five percent of the total project cost shall be provided from local sources. Up to a maximum of 10 percent of the total project costs may be in the form of in-kind services.

14.3(7) *Program requirements.*

a. Recruiting for program enrollees shall be conducted in a manner that youth of all social, economic, and ethnic backgrounds have equal opportunity in applying for positions available.

b. Youth shall be paid the prevailing minimum wage for 32 hours per week for six to eight weeks. Youth with one year's experience may be hired as youth leaders and paid an additional 25 cents per hour. An additional eight hours per week shall be nonpaid, environmental instruction.

c. Sponsoring agencies shall abide by federal and state child labor laws.

d. Youth and staff are required to wear a uniform consisting of a safety helmet, hard-toed shoes, blue jeans, and blue work shirts.

e. Staff may be paid for a maximum of 40 hours per week for ten weeks.

f. Sponsoring agencies will assume responsibility for any tort claims related to their project and shall maintain workers' compensation and liability insurance covering their operations.

g. All contracts for the operation of summer programs shall be on a reimbursement basis.

h. All sponsoring agencies are required to conduct an audit performed by a certified public accountant within 90 days following the termination date of the contract.

If an agency conducts an agencywide audit in accordance with the federal OMB Circular A-128, the audit shall be due within 90 days of the end of the agency's fiscal year.

14.3(8) *Allowable costs.* Allowable program costs include:

a. Enrollee wages based on the minimum wage for an average of 32 hours per week. Youth leaders may be paid an additional 25 cents per hour. A minimum of 55 percent of the budget shall be allocated to enrollee wages and benefits.

b. Enrollee fringe benefits including FICA, workers' compensation insurance and liability insurance. Enrollees who successfully complete the program may be paid a bonus, not to exceed $100, to reimburse the cost of work boots, uniforms, and state camp fees.

c. Staff pay calculated at an hourly rate comparable to other similar temporary summer employment opportunities in the local area.

d. Staff fringe benefits including FICA, workers' compensation insurance, IPERS, health and life insurance and other benefits as provided by the applicant agency.

e. Travel and per diem for staff travel directly related to the operation of the ICC program; work-related travel, such as travel to and from work sites; and enrollee travel to spike camp, state camp, etc.

f. Equipment items which are necessary for the completion of work projects may be purchased. Items with a unit cost of more than $100 and used only on an occasional basis should be rented, rather than purchased.

g. Supplies, including safety equipment (hard hats, goggles, first-aid kits, etc.), small hand tools, work-related supplies, environmental educational materials and supplies, office supplies (paper, envelopes, stamps, pencils, etc.).

h. Other costs, including food and lodging costs for spike camp and state camp, fiscal administration, audit, liability insurance, telephone and other costs deemed necessary for the efficient operation of the program.

14.3(9) *Grant awards.* Projects may receive up to a maximum grant award of $17,500. The number of grant awards each year shall be contingent upon the amount of state funds appropriated for the program.

14.3(10) *Program reporting.* Sponsoring agencies shall submit monthly financial reports and a final performance report. The format and due dates of the reports shall be specified by the Iowa department of economic development. All contractors shall report the amount of grant funds expended for wages and fringe benefits for all minority youth employed.

261—14.4(15) In-school public service employment program.

14.4(1) *In-school component objectives.* The objectives of the in-school program are to provide disadvantaged youth between the ages of 14 and 21 years with supervised work experience, educational services and other services designed to assist them in completing their secondary education and becoming self-sufficient adults.

14.4(2) *Participating agencies.* Nonprofit private and public agencies will be chosen to operate in-school programs through a request for proposal process. The request for proposal, application form and selection criteria are available upon request in writing or orally from the State Youth Coordinator, Division of Job Training, Iowa Department of Economic Development, 200 East Grand Avenue, Des Moines, Iowa 50309; (515) 281-3927. Selection criteria for participating agencies will follow in 14.4(3). Applicant agencies may apply to serve youth in one county, a planning area as designated in 14.4(11), or a combination of counties.

14.4(3) *Selection system.* Only applicants who meet the program procedures and requirements, as found in the request for proposal package, will be funded. In order to be considered for funding, each proposal shall satisfy the following four items:

a. Thirty-five percent of the total project costs shall be provided from local sources as the agency's match with a minimum of 25 percent cash and a maximum of 10 percent in-kind services.

b. Proposed objectives shall be related to the goals of the in-school component of the Iowa Conservation Corps;

c. Proposed project shall include work experience, support services and project administration components;

d. The description of the proposed job slots will demonstrate the applicant's understanding of the program goals.

After the applications are screened for the four mandatory items, three persons designated by the director of the Iowa department of economic development shall independently score each application using a 100-point system. The three scores will then be averaged and the applications ranked from highest to lowest average score for each county or an area served. Contracts for each county, counties or planning areas will be awarded to the applicant agencies scoring the highest point average. A maximum of 25 points will be given for budget factors (includes accuracy of budget calculations, budget detail provided, allowability of costs, firm commitments of local match, etc.); 50 points for program design factors (includes variety and quality of work projects, quality of support services program, comprehensiveness of program, completeness of responses, etc.); and 25 points for training and education; degree to which enrollees are provided with work skills, job retention skills, job search techniques, and work ethics.

14.4(4) *Youth served.* To be eligible to participate in the in-school program a youth shall, effective state fiscal year 1990, at the time of application be at least 14 years old, but no older than 21 years; either a current recipient of AFDC or disadvantaged; and enrolled in a full-time educational program leading to the completion of a secondary degree or its equivalent.

a. "Current recipient of AFDC" means a recipient of the Aid to Families with Dependent Children (AFDC) program and includes youth in the AFDC foster care program.

b. "Disadvantaged" means those youth who fall in one or more of the following categories:

(1) Youth who are from families whose gross income is equal to or less than the Federal OMB poverty level guidelines. A complete income statement signed by the head of the household shall accompany the enrollee's application for admission into the program.

(2) Youth who have been or potentially will be judged as delinquent by the appropriate law enforcement agency, by the juvenile court or by the probation department in the county in which the youth resides. A brief narrative description of the youth's circumstances and relevant data should be attached to the application along with the recommendation of an official of one of the above-mentioned agencies.

(3) Youth who are mentally retarded, which for purposes of these rules means any individuals scoring 79 or below on an individually administered psychological examination by a qualified psychologist or any individual presently enrolled in a program for the mentally retarded. An identifying statement documenting the youth's mental retardation should be attached to the application.

(4) Youth who have been determined as disadvantaged for some other cause such as family disruption, under foster care, learning disabilities, physical handicaps, potential school withdrawal, behavioral disorders, etc. A brief statement, which is signed by the referring agency, describes the rationale for utilizing this category, indicates the source of information on which the rationale is based and gives all other pertinent information, shall be attached to the enrollee's application.

14.4(5) *Project period.* Projects will be funded for all or part of the ten-month period beginning August 15 and ending June 15 of each program year.

14.4(6) *Local contribution.* Thirty-five percent of the total project costs shall be provided from local sources.

14.4(7) *Mandatory components.* Each in-school project shall be composed of the following three components: work experience; support services; project administration.

a. Work experience means work activities related to soil conservation, land management, energy savings, community improvement and work benefiting human service programs. Worksites are restricted to public and private nonprofit agencies. Youth shall work a maximum of 18 hours per week while school is in session and a maximum of 40 hours per week during school recesses. Youth may work no more than 540 total hours under the work experience component unless a waiver is granted by the state youth coordinator. Waivers will be granted on an individual basis based on need and prior attendance.

b. Support services means services designed to expand a youth's understanding of employment and experience in the world of work or broaden a youth's perception of the environment. At least one hour of supportive services will be provided to each youth for every 20 hours they work. This time may be paid or nonpaid at the project's discretion.

c. Project administration means activities related to project management, bookkeeping and payroll.

14.4(8) *Audit.* Within 90 days from the contract's termination date, unless an extension of time is approved by the state youth coordinator, every organization awarded a contract shall submit to the Iowa department of economic development two copies of an audit report performed by a certified public accountant or a public accountant, as defined by Iowa Code chapter 116. The audit report shall, at a minimum, include:

a. Short form auditor's opinion on the financial statements;

b. The auditor's comments on:

(1) The compliance of subgrantee with the terms and conditions of the contract (including the statement of work) and policies and procedures prescribed by the subgrantee's governing board regarding financial operations;

(2) The internal accounting controls;

(3) The reasonableness of the cost allocation methods if personnel and overhead costs are allocated to more than one project;

c. A cumulative statement of the resources and expenses by individual project; contract for the full contract period with a balance sheet if there are receivables and payables at the end of the project period;

d. Notes to the financial statements and comments on questioned costs and accounting systems weaknesses.

If the audit of the contract is included as a part of an annual agencywide audit, conducted in accordance with the federal OMB Circular A-128, the audit will meet the requirements of the subrule. The audit report shall be due within 90 days of the end of the agency's fiscal year, rather than 90 days within the end of the contract.

14.4(9) *Allowable program costs.* To be allowable, the costs shall be necessary and reasonable for the proper and efficient administration of the program, be allocable to the program under standard accounting procedures, and shall be properly documented.

a. Work experience costs. Allowable cost categories for the work experience component are youth salaries, FICA, liability insurance and workers' compensation. All contractors shall report the amount of grant funds expended for wages and fringe benefits for all minority youth employed.

b. Reimbursement. No reimbursements shall be made for costs which relate to youth who have not been certified eligible by the project director, or for claims which are over three months old.

c. Administrative costs. Administrative costs including those for support services may not exceed 20 percent of the total project budget, unless a higher amount, not to exceed 30 percent, is specifically allowed in writing by the state youth coordinator based on adequate justification submitted by the contractor.

Allowable administrative costs are limited to: project management (job development, placement, supervision, recruitment, certification), bookkeeping, payroll activities, travel, consumable supplies, printing, audit, postage, telephone, and rent. Every effort should be made to share costs with other programs and agencies to minimize administrative expenses.

Where extreme circumstances exist and the contractor receives specific written permission from the state youth coordinator, interest on commercial bank 30-day loans is allowable.

Travel reimbursements shall not exceed mileage, meals and lodging allowed for state employees.

14.4(10) *Funds allocation.* One-fourth of the state funds available for operation in the in-school component of the Iowa Conservation Corps shall be allocated to each county based on that county's share of the total number of dropouts in the state, as shown by the most recent department of education statistics; one-fourth shall be allocated to each county based on that county's share of the total number of youth aged 16 to 21 in the state, as shown by the most current available census data; one-fourth shall be allocated to each county based on that county's share of the total number of persons living at or below the poverty level in the state as most recently reported by the Iowa department of revenue and finance; and the final one-fourth shall be allocated to each county based on that county's share of the state's total number of persons unemployed, as shown by the most recent department of employment services report. Money allocated to counties in which no in-school component operates shall be reallocated to counties in which in-school projects do operate.

14.4(11) *Youth planning areas.* For purposes of this chapter, the planning areas are as follows:

Area 1 is composed of Allamakee, Clayton, Fayette, Howard, and Winneshiek counties.

Area 2 is composed of Cerro Gordo, Floyd, Franklin, Hancock, Kossuth, Mitchell, Winnebago, and Worth counties.

Area 3 is composed of Buena Vista, Clay, Dickinson, Emmet, Lyon, O'Brien, Osceola, Palo Alto, and Sioux counties.

Area 4 is composed of Cherokee, Ida, Monona, Plymouth, and Woodbury counties.

Area 5 is composed of Calhoun, Hamilton, Humboldt, Pocahontas, Webster, and Wright counties.

Area 6 is composed of Hardin, Marshall, Poweshiek, and Tama counties.

Area 7 is composed of Black Hawk, Bremer, Buchanan, Butler, Chickasaw, and Grundy counties.

Area 8 is composed of Cedar, Clinton, Delaware, Dubuque, and Jackson counties.

Area 9 is composed of Muscatine and Scott counties.

Area 10 is composed of Benton, Iowa, Johnson, Jones, Linn, and Washington counties.

Area 11 is composed of Boone, Dallas, Jasper, Madison, Marion, Polk, Story, and Warren counties.

Area 12 is composed of Audubon, Carroll, Crawford, Greene, Guthrie, and Sac counties.

Area 13 is composed of Cass, Fremont, Harrison, Mills, Montgomery, Page, Pottawattamie, and Shelby counties.

Area 14 is composed of Adair, Adams, Clarke, Decatur, Ringgold, Taylor, and Union counties.

Area 15 is composed of Appanoose, Davis, Jefferson, Keokuk, Lucas, Mahaska, Monroe, Van Buren, Wapello, and Wayne counties.

Area 16 is composed of Des Moines, Henry, Lee, and Louisa counties.

261—14.5(15) Iowa corps.

14.5(1) *Objectives.* The objectives of the Iowa corps are to encourage high school students to perform community service work for nonprofit organizations and provide incentives for Iowa youth to attend Iowa postsecondary institutions.

14.5(2) *Youth served.* To be eligible to apply for the Iowa corps, youth must be enrolled in a full-time educational program leading to a secondary degree and be a resident of the state of Iowa. Youth who are seniors on April 1 are eligible to apply if they have not earned four tuition grants and their project can be completed prior to starting their postsecondary education. Exceptions can be made for extenuating circumstances with the approval of the Iowa corps administrator.

14.5(3) *Eligible projects.* Projects approved under the Iowa corps must meet the following criteria:

a. Be at least 100 hours in duration;

b. Perform volunteer service in one of the following areas: park maintenance and restoration; soil conservation; wildlife and land management; energy savings; community improvements; tourism; economic development; environmental protection; and work benefiting human service programs;

c. When applicable, obtain a written statement from local labor organizations that the proposed volunteer project will not displace existing employees at the sponsoring agency;

d. Each person may be approved for only one project per year and a maximum of four projects;

e. A project may consist of a number of different activities or smaller projects for the same organization.

14.5(4) *Application procedure.* To apply for the Iowa corps, students must submit an application which contains the following information:

a. Name, address, phone number, social security number, grade in school, number of family members, total family income, and name of the school the student is attending.

b. Agency for which volunteer project will be performed.

c. Adult supervisor at agency who will verify hours volunteered and services performed.

d. Description of the volunteer project to be undertaken.

e. Number of hours of volunteer service to be performed and a time schedule when the hours will be performed.

f. Personal reasons for undertaking the proposed volunteer project.

g. Benefit to the public that will accrue from completing the proposed volunteer project.

h. How the proposed project will enhance the applicant's career objectives, work skills or job seeking/retention skills.

i. Previous volunteer experiences of the applicant.

14.5(5) *Selection procedure.*

a. Applications for participation in the Iowa corps will be approved using a 100 point system, based upon the following criteria:

(1) Financial need of applicant	10 points
(2) Impact of project on the unemployed, low-income or handicapped persons	20 points
(3) Personal reasons for performing the proposed volunteer project	10 points
(4) Opportunities afforded by the proposed project to gain career experiences, work skills, job seeking/retention skills	20 points
(5) Opportunities for interpersonal/mentoring/intergenerational relationships afforded by the proposed project	10 points
(6) Impact of the project on conservation, the environment or management of natural resources	15 points
(7) Public benefits to be gained by the proposed project	15 points

b. Teams of three reviewers will independently score each application. The scores of the reviewers will be averaged and the applications receiving the highest scores will be approved up to the maximum funding available during the fiscal year under which approval is being requested.

c. During state fiscal year 1990, the application deadlines will be December 31, 1989, and April 30, 1990. After state fiscal year 1990, the application deadline will be April 1 annually.

d. All projects must be completed by the end of the state fiscal year in which they were funded.

14.5(6) *Reporting requirements.*

a. Persons participating in the Iowa corps will provide monthly progress reports as required by the Iowa department of economic development and verified by the adult supervisor. A final report will be required by both the Iowa corps participant and the adult supervisor within 30 days of the completion of the volunteer project.

b. Persons who have completed approved projects must notify the Iowa department of economic development of any change of address or phone number until all tuition payments have been made.

14.5(7) *Tuition payments.*

a. For each approved and completed volunteer project, a $500 tuition payment in the participant's name will be escrowed at the state treasurer's office. The participant will have three years after completion of secondary education or graduation from high school in which to utilize the tuition payment or forfeit the amount escrowed, which will then revert to the Iowa community development loan fund.

b. All tuition payments will be made directly to the postsecondary institution of the participant's choice.

c. Tuition payments are limited to only Iowa postsecondary institutions.

261—14.6(15) Green thumb component.

14.6(1) *Purpose and intent.* The purpose of the green thumb program is the employment of persons, 60 years of age or older, in conservation and outdoor recreation related positions with the department of natural resources, county conservation boards, and other public and private nonprofit entities. The funds appropriated for this program shall be used only for wage payments, including the employer's share of social security payments, to persons employed under this program and for any physical examinations that may be required of persons selected for employment.

14.6(2) *Fund distribution.* Funds appropriated from the state general fund for the green thumb program shall be divided approximately 60 percent for state agencies and 40 percent for other public and private nonprofit entities.

14.6(3) *Conditions and guidelines for program participants.* The following conditions and guidelines shall apply to any person employed in the green thumb program:

a. A person shall be sixty years of age or older to be eligible for employment.

b. A lower income person shall be preferred for employment. "Lower income" means a person who meets the requirements for "lower income families" described in section eight (8), subsection "f" of the United States Housing Act of 1937, as amended by the Housing and Community Development Act of 1974 (Public Law 93-383), section 201, subsection *"a."* If there is more than one applicant for a green thumb position, the person interviewing and directly hiring the program participants shall give preference to the lower income applicant and may make use of any reasonable means to make this determination.

c. At the option of the employee, persons may cease being employed when they have earned the maximum amount allowed before retirement benefits are reduced.

d. A person employed shall be paid at least the minimum wage as established by federal law, and not more than five dollars per hour. The project sponsor may pay a rate in excess of five dollars per hour, but none of the excess shall be used as cash match, or be eligible for reimbursement from program funds.

The number of program participants or labor-hours requested on one or more submissions may be reduced by the review committee in order to achieve this goal. Project submissions which specifically provide facilities or enhance outdoor opportunities for the handicapped or the elderly shall be given special consideration. Priority shall also be given to areas of the state likely to receive the greatest benefit.

Funds will be allocated for each program as it is approved to the full amount appropriated for the program. If additional funds become available by reason of modifications or cancellations of approved projects, then projects on the priority list not previously funded may be approved. Project submissions received after the date specified for review will be considered only if funds are available and not allocated for projects received before that date.

14.6(6) *Recruitment of program participants.* Upon approval of a project, the administering agency shall notify the department of elder affairs and the department of employment services or successor agencies. These agencies, in turn, may notify any regional or local agency that might be in a position to refer prospective program participants.

If the project supervisor does not receive a sufficient number of applicants within fifteen days following the receipt of the project approval notification by the local or regional agencies, the project supervisor may recruit other persons sixty years of age or older by any reasonable means. In all cases, the project supervisor shall prefer "lower income" applicants.

If the project supervisor believes it is necessary, the applicant, which has been offered employment, shall be given a physical examination by a qualified physician to determine whether or not the prospective program participant can adequately assume the responsibilities of the position. The cost of the examination shall be charged the green thumb program in the same manner as wage payments.

14.6(7) *Termination of employment.* The project sponsor may terminate the employment of a program participant upon completion of the project or because of the unavailability of program funds.

Any disciplinary action, including discharge, shall be conducted in the same manner as for other temporary or part-time employees of the project sponsor. Program participants shall have the same rights under the project sponsor's grievance procedure as any regular temporary or part-time employee, except that program participants working for state agencies are not covered by provisions of Iowa Code chapters 19A, 96 and 97B.

14.6(8) *Claims by program participants.* Claims by program participants for workers' compensation shall be paid by the project sponsor in the same manner that similar claims are paid for other employees of the project sponsor. These costs shall not be used as matching expenditures for program funds. Program participants are not eligible for unemployment compensation benefits.

14.6(9) *Program evaluation and accounting.* The project supervisor shall keep an accurate record of the hours worked and accomplishments of program participants, the cost of materials and supplies used for the project, the value of equipment use on the project, the amount of supervisory labor-hours provided by the regular staff, and the comments and reactions of the program participants.

Upon completion of each project, or when requested by the administering agency, the project sponsor shall provide an exact accounting on project billings forms provided by the administering agency of the actual program participant labor-hours and a detailed account of the matching expenditures from project sponsor funds. The project sponsor shall also provide a narrative of the accomplishments and problems relative to the project; and the comments, reactions, and recommendations of the program participants.

Local project sponsors will be reimbursed eighty-five percent of wage payments, including the employer's share of social security payments, contingent on a showing that supervisory time, materials, and services contributed by the sponsor equaled at least twenty-five percent of total wages paid to green thumb participants. However, reimbursements may not exceed the amount of the approved grant. Program participants sponsored by a state agency shall be paid by the state payroll system from the green thumb funds appropriated from the general fund. Quarterly, the sponsoring state agency shall reimburse the fund from which payroll

payments were made fifteen percent of total wage and benefit payments. The program's share of wage payments to any state agency's program participants shall not exceed the total of grants approved to the project sponsor.

The administering agency shall have the right to request any additional fiscal documents as may be necessary to support the final accounting.

261—14.7(15) Young adult component.

14.7(1) *Objectives.* The objectives of the young adult program are to accomplish meaningful and productive work on public lands and to provide gainful employment for 18- through 24-year-old, unemployed persons. The corps shall provide opportunities in the areas of park maintenance and restoration, soil conservation, wildlife and land development, energy savings, community improvement projects, tourism, economic development, and work benefiting human service programs.

14.7(2) *Participating agencies.* Nonprofit private and public agencies will be chosen to operate programs through a request for proposal process. The request for proposal, application form, and selection criteria are available upon request from the Iowa Conservation Corps (ICC), Department of Economic Development, 200 East Grand Avenue, Des Moines, Iowa 50309, (515) 281-3927. Selection criteria for participating agencies are stated in subrule 14.7(3). Each participating agency is required to provide 35 percent of the total project costs as the local matching requirement. Of the 35 percent, no more than 10 percent may be in-kind services. The remaining 25 percent shall be in the form of cash.

14.7(3) *Selection system.* Three persons designated by the director of the department of economic development will independently score each application using a 100-point system. The scores will be averaged and the applications receiving the highest scores will be recommended for funding. The director will review the recommendations and issue a final decision based on various factors, such as geographical distribution of the projects, economic impact, etc. A maximum of 25 points will be given for budget factors (includes accuracy of budget calculations, budget detail provided, allowability of costs, firm commitments of local match, etc.); 50 points for program design factors (includes variety and quality of work projects, comprehensiveness of health and safety program, equitability and fairness of recruiting and selection system, completeness of responses, degree to which the proposal provides corps members with work skills, job retention skills, job search techniques, and work ethics); and 25 points for demonstrated need for the project. Five points will be automatically awarded to those applicants who will operate a young adult program in conjunction with an ICC/Summer Conservation Program.

14.7(4) *Youth Served.* To be eligible for the young adult program, persons shall be at least 18 years of age and no older than 24 years of age at time of application; unemployed; possess a minimum level of work skills; and have not been convicted of a felony in the past two years.

14.7(5) *Project period.* Projects will be funded for all or part of the four-month period beginning May 15 and ending September 15 each year. Under extenuating circumstances, such as natural disasters or unusual weather conditions, the project period may begin earlier than May 15 or end after September 15 with the written permission of the state youth coordinator.

14.7(6) *Local contribution.* Thirty-five percent of the total project cost shall be provided from local sources. Twenty-five percent shall be in the form of cash and 10 percent may be in the form of in-kind services directly to the operation of the project.

14.7(7) *Program requirements.*

a. Recruiting for corps members shall be conducted in such a manner that persons who are eligible have equal opportunity to apply for positions available.

b. Corps members shall be paid the prevailing minimum wage for 40 hours per week. Eligible persons employed as lead workers may be paid an additional 35¢ per hour.

c. Corps members and staff are required to wear a uniform consisting of a safety helmet, hard-toed shoes, blue jeans and blue work shirt or a uniform consistent with the agency's personnel policies.

d. Participating agencies will assume responsibility for any tort claims related to their project and shall maintain worker's compensation and liability insurance covering their operations; or, in the case of state agencies, provide assurances that alternative arrangements are made to cover such liabilities.

e. Corps members are exempted from the provisions of Iowa Code chapters 19A, 96, and 97B. Corps members shall follow all personnel policies of the participating agency.

f. All contracts for the operation of the young adult program shall be on a reimbursement basis.

g. All participating agencies are required to conduct an audit performed by a certified public accountant within 90 days following the termination date of the contract. If an agency conducts an agencywide audit in accordance with the federal OMB Circular A-128, the audit shall be due within 90 days of the end of the agency's fiscal year. In the case of agencies utilizing the state auditor, the audit will be required 30 days after the state auditor issues the audit report.

h. Corps members may be allowed up to five hours per week of nonpaid release time to attend graduate equivalency diploma (GED) classes.

i. Participating agencies shall prepare written work project plans for each project that is performed. Plans shall include projected and actual costs of labor and materials, special equipment needs, timeline to perform project, and safety hazards.

j. Participating agencies shall designate a project supervisor and assure that corps members will receive appropriate supervision at all times.

k. During the last three weeks of employment, corps members may be granted eight hours of paid time each week to search for permanent employment.

l. Personnel files shall be maintained for each person enrolled in the program, which shall include a standardized application form, state and federal withholding forms, federal immigration form (Form I-9), time sheets signed by the corps member and supervisor, evaluation reports, any disciplinary actions and termination form.

m. The director of the department of economic development, or designee, retains the right to monitor the project, including a review of personnel files, work project plans and financial report, for program compliance.

14.7(8) *Allowable costs.* Allowable program costs include:

a. Corps members' wages based on the minimum wage for an average of 40 hours per week. A minimum of 55 percent of the budget shall be allocated to corps members' wages and fringe benefits.

b. Corps members' fringe benefits, including FICA, workers' compensation insurance, and liability insurance.

c. Staff pay and fringe benefits, including FICA, workers' compensation insurance, IPERS, health and life insurance, and other benefits as provided by the applicant agency.

d. Travel and per diem for staff travel directly related to the operation of the program; work-related travel, such as travel to and from work sites.

e. Equipement items may be purchased which are necessary for the completion of work projects. Items with a unit cost of more than $100 and used only on an occasional basis should be rented, rather than purchased.

f. Supplies, including safety equipment (hard hats, goggles, first-aid kits, etc.), small hand tools, work-related supplies, and office supplies (paper, envelopes, stamps, pencils, etc.).

g. Educational costs, including the cost of enrollment in a GED program.

h. Other costs, including fiscal administration, audit, liability insurance, telephone, and other costs deemed necessary for the efficient operation of the program.

14.7(9) *Grant awards.* Participating agencies may receive up to a maximum grant award of $45,000. The number of grant awards each year shall be contingent upon the amount of state funds appropriated for the program. For multijurisdictional agencies, the term "agency" shall be defined as a geographical unit of the agency, such as a state park.

14.7(10) *Program reporting.* Participating agencies shall submit monthly financial reports and a final performance report. The format will be provided by the department of economic development. All contractors shall report the amount of grant funds expended for wages and fringe benefits for all minority youth employed.

These rules are intended to implement Iowa Code sections 15.225 to 15.230 and 99E.32(3).

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CHAPTERS 15 to 17
Reserved

*Rules regarding "Green Thumb Program" were previously 290—Ch70.

CHAPTER 39
IOWA MAIN STREET PROGRAM

[Prior to 1/14/87; Iowa Development Commission(520), Ch 9]

261—39.1(99E) Purpose. The purpose of the Iowa main street program is to stimulate downtown economic development within the context of historic preservation. The main street program emphasizes community self-reliance and downtown's traditional assets of personal service, local ownership and unique architecture. The main street program is based on four strategies which, when applied together, create a positive image and successful economy in downtown. The strategies are: organization, promotion, design and economic restructuring.

Communities selected for participation in this demonstration project will receive a grant to aid them in the implementation of a local main street program and will receive technical assistance from the department's main street staff, professional staff of the National Main Street Center, other professional consultants and may have professional services of other state agencies to draw upon in order to facilitate their local main street project.

261—39.2(99E) Definitions. The following definitions will apply to the Iowa main street program unless the context otherwise requires:

"Department" means the Iowa department of economic development.

"Director" means the director of the Iowa department of economic development.

"Eligible activity" includes organization, promotion, design and economic restructuring activities to create a positive image and successful economy in a city's downtown.

"Eligible applicant" means a city with a population of less than 50,000 based upon the most recent census report or population study completed since the last census, filing a joint application with a local nonprofit organization established by the community to govern the local main street program.

"Grant" means funds received through the Iowa main street program as evidenced by an agreement with the Iowa department of economic development.

"Grantee" means any eligible applicant receiving funds under this program.

"National Main Street Center" refers to an entity within the National Trust for Historic Preservation, a nonprofit national organization chartered by Congress.

261—39.3(99E) Program administration.

39.3(1) *Administering agency.* The Iowa main street program will be administered by the Iowa department of economic development.

39.3(2) *Subcontracting.* The department may contract with the National Main Street Center of the National Trust for Historic Preservation for technical and professional services as well as other appropriate consultants and organizations.

39.3(3) *Request for proposals (RFP).* The department, upon availability of funds, will distribute a request for proposal which describes the Iowa main street program, outlines eligibility requirements, includes an application and a description of the application procedures. Grants will be awarded on a competitive basis.

39.3(4) *Applications.* An application may also be obtained by contacting the Iowa Main Street Program Coordinator, Iowa Department of Economic Development, 200 East Grand Avenue, Des Moines, Iowa 50309; telephone (515) 281-7245.

39.3(5) *Deadline.* A completed application shall be returned to the department, postmarked no later than the date specified by the department in the RFP and contain the information requested in the application.

39.3(6) *Advisory council.* The director may appoint a state main street advisory council composed of individuals knowledgeable in downtown revitalization to advise the director on the various elements of the program.

261—39.4(99E) Eligible applicants. All cities with a population under 50,000 are eligible to file a joint application along with their local community nonprofit organization established to govern the local main street program for selection as a main street demonstration community.

261—39.5(99E) Funding.

39.5(1) *Timing of grants.* The funding of eligible projects under the Iowa main street program is contingent upon the availability of funds allocated to the department. Grants will be announced annually. When funds are available, the department reserves the right to withhold grant funds if an insufficient number of acceptable applications are submitted to adequately achieve the purposes of the Iowa main street program.

39.5(2) *Grant period.* A community may receive a grant each year of the three-year program cycle. However, each year the grant will be approximately 25 percent less than the previous year's grant to that community.

39.5(3) *Compliance and termination.* Continued funding during the grant period is contingent upon acceptable audit and monitoring reports received by the department and the grantee's compliance with the terms and conditions of the grant agreement. The department may terminate or suspend funding, in whole or in part, if there is a substantial violation of a specific provision of the agreement or these rules and corrective action has not been taken by the grantee.

39.5(4) *Allowable cost.* Funds granted by this program to a community shall be applied toward the salary of a full-time local main street program manager.

39.5(5) *Match required.* Funds from local public and private sources shall be used to supplement the state grant awarded by this program. The minimum match requirement shall be 2 times the state grant in year one, 3 times the state grant in year two, and 4.5 times the state grant in year three.

261—39.6(99E) Selection.

39.6(1) The director will determine, contingent upon the availability of state funding, the number of cities to be selected for inclusion in the main street program.

39.6(2) Cities will be selected for participation in the program on a competitive basis as described in these rules.

39.6(3) Upon selection of the projects to be funded, the department shall prepare a grant agreement which will include the terms and conditions of the grant.

261—39.7(99E) Selection criteria. The following factors shall be considered in the selection of a city for participation in the main street program (the highest point total possible is 400 points):

39.7(1) *Support/funding.* (100 points maximum)

a. Evidence of a strong commitment from city government and various local and private sector organizations to support a local main street program for at least three years. This evidence will include a resolution of support from the city government and other organizations in the community such as: merchants associations, chambers of commerce or economic development corporations in addition to letters of support from other private sector entities.

b. Evidence of local public and private funds available to finance, in addition to the state main street grant, a local main street program for three years. This evidence will include a proposed local main street budget, sources of funding and financial commitment letters from the city government and other identified sources.

c. Evidence of a positive commitment to hire a full-time local main street program manager for not less than a three-year period. This evidence shall include a written commitment to hire a program manager, signed jointly by the local nonprofit organization established to govern the local program and the city.

d. Evidence of the existence of, or a plan for, a nonprofit corporation organized under the laws of the state, such as a local main street organization, merchants association, chamber of commerce or economic development corporation that will be locally designated to serve as the governing body and policy board for the local main street program and program manager. This evidence will include a copy of the proposed or filed articles of incorporation and the bylaws of such organization.

39.7(2) *Historic building fabric.* (60 points maximum)

a. Evidence of the existence of architecturally and historically significant buildings in the downtown area currently listed on the national register or national register eligible and designated historic preservation districts. This evidence shall include identification of such buildings or districts.

b. Evidence of a local historic preservation organization and any evidence that indicates their involvement working on historic projects located in the downtown central business district. This evidence shall include the identification of such organizations and activities over the past three years.

c. Evidence of any current historic preservation activities.

d. Evidence of the concentration of historic buildings located within the identifiable main street area.

e. Evidence of a locally designated historic district.

39.7(3) *Potential.* (100 points maximum)

a. Consideration of the possible demonstrable change in the downtown as a result of being a main street city. This includes the identified goals of the applicant, the potential for the realization of these goals and identification of the long-term impact the main street program will have on the city.

b. Potential for sucessfully completing the three-year demonstration program. This shall include the proposed structure of the organization, the responsibilities of the board members, the program manager and the chain of command for the organization.

c. Demonstration of the need for economic revitalization and development downtown. This includes a summary of the current economic trends in the area, their impact on the downtown and a summary identifying reasons for needing the main street program.

39.7(4) *Current community demographics.* (40 points maximum)

a. Identification of the size and location of the downtown as related to the whole community. This shall include justification for the size of the project area.

b. Description of the housing characteristics of the city, including the average vacancy rate and the condition of housing stock.

c. Description of the cultural, tourism and recreational aspects of the community. The importance the community places on these quality of life issues provides a barometer for future community growth.

d. Description of the downtown mix of retail, professional services, government offices and other enterprises.

e. Description of building ownership within the main street area, such as the current use, percentage of owner-occupied buildings, average rent rates and the vacancy rate.

39.7(5) *Previous history.* (60 points maximum)

a. Identification of previous downtown revitalization efforts, including identifying prior programs and their outcome.

b. Evidence of past public/private partnerships. This shall include a summary of significant civic improvements completed by the community within the past five years.

c. Evidence of good private investment record in the downtown main street area. This shall include descriptions of commercial building rehabilitations and new construction within the past five years.

d. Evidence of downtown plans, studies or surveys done within the past three years. This shall include copies of such plans, studies or surveys and their outcome.

e. Evidence of participation, if any, in the Iowa community betterment program, the Iowa community economic preparedness program or related programs within the last three years.

39.7(6) *Readiness.* (40 points maximum)

a. Identification of the community's familiarity with the main street program and principles as evidenced by prior exposure to main street conferences, slide shows and contact with the main street Iowa program.

b. Demonstration of support shown for the main street program by the local financial community, the chamber of commerce, the local economic development organization, the local elected officials and the professional staff of city government.

c. Demonstration of the ability to implement the main street program and hire a program manager upon selection. This shall include a work plan with established timetables to hire a manager and organize a board of directors, if needed.

261—39.8(99E) Financial management.

39.8(1) All grants under the main street program are subject to audit. Grantees shall be responsible for the procurement of audit services and for the payment of audit costs. Audits may be performed by the state auditor's office or by a qualified independent auditor. Grantees which determine that they are not required to comply with the Single Audit Act of 1984 shall then have audits prepared in accordance with state laws and regulations. Representatives of the department and the state auditor's office shall have access to all books, accounts, documents and records belonging to, or in use by, grantees pertaining to the receipt of a grant under these rules.

39.8(2) All records shall be retained for three years beyond the grant period or longer if any litigation or audit is begun or if a claim is instituted involving the grant or agreement covered by the record. In these instances, the records will be retained until the litigation, audit or claim has been resolved.

261—39.9(99E) Performance reviews. Grantees shall submit performance reports to the department as required. The reports shall assess the use of funds in accordance with program objectives and progress of the program activities.

261—39.10(99E) Noncompliance. If the department finds that a grantee is not in compliance with the requirements under this program, the grantee will be required to refund to the state all disallowed costs. Reasons for a finding of noncompliance include, but are not limited to, a finding that the grantee is using program funds for unauthorized activities, has failed to complete approved activities in a timely manner, has failed to comply with applicable laws and regulations or the grant agreement, or the grantee lacks the capacity to carry out the purposes of the program.

261—39.11(99E) Forms. The following forms will be used by the administering agency for the main street program.

1. Application form for the Iowa main street program (Form 1).
2. Performance reports for monitoring the performance of each grantee (Form 2).

This chapter is intended to implement Iowa Code section 99E.32(3)*"d"*(3).

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261—67.7(15) Award process. Recommendations by the committee for funding will be forwarded to the director of the department for final decisions. Applicants will be notified in writing after the final decisions on grants are made. Successful applicants will enter into an agreement with the department which clarifies their responsibilities as a grantee for oversight of the project and reporting to the department.

261—67.8(15) Eligible and ineligible expenses.

67.8(1) Expenses eligible for reimbursement may include, but are not limited to, the following:

a. Travel, office, meeting expenses, and equipment pertaining to specific goals of the project.

b. Coordinating staff for the community or county or development group.

c. Feasibility studies or implementation of an existing study or plan.

d. Educational/training materials.

67.8(2) Expenses ineligible for reimbursement may include, but are not limited to, the following:

a. Buildings, building sites or construction of buildings.

b. Expenses for development or purchase of recreational sites and facilities.

c. Expenses for renovation of historical/cultural attractions.

261—67.9(15) Program management.

67.9(1) Record keeping. Financial records, supporting documents, statistical records and all other records pertinent to the project shall be retained by the grantee.

67.9(2) A contract will be negotiated with the successful applicants to define the terms for disbursement of funds and responsibilities.

67.9(3) Representatives of the department and state auditors shall have access to all books, accounts and documents belonging to or in use by the grantee pertaining to the receipt of assistance under this program.

67.9(4) All contracts under this program are subject to audit.

261—67.10(15) Performance reviews.

67.10(1) Applicants will be required to submit a quarterly performance report to the department. The report will assess progress on the goals and project activities.

67.10(2) The department may perform field visits as deemed necessary.

These rules are intended to implement Iowa Code section 99E.32(3) as amended by 1989 Iowa Acts, chapter 314, section 4(3)*"aa."*

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CHAPTERS 68 to 79
Reserved

CHAPTER 80
COMMUNITY BUILDER PROGRAM

261—80.1(73GA,ch1140) Definitions. As used in this chapter:

"Certified applicant" means any eligible applicant or group of applicants which submits a community builder plan to the department for review and subsequently receives certification.

"Department" means the department of economic development.

261—80.2(73GA,ch1140) Purpose. The purpose of the community builder program is to encourage local governments or coalitions of local governments to implement and complete comprehensive planning efforts for community development, business development and economic development. Certified applicants receive bonus points when applying for selected state financial assistance programs. Plans are required for communities which receive funding under these same programs.

261—80.3(73GA,ch1140) Eligible participants. Incorporated cities, counties, unincorporated communities, clusters of cities, groups of counties and groups of unincorporated communities may submit community builder plans to the department. Plans from clusters or groups of local governments shall include contiguous jurisdictions to the maximum extent possible. Only the above-noted entities may submit community builder plans to the department for review, although participants may utilize or contract with other parties to prepare the plans. Private businesses may not submit community builder plans and are not eligible for bonus points.

261—80.4(73GA,ch1140) Additional consideration for financial assistance. Any certified applicant shall be eligible for bonus points of not less than 5 percent and not more than 20 percent of the total points available when applying for the state financial assistance programs listed below.

80.4(1) The agency responsible for administering the program shall be responsible for assigning bonus points to the applications of certified applicants.

80.4(2) Financial assistance programs affected. The following state financial assistance programs shall assign bonus points to the applications of certified applicants:

a. The community economic betterment account administered by the department.

b. The community development block grant program administered by the department.

c. The rural community 2000 program administered by the department.

d. The revitalize Iowa's sound economy program administered by the department of transportation.

e. The chapter 220 housing program fund administered by the Iowa finance authority.

f. The recycling projects program under Iowa Code Supplement chapter 455D administered by the department of natural resources.

g. The resource enhancement and protection program administered by the department of natural resources.

261—80.5(73GA,ch1140) Contents of community builder plans. At a minimum, each community builder plan shall include the following items:

80.5(1) A cover letter or letters signed by the mayor(s) or the chair(s) of the county board of supervisors from the community, communities, county or counties involved in transmitting the plan to the department. This letter shall designate a principal contact for correspondence

regarding the plan, including a name, mailing address and telephone number. For plans involving groups of communities or clusters, a lead community and contact shall be designated.

80.5(2) A five-year strategic plan and vision designed to meet the needs of the local government(s) involved. This plan should identify the key assets and liabilities of the jurisdictions involved, identify goals for development, and describe the community, business and economic development strategies to be followed locally during the next five years and their expected results. The five-year plan will include:

a. A community profile and data base including assessments of infrastructure, cultural and fine arts resources, housing, primary health care services, natural resources, conservation and recreational facilities. The profile and data base shall also include a description of each local government's participation in county or regional economic development plans.

b. A plan to improve the local government(s) involved with respect to infrastructure, cultural and fine arts resources, housing, primary health care services, natural resources, conservation and recreational facilities. The plan shall include a listing of priorities and action steps to meet identified needs.

c. A listing of local community programs which encourage community, business and economic development, including both public and private resources. State and federal programs need not be listed.

d. An analysis of current and potential local tax revenues over the next five years. This analysis shall show the extent of tax abatements for community, business and economic development purposes and use of available tax capacity.

e. A county or regional survey showing the available labor force for the area and current employment.

f. A description of how the public was informed or participated in the development of the community builder plan.

261—80.6(73GA,ch1140) Submittal of community builder plans. Applicants shall submit six copies of each community builder plan to the Iowa Department of Economic Development, Community Builder Plan Review, 200 East Grand Avenue, Des Moines, Iowa 50309. The department shall distribute copies of each plan for review by the department of transportation, department of natural resources and Iowa finance authority. At the same time applicants shall submit one copy of each community builder plan to the appropriate regional coordinating council(s) who may submit comments to the Iowa department of economic development within 25 days.

261—80.7(73GA,ch1140) Review process. The department shall coordinate a review process for each submitted community builder plan, accept comments on plans from other departments and regional coordinating councils and determine whether the plan meets the requirements stated under rule 80.5(73GA,ch1140). The department shall inform applicants in writing within 60 days from time of receipt if the plan meets or does not meet the requirements. If the plan does not meet the requirements, the department shall notify the applicant in writing of any deficiencies. The applicant may resubmit the revised portions for reconsideration after addressing these deficiencies.

261—80.8(73GA,ch1140) Certification. The department shall certify the completion of eligible applicants whose plans have met the requirements of the community builder program. Certified applicants shall be notified in writing by the department. The department shall keep a complete listing of certified applicants and the date of their certification. Copies of this listing shall be provided to the department of transportation, the department of natural resources, the Iowa finance authority and all regional coordinating councils and councils of government.

Certification shall continue to remain in effect for five years from the date of notification to the applicant. Eligible applicants may submit an updated plan to apply for recertification for another five-year period. This may be done at any time the applicant deems appropriate. Recertification shall remain in effect from the date the applicant is notified by the department of the approval of the updated plan.

261—80.9(73GA,ch1140) Amendments. Certified applicants may amend plans once each year before the anniversary of certification. Amendments will be accepted or rejected and will not result in recertification but will allow applicants to account for changes in their jurisdictions. If the amendment is not accepted, the original plan will remain certified.

261—80.10(73GA,ch1140) Plan required for awardees of state programs. After July 1, 1990, any city, cluster of cities, county, group of counties, unincorporated community or group of unincorporated communities not yet certified but awarded a grant or other initiative under the programs listed in 80.4(2)*"b"* shall notify the department that it has initiated a process to prepare and submit a community builder plan within six months of the receipt of the award. This plan must be submitted to the department within three years of the receipt of the award to be eligible to receive bonus points on future applications.

261—80.11(73GA,ch1140) Compliance. Failure to comply with the requirements of the community builder program will result in the noncertification of the city, cluster of cities, county, group of counties, unincorporated community or group of unincorporated communities resulting in ineligibility for bonus points on future applications.

261—80.12(73GA,ch1140) Technical assistance for planning. Contingent on the availability of funding for this purpose, the department may enter into contracts with service providers including, but not limited to, councils of government, Iowa State University extension, the University of Iowa, merged area schools, private colleges, regional coordinating councils, Iowa finance authority and the University of Northern Iowa to provide technical assistance for eligible applicants preparing community builder plans. Eligible applicants are encouraged to seek the assistance of these service providers in preparing their plans.

These rules are intended to implement 1990 Iowa Acts, chapter 1140.

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CHAPTERS 81 to 99
Reserved

CHAPTER 100
PUBLIC RECORDS AND FAIR INFORMATION PRACTICES

The Iowa department of economic development hereby adopts, with the following exceptions and amendments, rules of the Governor's Task Force on Uniform Rules of Agency Procedure relating to public records and fair information practices which are printed in Volume I of the Iowa Administrative Code.

261—100.1(17A,22) Definitions. As used in this chapter:

"Agency." In lieu of the words "(official or body issuing these rules)", insert "department of economic development".

261—100.3(17A,22) Requests for access to records.

100.3(1) *Location of record.* In lieu of the words "(insert agency head)", insert "director of the agency". In lieu of the words "(insert agency name and address)", insert "Department of Economic Development, 200 East Grand Avenue, Des Moines, Iowa 50309; (515) 281-3251".

100.3(2) *Office hours.* In lieu of the words "(insert customary office hours and, if agency does not have customary office hours of at least thirty hours per week, insert hours specified in Iowa Code section 22.4)", insert "8 a.m. to 4:30 p.m. daily, excluding Saturdays, Sundays and legal holidays".

100.3(7) *Fees.*

c. Supervisory fee. In lieu of the words "(specify time period)", insert "one hour".

261—100.9(17A,22) Disclosures without the consent of the subject.

100.9(1) Open records are routinely disclosed without the consent of the subject.

100.9(2) To the extent allowed by law, disclosure of confidential records may occur without the consent of the subject. Following are instances where disclosure, if lawful, will generally occur without notice to the subject:

a. For a routine use as defined in rule 100.10(17A,22) or in the notice for a particular record system.

b. To a recipient who has provided the agency with advance written assurance that the record will be used solely as a statistical research or reporting record, provided that the record is transferred in a form that does not identify the subject.

c. To another government agency or to an instrumentality of any governmental jurisdiction within or under the control of the United States for a civil or criminal law enforcement activity if the activity is authorized by law, and if an authorized representative of such government agency or instrumentality has submitted a written request to the agency specifying the record desired and the law enforcement activity for which the record is sought.

b. To an individual pursuant to a showing of compelling circumstances affecting the health or safety of any individual if a notice of the disclosure is transmitted to the last known address of the subject.

e. To the legislative fiscal bureau under Iowa Code section 2.52.

f. Disclosures in the course of employee disciplinary proceedings.

g. In response to a court order or subpoena.

261—100.10(17A,22) Routine use.

100.10(1) Defined. "Routine use" means the disclosure of a record without the consent of the subject or subjects, for a purpose which is compatible with the purpose for which the

record was collected. It includes disclosures required to be made by statute other than the public records law, Iowa Code chapter 22.

100.10(2) To the extent allowed by law, the following uses are considered routine uses of all agency records:

a. Disclosure to those officers, employees, and agents of the agency who have a need for the record in the performance of their duties. The custodian of the record may upon request of any officer or employee or on the custodian's own initiative, determine what constitutes legitimate need to use confidential records.

b. Disclosure of information indicating an apparent violation of the law to appropriate law enforcement authorities for investigation and possible criminal prosecution, civil court action, or regulatory order.

c. Disclosure to the department of inspections and appeals for matters in which it is performing services or functions on behalf of the agency.

d. Transfers of information within the agency, to other state agencies, or to local units of government as appropriate to administer the program for which the information is collected.

e. Information released to staff of federal and state entities for audit purposes or for purposes of determining whether the agency is operating a program lawfully.

f. Any disclosure specifically authorized by the statute under which the record was collected or maintained.

261—100.11(17A,22) Consensual disclosure of confidential records.

100.11(1) Consent to disclosure by a subject individual. The subject may consent in writing to agency disclosure of confidential records as provided in rule 100.7(17A,22).

100.11(2) Complaints to public officials. A letter from a subject of a confidential record to a public official which seeks the official's intervention on behalf of the subject in a matter that involves the agency may be treated as an authorization to release sufficient information about the subject to the official to resolve the matter.

261—100.12(17A,22) Release to subject.

100.12(1) The subject of a confidential record may file a written request to review confidential records about that person as provided in rule 100.7(17A,22). However, the agency need not release the following records to the subject:

a. The identity of a person providing information to the agency need not be disclosed directly or indirectly to the subject of the information when the information is authorized to be held confidential pursuant to Iowa Code section 22.7(18).

b. Records need not be disclosed to the subject when they are the work product of an attorney or are otherwise privileged.

c. Peace officers' investigative reports may be withheld from the subject, except as required by the Iowa Code. (See Iowa Code section 22.7(5)

d. As otherwise authorized by law.

100.12(2) Where a record has multiple subjects with interest in the confidentiality of the record, the agency may take reasonable steps to protect confidential information relating to another subject.

261—100.13(17A,22) Availability of records.

100.13(1) *Open records.* Agency records are open for public inspection and copying unless otherwise provided by rule or law.

100.13(2) *Confidential records.* The following records may be withheld from public inspection. Records are listed by category, according to the legal basis for withholding them from public inspection.

a. Sealed bids received prior to the time set for public opening of bids. (Iowa Code section 73.2)

CHAPTER 90
STANDARDS FOR GRADUATE
TEACHER EDUCATION PROGRAMS

CHAPTER 65
INNOVATIVE PROGRAMS FOR AT-RISK EARLY ELEMENTARY STUDENTS

281—65.1(279) Purpose. These rules set forth procedures and conditions under which state funds shall be granted to public schools which provide innovative in-school programming.

281—65.2(279) Definitions.

"Applicant" means a public school that applies for the early elementary at-risk funds.

"At-risk student" means a student who meets one or more of the primary and secondary risk factors stated in rule 65.4(279) and 65.5(279).

"Department" means the department of education.

"Early elementary grades" means kindergarten through grade three.

"Early elementary grants" means the funds awarded by the department to assist at-risk early elementary school programs.

"Grantee" means the applicant designated to receive early elementary school grants.

"Low-income family" means a family who meets the current income eligibility guidelines for free and reduced price meals in a local school as documented in the year in which the application is made.

"Project" means the early education school program for which grant funds are requested.

281—65.3(279) Eligibility identification procedures. In a year in which funds are made available by the Iowa legislature, the department shall grant awards to applicants for early elementary grants on a competitive basis to those schools with a high percentage of low-income families. A priority shall be given to school programs which integrate at-risk children with the rest of the school population.

281—65.4(279) Primary risk factor. In identifying the at-risk population of a school district or building, the applicant shall give primary consideration to students in low-income families.

281—65.5(279) Secondary risk factors. In identifying the at-risk population of a school district or building, the applicant shall also give consideration to students who are:

1. Functioning below chronological age in two or more developmental areas, one of which may be English proficiency, as determined by an appropriate professional;
2. Born at biological risk, such as low birth weight (under 1500 grams—approximately three pounds) or with a diagnosed medical disorder, such as spina bifida or Down's syndrome;
3. Born to a parent who was under the age of 18; or
4. Residing in a household where one or more of the parents or guardian:
   - Has not completed high school;
   - Has been identified as a substance abuser;
   - Has been identified as chronically mentally ill;
   - Is incarcerated;
   - Is illiterate; or
   - Is a child or spouse abuser.
5. Subject to other special circumstances, such as being in foster care or being homeless.

281—65.6(279) Grant awards criteria.

65.6(1) *Criteria points.* The following information shall be provided and points shall be awarded to applicants based on the following criteria as stated in the request for proposal:

1. Integration of at-risk children with the rest of the school population.
2. Limited class size.
3. Limited pupil-teacher ratios.
4. Provision of parental involvement.
5. Demonstration of community support.

6. Utilization of services provided by other community agencies.
7. Provision of appropriate guidance counseling services.
8. Use of teachers with an early childhood endorsement.
9. Innovation and comprehension in program design.
10. Existence of a plan for program evaluation including, but not limited to, measurement of student outcomes.
11. Developmentally appropriate practices.

65.6(2) *Additional grant components.* The following information shall be provided and points shall be awarded to applicants based on the following additional components:

1. Program summary.
2. Research documentation.
3. Identification and documentation of local at-risk population.
4. Letters of community support.
5. Program budget (administrative costs not to exceed 10 percent of total award).

281—65.7(279) Application process. The department shall announce through public notice the opening of an application period.

281—65.8(279) Request for proposals. Applications for the early elementary grants shall be on forms provided by the department upon request.

Proposals not containing the specified information or not received by the specified date may not be considered.

281—65.9(279) Grant process.

65.9(1) An applicant shall make formal response using forms issued and procedures established by the department.

65.9(2) A rating team comprised of persons with expertise in early elementary school programs, understanding of the at-risk population, and fiscal management shall review and rank the proposals.

65.9(3) Additional weighting not to exceed 30 percent of the total grant points shall be given to applicant buildings based on the percentage of low-income families within each district-size category. The weighting points shall be based on the free and reduced price lunch percentage of the individual applicant building or of the district, whichever is higher.

65.9(4) The department shall have the final discretion to award funds.

65.9(5) Grants shall be awarded to applicant buildings in districts not currently funded for innovative programs.

65.9(6) New program requests may be funded up to $200,000 per building or up to $1,000 per K-3 child in buildings with K-3 enrollment of less than 200.

65.9(7) A minimum of one grant will be funded in each of the following five district-size categories for new innovative grants beginning July 1, 1991, if acceptable application is made and the proposed program meets all program criteria:

- less than 401
- 401-600
- 601-1,000
- 1,001-2,500
- 2,501 and larger

Additional programs may be funded within these categories depending upon available funds and requests within each category.

281—65.10(279) Award contracts. Rescinded IAB 12/12/90, effective 11/21/90.

281—65.11(279) Notification of applicants. Applicants shall be notified of the department's decision within 45 days of the deadline for applications. Successful applicants will be requested to have an official with vested authority sign a contract with the department.

281—65.12(279) Grantee responsibilities. The grantee shall maintain records which include, but are not limited to:

1. Information on children served,
2. Direct services provided to children,
3. Record of expenditures,
4. Overall program goals, and
5. Other appropriate information specified by the department necessary to the overall evaluation.

Grantees shall complete a year-end report on forms provided by the department documenting the above information. No new awards shall be made for continuation of programs where there are delinquent reports from prior grants.

281—65.13(279) Withdrawal of contract offer. If the applicant and the department are unable to successfully negotiate a contract, the department may withdraw the award offer.

281—65.14(279) Evaluation. The grantee shall cooperate with the department and provide requested information to determine how well the goals and objectives of the project are being met.

281—65.15(279) Contract revisions. The grantee shall obtain the approval of the department for any revisions in the project budget, in excess of 10 percent of a line item provided the revisions do not increase the total amount of the grant.

281—65.16(279) Termination for convenience. The contract may be terminated, in whole or in part, upon agreement of both parties. The parties shall agree upon the termination conditions, including the effective date, and in the case of partial termination, the portion to be terminated. The grantee shall not incur new obligations for the terminated portion after the effective date of termination and shall cancel as many outstanding obligations as possible.

281—65.17(279) Termination for cause. The contract may be terminated, in whole or in part, at any time before the date of completion, whenever it is determined by the department that the grantee has failed to comply substantially with the conditions of the contract. The grantee shall be notified in writing by the department of the reasons for the termination and the effective date. The grantee shall not incur new obligations for the terminated portion after the effective date of termination and shall cancel as many outstanding obligations as possible.

The department shall administer the early elementary school grants contingent upon their availability. If there is a lack of funds necessary to fulfill the fiscal responsibility of the early elementary school grants, the contracts shall be terminated or renegotiated. The department may terminate or renegotiate a contract upon 30 days' notice when there is a reduction of funds by executive order.

281—65.18(279) Responsibility of grantee at termination. Within 45 days of the effective date of termination, the grantee shall supply the department with a financial statement detailing all program expenditures up to the effective date of the termination. The grantee shall be solely responsible for all expenditures after the effective date of termination.

281—65.19(279) Appeals from terminations. Any grantee aggrieved by a unilateral termination of a contract pursuant to 65.17(279) may appeal the decision to the director of the department in writing within 30 days of the decision to terminate. The hearing procedures found at 281 IAC 6 shall be applicable to appeals of terminated grantees.

In the notice of appeal, the grantee shall give a short and plain statement of the reason for the appeal.

The director shall issue a decision within a reasonable time, not to exceed 120 days from the date of hearing.

281—65.20(279) Refusal to issue ruling. The director may refuse to issue a ruling or decision upon an appeal for good cause. Good cause includes, but is not limited to, the following reasons:

1. The appeal is untimely;
2. The appellant lacks standing to appeal;
3. The appeal is not in the required form or is based upon frivolous grounds;
4. The appeal is moot because the issues raised in the notice of appeal or at the hearing have been settled by the parties;
5. The termination of the grant was beyond the control of the department because it was due to lack of funds available for the contract.

281—65.21(279) Requests for reconsideration. A disappointed applicant who has not been approved for funding may file a Request for Reconsideration with the director of the department in writing within ten days of the decision to decline to award a grant. In order to be considered by the director, the request shall be based upon one of the following grounds:

1. The decision process was conducted in violation of statute or rule;
2. The decision violated state or federal law, policy, or rule (to be cited in the request);
3. The decision process involved a conflict of interest.

Within 20 days of filing a Request for Reconsideration, the requester shall submit all written documentation, evidence, or argument in support of the request. The director shall notify the department of the request and shall provide the department an opportunity to defend its decision by submitting written documentation, evidence, or argument within 20 days of receipt of the request. The department shall provide copies of all documents to the requester at the time the items are submitted to the director.

The director shall issue a decision granting or denying the Request for Reconsideration within 30 days of the receipt of the evidence, or no later than 60 days from the date of Request for Reconsideration, unless a later date is agreeable to the requester and the department.

281—65.22(279) Refusal to issue decision on request. The director may refuse to issue a decision on a Request for Reconsideration upon good cause. Good cause includes, but is not limited to, the following reasons:

1. The request was untimely;
2. The requester lacks standing to seek reconsideration;
3. The request is not based on any of the available grounds above, or is merely frivolous or vexatious;
4. The requester failed to provide documentation, evidence, or argument in support of its request;
5. The request is moot due to negotiation and settlement of the issue(s).

281—65.23(279) Granting a request for reconsideration. If the director grants a Request for Reconsideration, the department shall reconsider the grantee's application in accordance with the director's findings and decision.

These rules are intended to implement Iowa Code Supplement section 279.51.

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[Filed emergency 11/21/90—published 12/12/90, effective 11/21/90]

TITLE XIV—A

TEACHERS AND PROFESSIONAL LICENSING

(Effective through September 30, 1988)

CHAPTER 84
INFORMATION AND REQUIREMENTS FOR CERTIFICATION (Through 9/30/88)

[Prior to 9/7/88, see Public Instruction Department(670) Ch 13]

281—84.1(256) Applicants desiring Iowa certification. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.2(256) Transcripts. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.3(256) Adding endorsements. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.4(256) Adding approvals. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.5(256) Correcting certificates. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.6(256) Duplicate certificates. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.7(256) Dating of certificates. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.8(256) Recency of preparation. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.9(256) Evidence of successful experience. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.10(256) Recognized Iowa institutions. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.11(256) Recognized non-Iowa institutions. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.12(256) Validation of credit from nonrecognized institutions. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.13(256) Foreign institutions. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.14(256) Amount of experience. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.15(256) Condition to be met. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.16(256) Persons with a degree who have not completed a teacher education program. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.17(256) Extension for military service. Rescinded IAB 12/12/90, effective 11/14/90.

281—84.18(256) Human relations requirements for teacher education and certification. Preparation in human relations shall be included in programs leading to teacher certification. Human relations study shall include interpersonal and intergroup relations and shall contribute to the development of sensitivity to and understanding of the values, beliefs, life styles and attitudes of individuals and the diverse groups found in a pluralistic society.

84.18(1) Beginning on or after August 31, 1980, each applicant for an initial teacher's certificate shall have completed the human relations requirement.

84.18(2) On or after August 31, 1980, each applicant for the renewal of a teacher's certificate shall have completed an approved human relations requirement.

84.18(3) Certificated persons entering the state on or after August 31, 1980, will be granted a temporary certificate on condition that they fulfill the human relations requirement before renewal.

Where an applicant qualifies for a certificate, with the exception of the preparation in human relations, the applicant shall be issued the initial regular certificate; however, before renewal of the certificate, the individual must complete an approved human relations program.

Applicants who qualify for the permanent professional certificate shall be issued the professional certificate. Upon completion of the human relations requirement, within the term of the professional certificate, the applicant shall be issued the permanent professional certificate.

This rule amendment will terminate September 30, 1981.

84.18(4) The human relations requirement shall be waived for certificated persons who can give evidence that they have completed a human relations program which meets state board of education criteria (see 84.21).

This rule is intended to implement Iowa Code section 256.7(3).

281—84.19(256) Development of human relations components. Human relations components shall be developed by teacher preparation institutions. In-service human relations components may also be developed by educational agencies other than teacher preparation institutions, as approved by the state board of education.

281—84.20(256) Advisory committee. Education agencies developing human relations components shall give evidence that in the development of their programs they were assisted by an advisory committee. The advisory committee shall consist of equal representation of various minority and majority groups.

281—84.21(256) Standards for approved components. Human relations components will be approved by the state board of education upon submission of evidence that they are designed to develop the ability of participants to:

84.21(1) Be aware of and understand the various values, life styles, history, and contributions of various identifiable subgroups in our society.

84.21(2) Recognize and deal with dehumanizing biases such as sexism, racism, prejudice, and discrimination, and become aware of the impact that such biases have on interpersonal relations.

84.21(3) Translate knowledge of human relations into attitudes, skills, and techniques which will result in favorable learning experiences for students.

84.21(4) Recognize the ways in which dehumanizing biases may be reflected in instructional materials.

84.21(5) Respect human diversity and the rights of each individual.

84.21(6) Relate effectively to other individuals and various subgroups other than one's own.

281—84.22(256) Evaluation. Educational agencies providing the human relations components shall indicate the means to be utilized for evaluation.

281—84.23(256) American history or government. Rescinded IAB 12/12/90, effective 11/14/90.

[Filed 1/29/76, Notice 10/6/75—published 2/23/76, effective 3/29/76]
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[Filed emergency 11/14/90—published 12/12/90, effective 11/14/90]

CHAPTER 85
CLASSIFICATION OF CERTIFICATES (Through 9/30/88)

[Prior to 9/7/88, see Public Instruction Department(670) Ch 14]
Rescinded 11/14/90, see IAB 12/12/90

CHAPTER 86
ENDORSEMENTS (Through 9/30/88)

[Prior to 9/7/88, see Public Instruction Department(670) Ch 15]
Rescinded 11/14/90, see IAB 12/12/90

CHAPTER 87
APPROVALS (Through 9/30/88)

[Prior to 9/7/88, see Public Instruction Department(670) Ch 16]
Rescinded 11/14/90, see IAB 12/12/90

CHAPTER 88
CONVERSION AND RENEWAL OF CERTIFICATES (Through 9/30/88)

[Prior to 9/7/88, see Public Instruction Department(670) Ch 17]
Rescinded 11/14/90, see IAB 12/12/90

CHAPTER 89
STANDARDS FOR TEACHER EDUCATION PROGRAMS (Through 9/30/88)

[Prior to 9/7/88, see Public Instruction Department(670) Ch 19]
Rescinded 11/14/90, see IAB 12/12/90

CHAPTER 103
CORPORAL PUNISHMENT BAN

281—103.1(280) Purpose. In conjunction with Iowa Code Supplement section 280.21, the purpose of this chapter is to define and exemplify generally the limitations placed on employees of public schools, accredited nonpublic schools, and area education agencies in applying physical contact or force to enrolled students, and to require that any such force or contact is reasonable and necessary under the circumstances.

281—103.2(280) Ban on corporal punishment. An employee of a public school district, accredited nonpublic school, or area education agency shall not inflict, or cause to be inflicted, corporal punishment upon a student. "Corporal punishment" is defined to mean the intentional physical punishment of a student.* It includes the use of unreasonable or unnecessary physical force, or physical contact made with the intent to harm or cause pain.* It covers contemplated, calculated, or premeditated physical acts as well as spontaneous, unprivileged physical reactions.

281—103.3(280) Exclusions. Corporal punishment does not include the following:

1. Verbal recrimination or chastisement directed toward a student;
2. Reasonable requests or requirements of a student engaged in activities associated with physical education class or extracurricular athletics;
3. Actions consistent with and included in an individualized educational program developed under the Education for All Handicapped Children Act and Iowa Code chapter 281;
4. Detention in a seat, classroom or other part of a school facility, unless the detention is accomplished by the use of material restraints applied to the person;
5. Actions by an employee subject to these rules toward a person who is not a student of the school or receiving the services of an area education agency employing or utilizing the services of the employee.

281—103.4(280) Exceptions and privileges. Notwithstanding rule 103.2(280), no employee subject to these rules is prohibited from:

1. Using reasonable and necessary force, not designed or intended to cause pain, in order to accomplish any of the following:
   - To quell a disturbance or prevent an act that threatens physical harm to any person.
   - To obtain possession of a weapon or other dangerous object within a pupil's control.
   - For the purposes of self-defense or defense of others as provided for in Iowa Code section 704.3.
   - For the protection of property as provided for in Iowa Code section 704.4 or 704.5.
   - To remove a disruptive pupil from class or any area of school premises, or from school-sponsored activities off school premises.
   - To prevent a student from the self-infliction of harm.
   - To protect the safety of others.
2. Using incidental, minor, or reasonable physical contact to maintain order and control.

An employee subject to these rules is not privileged to use unreasonable force to accomplish any of the purposes listed above.

281—103.5(280) Reasonable force. In determining the reasonableness of the physical force used by a school employee, the following factors shall be applied:

1. The size and physical, mental, and psychological condition of the student;
2. The nature of the student's behavior or misconduct provoking the use of physical force;
3. The instrumentality used in applying the physical force;

*Effective date of 103.2(280), last two sentences, delayed until adjournment of the 1991 Session of the General Assembly by the Administrative Rules Review Committee at its November 13, 1990 meeting.

4. The extent and nature of resulting injury to the student, if any;
5. The motivation of the school employee using physical force.

Reasonable physical force, privileged at its inception, does not lose its privileged status by reasons of an injury to the student, not reasonably foreseeable or otherwise caused by intervening acts of another, including the student.

281—103.6(280) Physical confinement and detention. If a student is physically confined or detained in a portion of a school facility, the following conditions shall be observed:

1. The area of confinement shall be of reasonable dimensions;
2. There shall be sufficient light and adequate ventilation for human habitation;
3. A comfortable temperature shall be maintained, consistent with the facility that includes the detention or confinement area;
4. Reasonable break periods shall be afforded the student to attend to bodily needs. However, sleep shall not be considered a "bodily need" for purposes of this subrule;
5. The period of detention or confinement is reasonable and not in excess of the hours in a school day as defined by local board policy or rule. However, reasonable periods of before- and after-school detention are permissible;
6. Adequate adult supervision is provided;
7. Material restraints applied to the person are not used to effect confinement.

These rules are intended to implement Iowa Code Supplement section 280.21 and 1990 Iowa Acts, chapter 1218.

[Filed 10/12/90, Notice 9/5/90—published 10/31/90, effective 12/5/90*]

*Effective date of 281—103.2(280), last 2 sentences, delayed until adjournment of the 1991 Session of the General Assembly by the Administrative Rules Review Committee at its November 13, 1990 meeting.

COLLEGE STUDENT AID COMMISSION[283]

[Prior to 8/10/88, see College Aid Commission[245]]

CHAPTER 15
IOWA GUARANTEED LOAN PAYMENT PROGRAM
15.1(261) Iowa guaranteed loan payment for new teachers of advanced mathematics and specified science programs in approved Iowa postsecondary schools

CHAPTER 16
IOWA SCIENCE AND MATHEMATICS LOAN PROGRAM
16.1(261) Cancelable loans to aid teachers in obtaining authorization to teach mathematics and science

CHAPTER 17
IOWA SUMMER INSTITUTE PROGRAM
17.1(261) State funded grants to Iowa institutions of higher education to enable Iowa teachers in critical teaching areas to upgrade their skills

CHAPTER 18
IOWA WORK-STUDY PROGRAM
18.1(261) Iowa work-study agreement
18.2(261) Annual application
18.3(261) Award notices
18.4(261) Final notices
18.5(261) Initial report
18.6(261) Final report
18.7(261) Administrative procedures
18.8(261) Disbursement schedule
18.9(261) Matching funds
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18.11(261) Unused funds
18.12(261) Summer employment
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CHAPTER 19
OCCUPATIONAL THERAPIST LOAN PAYMENTS PROGRAM
19.1(72GA,ch1284) Loan payment program for occupational therapists who live and work in Iowa

CHAPTER 20
IOWA NATIONAL GUARD LOAN PAYMENTS PROGRAM
20.1(261) Iowa national guard loan payments program

CHAPTER 21
IOWA NURSING LOAN PAYMENTS PROGRAM
21.1(261) Iowa nursing loan payments program

CHAPTER 22
IOWA MINORITY GRANTS FOR ECONOMIC SUCCESS (IMAGES)
22.1(261) Iowa minority grants for economic success

CHAPTERS 23 and 24
Reserved

CHAPTER 25
IOWA MEDICAL TUITION LOAN PLAN
25.1(261) Tuition loans for Iowa resident students who agree to become general practitioners (family doctors) and practice in Iowa

CHAPTER 26
IOWA SCIENCE AND MATHEMATICS GRANT PROGRAM
26.1(261) State funded grants for Iowa high school graduates who have earned a specified number of credits in science and mathematics courses and who are enrolling at eligible Iowa postsecondary institutions

CHAPTER 27
IOWA GRANT PROGRAM
27.1(261) State-supported grants

CHAPTER 28
ACCESS TO EDUCATION GRANT PROGRAM
28.1(261) State-supported grant

CHAPTER 29
DISPLACED WORKERS FINANCIAL AID PLAN
29.1(261) State-supported grants for displaced workers

CHAPTER 30
OSTEOPATHIC FORGIVABLE LOAN PROGRAM
30.1(261) Osteopathic forgivable loan program

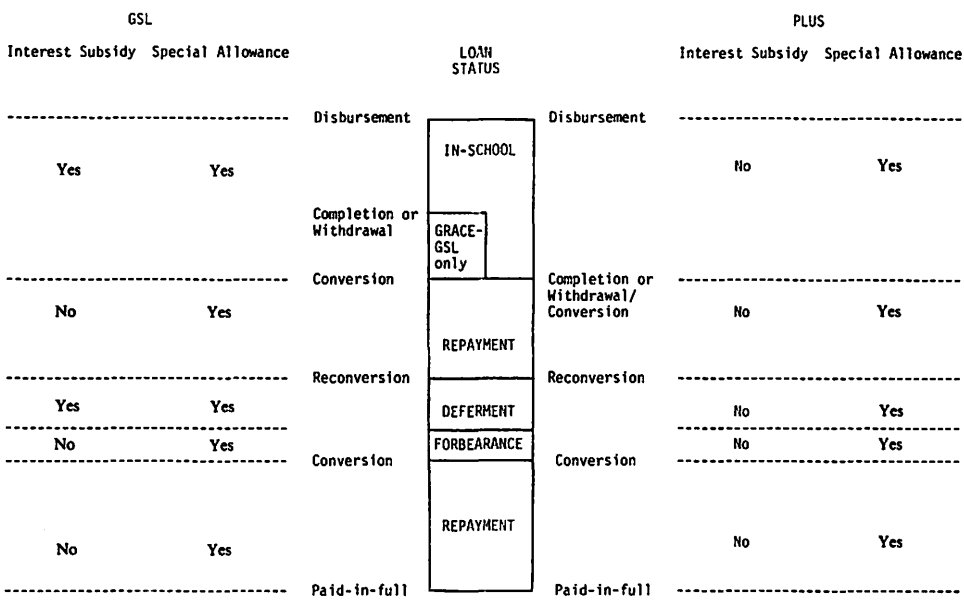
The special allowance rate is set quarterly on March 31, June 30, September 30, and December 31 of each year by the Secretary of Education in consultation with the Secretary of the Treasury. The rates set apply to the quarters ending on those dates.

A lender bills the U.S. Department of Education for special allowance using the Request for Interest and Special Allowance (ED 799). A lender may bill quarterly, semiannually, or annually. The Department of Education calculates the actual amount of special allowance due based on information supplied by the lender.

A lender should bill for interest benefits and special allowance concurrently and on the same form (ED 799). Two separate forms are not submitted.

ICAC informs lenders each quarter of the special allowance rate.

283—10.23(261) Loan eligibility for interest and special allowance.



283—10.24(261) Guarantee fee. Reference: Code of Federal Regulations, Title 34, Sections 682.202(d) and 682.401(b) (6) as in effect December 26, 1986. The ICAC guarantee fee is an amount a borrower pays to the ICAC for guaranteeing repayment of a loan. Its rate is determined by the ICAC with consideration given to the ICAC Reserve Fund and the requirements of the U.S. Department of Education regulations.

The guarantee fee for an Iowa Stafford Loan with a period of instruction beginning prior to May 1, 1987, is three-fourths of one percent (.75%) per year calculated for the period between disbursement and ten months following a student's anticipated completion date. The guarantee fee for an Iowa Stafford Loan for a period of instruction beginning on or after May 1, 1987, and prior to January 1, 1991, is one and one-half percent (1.5%) of the loan amount. The guarantee fee for an Iowa Stafford Loan for a period of instruction beginning on or after January 1, 1991, is one percent (1%) of the loan amount. The amount of the guarantee fee is computed by the ICAC and reported to a lender on the Notice of Loan Guarantee and Disclosure Statement. Assistance with calculation of guarantee fees is available from the College Student Aid Commission office.

A guarantee fee on a multiple disbursement loan is charged only on the portion of the loan disbursed.

A lender deducts the guarantee fee from the proceeds of a loan and holds the fee in an escrow account until a billing is received. Once a month the ICAC Processing Center sends each lender a Fee Billing Statement for the guarantee fees on all GSLs scheduled for disbursement the previous month. The fees for multiple disbursement loans are billed according to the months that individual disbursements are scheduled.

A lender is to use the Fee Billing Statement to notify the ICAC Processing Center of all changes to a loan apparent at disbursement. Lenders are encouraged to provide as much information on the Fee Billing Statement as necessary to clarify their intentions.

A loan for which the guarantee fee is past due for over 130 days is subject to cancellation.

A lender must recalculate the guarantee fee of a loan and prepare a new Notice of Loan Guarantee and Disclosure Statement (NOG/DS) or make changes to the original NOG/DS and have the borrower initial the changes if an amount less than the original amount guaranteed is disbursed or a loan is changed from single to multiple disbursement.

The ICAC does not charge an additional guarantee fee for extension, conversion, or any authorized period of deferment or forbearance.

A guarantee fee must be refunded to a borrower, by a credit against the borrower's loan balance, if the original check is returned uncashed to the lender or if the loan is repaid in full or the loan check is not cashed within 120 days of disbursement. If the original check is returned, the loan is canceled; otherwise it is paid-in-full. If the guarantee fee has already been paid by the lender, a credit adjustment may be requested on a future Fee Billing Statement. If a school takes more than 120 days to return an original loan check for a student who never enrolled, a refund may be obtained by contacting the ICAC office in Des Moines.

A loan cannot be sold or transferred until the guarantee fee has been paid.

In deference to long-standing usage, the term "insurance premium" is sometimes used in lieu of guarantee fee, despite the fact that the guarantee fee or insurance premium is incident to a guarantee transaction and is not actually "insurance."

This rule is intended to implement Iowa Code sections 261.3 and 261.37.

283—10.25(261) Origination fee. An origination fee of 5 percent of the principal amount of a subsidized loan is assessed by the U.S. Department of Education. A lender may pass the origination fee on to the borrower by deducting it from the loan proceeds. Origination fees are verified by the Department of Education and deducted from the interest and special allowance paid to lenders.

A lender may not withhold origination fees on unsubsidized loans. Any origination fees collected in error and forwarded to the U.S. Department of Education will be refunded, with interest, if requested in writing. A lender may not make an adjustment to the normal interest and special allowance billing forms to recover these fees.

A lender must keep a record of the fees the lender is authorized to deduct from loan proceeds before disbursement. When requesting interest and special allowance, a lender must report the amount deducted as origination fees. If the total of origination fees exceeds the interest and special allowance due, the Department of Education deducts the difference from the lender's next request for subsidy payment.

If a loan is disbursed in multiple installments, a lender deducts five percent of each disbursement and reports only the portion of the total origination fee actually collected on the Lender's Request for Interest and Special Allowance.

A lender selling or transferring a loan within the billing period it is disbursed must collect the origination fee and see that it is reported on a Lender's Request for Interest and Special Allowance. The seller and buyer of a loan are responsible for an equitable distribution of the fee collected, but only the seller reports the fee. An audit trail must be maintained.

c. A student borrower must be:

1. A U.S. citizen, national, or eligible noncitizen in accordance with federal program regulations;

2. A resident of the state of Iowa, a student attending an approved education institution in Iowa, or a resident of a state contiguous to Iowa borrowing from an eligible lender located in Iowa;

3. Accepted for enrollment or enrolled at least half time in an approved school, and if currently enrolled, maintaining satisfactory academic progress in a program leading to a degree or certificate;

4. Free of the obligation to repay overpayments on education grants (Pell Grant, Supplemental Educational Opportunity Grant, National Direct Student Loan and State Student Incentive Grant) unless exempted in accordance with federal regulations;

5. Not in default on any education loans unless exempted by circumstances specified below;

6. Attending neither elementary nor secondary school if enrolled or accepted for enrollment in a vocational school and able to benefit from the training offered;

7. A national of the U.S. if enrolled or accepted for enrollment in a school outside the U.S.; and

8. Able to meet the requirements of the federal regulations if enrolled in a flight school program at a vocational school or an institution of higher education. See 34 CFR 683.11(d)(4).

d. A student on whose behalf a parent is borrowing a PLUS Loan must be:

1. A U.S citizen, national, or eligible noncitizen in accordance with federal program regulations;

2. A dependent undergraduate as determined by the school;

3. Accepted for enrollment or enrolled at least half time in an approved school, and if currently enrolled, maintaining satisfactory academic progress in a program leading to a degree or certificate;

4. Free of the obligation to repay overpayments on education grants (Pell Grant, Supplemental Educational Opportunity Grant, National Direct Student Loan, and State Student Incentive Grant) unless exempted in accordance with federal regulations;

5. Not in default on any education loans unless exempted by circumstances specified below.

6. Attending neither elementary nor secondary school if enrolled or accepted for enrollment in a vocational school, and able to benefit from the training offered;

7. A national of the U.S. if enrolled or accepted for enrollment in a school outside the U.S.; and

8. Able to meet the requirements of the federal regulations if enrolled in a flight school program at a vocational school or an institution of higher education. See 34 CFR 683.11(d)(4).

An individual in default on a previous Perkins/National Direct/National Defense Student Loan (NDSL), Federal Insured Student Loan (FISL), Health Education Assistance Loan (HEAL), Guaranteed Student Loan (GSL), Parental Loan for Students (PLUS), Supplemental Loan for Students (SLS), or Auxiliary Loan to Assist Students (ALAS) must pay the defaulted loan in full before an Iowa PLUS/SLS Loan may be guaranteed unless the ICAC agrees to reinstate eligibility on the basis of adequate evidence of extenuating circumstances. If the ICAC refuses reinstatement, the applicant may present a formal appeal. In determining whether a student is in default on a Perkins/NDSL, FISL, HEAL, GSL, PLUS/SLS, or ALAS Loan, a school may, in good faith and in the absence of information to the contrary, rely upon a written statement to that effect by the individual.

A parent of a dependent undergraduate may serve as a comaker for a PLUS Loan. A comaker must meet the eligibility qualifications of a PLUS borrower and carry equal responsibilities. A comaker is obligated to pay the loan if for any reason the borrower fails to pay, as well as if the borrower dies or becomes permanently and totally disabled. A spouse of an independent undergraduate student or graduate student may not serve as a comaker.

A parent may borrow PLUS Loans for two or more students at the same time. A separate application is required for each loan.

The Iowa PLUS/SLS Program has no income restrictions for borrowers.

The Iowa PLUS/SLS Program is subject to federal and state laws that prohibit discrimination of a person from equal opportunity because of race, religion, color, sex, age, national origin, ancestry, marital status, or physically handicapped condition.

10.42(2) *Lender.* Reference: Code of Federal Regulations, Title 34, Section 683.10.

Banks, savings and loan associations, credit unions, pension funds, insurance companies, and schools that meet the requirements outlined in 34 CFR 683.10 are eligible to be lenders under the Iowa PLUS/SLS Program. A single agency of the state of Iowa or a single nonprofit, private agency designated by the state of Iowa also qualifies. A school must meet the requirements specified in subrule 10.2(2). For the purposes of purchasing, holding, and consolidating loans made by other lenders under the program, the Student Loan Marketing Association and the Iowa Student Loan Liquidity Corporation are lenders. The Iowa Student Loan Liquidity Corporation is also considered a lender only for the purpose of originating PLUS and SLS Loans for borrowers who have obtained prior PLUS and SLS Loans which are held by the Iowa Student Loan Liquidity Corporation.

A lender may participate in the Iowa PLUS/SLS Program by executing the Agreement to Guarantee Parental Loans which establishes the rights and duties of the lender and the Iowa College Aid Commission. This document may be obtained from the ICAC office. Both the lender and the ICAC retain an original copy of this document.

A lender must provide the ICAC with the Department of Education identification number which serves as a lender identifier for the program. The ICAC can assist a lender in requesting a DE identification number.

A lender may participate in the Guaranteed Student Loan Program only and not in the PLUS/SLS Program. A lender may participate in the PLUS/SLS Program only and not in the Guaranteed Student Loan Program.

The ICAC reserves the right to limit, suspend, or terminate the participation of a lender in the Iowa PLUS/SLS Program under terms consistent with the Agreement to Guarantee Parental Loans, applicable state and federal law, and ICAC rules. See rules 10.77(261) to 10.89(261) for a description of limitation, suspension, and termination procedures.

10.42(3) *School and course of study.* See subrule 10.2(3) which applies to PLUS/SLS Loans as well as to Guaranteed Student Loans.

283—10.43(261) Loan amounts.

Type of Borrower	A PLUS/SLS Loan is limited to no more than	Cumulative Maximum
Parent	$4,000 for each dependent undergraduate student	$20,000 for each dependent undergraduate
Independent undergraduate student	$4,000	$20,000
Graduate/ professional student	$4,000	$20,000 including all PLUS/SLS Loans borrowed as an independent undergraduate

A PLUS/SLS Loan is also limited to:

1. The amount requested by the borrower,
2. The amount recommended by the school, or

3. A requirement that a school obtain a bond, in a specified amount, to assure its ability to meet its financial obligations to students who receive or benefit from ICAC-guaranteed loans; or

4. Other conditions deemed to be reasonable and appropriate.

A limitation of a lender may include, but is not limited to:

1. A limit on the number or total amount of ICAC-guaranteed loans that a lender or holder may make, purchase, or hold;

2. A requirement that a lender disburse all ICAC-guaranteed loans in equal multiple installments in accordance with scheduled academic terms; or

3. Other conditions deemed to be reasonable and appropriate.

A limitation may contain an expiration date after which the limitation ceases.

If a school or lender violates any provision of a limitation agreement, the ICAC may immediately suspend the school or lender and initiate termination proceedings.

The ICAC may require a school or lender subject to limitation to notify affected borrowers and loan applicants of the limitation.

283—10.85(261) Termination proceedings. The ICAC initiates a termination proceeding, regardless of whether a suspension proceeding has begun, by sending a notice of intent to terminate to a school or lender by certified mail (return receipt requested). The notice must:

1. Inform the school or lender of the ICAC's intent to terminate the institution's eligibility, cite the consequences of the action, and identify the grounds on which the intent is based;

2. Specify the proposed effective date of the termination which must be at least twenty days after the date of mailing of the notice of intent;

3. Inform the school or lender that the termination becomes effective on the date specified unless the ICAC receives, at least five days before that date, a written request for a hearing or written material indicating why the termination should not take effect; and

4. Invite voluntary efforts to correct the alleged violation(s).

If the school or lender submits written material, the ICAC, after considering the material, notifies the school or lender that the proposed termination is dismissed or that the termination is effective as of a specified date.

If the school or lender requests a hearing before the effective date of the termination, the ICAC sets a place and time for the hearing no earlier than fifteen days after the ICAC receives the request. No termination takes effect before the hearing is held.

A termination removes, without qualification, a school's or lender's eligibility to participate in the ICAC program for an indefinite period of time.

283—10.86(261) Hearing and decision. When a school or lender affected by a limitation, suspension, or termination proceeding submits a timely written request for a hearing, the ICAC sets a time and place for the hearing no earlier than fifteen days after the ICAC receives the request. Hearings may be expedited and scheduled earlier than provided in these regulations if the ICAC Executive Director and the school or lender mutually agree.

The Executive Director of the ICAC presides at the hearing which is attended by the ICAC administrative staff. They consider written material presented before the hearing and any material and evidence presented during the hearing.

The Executive Director of the ICAC issues a written decision and promptly mails it to the school or lender by certified mail. The decision must comprise findings of fact and conclusions of law and be based only on evidence considered at the hearing and matters given official notice. The decision may limit, suspend, or terminate, in whole or in part, the school's or lender's eligibility to participate in the ICAC program. In a termination proceeding, the Executive Director may deem imposing limitation rather than termination.

A suspension takes effect either on the date the decision is received by the school or lender or on the original proposed effective date stated in the notice of intent, whichever is later. A limitation or termination takes effect twenty days after the decision is issued unless within the twenty-day period, the school or lender appeals the decision.

283—10.87(261) Appeal. A decision resulting from a hearing may be appealed to the Iowa College Aid Commission or its designated appeals panel. Pending appeal, a hearing decision to limit or terminate a school or lender takes effect only if the Executive Director of the ICAC determines a stay would adversely affect the ICAC program or borrowers.

A school or lender may submit for consideration in the appeal additional written material including exceptions to the decision, proposed findings of fact and conclusions of law, and supporting briefs and statements. A copy of the additional materials must be provided to each party that participated in the hearing.

The ICAC issues a written final decision affirming, modifying, or reversing the hearing decision and a statement of reasons supporting the final decision.

283—10.88(261) Removal of limitation. A school or lender whose eligibility to participate in the ICAC program has been limited may file a written request for removal of a limitation no sooner than twelve months after the effective date of the limitation. The request must state how the institution has corrected the violation(s) on which the limitation was based.

Within sixty days of receiving the request for removal of a limitation, the ICAC grants the request, denies the request, or grants the request subject to other limitation.

If the ICAC denies the request or establishes other limitation, the school or lender may request in writing a meeting with the ICAC to show why the limitation should be removed. Pending outcome of the meeting, the school or lender may participate in the ICAC program subject to the limitation.

283—10.89(261) Reinstatement after termination. A school or lender whose eligibility to participate in the ICAC program has been terminated may file a written request for reinstatement of eligibility no sooner than eighteen months after the effective date of termination. The request must state how the institution has corrected the violation(s) on which the termination was based and substantiate that the school or lender meets all qualifications for eligibility.

Within sixty days of receiving the request for reinstatement, the ICAC grants the request, denies the request, or grants the request subject to limitation(s).

If the ICAC denies the request or grants reinstatement subject to limitation, the school or lender may request in writing a meeting to show cause why its eligibility should be reinstated. Pending outcome of the meeting, a school or lender granted reinstatement subject to limitations maintains its right to participate in the ICAC program subject to the reinstatement limitations.

These rules are intended to implement Iowa Code section 261.37 and Iowa Code Supplement section 261.12(2).

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◊Two ARCs.
*Three ARCs.

CHAPTER 11
STATE OF IOWA SCHOLARSHIP PROGRAM

[Prior to 8/10/88, see College Aid Commission, 245—Ch 2]

283—11.1(261) A state-supported and administered scholarship program.

11.1(1) *Application requirements.* All Iowa high school graduates who rank in the upper 15 percent of their class at the end of their junior year and who take a national test, as designated by the commission, during the period specified by the commission are eligible to apply for state of Iowa scholar recognition awards.

11.1(2) *Eligibility for scholarship.* An applicant for a state of Iowa scholarship must meet the following initial requirements:

a. Be a resident of Iowa according to rule 681—1.4(262), established by the board of regents and adopted by the commission.

b. Release test scores, rank in class, and curriculum information to the commission on a form specified by the commission, with date of receipt by the commission as stated in the application instructions. In the case of an applicant who has earned a general equivalency diploma, class rank will be waived and academic potential will be judged on the basis of test scores alone.

11.1(3) *Eligibility for monetary scholarship.* Having qualified academically as a state of Iowa scholar, an applicant must meet the following requirements to receive a monetary award.

a. Complete requirements for the high school diploma or its equivalent by the end of the summer preceding entrance into college.

b. Plan to enroll as a full-time freshman student at an approved college, university, or other postsecondary institution in Iowa. Applicants who have fulfilled requirements for the freshman year of college, either by advanced placement examination or by entry into college prior to receipt of a high school diploma, will be considered for awards on an individual basis. The same is true of a student who plans an alternative education program (e.g., study abroad, exchange program, internship program) which may delay the regular academic period.

c. A student who is in default on a Stafford/guaranteed student loan, supplemental loan to students, or who owes a repayment on any Title IV grant assistance or state award shall be ineligible for assistance under the state of Iowa scholarship program. Eligibility for state aid may be reinstated upon payment in full of the delinquent obligation or by commission ruling on the basis of adequate extenuating evidence presented in an appeal under the procedures set forth in 283—Chapter 5.

d. A recipient may request a leave of absence for a maximum of one calendar year if illness, financial circumstances, or other reasons beyond the recipient's control prevent enrollment or force withdrawal from college.

11.1(4) *Criteria for awards.*

a. Academic rank of an applicant is determined by two factors: percentile rank in high school class and scores on the designated standard national test will be weighed equally to produce an academic index score. The commission determines the minimum academic index score, based on a descending ranking of the applicants. Approximately 2000 students will be designated as scholars.

b. High school curriculum plays an important role in determining the amount of monetary awards. The commission will designate the top 500 scholars who have completed a designated number of high school units, as determined by the commission, to receive the maximum scholarship award. The next level of scholars, who have also completed a rigorous curriculum as designated by the commission, will receive an intermediate monetary scholarship. The remaining designated scholars will be credited for a partial monetary award as designated by the commission.

11.1(5) *Monetary awards.*

a. Awards are prorated on a quarterly or semeter basis and are paid directly to the institu-

CHAPTER 13
IOWA VOCATIONAL-TECHNICAL TUITION GRANT PROGRAM

[Prior to 8/10/88, see College Aid Commission, 245—Ch 5]

283—13.1(261) Tuition grant based on financial need to Iowa residents enrolled as full-time students in vocational or technical (career education) programs at public area schools in the state.

13.1(1) *Financial need.*

a. Financial need is defined as the difference between the estimated amount of family resources available for college expenses and the total costs at the institution the student plans to attend.

b. Financial need shall be evaluated annually on the basis of a confidential financial statement filed on forms designated by the commission which must be received by the processing agent by the date specified in the application instructions.

13.1(2) *Student eligibility.*

a. A recipient must be an Iowa resident. The criteria used by the state board of regents to determine residency for tuition purposes, IAC 681—1.4(262) are adopted for this program.

b. A recipient may receive moneys under this program for not more than four semesters, eight quarters, or the equivalent of two full years of study.

c. A recipient may again be eligible for moneys under 13.1(2)*"b"* if the recipient resumes study after at least a two-year absence, except for course work for which credit was previously received.

13.1(3) *Self-supporting applicants.* For purposes of determining financial independence, the commission has adopted the definition in use by the U.S. Department of Education for the federally funded student assistance programs. Self-supporting applicants must certify their status on the financial aid form and supply any required documentation to the educational institution.

13.1(4) *Priority for grants.* Applicants are ranked in order of the estimated amount of the student's family contribution toward college expenses and awards are granted to those who demonstrate need in order of family contribution from lowest to highest, insofar as funds permit.

13.1(5) *Award notification.* A grant recipient is notified of the award by the educational institution(s) to which application is made. The institution(s) is responsible for completing necessary verification and for coordinating other aid to ensure compliance with student eligibility requirements and allowable award amounts. The insitution reports changes of student eligibility to the commission.

13.1(6) *Full year of study.* For purposes of this program, the commission has defined full year of study as either four quarters or two semesters plus a summer session. Grant payments are prorated according to this definition.

13.1(7) *Award transfers and adjustments.* Recipients are responsible for promptly notifying the appropriate institution(s) of any change in enrollment or financial situation. The educational institution will make necessary changes and notify the commission.

13.1(8) *Restriction.* A student who is in default on a Stafford Loan, SLS Loan, or a Perkins/National Direct/National Defense Student Loan or who owes a repayment on any Title IV grant assistance or state award shall be ineligible for assistance under the Iowa vocational-technical tuition grant program. A loan which has been discharged in bankruptcy shall not be considered in default. Eligibility for state aid may be reinstated upon payment in full of the delinquent obligation or by commission ruling on the basis of adequate extenuating evidence presented in an appeal under the procedures set forth in Chapter 5.

This rule is intended to implement Iowa Code sections 261.17 and 261.9(5).

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CHAPTER 14
OSTEOPATHIC GRANT SUBVENTION PROGRAM

[Prior to 8/10/88, see College Aid Commission, 245—Ch 7]

283—14.1(261) A state-supported grant and subvention program to be used for admission and education of Iowa residents at the College of Osteopathic Medicine and Health Sciences.

14.1(1) *Iowa residency.* The criteria used by the state board of regents to determine residency for tuition purposes, IAC 681—1.4(262) are adopted by the commission for purposes of this program.

14.1(2) *Selection of Iowa residents.* Iowa residents to be admitted to the college under contract shall be selected by the college on the basis of their qualifications and without discrimination because of sex, color or creed.

14.1(3) *Student eligibility.* A recipient must be an Iowa resident who is enrolled in a program at the University of Osteopathic Medicine and Health Sciences leading to a degree in osteopathic medicine. Recipients must have enrolled as a first-year student after July 1, 1986, but before July 1, 1990. The criteria used by the state board of regents to determine residency for tuition purposes, 681 IAC 1.4 (262), are adopted to determine residency for this program.

14.1(4) *Award limits.*

a. The annual amount of the grant to an eligible osteopathic student is set by legislation. The current amount is $3,000.

b. If, after crediting the amount of the grant to the student's tuition and fees, a credit balance remains, the institution may distribute the grant balance to the student, who may use the proceeds for other bona fide education expenses such as books and equipment.

14.1(5) *Extent of grant.* Students who are repeating an entire year's academic program and who are not charged tuition and fees for that program will not be eligible for a grant during that year.

14.1(6) *Notice of award.* The commission, on receipt of the university's certified roster, will notify each eligible student of the student's osteopathic grant award.

14.1(7) *Restriction.* A student who is in default on a Stafford Loan, SLS Loan, or a Perkins/National Direct/National Defense Student Loan or who owes a repayment on any Title IV grant assistance or state award shall be ineligible for assistance under the osteopathic grant program. Eligibility for state aid may be reinstated upon payment in full of the delinquent obligation or by commission ruling on the basis of adequate extenuating evidence presented in appeal under the procedure set forth in 283—Chapter 3, Iowa Administrative Code.

14.1(8) *Payment of grant funds.*

a. The registrar of the university shall provide to the commission, by September 15 and January 15, a certified roster of enrolled Iowa residents. The roster will contain the names and addresses of all students, by class, and shall indicate which students are residents of Iowa.

b. The commission shall make the grant payment to the university within ten days following receipt of the required enrollment certification.

c. Each student claiming Iowa residency shall complete a residency questionnaire. University officials shall initially review each questionnaire and approve or disapprove residency status in accordance with the criteria used by the state board of regents, 681 IAC 1.4(262).

14.1(9) *Payment of subvention funds.*

a. Subvention funds are provided by the state to the university for the admission and education of Iowa residents enrolled in the college of osteopathic medicine.

b. The payment of subvention funds will be made in two equal installments ten days following the receipt from the university of a certified roster of enrolled students.

c. The roster required in paragraph 14.1(8)*"a"* is also to be used for determining the subvention payment.

d. The commission shall determine a subvention amount per resident student by dividing the funds appropriated for the subvention program by a number equal to that year's required

percentage of the total students enrolled, as specified in legislation. If fewer than the required percentage of Iowa residents are enrolled, the commission shall deduct from the funds appropriated an amount equal to the subvention amount per resident student multiplied by the number of students required to equal the required percentage of the total students enrolled as stated in legislation.

e. No payment of the subvention will be made until the university has provided the commission a certified copy of its annual audit.

This rule implements Iowa Code section 261.18.

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CHAPTER 15
IOWA GUARANTEED LOAN PAYMENT PROGRAM
[Prior to 8/10/88, College Aid Commission, 245—Ch 14]

283—15.1(261) Iowa guaranteed loan payment for new teachers of advanced mathematics and specified science programs in approved Iowa postsecondary schools.

15.1(1) *Application for loan payments.*

a. Application forms shall be provided by the commision for distribution through school districts and teacher preparation institutions in the state.

b. In the appropriate section of the application form the superintendent of the school district which has contracted with the applicant shall certify the teaching assignment of the applicant for the forthcoming school year.

c. The appplicant shall file the completed application with the commission.

15.1(2) *Criteria for selection of beneficiaries.* Eligible teachers who file completed applications shall be granted loan payment benefits in rank order of the date the application was received by the commission.

15.1(3) *Definitions.*

a. For purposes of this program, a "sequential mathematics course at the advanced algebra level or higher" (Iowa Code section 261.45(4)"a") shall be defined as a course which requires, as a minimum prerequisite, two courses in the mathematics sequence.

b. For purposes of this program, "graduated from college" is defined as the occasion of the individual's award of the first baccalaureate degree.

c. For the purposes of this program, a major in mathematics or science is defined as a major in one or more of the courses of study specified in 281—87.17(257) or 281—87.23(257) of the Iowa administrative rules adopted by the department of education, as amended from time to time.

d. "Outstanding debt" is defined as an Iowa guaranteed student loan insured by the commission.

15.1(4) *Certifications required for reimbursement of loan payments.*

a. After the close of the school year and before July 15, the superintendent of the school district which has employed the teacher shall certify to the commission that the teacher served throughout the school year in an eligible teaching assignment. The certification form provided by the commission for this purpose shall include a section in which the superintendent will indicate renewal status of the teacher's contract and anticipated teaching assignment for the forthcoming school year.

b. After the close of the school year and before July 15, the lending institution which holds the teacher's student loan notes shall certify to the commission the total amount paid on principal and interest during the preceding state fiscal year. The form provided by the commission for this purpose shall include a section to report any delinquencies in loan payment. If two or more lenders are holders of the teacher's Iowa guaranteed student loan notes, all lenders must provide certification.

15.1(5) *Reimbursement of loan payments.*

a. Upon receipt of the necessary certifications, the commission shall reimburse the teacher for loan payments made during the preceding fiscal year within the limitations of the maximum amount specified by law.

b. A teacher shall not be reimbursed for payments made more than 60 days after the due date.

This rule is intended to implement Iowa Code sections 261.45 and 261.51.

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CHAPTER 19
OCCUPATIONAL THERAPIST LOAN PAYMENTS PROGRAM

283—19.1(72GA,ch1284) Loan payment program for occupational therapists who live and work in Iowa.

19.1(1) *Recipient eligibility.*

a. Application for repayment will generally involve two phases. The term "student applicant" will apply to one who has entered into an agreement with the commission before leaving school. "Eligible therapist" will apply to an occupational therapist who is currently employed in Iowa. An eligible therapist may or may not have entered into an agreement before leaving school.

b. Student applicants may enter into a conditional agreement with the commission as early as the first semester of the third year of college.

c. An eligible therapist shall be an Iowa resident and a licensed occupational therapist as specified under Iowa Code chapter 148B before a request for loan repayment can be submitted.

d. An eligible therapist shall be practicing as an occupational therapist in an Iowa institution.

e. An eligible therapist shall have an outstanding debt for loans taken out during the third and fourth years of the occupational therapist program with an eligible lender under the Iowa Stafford/guaranteed student loan program, the supplemental loans for students program, or have parents with an outstanding debt, for loans which assisted the therapist during the therapist's third or fourth year of the occupational therapist program, with an eligible lender under the Iowa PLUS loan program.

f. A borrower who is in default on a Stafford/guaranteed student loan, supplemental loan to students, or who owes a repayment on any Title IV grant assistance or state award shall be ineligible for loan payments. If a parent borrower is in default on a PLUS loan, any loans held by that parent are ineligible for loan payments. Eligibility for state aid may be reinstated upon payment in full of the delinquent obligation or by commission ruling on the basis of adequate extenuating evidence presented in an appeal under the procedures set forth in 283—Chapter 5.

19.1(2) *Application and request for loan repayment.*

a. Forms shall be provided by the commission for distribution through colleges and related organizations.

b. Students who have entered into an agreement while still in school will receive a request for loan repayment form at the time of graduation.

c. In the appropriate section of the request for loan repayment form, the employer will certify the employment status of the eligible therapist.

d. The eligible therapist shall file the completed request for repayment by a deadline designated by the commission.

19.1(3) *Criteria for selection of recipients.*

a. Priority will be given to eligible therapists who have entered into an agreement with the commission while completing their occupational therapist program and who have returned to Iowa to begin their careers. Requests for loan repayment received before the designated deadline will be honored to the extent that funds are available. If funds are insufficient to honor all requests, the commission shall repay loans to students demonstrating the greatest financial need.

b. Eligible therapists currently employed in Iowa will be considered if funds remain after the applicants described in paragraph *"a"* of this subrule are assisted. A lottery will determine awards if funds are insufficient to honor all requests. A repayment request in this category may be renewed only if funds remain after priority applicants are given consideration.

c. Renewal of requests for loan repayment for those described in paragraph *"a"* of this subrule will be given first priority.

19.1(4) *Certifications required for reimbursement of loan payments.*

a. After 12 months of employment, the eligible therapist shall ask the employer to certify to the commission the period of time that the eligible therapist has been employed full time as an occupational therapist, using the request for repayment form on which the employer gave initial certification (19.1(2)*"c"*). A qualified occupational therapist who has been employed full-time by an area education agency or other education entity under a 9-month employment contract will be considered to have completed a full year's employment, providing the therapist has been employed for the duration of the 9-month contract. The annual request for loan repayment form will allow a 12-month maximum. The form will also allow the employer to indicate whether continued employment of the applicant is expected.

b. On the request for repayment form, the lending institution which holds the eligible therapist's student loan notes or parent loan notes shall certify to the commission the total amount paid on principal and interest during the preceding state fiscal year. The form provided by the commission for this purpose shall also include a section to report any delinquencies in loan payment. If two or more lenders are holders of the eligible therapist's Iowa student loan notes, all lenders must provide certification.

19.1(5) *Reimbursement of loan payments.*

a. Upon receipt of the necessary certifications, the commission shall reimburse the eligible therapist, or the parent if a PLUS loan is involved, for loan payments made during the period of full-time employment as an occupational therapist for the preceding fiscal year within the limitations of the maximum amount specified by law.

b. An eligible therapist shall not be reimbursed for payments made more than 60 days after the due date.

This rule is intended to implement Iowa Code sections 261.2(10) and 261.46.

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CHAPTER 21
IOWA NURSING LOAN PAYMENTS PROGRAM

283—21.1(261) Iowa nursing loan payments program.

21.1(1) *Recipient eligibility.*

a. An eligible applicant shall be an Iowa resident and a registered nurse or licensed practical nurse who has graduated from an approved registered nurse or licensed practical nurse program on or after April 1, 1989.

b. An eligible nurse shall have an outstanding debt with an eligible lender under the Stafford/guaranteed student loan program, supplemental loans for students program, or have parent(s) with an outstanding debt with an eligible lender under the PLUS Program from which the nurse benefited.

c. The maximum annual reimbursement to an eligible nurse is $1000 or the remainder of the nurse's and parent's loans, whichever is less.

d. Total payments for an eligible nurse are limited to a six-year period and shall not exceed a total of $6000.

e. Eligible applicants must be employed full-time for the complete state fiscal year to qualify for reimbursement during that year.

f. A nurse who is in default on a Stafford/guaranteed student loan, supplemental loan to students, PLUS loan, Perkins loan, or who owes a repayment on any Title IV grant assistance or state award shall be ineligible for loan payments. If a member's parents are in default on any loan, those loans are not eligible for reimbursement and will not be considered in the calculation of total debt for the applicant.

g. Any payment made more than 60 days after the due date is not eligible for reimbursement.

21.1(2) *Criteria for selection of recipients.*

a. For the fiscal year beginning July 1, 1989, and ending June 30, 1990, reimbursement will be made only to a registered nurse or licensed practical nurse employed on a full-time basis in a hospital, state agency, agency of a political subdivision, or agency delivering home-based health care, or a health care facility within the state. In subsequent years, reimbursement will be allowed for applicants employed full-time as a registered nurse or licensed practical nurse anywhere in the state.

b. Priority will be given to eligible nurses determined by ranking of applicants according to a system which considers an assessment of nursing shortage areas in the state and the applicant's level of educational debt.

c. Applicants who have entered into a contract with the commission as a nursing student will receive priority consideration after an eligible year of nursing has been completed. These applicants will also receive priority for annual renewals.

d. A graduate nurse (not yet licensed) may apply for loan payment benefits, but will be reimbursed only if the first available licensing examination is taken and passed, and the nurse has been employed as either a graduate or licensed nurse for the full fiscal year.

e. If funds are insufficient to repay loans to all qualified applicants, moneys appropriated for the program shall be used to repay loans to qualified applicants demonstrating the greatest financial need.

21.1(3) *Application for loan payment reimbursement.*

a. Forms shall be provided by the commission for distribution through approved nursing schools.

b. Eligible students may enter into a contract with the commission at or after the time of loan origination to ensure loan repayment. This agreement will specify that subsequent guaranteed loans secured by the nursing student or parents must be guaranteed by the commission in order to receive reimbursement benefits under this program.

c. Students who have entered into an agreement with the commission will receive a request for loan repayment form at the time of graduation.

d. In the appropriate section of the request for loan repayment form, the employer must certify the employment status of the nurse.

e. The eligible nurse shall file the completed request for repayment by a deadline designated by the commission.

21.1(4) *Certification required for reimbursement of loan payment.*

a. After 12 months of eligible nursing employment in Iowa, the employer will certify that the eligible nurse has been employed full-time for the entire fiscal year.

b. On the request for repayment form, the lending institution which holds the eligible nurse's student loan notes or parent loan notes shall certify to the commission the total amount paid on principal and interest during the preceding state fiscal year. The form provided by the commission for this purpose shall also include a section to report any delinquencies in loan payment. If two or more lenders are holders of the eligible loan notes, all lenders must provide certification.

21.1(5) *Reimbursement of loan payments.* Upon receipt of the necessary certifications, the commission shall reimburse the nurse for eligible loan payments made during the year of employment within the limitation of the maximum amount specified by law and the funds available for the program.

This rule is intended to implement Iowa Code Supplement section 261.47.

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CHAPTER 28
ACCESS TO EDUCATION GRANT PROGRAM

283—28.1(261) State-supported grants. The access to education grant program is a state-supported and administered grant based on financial need to Iowa residents who attend community colleges in Iowa.

28.1(1) *Definitions.* As used in this chapter:

"Community college" means any public, two-year institution of higher education as defined in Iowa Code section 280A.2, subsection 3.

"Full-time resident student" means an individual resident of Iowa who is enrolled at an Iowa community college in a course of study including at least 12 semester hours or the trimester or quarter equivalent of 12 semester hours. "Course of study" does not include correspondence courses.

"Pell grant" means the federally funded and operated need-based entitlement grant program available to undergraduate students.

"Qualified student" means a resident student who has a federal Pell grant index up to 20 percent over the index cutoff for a Pell grant, who is making satisfactory progress toward graduation, and who is not receiving a Pell grant.

28.1(2) *Student eligibility.* A recipient must be an Iowa resident who is enrolled for at least 12 semester hours or the trimester or quarter equivalent in a program leading to a degree, diploma, or certificate from an Iowa community college. The criteria used by the state board of regents to determine residency for tuition purposes, 681 IAC 1.4(262), are adopted for this program.

28.1(3) *Self-supporting applicants.* For purposes of determining financial independence, the commission has adopted the definition in use by the U.S. Department of Education for the federally funded student assistance programs. Self-supporting applicants must certify their status on the financial aid form and supply any required documentation to the educational institution.

28.1(4) *Award limits and eligibility requirements.*

a. A grant may be awarded to any qualified person who is accepted for admission or is enrolled for at least 12 semester hours or the trimester or quarter equivalent.

b. The annual amount of the grant to a full-time student shall not exceed a student's financial need or $250, whichever is less.

c. Grants shall be awarded on an annual basis and shall be credited by the institution against the student's tuition, fees, and room and board charges, at the beginning of each term in equal installments upon certification that the eligible student is enrolled.

d. If, after crediting the amount of the grant to the student's tuition, fees, and, if applicable, room and board charges, a credit balance remains, the institution may distribute the grant [illegible] who may use the proceeds for other bona fide education expenses such [illegible], equipment, and transportation.

e. If a student receiving a grant under the program discontinues attendance before the end of any academic period, but after receiving payment of grant funds for the academic period, the pro rata share of any refund due the student applicable to the state grant shall be paid by the institution to the state.

28.1(5) *Extent of grant.* A qualified full-time student may receive grants for not more than four semesters of undergraduate study or the trimester or quarter equivalent.

28.1(6) *Application process.* Eligible students shall apply for this grant through the use of an approved financial aid form, which uses the federally accepted method of needs analysis. The application form must be received by the need analysis processor by the deadline date specified by the commission.

28.1(7) *Full year of study.* For purposes of this program, the commission has defined full year of study as either three quarters or two semesters. Grant payments are prorated according to this definition.

28.1(8) *Priority for grants.* If funds are insufficient to pay all approved grants, grants will be offered first to those eligible applicants meeting the commission's priority deadline.

28.1(9) *Award notification.* A grant recipient is notified of the award by the educational institution to which application is made. The institution shall clearly identify the access to education grant on the student's aid award notice. The institution is responsible for completing necessary verification and for coordinating other aid to ensure compliance with student eligibility requirements and allowable award amounts. The institution reports changes of student eligibility to the commission.

28.1(10) *Award transfers and adjustments.*

a. Awards may be transferred among eligible institution(s).

b. Recipients are responsible for promptly notifying the appropriate institution of any change in enrollment or financial situation. The educational institution will make necessary changes and notify the commission.

28.1(11) *Restriction.* A student who is in default on a Stafford Loan, SLS Loan, or a Perkins/National Direct/National Defense Student Loan or who owes a repayment on any Title IV grant assistance or state award shall be ineligible for assistance under the Iowa grant program. Eligibility for state aid may be reinstated upon payment in full of the delinquent obligation or by commission ruling on the basis of adequate extenuating evidence presented in appeal under the procedure set forth in 283—Chapter 3, Iowa Administrative Code.

28.1(12) *Institutional reporting.* The commission will monitor the program according to this chapter and will require participating postsecondary institutions that receive funds for enrolled students to furnish any information necessary for the implementation or administration of the program.

This rule is intended to implement Iowa Code chapter 261 as amended by 1990 Iowa Acts, chapter 1272, section 65.

[Filed 11/14/90, Notice 10/3/90—published 12/12/90, effective 1/16/91]

CHAPTER 29
DISPLACED WORKERS FINANCIAL AID PROGRAM

283—29.1(261) State-supported grants for displaced workers. The displaced workers financial aid program is designed to provide aid for attendance of displaced workers at Iowa-based programs, colleges, or universities.

29.1(1) *Definitions.* As used in this chapter:

"Displaced worker" means an Iowa resident who was formerly employed by a hog slaughtering operation which employed 500 or more workers at any time during the six-month period preceding the date on which the employer ceased slaughtering operations, and the individual became unemployed as a result of the employer's ceasing operations between January 1, 1989, and December 31, 1990. The criteria used by the state board of regents to determine residency for tuition purposes, 681 IAC 1.4(262), are adopted to determine residency for this program.

"Eligible institution" means an Iowa-based program, college, or university which is an eligible participant for federal loan programs under Part B of Title IV of the Higher Education Act of 1965, as amended.

"Financial need" means the difference between the student's financial resources, excluding income received from employment by a hog slaughtering operation which ceased operations between January 1, 1989, and December 31, 1990, and the anticipated cost of attendance at the Iowa-based program, college, or university, as determined by a completed financial statement. Any displaced worker making application for financial aid under this program shall apply for, and accept, any student aid or job training program aid available to the displaced worker. The application form must be received by the needs analysis processor by the deadline date established by the commission.

"Full-time student" means an individual resident of Iowa who is enrolled at an eligible institution in a course of study including at least 12 semester hours, or the trimester or quarter equivalent. "Course of study" does not include correspondence or noncredit remedial courses.

"Part-time student" means a displaced worker who is enrolled at an eligible institution in a course of study including at least three semester hours, or the trimester or quarter equivalent of three semester hours. "Course of study" does not include correspondence course or noncredit remedial courses.

29.1(2) *Student eligibility.*

a. A recipient must be a displaced worker who is accepted for admission and enrolled as a part-time or full-time student in a program in an eligible Iowa institution.

b. A recipient must register as a displaced worker with a displaced worker center and have requested assistance through the Job Training Partnership Act (JTPA).

29.1(3) *Award limits and eligibility requirements.*

a. A grant may be awarded to any eligible student who demonstrates financial need.

b. The annual amount of the grant to a full-time student shall not exceed the lesser of the tuition and fees at the eligible institution in which the individual is enrolled or the highest tuition at any area community college.

c. The maximum amount of a grant to a part-time student shall be prorated by taking the maximum full-time grant amount, dividing that amount by 24 semester hours, or the trimester or quarter equivalent, and taking that amount times the number of hours the student is enrolled.

d. Grants shall be awarded on an annual basis, which includes summer terms, and shall be credited by the institution against the student's tuition, fees, and room and board charges at the beginning of each term in equal installments upon certification that the student is enrolled.

e. If, after crediting the amount of the grant to the student tuition, fees, and, if applicable, room and board charges, a credit balance remains, the institution may distribute the grant balance to the student who may use the proceeds for other bona fide education expenses such as books, equipment, and transportation.

f. If a student receiving a grant under the program discontinues attendance before the end of any academic period, but after receiving payment of grant funds for the academic period, the pro rata share of any refund due the student applicable to the state grant, up to the amount of any payments made by the state, shall be remitted by the institution to the commission.

29.1(4) *Extent of grant.* If funds are available, a qualified full-time student may receive grants for up to eight semesters of undergraduate study or the trimester or quarter equivalent. If funds are available, a qualified part-time student may receive grants for not more than 16 semesters of undergraduate study or the trimester or quarter equivalent.

29.1(5) *Application process.*

a. Eligible students shall apply for all forms of federal, state, and institutional financial aid through the use of an approved financial aid application which uses the federally accepted method of needs analysis.

b. The commission shall contact all known eligible displaced workers with a specialized application. To be eligible, the student shall complete and return the application to the institution's financial aid officer by the date specified by the commission.

c. A student shall accept all federal, state, and job training assistance before being considered for grants under this program.

29.1(6) *Priority for grants.*

a. If funds are insufficient to pay all approved grants, the amount of the maximum grant will be reduced to enable all eligible applicants to receive an award.

b. Grants shall not be offered to students whose available resources, including all grant, scholarship, and work assistance awards, meet or exceed the student's financial need.

29.1(7) *Award transfers and adjustments.*

a. Awards may be transferred among eligible institutions.

b. Recipients are responsible for promptly notifying the appropriate institution of any change in enrollment or financial situation. The educational institution will make necessary changes and notify the commission.

29.1(8) *Restriction.* A student who is in default on a Stafford Loan, SLS Loan, or a Perkins/National Defense Student Loan, or who owes a repayment on any Title IV grant assistance or state award, shall be ineligible for assistance under the displaced workers financial aid program. Eligibility for state aid may be reinstated upon payment in full of the delinquent obligation or by commission ruling on the basis of adequate extenuating evidence presented in appeal under the procedure set forth in 283—Chapter 3.

29.1(9) *Institutional reporting.* The commission will monitor the program according to this chapter and will require participating postsecondary institutions that receive funds for enrolled students to furnish any information necessary for the implementation or administration of this program.

This rule is intended to implement Iowa Code chapter 261 as amended by 1990 Iowa Acts, chapter 1272, section 46.

[Filed 11/14/90, Notice 10/3/90—published 12/12/90, effective 1/16/91]

CHAPTER 30
OSTEOPATHIC FORGIVABLE LOAN PROGRAM

283—30.1(261) Osteopathic forgivable loan program. A state-supported and administered forgivable loan program is for Iowans enrolled at the University of Osteopathic Medicine and Health Sciences.

30.1(1) *Definitions.* As used in this chapter:

"Iowa resident student" means an individual who meets the criteria used by the state board of regents to determine residency for tuition purposes, 681 IAC 1.4(262).

"Medical practice" means working full-time as a licensed physician in the state of Iowa following completion of either a required internship or residency program as certified by the state board of medical examiners.

"Medical residency or internship program" means an advanced medical training program which graduates pursue immediately after graduating from the university.

30.1(2) *Student eligibility.* Individuals enrolling as first-year students on or after July 1, 1990, in the osteopathic university who meet the Iowa residency criteria as defined in 681 IAC 1.4(262) and plan to practice medicine in Iowa are eligible recipients.

30.1(3) *Promissory note.* The recipient of a loan under this program shall sign a promissory note agreeing to practice medicine in Iowa for one full year for each loan received or to repay the loan and accrued interest according to repayment terms specified in the note.

30.1(4) *Interest rate.* The rate of interest on loans under this program shall be at the rate of 10.5 percent per annum on the unpaid principal balance.

30.1(5) *Disbursement of loan proceeds.*

a. The full loan amount will be disbursed when the university certifies that the borrower is an Iowa resident and enrolled in good standing.

b. The loan check will be made copayable to the borrower and the University of Osteopathic Medicine and Health Sciences and will be sent to the university within ten days following the receipt of the proper certification.

c. The university will deliver the check to the student and require that the loan check be endorsed to the university to be applied directly to the borrower's tuition account.

d. If the student withdraws from attendance and is entitled to a refund of tuition and fees, the pro rata share of the refund attributable to the state loan must be refunded to the commission.

30.1(6) *Loan cancellations.*

a. Thirty days following the termination of enrollment in the University of Osteopathic Medicine and Health Sciences or the completion of a medical residency or internship or termination of a medical practice in the state of Iowa, the borrower shall notify the commission of the nature of the borrower's employment or educational status.

b. To certify eligibility for cancellation, the borrower must submit to the commission an affidavit from a local medical society or state licensing board verifying that the borrower practiced medicine as a licensed physician in the state of Iowa for 12 consecutive months for each annual loan to be canceled.

c. If the borrower qualifies for partial loan cancellation, the commission shall notify the borrower promptly and revise the repayment schedule accordingly.

d. In the event of death or total and permanent disability, a borrower's obligation to pay this loan is canceled. Borrowers seeking forgiveness as a result of total or permanent disability must submit sufficient information substantiating the claim to the commission. Reports of a borrower's death will be referred to the licensing board for confirmation.

30.1(7) *Loan payments.*

a. Prior to the start of the repayment period, the commission shall provide the borrower with a repayment schedule, modified to reflect any applicable cancellation benefits.

b. It shall be the borrower's responsibility to remit payments to the commission by the fifteenth day of each month.

c. In the event the borrower fails to abide by any material provision of the promissory note or fails to make any payment due under the promissory note within ten days after the date the payment is due, the commission may declare the borrower in default and declare the entire unpaid balance and accrued interest on the promissory note due.

d. The borrower is responsible for notifying the commission immediately of any change in name, place of employment, or home address.

30.1(8) *Deferral of repayment.*

a. Repayment of the borrower's loan obligation may be deferred under the following circumstances: active duty in the United States military service, not to exceed three years; during a period of temporary disability, not to exceed three years.

b. Repayment of the borrower's loan obligation under this loan program is not required during periods of enrollment as an osteopathic student at the University of Osteopathic Medicine and Health Sciences or during an internship or medical residency.

30.1(9) *Restriction.* A student who is in default on a Stafford Loan, SLS Loan, Perkins/National Direct/National Defense Student Loan, Health Professions Student Loan (HPSL), or Health Education Assistance Loan (HEAL) or who owes a repayment on any Title IV grant assistance shall be ineligible for loan payments. Eligibility for state aid may be reinstated upon payment in full of the delinquent obligation or by commission ruling on the basis of adequate extenuating evidence presented in appeal under the procedure set forth in 283—Chapter 3, Iowa Administrative Code.

This rule is intended to implement Iowa Code chapter 261 as amended by 1990 Iowa Acts, chapter 1272, section 52.

[Filed 11/14/90, Notice 10/3/90—published 12/12/90, effective 1/16/91]

76.5(2) *First day of month.*

a. For persons approved for aid to dependent children or programs related to aid to dependent children, medical assistance benefits shall be effective on the first day of a month when eligibility was established any time during the month.

b. For persons approved for supplemental security income, programs related to supplemental security income, or state supplementary assistance, medical assistance benefits shall be effective on the first day of a month when the individual was eligible as of the first moment of the first day of the month.

76.5(3) *Care prior to approval.* No payment shall be made for medical care received prior to the effective date of approval.

441—76.6(249A) Certification for services. The department of human services shall issue a Medical Assistance Eligibility Card, Form DP-6002, to persons determined to be eligible for the benefits provided under the Medicaid program unless one of the following situations exists:

76.6(1) The eligible person is receiving Medicaid under the recipient lock-in provisions defined at rule 441—76.9(249A). These persons shall be issued an Individual Medical Assistance Eligibility Card, Form 470-2188, by the department.

***76.6(2)** The eligible person is receiving Medicaid through any form of managed health care as defined at 441—Chapter 88. Those persons will be issued Form 470-2213, Managed Health Care Card.

76.6(3) The eligible person is an alien who is receiving Medicaid only for emergency services as provided in rule 441—75.11(249A). These persons shall be issued an Individual Medical Assistance Eligibility Card, Form 470-2188, by the department.

76.6(4) The eligible person is receiving Medicaid under the Qualified Medicare Beneficiary program. These persons shall be issued an Individual Medical Assistance Card, Form 470-2188, by the department.

These persons shall be eligible only for payment of Medicare premiums, deductibles, and coinsurance, as provided in subrule 75.1(29).

441—76.7(249A) Reinvestigation. Reinvestigation will be made as often as circumstances indicate but in no instance shall the period of time between reinvestigations exceed 12 months.

The recipient shall supply, insofar as the recipient is able, additional information needed to establish eligibility within five working days from the date a written request is issued. The recipient shall give written permission for release of information when the recipient is unable to furnish information needed to establish eligibility. Failure to supply the information or refusal to authorize the local office to secure information from other sources shall serve as a basis for cancellation of Medicaid.

Eligibility criteria for persons whose eligibility for Medicaid is related to the aid to dependent children program shall be reviewed according to policies governing monthly and nonmonthly reporters found in subrule 40.7(1).

Persons whose eligibility for Medicaid is related to supplemental security income shall complete Form PA-1107-0 as part of the reinvestigation process when requested to do so by the local office.

441—76.8(249A) Investigation by quality control or the food stamp investigation section of the department of inspections and appeals. The recipient or applicant shall cooperate with the department when the recipient's case is selected by quality control or the food stamp investigation section of the department of inspections and appeals for verification of eligi-

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bility unless the investigation revolves solely around the circumstances of a person whose income and resources do not affect medical assistance eligibility. (See department of inspections and appeals rules 481—Chapter 72.) Failure to do so shall serve as a basis for cancellation of assistance unless the Medicaid eligibility is determined by the Social Security Administration. Once denied or canceled for failure to cooperate, the person may reapply but shall not be determined eligible until cooperation occurs.

441—76.9(249A) Recipient lock-in. In order to promote high quality health care and to prevent harmful practices such as duplication of medical services, drug abuse or overuse, and possible drug interactions, recipients that utilize medical assistance services or items at a frequency or in an amount which is considered to be overuse of services as defined in subrule 76.9(7) may be restricted (locked-in) to receive services from a designated provider(s).

76.9(1) A lock-in or restriction shall be imposed for a minimum of 24 months with longer restrictions determined on an individual basis.

76.9(2) The recipient may select the provider(s) from which services will be received. The selection shall be made by using Form MA-4068, Designation of Primary Providers. The designated providers will be identified on the Individual Medical Assistance Eligibility card. Only prescriptions written or approved by the designated primary physician(s) will be reimbursed. Other providers of the restricted service will be reimbursed only under circumstances specified in subrule 76.9(3).

76.9(3) Payment will be made to provider(s) other than the designated (lock-in) provider(s) in the following instances:

a. Emergency care is required and the designated provider is not available. Emergency care is defined as care necessary to sustain life or prevent a condition which could cause physical disability.

b. The designated provider requires consultation with another provider. Reimbursement shall be made for office visits only. Prescriptions will be reimbursed only if written or approved by the primary physician(s). Referred physicians may be added to the designation as explained in subrule 76.9(5).

c. The designated provider refers the recipient to another provider. Reimbursement shall be made for office visits only. Prescriptions will be reimbursed only if written or approved by the primary physician(s). Referred physicians may be added to the designation as explained in subrule 76.9(5).

76.9(4) When the recipient fails to choose a provider(s) within 30 days of the request, the local income maintenance worker will select the provider(s) based on previously utilized provider(s) and reasonable access for the recipient.

76.9(5) Recipients may change designated provider(s) when a change is warranted, such as when the recipient has moved, the provider no longer participates, or the provider refuses to see the patient. The worker for the recipient shall make the determination when the recipient has demonstrated that a change is warranted. Recipients may add additional providers to the original designation with approval of a health professional employed by the department for this purpose.

76.9(6) When lock-in is imposed on a recipient, timely and adequate notice shall be sent and an opportunity for a hearing given in accordance with 441—Chapter 7.

76.9(7) Overuse of services is defined as receipt of treatments, drugs, medical supplies or other Medicaid benefits from one or multiple providers of service in an amount, duration, or scope in excess of that which would reasonably be expected to result in a medical or health benefit to the patient.

76.9(8) Determination of overuse of service shall be based on utilization data generated by the Surveillance and Utilization Review Subsystem of the Medicaid Management Information System. The system employs an exception reporting technique to identify recipients most likely to be program overutilizers by reporting cases in which the utilization exceeds the statistical

76.12(6) *Appeals.* The client shall have the right to appeal the amount of funds subject to recovery under the provisions of 441—Chapter 7.

These rules are intended to implement Iowa Code sections 249.3, 249.4 and 249A.4 and 1989 Iowa Acts, chapter 318, section 2, subsection 11.

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CHAPTER 78
AMOUNT, DURATION AND SCOPE OF MEDICAL AND REMEDIAL SERVICES

[Prior to 7/1/83, Social Services(770), Ch 78]
[Prior to 2/11/87, Human Services(498)]

441—78.1(249A) Physicians' services. Payment will be approved for all medically necessary services and supplies provided by the physician including services rendered in the physician's office or clinic, the home, in a hospital, nursing home or elsewhere.

Payment shall be made for all services rendered by a doctor of medicine or osteopathy within the scope of this practice and the limitations of state law subject to the following limitations and exclusions:

78.1(1) Payment will not be made for:

a. Drugs dispensed by the physician unless it is established that there is no licensed retail pharmacy in the community in which the physician's office is maintained. Payment will not be made for biological supplies and drugs provided free of charge to practitioners by the state department of public health. Rate of payment shall be established as in subrule 78.2(2), but no professional fee shall be paid.

b. Routine physical examinations. A routine physical examination is an examination performed without relationship to treatment or diagnosis for a specific illness, symptom, complaint, or injury. No payment will be made for these examinations unless:

(1) The examination is required as a condition of employment or training and is approved by the department.

(2) The examination is required for an initial certification or period of recertification of the need for nursing care.

(3) The examination is in connection with early and periodic screening, diagnosis, and treatment or persons under age twenty-one (21) in aid to dependent children cases, as specified in rule 78.18(249A).

(4) The examination is required of a child or disabled adult for attendance at school or camp.

(5) The examination is in connection with the prescription of birth control medications and devices.

(6) The examination is for a pap smear which is allowed as preventative medicine services.

(7) The examination is for well baby care or a routine physical examination for a child under six (6) years of age.

(8) The examination is an annual routine physical examination for a child in foster care for whom the department assumes financial responsibility.

c. Treatment of certain foot conditions as specified in 78.5(2)"*a*", "*b*", and "*c*".

d. Acupuncture treatments.

e. Rescinded 9/6/78.

f. Unproven or experimental medical and surgical procedures. The criteria in effect in the Medicare program shall be utilized in determining when a given procedure is unproven or experimental in nature.

g. Charges for surgical procedures on the "Outpatient/Same Day Surgery List" produced by the Iowa foundation for medical care or associated inpatient care charges when the procedure is performed in a hospital on an inpatient basis unless the physician has secured approval from the hospital's utilization review department prior to the patient's admittance to the hospital. Approval shall be granted only when inpatient care is deemed to be medically necessary based on the condition of the patient or when the surgical procedure is not performed as a routine, primary, independent procedure. The "Outpatient/Same Day Surgery List" shall be published by the department in the provider manuals for hospitals and physicians. The "Outpatient/Same Day Surgery List" shall be developed by the Iowa foundation for medical care, and shall include procedures which can safely and effectively be performed in a doctor's office or on an outpatient basis in a hospital. The Iowa foundation for medical care may add, delete, or modify entries on the "Outpatient/Same Day Surgery List".

78.1(2) Payment will be approved for the following drugs and supplies when prescribed by a physician.

a. Legend drugs and devices requiring a prescription by law.

(1) Payment will be approved for insulin on the written prescription of a physician.

(2) Payment will be approved for certain drugs when prior approval is obtained from the fiscal agent and when prescribed for treatment of specified conditions as follows:

Payment for amphetamines and combinations of amphetamines with other therapeutic agents and amphetamine-like sympathomimetic compounds used for obesity control, including any combination of these compounds with other therapeutic agents, will be provided when there is a diagnosis of narcolepsy, hyperkinesis in children, or senile depression but not for obesity control. (Cross-reference 78.28(1)*"a"*)

Payment for multiple vitamins, tonic preparations and combinations thereof with minerals, hormones, stimulants, or other compounds which are available as separate entities for treatment of specific conditions will be approved when there is a specifically diagnosed vitamin deficiency disease. (Prior approval is not required for products principally marketed as prenatal vitamin-mineral supplements.) (Cross-reference 78.28(1)*"b"*)

Payment for clozapine will be approved to a Medicaid-certified provider when the following criteria have been met:

1. The condition being treated meets the Diagnostic and Statistical Manual (DSM) III-R criteria for a schizophrenic disorder.

2. The patient has had an unsuccessful trial on at least three or more different antipsychotic medications or is unable to tolerate other neuroleptics due to tardive dyskinesia or other side effects.

3. The patient must be treatment-resistant as evidenced by a documented duration of illness longer than five years with multiple hospitalizations, or continuous hospitalization for more than one year.

4. The patient must have a score of 50 or higher on the Brief Psychiatric Rating Scale (BPRS).

5. Payment will be approved for 12 weeks of therapy for patients meeting criteria 1 to 4 above if there are no contraindications for use of the drug and the patient has undergone a medical evaluation prior to the beginning of drug therapy.

6. After 12 weeks, patients showing improvement (a 20 percent reduction in the total BPRS score from baseline and documented progress) will continue to be covered.

7. Patients showing some documented clinical improvement after 12 weeks but not meeting continuation criteria must be reviewed for consideration of an additional 12 weeks of therapy. If an additional 12 weeks is granted, continuation criteria must be met to continue coverage after a total of 24 weeks of therapy.

8. Patients showing no improvement after 12 weeks of therapy are not eligible for continued therapy with clozapine. (Cross-reference 78.28(1)*"g"*)

When the above criteria have not been met, payment for clozapine will be approved if recommended as appropriate treatment for chronic, treatment-resistant schizophrenia by a physician review panel established by the department. The review panel shall base its recommendation on clinical documentation provided by the prescribing physician.

(3) Payment will not be made for drugs determined to be ineffective or less than effective by the Secretary of Health and Human Services.

Unless the Secretary has determined there is a compelling justification for medical need, payment will not be made for those drugs and any other drug which is identical, related, or similar and placed under notice by the Secretary pursuant to section 505(e) of the Federal Food, Drug and Cosmetic Act.

(4) Payment will not be approved for prescription only products containing hexachlorophene.

(5) Payment will not be approved for prescription laxative drugs.

b. Medical and sickroom supplies when ordered by the physician for a specific rather than incidental use. No payment will be approved for medical and sickroom supplies for a recipient receiving care in a skilled nursing home. When a recipient is receiving care in an intermediate care facility or custodial home not certified as a skilled nursing home, payment will be approved only for the following supplies when prescribed by a physician:

(1) Colostomy and ileostomy appliances.
(2) Colostomy and ileostomy care dressings, liquid adhesive and adhesive tape.
(3) Disposable irrigation trays or sets.
(4) Disposable catheterization trays or sets.
(5) Indwelling Foley catheter.
(6) Disposable saline enemas.
(7) Diabetic supplies including disposable or reusable needles and syringes, testape, clinitest tablets, and clinistix.

c. Prescription records are required for all drugs as specified in Iowa Code sections 155.33, 155.34 and 204.308. For the purposes of the medical assistance program, prescriptions for medical supplies are required and shall be subject to the same provisions.

d. When it is not therapeutically contraindicated, the physician shall prescribe a quantity of medication sufficient for a thirty (30) day supply. Maintenance drugs in the following therapeutic classifications for use in prolonged therapy may be prescribed in ninety (90) day quantities:

(1) Oral contraceptives
(2) Cardiac drugs
(3) Hypotensive agents
(4) Vasodilating agents
(5) Anticonvulsants
(6) Diuretics
(7) Anticoagulants
(8) Thyroid and anti-thyroid agents
(9) Anti-diabetic agents

dure surgical review applies to surgeries performed in hospitals (outpatient and inpatient) and ambulatory surgical centers. Approval by IFMC will be granted only if the procedures are determined to be necessary based on the condition of the patient and on the published criteria established by the department and the IFMC. If not so approved by the IFMC, payment will not be made under the program to the physician or to the facility in which the surgery is performed. The criteria are available from IFMC, 3737 Woodland Avenue, Suite 500, West Des Moines, Iowa 50265, or in local hospital utilization review offices.

The "Preprocedure Surgical Review List" shall be published by the department in the provider manuals for physicians, hospitals, and ambulatory surgical centers. (Cross-reference 78.1(19)

g. Prior approval is required for clozapine. Payment will be approved to a Medicaid-certified provider when the following criteria have been met:

(1) The condition being treated meets the Diagnostic and Statistical Manual (DSM) III-R criteria for a schizophrenic disorder.

(2) The patient has had an unsuccessful trial on at least three or more different antipsychotic medications or is unable to tolerate other neuroleptics due to tardive dyskinesia or other side effects.

(3) The patient must be treatment-resistant as evidenced by a documented duration of illness longer than five years with multiple hospitalizations, or continuous hospitalization for more than one year.

(4) The patient must have a score of 50 or higher on the Brief Psychiatric Rating Scale (BPRS).

(5) Payment will be approved for 12 weeks of therapy for patients meeting criteria (1) to (4) above if there are no contraindications for use of the drug and the patient has undergone a medical evaluation prior to the beginning of drug therapy.

(6) After 12 weeks, patients showing improvement (a 20 percent reduction in the total BPRS score from baseline and documented progress) will continue to be covered.

(7) Patients showing some documented clinical improvement after 12 weeks but not meeting continuation criteria must be reviewed for consideration of an additional 12 weeks of therapy. If an additional 12 weeks is granted, continuation criteria must be met to continue coverage after a total of 24 weeks of therapy.

(8) Patients showing no improvement after 12 weeks of therapy are not eligible for continued therapy with clozapine. (Cross-reference 78.1(2)*"a"*(2)

When the above criteria have not been met, payment for clozapine will be approved if recommended as appropriate treatment for chronic, treatment-resistant schizophrenia by a physician review panel established by the department. The review panel shall base its recommendation on clinical documentation provided by the prescribing physician.

78.28(2) Dental services which require prior approval are as follows:

a. Oral prophylaxis, including necessary scaling and polishing, is payable only once in a six-month period except for persons who because of physical or mental disability need more frequent care. Prior authorization is required in all cases where the oral prophylaxis is to be performed more frequently than every six months. (Cross-reference 78.4(1)*"a"*)

b. Cast post and core, steel post and composite or amalgam in addition to a crown will be approved when a tooth is functional and the integrity of the tooth would be jeopardized by no post support. (Cross-reference 78.4(3)*"e"*)

c. The following periodontal services:

(1) Payment for periodontal scaling and root planing will be approved when interproximal and subgingival calculus is evident in X rays or when justified and documented that curettage, scaling or root planing is required in addition to routine prophylaxis. (Cross-reference 78.4(4)*"b"*)

(2) Payment for periodontal surgical procedures will be approved after periodontal scaling and root planing has been provided, a reevaluation examination has been completed, and the patient has demonstrated reasonable oral hygiene, unless the patient is unable to demonstrate reasonable oral hygiene because of physical or mental disability or in cases which demonstrate gingival hyperplasia resulting from drug therapy. (Cross-reference 78.4(4)*"c"*)

(3) Payment for periodontal maintenance therapy will be approved when periodontal scaling and root planing and periodontal surgical procedures have been provided. Periodontal maintenance therapy will be approved for three visits at three-month intervals following treatment for moderate to advanced cases. Periodontal maintenance therapy may then be approved once per six-month interval if the patient's condition is getting worse or, if not maintained, conditions would deteriorate. (Cross-reference 78.4(4)*"d"*)

d. Surgical endodontic treatment which includes an apicoectomy, performed as a separate surgical procedure; an apicoectomy, performed in conjunction with endodontic procedure; an apical curettage; a root resection; or excision of hyperplastic tissue will be approved when nonsurgical treatment has been attempted and a reasonable time has elapsed after which failure has been demonstrated. Surgical endodontic procedures may be indicated when:

(1) Conventional root canal treatment cannot be successfully completed because canals cannot be negotiated, debrided or obturated due to calcifications, blockages, broken instruments, severe curvatures, open-ended canals, and dilacerated roots.

(2) Correction of problems resulting from conventional treatment including gross underfilling, perforations, and canal blockages with restorative materials. (Cross-reference 78.4(5)*"c"*)

e. The following prosthetic services:

(1) Partial dentures replacing posterior teeth will be approved when the patient has less than eight posterior teeth in occlusion; or when the patient's missing teeth could cause shifting or supra eruption of the remaining dentition; or the patient has a full denture in one arch, and a partial denture replacing posterior teeth is required in the opposing arch in order to balance occlusion; or a partial denture replacing anterior teeth is being approved, and posterior teeth can be replaced with little additional cost. Partial dentures replacing posterior teeth are payable only once in a five-year period unless the dentures are broken beyond repair, lost or stolen and are required to prevent significant dental problems. (Cross-reference 78.4(7)*"d"*)

(2) Fixed bridgework (including acid etch bridgework) for missing anterior teeth will be approved for recipients whose medical condition precludes the use of removable prostheses. (Cross-reference 78.4(7)*"e"*)

f. Orthodontic services will be approved when it is determined that a patient has the most handicapping malocclusion. This determination is made in a manner consistent with the "Handicapping Malocclusion Assessment to Establish Treatment Priority," by J. A. Salzmann, D.D.S., American Journal of Orthodontics, October 1968.

A handicapping malocclusion is a condition that constitutes a hazard to the maintenance of oral health and interferes with the well-being of the patient by causing impaired mastication, dysfunction of the temporomandibular articulation, susceptibility to periodontal disease, susceptibility to dental caries, and impaired speech due to malpositions of the teeth. Treatment of handicapping malocclusions will be approved only for the severe and the most handicapping. Assessment of the most handicapping malocclusion is determined by the magnitude of the following variables: degree of malalignment, missing teeth, angle classification, overjet and overbite, openbite, and crossbite.

A request to perform an orthodontic procedure must be accompanied by an interpreted cephalometric radiograph and study models trimmed so that the models simulate centric occlusion of the patient. A written plan of treatment must accompany the diagnostic aids. Post-treatment records must be furnished upon request of the fiscal agent.

Approval may be made for eight units of a three-month active treatment period. Additional units may be approved by the fiscal agent's orthodontic consultant if found to be medically necessary. (Cross-reference 78.4(8)*"a"*)

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e. Upon a patient's death, a receipt shall be obtained from the next of kin or the resident's guardian before releasing the balance of the personal needs funds. In the event there is no next of kin available and the recipient has been receiving a grant from the department for all or part of the personal needs, any funds shall revert to the department. In the event that an estate is opened, the department shall turn the funds over to the estate.

81.4(4) *Safeguarding personal property.* The facility shall safeguard the resident's personal possessions. Safeguarding shall include, but is not limited to:

a. Providing a method of identification of the resident's suitcases, clothing, and other personal effects, and listing these on an appropriate form attached to the resident's record at the time of admission. These records shall be kept current. Any personal effects released to a relative of the resident shall be covered by a signed receipt.

b. Providing adequate storage facilities for the resident's personal effects.

c. Insuring that all mail is delivered unopened to the resident to whom it is addressed, except in those cases where the resident is too confused, as documented in the person's permanent medical record, to receive it, in which case the mail is held unopened for the resident's conservator or relatives. Mail may be opened by the facility in cases where the resident or relatives or guardian have given permission in writing for mail to be opened and read to the resident.

This rule is intended to implement Iowa Code sections 249A.2, 249A.3(2)*"a,"* and 249A.4.

441—81.5(249A) Discharge and transfer. (See subrules 81.13(2)*"a"* and 81.13(6)*"c."*

81.5(1) *Notice.* When a public assistance recipient requests transfer or discharge, or another person requests this for the recipient, the administrator shall promptly notify the local office of the department. This shall be done in sufficient time to permit a social service worker to assist in the planning for the transfer or discharge.

81.5(2) *Case activity report.* A Case Activity Report, Form AA-4166-0, shall be submitted to the department whenever a Medicaid applicant or recipient enters the facility, changes level of care, is hospitalized, leaves for visitation, or is discharged from the facility.

81.5(3) *Plan.* The administrator and staff shall assist the resident in planning for transfer or discharge through development of a discharge plan.

81.5(4) *Transfer records.* When a resident is transferred to another facility, transfer information shall be summarized from the facility's records in a copy to accompany the resident. This information shall include:

a. A transfer form of diagnosis.
b. Aid to daily living information.
c. Transfer orders.
d. Nursing care plan.
e. Physician's orders for care.
f. The resident's personal records.
g. When applicable, the personal needs fund record.
h. Resident care review team assessment.

81.5(5) *Unused client participation.* When a resident leaves the facility during the month any unused portion of the resident's client participation shall be refunded.

This rule is intended to implement Iowa Code sections 249A.2, 249A.3(2)*"a,"* and 249A.4.

441—81.6(249A) Financial and statistical report. All facilities in Iowa wishing to participate in the program shall submit a Financial and Statistical Report for Nursing Homes, Form AA-4036-0, to the department. These reports shall be based on the following rules.

81.6(1) *Failure to maintain records.* Failure to adequately maintain fiscal records, including census records, medical charts, ledgers, journals, tax returns, canceled checks, source documents, invoices, and audit reports by or for a facility may result in the penalties specified in subrule 81.14(1).

81.6(2) *Accounting procedures.* Financial information shall be based on that appearing in the audited financial statement. Adjustments to convert to the accrual basis of accounting shall be made when the records are maintained on other accounting bases. Facilities which are a part of a larger health facility extending short-term, intensive, or other health care not generally considered nursing care may submit a cost apportionment schedule prepared in accordance with recognized methods and procedures. A schedule shall be required when necessary for a fair presentation of expense attributable to nursing facility patients.

81.6(3) *Submission of reports.* The report shall be submitted to the department no later than three (3) months after the close of each six (6) months' period of the facility's established fiscal year. Failure to submit the report within this time shall reduce payment to seventy-five percent (75%) of the current rate. The reduced rate shall be paid for no longer than three (3) months, after which time no further payments will be made.

81.6(4) *Payment at new rate.* When a new rate is established, payment at the new rate shall be effective with services rendered as of the first day of the month in which the report is postmarked, or if the report was personally delivered, the first day of the month in which the report was received by the department. Adjustments shall be included in the payment the third month after the receipt of the report.

81.6(5) *Accrual basis.* Facilities not using the accrual basis of accounting shall adjust recorded amounts to the accrual basis. Expenses which pertain to an entire year shall be included in each six (6)-month report in equal amounts. Records of cash receipts and disbursements shall be adjusted to reflect accruals of income and expense.

81.6(6) *Census of public assistance recipients.* Census figures of public assistance recipients shall be obtained on the last day of the month ending the reporting period.

81.6(7) *Patient days.* In determining in-patient days, a patient day is that period of service rendered a patient between the census taking hours on two (2) successive days, the day of discharge being counted only when the patient was admitted that same day.

81.6(8) *Opinion of accountant.* The department may require that an opinion of a certified public accountant or public accountant accompany the report when adjustments made to prior reports indicate disregard of the certification and reporting instructions.

81.6(9) *Calculating patient days.* When calculating patient days, facilities shall use an accumulation method.

a. Census information shall be based on a patient status at midnight each day. A patient whose status changes from one class to another shall be shown as discharged from the previous status and admitted to the new status on the same day.

b. When a recipient is on a reserve bed status and the department is paying on a per diem basis for the holding of a bed, or any day a bed is reserved for a public assistance or nonpublic assistance patient and a per diem rate for the bed is charged to any party, the reserved days shall be included in the total census figures for in-patient days.

81.6(10) *Revenues.* Revenues shall be reported as recorded in the general books and records. Expense recoveries credited to expense accounts shall not be reclassified in order to be reflected as revenues.

a. Routine daily services shall represent the established charge for daily care. Routine daily services are those services which include room, board, nursing services, and such services as supervision, feeding, incontinency, and similar services, for which the associated costs are in nursing service.

b. Revenue from ancillary services provided to patients shall be applied in reduction of the related expense.

c. Revenue from the sale of medical supplies, food or services to employees or nonresidents of the facility shall be applied in reduction of the related expense. Revenue from the sale to private pay residents of items or services which are included in the medical assistance per diem will not be offset.

81.10(7) *Comparative charges between private pay and Medicaid residents.* The department shall not pay nursing facilities a per diem rate in excess of the average per diem rate charged to private pay residents.

a. The nursing facility shall recompute the average per diem rate on a facilitywide, private pay basis twice yearly. This computation shall coincide with the preparation of the financial and statistical report for nursing homes, Form AA-4036-0 which is submitted to the department.

b. An individual private pay resident's rate shall be computed by accumulating the six months' total charges for the individual and dividing the total charges by the total number of days in which the bed was occupied by or was being held for the resident. The total monthly charges will include the basic charge per day plus any standard charges for extra care and service.

c. To compute the facilitywide average private pay per diem rate, the facility shall accumulate total monthly changes for all private pay residents for the six-month period and divide by the total patient days for all private pay residents for the same period to arrive at the private pay average per diem rate for the entire facility.

This rule is intended to implement Iowa Code sections 249A.2, 249A.3(2)*"a,"* and 249A.4.

441—81.11(249A) Billing procedures.

81.11(1) *Claims.* Claims for service must be received by the department by the fifth working day following the last day of the month in which service was provided. Claims shall be submitted to the Data Processing Section, Quality Assurance Unit, Iowa Department of Human Services, Hoover State Office Building, Des Moines, Iowa 50319-0114.

a. When payment is made, the facility will receive a copy of Form AA-4163-0, Long Term Care Billing Claim and Payment Register. The right-hand copy of the original shall be returned to the department as a claim for the next month.

b. When there has been a new admission, a discharge, a correction, or a claim for a reserved bed, the facility shall also submit Form AA-4164-0, Long Term Care Changes Notice, with the claim.

81.11(2) Reserved.

This rule is intended to implement Iowa Code sections 249A.2(6) and 249A.3(2)*"a."*

441—81.12(249A) Closing of facility. When a facility is planning on closing, the department shall be notified at least 60 days in advance of the closing. Plans for the transfer of residents receiving medical assistance shall be approved by the local office of the department.

This rule is intended to implement Iowa Code sections 249A.2(6) and 249A.3(2)*"a."*

441—81.13(249A) Conditions of participation for nursing facilities. All nursing facilities shall enter into a contractual agreement with the department which sets forth the terms under which they will participate in the program.

81.13(1) *Procedures for establishing health care facilities as Medicaid facilities.* All survey procedures and certification process shall be in accordance with Department of Health and Human Services publication "State Operations Manual."

a. The facility shall obtain the applicable license from the department of inspections and appeals.

e. Physician delegation of tasks.

(1) Except as specified in subparagraph (2) below, a physician may delegate tasks to a physician assistant or nurse practitioner who is acting within the scope of practice as defined by state law and is under the supervision of the physician.

(2) A physician may not delegate a task when the rules specify that the physician shall perform it personally, or when the delegation is prohibited under state law or by the facility's own policies.

81.13(14) *Specialized rehabilitative services.* A facility shall provide or obtain rehabilitative services, such as physical therapy, speech-language pathology, and occupational therapy, to every resident it admits.

a. Provision of services. If specialized rehabilitative services are required in the resident's comprehensive plan of care, the facility shall:

(1) Provide the required services; or

(2) Obtain the required services from an outside provider of specialized rehabilitative services.

b. Qualifications. Specialized rehabilitative services shall be provided under the written order of a physician by qualified personnel.

81.13(15) *Dental services.* The facility shall assist residents in obtaining routine and 24-hour emergency dental care. The facility shall provide or obtain from an outside resource the following dental services to meet the needs of each resident:

a. Routine dental services to the extent covered under the state plan.

b. Emergency dental services.

81.13(16) *Pharmacy services.* The facility shall provide routine and emergency drugs and biologicals to its residents or obtain them under an agreement.

a. Procedures. A facility shall provide pharmaceutical services (including procedures that ensure the accurate acquiring, receiving, dispensing, and administering of all drugs and biologicals) to meet the needs of each resident.

b. Service consultation. The facility shall employ or obtain the services of a licensed pharmacist who:

(1) Provides consultation on all aspects of the provision of pharmacy services in the facility.

(2) Establishes a system of records of receipt and disposition of all controlled drugs in sufficient detail to enable an accurate reconciliation.

(3) Determines that drug records are in order and that an account of all controlled drugs is maintained and periodically reconciled.

c. Drug regimen review.

(1) The drug regimen of each resident shall be reviewed at least once a month by a licensed pharmacist.

(2) The pharmacist shall report any irregularities to the attending physician or the director of nursing, or both, and these reports shall be acted upon.

d. Labeling of drugs and biologicals. The facility shall label drugs and biologicals in accordance with currently accepted professional principles and include the appropriate accessory and cautionary instructions and the expiration date.

e. Storage of drugs and biologicals.

(1) In accordance with state and federal laws, the facility shall store all drugs and biologicals in locked compartments under proper temperature controls and permit only authorized personnel to have access to the keys.

(2) The facility shall provide separately locked, permanently affixed compartments for storage of controlled drugs listed in Schedule II of the Comprehensive Drug Abuse Prevention and Control Act of 1970 and other drugs subject to abuse, except when the facility uses single unit package drug distribution systems in which the quantity stored is minimal and a missing dose can be readily detected.

f. Consultant pharmacists. When the facility does not employ a licensed pharmacist, it shall have formal arrangements with a licensed pharmacist to provide consultation on methods and procedures for ordering, storage, administration and disposal and record keeping of drugs and biologicals. The formal arrangements with the licensed pharmacist shall include separate written contracts for pharmaceutical vendor services and consultant pharmacist services. The consultant's visits are scheduled to be of sufficient duration and at a time convenient to work with nursing staff on the resident care plan, consult with the administrator and others on developing and implementing policies and procedures, and planning in-service training and staff development for employees. The consultant shall provide monthly drug regimen review reports. The facility shall provide reimbursement for consultant pharmacists based on fair market value. Documentation of consultation shall be available for review in the facility.

81.13(17) *Infection control.* The facility shall establish and maintain an infection control program designed to provide a safe, sanitary, and comfortable environment in which residents reside and to help prevent the development and transmission of disease and infection.

a. Infection control program. The facility shall establish an infection control program under which it:

(1) Investigates, controls and prevents infections in the facility.

(2) Decides what procedures, such as isolation, should be applied to an individual resident.

(3) Maintains a record of incidents and corrective actions related to infections.

b. Preventing spread of infection.

(1) When the infection control program determines that a resident needs isolation to prevent the spread of infection, the facility shall isolate the resident.

(2) The facility shall prohibit employees with a communicable disease or infected skin lesions from direct contact with residents or their food, if direct contact will transmit the disease.

(3) The facility shall require staff to wash their hands after each direct resident contact for which handwashing is indicated by accepted professional practice.

c. Linens. Personnel shall handle, store, process, and transport linens so as to prevent the spread of infection.

81.13(18) *Physical environment.* The facility shall be designed, constructed, equipped and maintained to protect the health and safety of residents, personnel and the public.

a. Life safety from fire. Except as provided in subparagraph (1) or (3) below, the facility shall meet the applicable provisions of the 1985 edition of the Life Safety Code of the National Fire Protection Association.

(1) A facility is considered to be in compliance with this requirement as long as the facility:

1. On November 26, 1982, complied with or without waivers with the requirements of the 1967 or 1973 editions of the Life Safety Code and continues to remain in compliance with those editions of the code; or

2. On May 9, 1988, complied, with or without waivers, with the 1981 edition of the Life Safety Code and continues to remain in compliance with that edition of the Code.

(2) After consideration of survey findings, the department of inspections and appeals may waive specific provisions of the Life Safety Code which, if rigidly applied, would result in unreasonable hardship upon the facility, but only if the waiver does not adversely affect the health and safety of residents or personnel.

(3) The provisions of the Life Safety Code do not apply in a state where the Health Care Financing Administration finds, that a fire and safety code imposed by state law adequately protects patients, residents and personnel in long-term care facilities.

b. Emergency power.

(1) An emergency electrical power system shall supply power adequate at least for lighting all entrances and exits, equipment to maintain the fire detection, alarm and extinguishing systems, and life support systems in the event the normal electrical supply is interrupted.

(2) When life support systems are used that have no nonelectrical backup, the facility shall provide emergency electrical power with an emergency generator, as defined in NFPA 99, Health Care Facilities, that is located on the premises.

c. Space and equipment. The facility shall:

(1) Provide sufficient space and equipment in dining, health services, recreation, and program areas to enable staff to provide residents with needed services as required by these standards and as identified in each resident's plan of care.

(2) Maintain all essential mechanical, electrical, and patient care equipment in safe operating condition.

the Omnibus Budget Reconciliation Act of 1987 or an agreement described in subparagraph (2) below.

(2) Arrangements or agreements pertaining to services furnished by outside resources shall specify in writing that the facility assumes responsibility for obtaining services that meet professional standards and principles that apply to professionals providing services in such a facility and for the timeliness of the services.

h. Medical director.

(1) The facility shall designate a physician to serve as medical director.

(2) The medical director is responsible for implementation of resident care policies and the coordination of medical care in the facility.

i. Laboratory services.

(1) The facility shall provide or obtain clinical laboratory services to meet the needs of its residents. The facility is responsible for the quality and timeliness of the services.

1. If the facility provides its own laboratory services, the services shall meet the applicable conditions for coverage of the services furnished by independent laboratories.

2. If the facility provides blood bank and transfusion services, it shall meet the applicable conditions for independent laboratories and hospitals.

3. If the laboratory chooses to refer specimens for testing to another laboratory, the referral laboratory must be approved for participation in the Medicare program either as a hospital or an independent laboratory.

4. If the facility does not provide laboratory services on site, it shall have an agreement to obtain these services only from a laboratory that is approved for participation in the Medicare program either as a hospital or as an independent laboratory.

(2) The facility shall:

1. Provide or obtain laboratory services only when ordered by the attending physician.

2. Promptly notify the attending physician of the findings.

3. Assist the resident in making transportation arrangements to and from the source of service, if the resident needs assistance.

4. File in the resident's clinical record signed and dated reports of clinical laboratory services.

j. Clinical records.

(1) The facility shall maintain clinical records on each resident in accordance with accepted professional standards and practices that are complete, accurately documented, readily accessible, and systematically organized.

(2) Clinical records shall be retained for:

1. The period of time required by state law.

2. Five years from the date of discharge when there is no requirement in state law.

3. For a minor, three years after a resident reaches legal age under state law.

(3) The facility shall safeguard clinical record information against loss, destruction, or unauthorized use.

(4) The facility shall keep confidential all information contained in the resident's records, regardless of the form or storage method of the records, except when release is required by:

1. Transfer to another health care institution.

2. Law.

3. Third party payment contract.

4. The resident.

(5) The facility shall:

1. Permit each resident to inspect personal records on request.

2. Provide copies of the records to each resident no later than 48 hours after a written request from a resident, at a photocopying cost not to exceed the amount customarily charged in the community.

(6) The clinical record shall contain:

1. Sufficient information to identify the resident.

2. A record of the resident's assessments.

3. The plan of care and services provided.
4. The results of any preadmission screening conducted by the state.
5. Progress notes.

k. Disaster and emergency preparedness.

(1) The facility shall have detailed written plans and procedures to meet all potential emergencies and disasters, such as fire, severe weather, and missing residents.

(2) The facility shall train all employees in emergency procedures when they begin to work in the facility, periodically review the procedures with existing staff, and carry out staff drills using those procedures.

l. Transfer agreement.

(1) The facility shall have in effect a written transfer agreement with one or more hospitals approved for participation under the Medicare and Medicaid programs that reasonably ensures that:

1. Residents will be transferred from the facility to the hospital and ensured of timely admission to the hospital when transfer is medically appropriate as determined by the attending physician.

2. Medical and other information needed for care and treatment of residents, and, when the transferring facility deems it appropriate, for determining whether the residents can be adequately cared for in a less expensive setting than either the facility or the hospital, will be exchanged between the institutions.

(2) The facility is considered to have a transfer agreement in effect if the facility has attempted in good faith to enter into an agreement with a hospital sufficiently close to the facility to make transfer feasible.

m. Quality assessment and assurance.

(1) A facility shall maintain a quality assessment and assurance committee consisting of the director of nursing services, a physician designated by the facility, and at least three other members of the facility's staff.

(2) The quality assessment and assurance committee:

1. Meets at least quarterly to identify issues with respect to which quality assessment and assurance activities are necessary.

2. Develops and implements appropriate plans of action to correct identified quality deficiencies.

n. Disclosure of ownership.

(1) The facility shall comply with the disclosure requirements of 42 CFR 420.206 and 455.104.

(2) The facility shall provide written notice to the department of inspections and appeals at the time of change, if a change occurs in:

1. Persons with an ownership or control interest.
2. The officers, directors, agents, or managing employees.
3. The corporation, association, or other company responsible for the management of the facility.
4. The facility's administrator or director of nursing.

(3) The notice specified in subparagraph (2) above shall include the identity of each new individual or company.

This rule is intended to implement Iowa Code sections 249A.2, 249A.3(2)*"a,"* and 249A.4 and 1989 Iowa Acts, chapter 304, section 903.

441—81.14(249A) Audits.

81.14(1) *Audit of financial and statistical report.*

Authorized representatives of the department or the Department of Health and Human Services shall have the right, upon proper identification, to audit, using generally accepted auditing procedures, the general financial records of a facility to determine if expenses reported on the Financial and Statistical Report for Nursing Homes, Form AA-4036-0, are reasonable

and proper according to the rules set forth in 441—81.6(249A). The aforementioned audits may be done either on the basis of an on-site visit to the facility, their central accounting office, or office(s) of their agent(s).

a. When a proper per diem rate cannot be determined, through generally accepted and customary auditing procedures, the auditor shall examine and adjust the report to arrive at what appears to be an acceptable rate and shall recommend to the department that the indicated per diem should be reduced to 75 percent of the established payment rate for the ensuing six-month period and if the situation is not remedied on the subsequent Financial and Statistical Report for Nursing Facilities, Form AA-4036-0, the health facility shall be suspended and eventually canceled from the nursing facility program, or

b. When a health facility continues to include as an item of cost an item or items which had in a prior audit been removed by an adjustment in the total audited costs, the auditor shall recommend to the department that the per diem be reduced to 75 percent of the current payment rate for the ensuing six-month period. The department may, after considering the seriousness of the exception, make the reduction.

81.14(2) *Audit of proper billing and handling of patient funds.*

a. Field auditors of the department of inspections and appeals, or representatives of Health and Human Services, upon proper identification, shall have the right to audit billings to the department and receipts of client participation, to ensure the facility is not receiving payment in excess of the contractual agreement and that all other aspects of the contractual agreement are being followed, as deemed necessary.

b. Field auditors of the department of inspections and appeals or representatives of Health and Human Services, upon proper identification, shall have the right to audit records of the facility to determine proper handling of patient funds in compliance with subrule 81.4(3).

c. The auditor shall recommend and the department shall request repayment by the facility to either the department or the resident(s) involved, any sums inappropriately billed to the department or collected from the resident.

d. The facility shall have 60 days to review the audit and repay the requested funds or present supporting documentation which would indicate that the requested refund amount, or part thereof, is not justified.

e. When the facility fails to comply with paragraph *"d,"* the requested refunds may be withheld from future payments to the facility. The withholding shall not be more than 25 percent of the average of the last six monthly payments to the facility. The withholding shall continue until the entire requested refund amount is recovered. If in the event the audit results indicate significant problems, the audit results may be referred to the attorney general's office for whatever action may be deemed appropriate.

f. When exceptions are taken during the scope of an audit which are similar in nature to the exceptions taken in a prior audit, the auditor shall recommend and the department may, after considering the seriousness of the exceptions, reduce payment to the facility to 75 percent of the current payment rate.

This rule is intended to implement Iowa Code sections 249A.2, 249A.3(2)*"a"* and 249A.4.

441—81.15(249A) Nurse aide training and testing programs. The department of human services has designated the department of inspections and appeals to approve required nurse aid training and testing programs. Policies and procedures governing approval of these programs are set forth in these rules.

81.15(1) *Program coordinators and primary instructors.* The department of inspections and appeals shall be responsible for approving persons to serve as program coordinators and primary instructors and shall maintain a list of all approved persons which shall include whether they are qualified for a facility-based or nonfacility-based program.

a. Qualifications. Each program coordinator and primary instructor shall be a registered nurse and shall meet the following requirements, if applicable:

(1) General requirements. The program coordinator and program instructor shall have met one or more of the following requirements:

1. Attended a state-approved train-the-trainer course in Iowa or another state.
2. Earned a master's or higher degree in education.
3. Obtained a license to teach in the Iowa vocational technical nursing program.
4. Have documented evidence of having successfully completed a college level course or courses in principles of teaching, learning, and evaluation of student performance.

(2) Facility-based program. In a facility-based program the program coordinator and primary instructor shall have at least one year of experience caring for the chronically ill or elderly.

(3) Nonfacility-based program. In a nonfacility-based program the program coordinator and primary instructor shall have at least two years of varied experience caring for the chronically ill or elderly.

b. Application process. The entity conducting the train-the-trainer course shall be responsible for submitting the names, nursing license numbers, and work experience of persons attending the course for approval as a program coordinator or primary instructor. Persons who meet the qualifications of a program coordinator or primary instructor without taking the approved train-the-trainer course shall submit proof of their qualifications to the department of inspections and appeals for approval. The department of inspections and appeals shall notify the applicant of its decision within 30 days of receipt of the application. If approval is denied, the notification shall include the reason for not giving approval and the applicable rule citation.

81.15(2) *Nurse aide education programs.* The required nurse aide education program may be facility-based or nonfacility-based and shall be approved by the department of inspections and appeals.

a. Approval requirements.

(1) Content. The program shall use a curriculum which meets the requirements set out in guidelines available from the department of inspections and appeals, and shall be developed by a person who meets the criteria to be a program coordinator or primary instructor.

(2) Length. The program shall provide 30 hours of classroom work, 16 hours of which shall occur before the trainee practices care-giving skills with a resident in a facility. These 16 hours shall include at a minimum: communications and interpersonal skills, infection control, safety and emergency procedures, promoting residents' independence and respecting residents' rights. The program shall also provide 15 hours of laboratory experience and 30 hours of clinical experience.

(3) Instructors. The program shall be taught by an approved program coordinator or primary instructor with a ratio not to exceed one instructor for every ten students in the clinical setting.

(4) Setting and equipment. The program shall provide a physical setting which has a comfortable temperature and is clean, safe, and large enough to accommodate all the students, and is adequately lighted. The classroom may be in an area used by residents so long as classes do not conflict with meals or other customary resident activities. The program shall provide a nurse aide textbook, necessary audio-visual equipment, and resident care equipment adequate for the number of students enrolled in the class.

Access for clinical practice shall be provided in a nursing facility which has not been terminated from the Medicare or Medicaid program during the two calendar years before the date a class is to begin.

(5) Records and reports. Nurse aide education programs approved by the department of inspections and appeals shall:

1. Notify the department of inspections and appeals of dates and location of classrooms and clinical practice sites 14 days before each course begins and if the course is canceled.
2. Notify the department of inspections and appeals of changes in curriculum content.
3. Maintain a record of complaints about the program.

c. Taking and scoring of test. Nurse aides who begin a nurse aide course shall be required to complete the state-approved nurse aide training course before taking the competency test. Each person will have three opportunities to pass each part of the test. If one part of the test is failed, only that part need be taken a second or third time. If either part of the test is failed three times, the 75-hour course shall be taken or retaken before the test can be taken again. A score of 70 percent or above is passing for both the written and skills demonstration parts of the test.

81.15(5) *Appeals.* Adverse decisions made by the department of inspections and appeals in administering these rules may be appealed pursuant to 441—Chapter 7.

This rule is intended to implement Iowa Code section 249A.4.

441—81.16(249A) Nurse aide requirements.

81.16(1) *Training and testing of nurse aides.* All nurse aides employed on a full-time, temporary, per diem, or other basis by a nursing facility for more than four months shall complete a state-approved education and competency evaluation program or competency evaluation program and shall be competent to provide nursing and nursing-related services.

81.16(2) *Orientation program.* Upon employment the facility shall provide an orientation program for each nurse aide, which cannot be included as a part of an approved nurse aide training program. The orientation shall include at a minimum an explanation of:

a. The organizational structure of the facility.

b. Facility practices and procedures.

c. The philosophy of care of the facility.

d. A description of the resident population.

e. Employee rules.

81.16(3) *Competency evaluation.* Before employment or within four months after employment all nurse aides shall pass a state-approved competency evaluation. Information about state-approved tests is available from the department of inspections and appeals.

a. Nurse aides may provide care only in those skill areas in which they have received training and have demonstrated competence.

b. No charge for nurse aide training, including charges for textbooks or other required course materials, or any charges for competency evaluations may be imposed on a nurse aide employed in a Medicare or Medicaid facility at the time of training.

c. Nurse aides who meet one or more of the following criteria shall be considered competent and not be required to take a nurse aide course or competency evaluation unless they have not been employed as a nurse aide for a period of 24 continuous months.

(1) Have successfully completed a state-approved 60-hour nurse aide training course and have documentation of having attended at least 15 hours of in-service nurse aide education before July 1, 1989.

(2) Have successfully completed a state-approved 60-hour nurse aide training course and have documentation of having successfully completed prior to July 1, 1989, the 20-hour structured on-the-job training required after August 20, 1986, by department of inspections and appeals rules 481—58.11(1) and 59.13(1)*"h."*

(3) Was employed by the same facility or corporation for 24 consecutive months.

(4) Has written documentation of being entered on the nurse aide registry of another state.

d. Nurse aides who have been qualified nurse aides but have not been employed as nurse aides or in a nursing capacity for a continuous 24-month period or more shall take a department-approved nurse aide course and pass the state-approved competency test within four months after being employed as a nurse aide in an intermediate care facility, nursing facility, or skilled nursing facility. A person may be employed as a nurse aide in a nursing facility, certified or licensed hospital, federally certified home health agency or hospice to meet this requirement.

81.16(4) *In-service training.* Each nurse aide shall receive and be compensated for 12 hours of in-service training each year. In-service training shall be provided by the facility. Training

may be offered for groups or individuals. Training for individuals may be performed on the unit as long as it is directed toward specific skill improvement, is provided by trained staff, and includes a return demonstration recorded on a checklist. In-service programs shall include training for individuals providing nursing and nursing-related services to residents with cognitive impairments.

81.16(5) *Performance evaluation.* The facility shall, at least annually, conduct an evaluation of each nurse aide's work performance. The facility shall determine the format and content of the performance evaluation. A record of the performance evaluation shall be kept in the nurse aide's personnel file.

81.16(6) *Nurse aide registry.* The facility shall ensure that the name of each person employed as a nurse aide in a Medicare or Medicaid certified nursing facility in Iowa is submitted to the registry.

a. Individuals employed as nurse aides shall complete Form 427-0496, Nurse Aide Registry Application, within the first 30 days of employment. This form shall be submitted to the department of inspections and appeals. Form 427-0496 may be obtained by calling (515) 281-4115 or writing the nurse aide registry.

b. A certified nurse aide who is not employed may apply for inclusion on the registry by submitting a copy of completed Form 427-0496 to the nurse aide registry.

c. When the registry has received and entered the required training and testing information on the registry, a letter will be sent to the nurse aide that includes all the information the registry has on the nurse aide. A nurse aide may obtain a copy of the information on the registry by writing the nurse aide registry and requesting the information. The letter requesting the information must include the nurse aide's social security number, current or last facility of employment and date of birth.

81.16(7) *Public information.* All information retained in the nurse aide registry shall be available to the public. Information will not be placed on the registry until the nurse aide has successfully completed a competency evaluation or an abuse allegation has been founded. Other information collected will be kept for statistical purposes. Information available to the public includes:

a. The name of the nurse aide.

b. The social security number of the nurse aide.

c. Founded abuse reports and a brief statement, if available, from the nurse aide disputing the findings of abuse.

81.16(8) *Registry contact by facilities.* To obtain information facility staff shall need the nurse aide's social security number and the last four digits of the facility license number. Facility staff shall contact the nurse aide registry before any person is hired as a nurse aide to determine if the person:

a. Is on the registry.

b. Has completed an approved training course.

c. Has passed the competency test.

d. Has any founded abuse reports on the registry record.

81.16(9) *Employment status report.* Within 30 days of when a nurse aide is hired and when a nurse aide's employment ends, the facility shall complete Form 427-0497, Nurse Aide Employment Status Report. This form may be obtained from and shall be sent to the nurse aide registry.

81.16(10) *Hearing.* When there is an allegation of abuse against a nurse aide, the department of inspections and appeals will investigate that allegation. When the department of inspections and appeals founds an act of abuse, the nurse aide named will be notified of this finding and the right to a hearing. The nurse aide shall have 14 days to request a hearing. The request shall be in writing and shall be sent to the nurse aide registry. The hearing shall

3. Failure to monitor drugs as evidenced by lack of ordered laboratory work, failure to take vital signs as indicated by drug regimen and lack of other nursing monitoring practices.

4. Gross mishandling of drugs such as leaving drug trays unattended and available to residents and visitors.

5. Administration of drugs by unqualified staff.

6. Administration of experimental drugs without the informed consent of the resident or responsible party.

(6) Inadequate procedures for procurement, safekeeping and transfusion of blood and blood products that could jeopardize resident health and safety.

(7) Excessive hot or cold temperatures in resident care areas of the facility to the extent that residents are experiencing signs of hyper- or hypothermia and the nursing facility does not have a short-term and effective plan for ameliorating these temperatures.

This rule is intended to implement Iowa Code section 249A.4.

441—81.20(249A) Out-of-state facilities. Payment will be made for care in out-of-state nursing facilities. Out-of-state facilities shall abide by the same policies as in-state facilities with the following exceptions:

81.20(1) Out-of-state providers will be reimbursed at the same nursing facility rate they are receiving for their state of residence or the Iowa maximum, whichever is lower.

81.20(2) Out-of-state facilities shall not submit financial and statistical reports as required in rule 441—81.6(249A).

81.20(3) Payment for periods when residents are absent for visitation or hospitalization will be made to out-of-state facilities at 75 percent of the rate paid to the facility by the Iowa Medicaid program.

81.20(4) Payment for special care shall not be applicable for residents in out-of-state facilities who meet the criteria for special care.

This rule is intended to implement Iowa Code section 249A.4.

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dent adult in a situation that may endanger the dependent adult's life or health or cruelly punish or unreasonably confine the dependent adult.

"Registry" means the central registry for child abuse information established in Iowa Code chapter 235A expanded to include the statewide registry for dependent adult abuse.

"Report" means a verbal or written statement, made to the department, which alleges that dependent adult abuse has occurred.

441—176.2(235B) Denial of critical care. The failure on the part of the caretaker or dependent adult to provide for minimum food, shelter, clothing, supervision, physical and mental care, and other care necessary for the dependent adult's health and welfare when financially able to do so or when offered financial and other reasonable means to do so shall constitute denial of critical care to that dependent adult.

441—176.3(235B) Appropriate evaluation. Immediately upon receipt of a dependent adult abuse report the worker shall conduct an intake sufficient to determine whether the allegation constitutes a report of dependent adult abuse.

176.3(1) Dependent adult abuse reports shall be evaluated when all of the following criteria are alleged to be met:

a. The person is a dependent adult.

b. Adult abuse exists as defined in Iowa Code section 235B.1.

c. A caretaker exists in reports of physical injury to or unreasonable confinement or cruel punishment of a dependent adult; commission of a sexual offense; exploitation; and deprivation by another person of food, shelter, clothing, supervision, physical and mental health care and other care necessary to maintain life or health.

176.3(2) The following are not dependent adult abuse situations:

a. A report of domestic abuse under Iowa Code chapter 236, domestic abuse, does not in and of itself constitute a report of dependent adult abuse.

b. Depriving a dependent adult of medical treatment when the dependent adult is an adherent of a religion whose tenets and practices call for reliance on spiritual means in place of reliance on medical treatment.

c. Withholding and withdrawing of health care from a dependent adult who is terminally ill in the opinion of a licensed physician when the withholding and withdrawing of health care is done at the request of the dependent adult or at the request of the dependent adult's next-of-kin or guardian pursuant to the applicable procedures under Iowa Code chapter 125, 144A, 222, 229 or 633.

d. All persons legally incarcerated in a penal setting, either in a local jail or confined to the custody of the director of the division of adult corrections.

441—176.4(235B) Reporters. The central registry and local office shall accept reports from mandatory reporters or any other person who believes dependent adult abuse has occurred. Mandatory reporters shall make a written report within 48 hours after an oral report. The reporter may use the department's Form 470—2441, Suspected Dependent Adult Abuse Reporting Form, or may use a form developed by the reporter which meets the requirements of Iowa Code section 232.70.

441—176.5(235B) Reporting procedure.

176.5(1) Each report made by someone other than a mandatory reporter may be oral or written.

176.5(2) The report shall be made by telephone or otherwise to the department of human services. When the person making the report has reason to believe that immediate protection for the dependent adult is advisable, that person shall also make an oral report to an appropriate law enforcement agency.

176.5(3) The department of human services shall:

a. Immediately, upon receipt of a report, make an oral report to the registry;

b. Forward a copy of the report to the registry; and

c. Promptly notify the appropriate county attorney of the receipt of any report.

176.5(4) The report shall contain the following information, or as much thereof as the person making the report is able to furnish:

a. The names and home addresses of the dependent adult, appropriate relatives, caretakers, and other persons believed to be responsible for the care of the dependent adult.

b. The dependent adult's present whereabouts if not the same as the address given.

c. The reason the adult is believed to be dependent. Dependency is the first criterion to be considered before beginning an evaluation.

d. The dependent adult's age.

e. The nature and extent of the adult abuse, including evidence of previous adult abuse. The existence of alleged adult abuse is the second criterion to be considered before beginning an evaluation.

f. Information concerning the suspected adult abuse of other dependent adults in the same residence.

g. Other information which the person making the report believes might be helpful in establishing the cause of the abuse or the identity of the person or persons responsible for the abuse, or helpful in providing assistance to the dependent adult.

h. The name and address of the person making the report.

176.5(5) A report shall be accepted whether or not it contains all of the information requested in 176.5(4), and may be made to the department, county attorney, or law enforcement agency. When the report is made to any agency other than the department of human services, that agency shall promptly refer the report to the department.

441—176.6(235B) Duties of the department upon receipt of report.

176.6(1) When a report is received, the department shall promptly commence and appropriate evaluation, except that the state department of public health is responsible for the evaluation and disposition of a case of adult abuse in a health care facility, as defined in Iowa Code section 135C.1, subsection 4. The department shall promptly forward all reports and other information concerning adult abuse in a health care facility to the state department of public health. The state department of public health shall inform the registry of all actions taken or contemplated concerning the evaluation or disposition of a case of adult abuse in a health care facility. The primary purpose of the evaluation by the department shall be the protection of the dependent adult named in the report.

176.6(2) The evaluation shall include all of the following:

a. Identification of the nature, extent, and cause of the adult abuse, if any, to the dependent adult named in the report.

b. The identification of the person or persons responsible for the adult abuse.

c. A determination of whether other dependent adults in the same residence have been subjected to adult abuse.

d. A critical examination of the residential environment of the dependent adult named in the report, and the dependent adult's relationship with caretakers and other adults in the same residence.

e. A critical explanation of all other pertinent matters.

176.6(3) The evaluation, with the consent of the dependent adult or caretaker, when appropriate, may include a visit to the residence of the dependent adult named in the report and an examination of the dependent adult. If permission to enter the residence and to examine the dependent adult is refused, the district court, upon a showing of probable cause that a dependent adult has been abused, may authorize a person, authorized by the department, to make an evaluation, to enter the residence of, and to examine the dependent adult.

176.6(4) County attorneys, law enforcement agencies, multidisciplinary teams as defined in section 235A.13, subsection 9, and social services agencies in the state shall cooperate and assist in the evaluation upon the request of the department. County attorneys and appropriate law enforcement agencies shall also take any other lawful action necessary or advisable for the protection of the dependent adult.

176.6(5) The department, upon completion of its evaluation, shall transmit a copy of its preliminary report, including actions taken or contemplated, to the registry within four regular working days after the department receives the adult abuse report, unless the registry grants an extension of time for good cause shown. If the preliminary report is not a complete report, a complete report shall be filed within ten working days of the receipt of the abuse report, unless the registry grants an extension of time for good cause shown.

176.6(6) The department shall also transmit a copy of the report of its evaluation to the appropriate county attorney. The county attorney shall notify the local office of the department of any actions or contemplated actions with respect to a suspected case of adult abuse.

176.6(7) Based on the evaluation, the department shall complete an assessment of services needed by a dependent adult believed to be the victim of abuse, the dependent adult's family, or a caretaker. The department shall explain that the department does not have independent legal authority to compel the acceptance of protective services. Upon voluntary acceptance of the offer of services, the department shall make referrals or may provide necessary protective services to eligible dependent adults, their family members, and caretakers. The department may establish a sliding fee schedule for those persons able to pay a portion of the protective services provided.

176.6(8) When, upon completion of the evaluation or upon referral from the state department of public health, the department determines that the best interests of the dependent adult require court action, the department shall initiate action for the appointment of a guardian or conservator, or for admission or commitment to an appropriate institution or facility, pursuant to the applicable procedures under Iowa Code chapter 125, 222, 229, or 633. The appropriate county attorney shall assist the department in the preparation of the necessary papers to initiate the action, and shall appear and represent the department at all district court proceedings.

176.6(9) The department shall assist the district court during all stages of court proceedings involving a suspected case of adult abuse.

176.6(10) In every case involving adult abuse which is substantiated by the department and which results in a judicial proceeding on behalf of the dependent adult, legal counsel shall be appointed by the court, to represent the dependent adult in the proceedings. The court may also appoint a guardian ad litem to represent the dependent adult when necessary to protect the dependent adult's best interests. The same attorney may be appointed to serve both as legal counsel and as guardian ad litem. Before legal counsel or a guardian ad litem is appointed pursuant to 1983 Iowa Acts, chapter 153, section 4, the court shall require the dependent adult and any person legally responsible for the support of the dependent adult to complete under oath a detailed financial statement. If, on the basis of that financial statement, the court deems that the dependent adult or the legally responsible person is able to bear all or a portion of the cost of the legal counsel or guardian ad litem, the court shall so order. In cases where the dependent adult or the legally responsible person is unable to bear the cost of the legal counsel or guardian ad litem, the expense shall be paid out of the court expense fund.

441—176.7(235B) Appropriate evaluation.

176.7(1) After receipt of the report alleging dependent adult abuse the field worker shall make a preliminary evaluation to determine whether the information as reported, other known information, and any information gathered as a result of the worker's contact with collateral sources would tend to corroborate the alleged abuse..

176.7(2) When the information gathered in the preliminary evaluation tends to corroborate, or the worker is uncertain as to whether it repudiates the allegations of the report, the worker shall immediately continue the evaluation by making a reasonable effort to ensure the safety of the adult. The worker and the worker's supervisor shall determine whether an immediate threat to the physical safety of the adult is believed to exist. If an immediate threat to the physical safety of the adult is believed to exist, the field worker shall make every reasonable effort to examine the adult, as authorized by 176.6(3), within one hour after receipt of the report and shall take any lawful action necessary or advisable for the protection of the adult. When physical safety of the adult is not endangered, the worker shall make every reasonable effort to examine the adult within 24 hours after receipt of the report.

176.7(3) In the event the information gathered in the preliminary evaluation fails to corroborate the allegation of adult abuse, the worker, with approval of the supervisor, may terminate the investigation and submit the "four-day report" required by subrule 176.6(5).

441—176.8(235B) Immunity from liability for reporters. A person participating in good faith in making a report or cooperating or assisting the department in evaluating a case of dependent adult abuse has immunity from liability, civil or criminal, which might otherwise be incurred or imposed based upon the act of making the report or giving the assistance. The person has the same immunity with respect to participation in good faith in a judicial proceeding resulting from the report or assistance or relating to the subject matter of the report or assistance.

441—176.9(235B) Registry records. Central registry records shall be kept in the name of the dependent adult and cross-referenced in the name of the caretaker.

441—176.10(235B) Adult abuse information disseminated.

176.10(1) *Requests for information.* Written requests for adult abuse information shall be submitted to the local or district office of the department on Form SS-1114, Request for Dependent Adult Abuse Information except as provided in subrule 176.10(3), paragraph "c."

Requests may be made by telephone to the central registry pursuant to the requirements of Iowa Code subsection 235A.16(2). Oral requests must be followed by a written request to the central registry within 72 hours on Form SS-1114.

176.10(2) *Verification of identity.* The local or district office shall verify the identity of the person making the request on Form SS-1114, Request for Dependent Adult Abuse Information. Upon verification of the identity of the person making the request, the local or district office shall transmit the request to the central registry.

176.10(3) *Approval of requests.* Access to dependent adult abuse information other than unfounded adult abuse information is authorized only to the following persons or entities:

a. Subjects of a report as follows:

(1) A dependent adult named in a report as a victim of abuse or the adult's attorney.

(2) A person or the attorney for the person named in a report as having abused a dependent adult.

(3) A legal guardian, or the attorney for the guardian, of a dependent adult named in a report as a victim of abuse.

b. Persons involved in an investigation of dependent adult abuse as follows:

(1) A health practitioner or mental health professional who is examining, attending, or treating a dependent adult whom the practitioner or professional believes or has reason to believe has been the victim of abuse or a health practitioner or mental health professional whose consultation with respect to the adult believed to have been the victim of abuse is requested by the department.

(2) An employee of the department of human services, or department of inspections and appeals responsible for the investigation of an adult abuse report.

(3) A law enforcement officer responsible for assisting in an investigation of a dependent adult abuse report.

(4) A multidisciplinary team, if the department of human services approves the composition of the multidisciplinary team and determines that access to the team is necessary to assist the department in the investigation, diagnosis, assessment, and disposition of a dependent adult abuse case.

(5) In an individual case, to the mandatory reporter who reported the dependent adult abuse.

c. Individuals, agencies, or facilities providing care to a dependent adult as follows:

(1) An authorized person or agency responsible for the care or supervision of a dependent adult named in a report as a victim of abuse or a person named in a report as having abused a dependent adult, if the district court or registry deems access to dependent adult abuse information by the person or agency to be necessary.

(2) A department of human services employee when it is necessary in the performance of the employee's duty.

d. Relating to judicial and administrative proceedings as follows:

(1) A district court involved in an adjudication or disposition of a dependent adult named in a report.

(2) A district court upon a finding that information is necessary for the resolution of an issue arising in any phase of a case involving dependent adult abuse.

(3) A court or administrative agency hearing an appeal for correction of dependent adult abuse information as provided in Iowa Code section 235A.19.

(4) An expert witness at any stage of an appeal necessary for correction of dependent adult abuse information as provided in Iowa Code section 235A.19.

e. Others as follows:

(1) A person conducting bona fide research on dependent adult abuse, but without information identifying persons named in an adult abuse report, unless having that informa-

tion open to review is essential to the research or evaluation and the authorized registry officials give prior written approval and the dependent adult, the adult's guardian and the person named in a report as having abused the dependent adult give permission to release the information.

(2) Registry or department personnel when necessary to the performance of their official duties or a person or agency under contract with the department to carry out official duties and functions of the registry.

(3) The department of public safety for the sole purpose of the filing of a claim for reparation pursuant to Iowa Code section 910A.5A.

(4) A legally constituted dependent adult abuse protection agency of another state which is investigating or treating a dependent adult named in a report as having been abused.

(5) The attorney for the department of human services who is responsible for representing the department.

(6) The legally authorized protection and advocacy agency recognized in Iowa Code section 135C.2, if a person identified in the information as a victim or a perpetrator of abuse resides in or receives services from a facility or agency because the person is diagnosed as having a developmental disability or a mental illness.

176.10(4) *Method of dissemination.* Except as provided in paragraph *"c"* below, the central registry shall notify the local or district office of the decision made regarding the request. If the request is denied by the central registry, the local or district office shall inform the person making the request of the denial. If the request is approved by the central registry, the local or district office shall disseminate to the person making the request the information specified by the central registry on Form SS-1114, Request for Dependent Adult Abuse Information.

176.10(5) *Dissemination of undetermined reports.* A report which cannot be determined by a preponderance of the evidence to be founded or unfounded may be disseminated and redisseminated in accordance with Iowa Code sections 235A.15 and 235A.17 until the report is expunged. Information referred to in the report may be referred to in subsequent reports and evaluations.

176.10(6) *Access to unfounded dependent adult abuse information.* Access to unfounded dependent adult abuse information is authorized only to persons identified as subjects of a report including the adult named in a report as a victim, a guardian of a dependent adult named in a report as a victim, a person named in a report as having abused a dependent adult or an attorney representing any of the above; an employee or agency of the department of human services responsible for the investigation of a dependent adult abuse report; and registry or department personnel when necessary to the performance of their official duties or a person or agency under contract with the department to carry out official duties and functions of the registry.

176.10(7) *Requests concerning employees of department facilities.* When a request is made by the hiring authority of a department operated facility which provides direct client care and the request is made for the purpose of determining continued employability of a person employed, with or without compensation, by the facility, the information shall be requested directly from the central registry. The information requested shall be disseminated to the personnel office of the department. The personnel office shall redisseminate the information to the hiring authority for the person involved only upon a finding that the information has a direct bearing on employability of the person involved.

When the personnel office determines that the information has no direct bearing on employability, the hiring authority shall be notified that no job-related dependent adult abuse information is available. If the central registry and local office files contain no information, the hiring authority shall be so informed.

176.10(8) *Dependent adult abuse information disseminated and redisseminated.* Notwithstanding subrule 176.10(3), written requests and oral requests are not required for dependent

adult abuse information that is disseminated to an employee of the department of human services, a district court, or the attorney representing the department as authorized by Iowa Code section 235A.15.

176.10(9) *Required notification.* The department shall notify orally the subject of a report of the results of the investigation. The department shall subsequently transmit a written notice to the subject which will include information regarding the results, the confidentiality provisions of Iowa Code sections 235A.15 and 235A.21, and the procedures for correction or expungement and appeal of dependent adult abuse information as provided in Iowa Code section 235A.19.

176.10(10) *Mandatory reporter notification.* The department shall notify orally the mandatory reporter who made the report in a dependent adult abuse case of the results of the evaluation and of the confidentiality provisions of Iowa Code sections 235A.15 and 235A.21. The department shall subsequently transmit a written notice on Form 470—2444, Dependent Adult Abuse Notification, to the mandatory reporter who made the report. The form shall include information regarding the results of the evaluation and confidentiality provisions. A copy of the written notice shall be transmitted to the registry and shall be maintained by the registry as provided in section 235A.18.

This rule is intended to implement Iowa Code sections 235A.15 to 235A.19.

441—176.11(235B) Person conducting research. The person in charge of the central registry shall be responsible for determining whether a person requesting dependent adult abuse information is conducting bona fide research. To make this determination, the central registry may require these persons to submit credentials and the research design. If the registry determines that identified information is essential to the research design, the registry shall also determine the method by which written permission is to be secured from the dependent adult or guardians of the dependent adult who could be identified by the information to be researched. Any costs incurred in the dissemination of the information shall be assumed by the researcher. The department will keep a public record of persons conducting research.

441—176.12(235B) Examination of information. Examination of information contained in the central registry can be made at the site of the central registry between the hours of 8 a.m. and 12 p.m. or 1 p.m. and 4 p.m., Monday through Friday, except state authorized holidays.

The person, or that person's attorney, requesting to examine the information in the registry which refers to that person, shall be allowed to inspect the information after providing appropriate identification.

441—176.13(235B) Maintenance of central registry records. Central registry records are maintained as follows:

176.13(1) A report of dependent adult abuse determined to be founded shall be retained and sealed by the registry in accordance with Iowa Code section 235A.18, subsection 1.

176.13(2) A report of dependent adult abuse determined to be unfounded shall be expunged when it is determined to be unfounded in accordance with Iowa Code section 235A.18, subsection 2.

176.13(3) A report of dependent adult abuse in which the information cannot be determined by a preponderance of the evidence to be founded or unfounded shall be expunged by the registry in accordance with Iowa Code section 235A.18, subsection 2.

This rule is intended to implement Iowa Code section 235A.18.

441—176.14(235B) Central registry. The central registry for child abuse shall be expanded to include dependent adult abuse, and Iowa Code chapter 235A shall apply unless the context otherwise requires.

441—176.15(235B) Multidisciplinary teams.

176.15(1) *Purpose of multidisciplinary teams.* The district office shall establish multidisciplinary teams for the purpose of assisting the department in assessment, diagnosis, and disposition of reported dependent adult abuse cases. The disposition of a case may include the provision for treatment recommendations and services.

176.15(2) *Execution of team agreement.* When the team is established the district administrator or designee and all team members shall execute an agreement on Form 470-2328, Dependent Adult Abuse Multidisciplinary Team Agreement. This agreement specifies:

a. That the team shall be consulted solely for the purpose of assisting the department in the assessment, diagnosis and treatment of dependent adult abuse cases.

b. That any team member may cause a dependent adult abuse case to be reviewed if approved by the department through use of the process of requesting adult abuse information specified in rule 176.10(235B).

c. That no team members shall redisseminate adult abuse information obtained solely through the multidisciplinary team. This shall not preclude redissemination of information as authorized by Iowa Code section 235A.17 when an individual team member has received information as a result of another authorized access provision of the Code.

d. That the department may consider the recommendation of the team in a specific dependent adult abuse case but shall not, in any way, be bound by the recommendations.

e. That any written report or document produced by the team pertaining to an individual case shall be made a part of the file for the case and shall be subject to all confidentiality provisions of Iowa Code chapter 235A and of 441—Chapter 176.

f. That any written records maintained by the team which identify an individual dependent adult abuse case shall be destroyed when the agreement lapses.

g. That consultation team members shall serve without compensation.

h. That any party to the contract may withdraw with or without cause upon the giving of 30 days' notice.

i. The date on which the agreement will expire.

176.15(3) *Filing of agreement.* Whenever a team is created, a copy of the executed contract shall be filed with the central registry in addition to any other requirement placed upon execution of agreements by the department.

441—176.16(235B) Medical and mental health examinations. In any year in which the legislature appropriates funds, the department shall administer a payment program for mental health or medical health examinations for subjects of dependent adult abuse reports.

176.16(1) *Conditions for payment.* The following conditions must be met before payment can be made:

a. Local resources to pay these costs must be exhausted.

b. The examination must be scheduled during the evaluation process.

c. Department staff must be involved in the decision to request the examination.

176.16(2) *Payment limits.* Payment for mental health examinations shall not exceed $150. Payment for medical examinations shall not exceed $60.

176.16(3) *Billing procedures.* Claims for payment shall be submitted to the bureau of adult, children and family services on a Claim Order/Claim Voucher, Form 625-5297 accompanied by a letter from department staff certifying that the necessary conditions for payment have been met.

441—176.17(235B) Request for correction or expungement. The department of human services is responsible for correction or expungement of reports prepared by department staff. The department of inspections and appeals is responsible for correction or expungement of reports prepared by that department's staff and that determination shall be binding on the registry.

176.17(1) Within six months of the date of the notice of evaluation results, a person may file with the registry a written statement to the effect that the dependent adult abuse information referring to the person is partially or entirely erroneous. The person may also request a correction of that information or of the findings of the report. The registry will record all requests and immediately forward the requests to the division of health facilities, department of inspections and appeals, when the reports were prepared by the department of inspections and appeals. The registry will notify the person requesting a correction that the report has been sent to the department of inspections and appeals.

176.17(2) Unless the designated department corrects the information or findings as requested, the designated department shall provide the person with an opportunity for a hearing as

provided by 441—Chapter 7 to correct the information or the findings. The department may defer the hearing until the conclusion of a pending district court case relating to the information or findings.

These rules are intended to implement Iowa Code section 235B.1, and 1985 Iowa Acts, chapters 173 and 174.

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567—40.2(455B) Definitions.

"Act" means the Public Health Service Act, as amended by the Safe Drinking Water Act (Pub. L. 93-523,88 Stat. 1860) 42 U.S.C. §300f et seq.

"Animal confinement" means a lot, yard, corral, or similar structure in which the concentration of livestock or poultry is such that a vegetative cover is not maintained.

"Animal pasturage" means a fenced area where vegetative cover is maintained and in which animals are enclosed.

"Animal waste" means animal wastes consisting of excreta, leachings, feed losses, litter, washwaters or other associated wastes.

"Animal waste stockpiles" means the stacking, composting or containment of animal wastes.

"Animal waste storage basin or lagoon" means a fully or partially excavated or diked earthen structure used for containing animal waste, including earthen sideslopes or floor.

"Animal waste storage tank" means a completely fabricated structure, with or without a cover, either formed in place or transported to the site, used for containing animal wastes.

"Antisiphon device" means a device which will prevent back siphonage by means of a relief valve which automatically opens to the atmosphere, preventing the creation of subatmospheric pressure within a pipe, thereby preventing water from reversing its flow.

"Backflow" means the flow of water or other liquids, mixtures, or substances into the distribution system of a potable water supply from any source other than its permitted source.

"Backflow preventer" is a device or means to prevent backflow into a potable water system.

"Back siphon" means the flowing back of used, contaminated, or polluted water, from a plumbing fixture or vessel as a result of negative or subatmospheric pressure within the distribution system.

"Best available technology" or *"BAT"* means the best technology, treatment techniques, or other means which the state finds, after examinations, for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration).

"Cistern" means a tank in which rainwater from roof drains is stored.

"Coagulation" means a process using coagulation chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into flocs.

"Confluent growth" means a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion thereof, in which bacterial colonies are not discrete.

"Contaminant" means any physical, chemical, biological, or radiological substance or matter in water.

"Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

"Corrosive water" means a water which due to its physical and chemical characteristics may cause leaching or dissolving of the constituents of the transporting system in which it is contained.

"Cross connection" means any actual or potential connection between a potable water supply and any other source or system through which it is possible to introduce into the potable system any used water, industrial fluid, gas, or other substance other than the intended potable water with which the system is supplied.

"Deep well" means a well located and constructed in such a manner that there is a continuous layer of low permeability soil or rock at least five feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

"Diatomaceous earth filtration" means a process resulting in substantial particulate removal in which (1) precoat cake of diatomaceous earth filter media is deposited on a support membrane (septum), and (2) while the water is filtered by passing through the cake on the septum, additional filter media known as body feed is continuously added to the feed water to maintain the permeability of the filter cake.

"Direct filtration" means a series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal.

"Disinfectant" means any oxidant, including but not limited to chlorine, chlorine dioxide, chloramines, and ozone added to water in any part of the treatment process or distribution process, that is intended to kill or inactivate pathogenic microorganisms.

"Disinfection" means a process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

"Dose equivalent" means the product of the absorbed dose from ionizing radiation and such factors as account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission on Radiological Units and Measurements (ICRU).

"EPA Methods" means "Methods for Chemical Analysis of Water and Wastes," U.S. Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460 (1974).

"Filtration" means a process for removing particulate matter from water by passage through porous media.

"Flocculation" means a process to enhance agglomeration or collection of smaller floc particles into larger, more easily settleable particles through gentle stirring by hydraulic or mechanical means.

"Gross alpha particle activity" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

"Gross beta particle activity" means the total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

"Halogen" means one of the chemical elements chlorine, bromine or iodine.

"Impoundment" means a reservoir, pond, or lake in which surface water is retained for a period of time, ranging from several months upward, created by constructing a barrier across a watercourse and used for storage, regulation or control of water.

"Lead free," when used with respect to solder and flux, refers to solders and flux containing not more than 0.2 percent lead; and, when used with respect to pipes and pipe fittings, refers to pipes and pipe fittings containing not more than 8.0 percent lead.

"Legionella" means a genus of bacteria, some species of which have caused a type of pneumonia called Legionnaires disease.

"Maintenance" means the replacement of equipment or materials that are necessary to maintain the operation of the public water supply system but do not alter the system capacity, water quality or treatment method or effectiveness.

"Man-made beta particle and photon emitters" means all radionuclides emitting beta particles or photons or both listed in maximum Permissible Body Burdens and Maximum Permissible Concentraton of Radionuclides in Air or Water for Occupational Exposure, NBS Handbook 69, as amended August, 1963, U.S. Department of Commerce, except the daughter products of thorium-232, uranium-235 and uranium-238.

"Maximum contaminant level" means the maximum permissible level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of a public water supply system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition.

"Maximum total trihalomethane potential (MTP)" means the maximum concentration of total trihalomethanes produced in a given water containing a disinfectant residual after seven days at a temperature of 25° C. or above.

"Nontransient noncommunity water system" or *"NTNCWS"* means a public water system that is not a community water system and that regularly serves at least 25 of the same persons four hours or more per day, for four or more days per week, for 26 or more weeks per year.

Examples of NTNCWSs are schools, day-care centers, factories, offices and other public water systems which provide water to a fixed population of 25 or more people. In addition, other service areas, such as hotels, resorts, hospitals and restaurants, are considered as NTNCWSs if they employ 25 or more people and are open for 26 or more weeks of the year.

"Performance evaluation sample" means a reference sample provided to a laboratory for the purpose of demonstrating that a laboratory can successfully analyze the sample within limits of performance specified by the department. The true value of the concentration of the reference material is unknown to the laboratory at the time of analysis.

"Picocurie" (pCi) means that quantity of radioactive material producing 2.22 nuclear transformations per minute.

"Point of disinfectant application" is the point where the disinfectant is applied and water downstream of that point is not subject to recontamination by surface water runoff.

"Point-of-entry treatment device" is a treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building.

"Point-of-use treatment device" is a treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one tap.

"Privy" means a structure used for the deposition of human body wastes.

"Project" includes the planning, design, construction, alteration or extension of any public water supply system but does not include the maintenance of a system.

"Public water supply system" means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the supplier of water and used primarily in connection with such system, and (2) any collection (including wells) or pretreatment storage facilities not under such control which are used primarily in connection with such system. A public water supply system is either a "community water system" or a "noncommunity water system."

1. *"Community water system"* means a public water supply system which has at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

2. *"Noncommunity water system"* means a public water supply system that is not a community water system.

"Regional water system" means a public water supply system in which the projected number of service connections in at least 50 percent of the length of the distribution system does not average more than eight service connections per linear mile of water main.

"Rem" means the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A "millirem" (mrem) is 1/1000 of a rem.

"Residual disinfectant concentration" ("C" in CT calculations) means the concentration of disinfectant measured in mg/l in a representative sample of water.

"Sanitary sewer pipe" means a sewer complying with the department's standards for sewer construction.

"Sanitary survey" means a review and on-site inspection conducted by the department of the water source, facilities, equipment, operation and maintenance and records of a public water supply system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water and identifying improvements necessary to maintain or improve drinking water quality.

"Sedimentation" means a process for removal of solids before filtration by gravity or separation.

"Septic tank" means a watertight tank which receives sewage.

"Shallow well" means a well located and constructed in such a manner that there is not a continuous layer of low permeability soil or rock at least five feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

"Slow sand filtration" means a process involving passage of raw water through a bed of sand at low velocity (generally less than 0.4 m/h (0.02 ft/min.) resulting in substantial particulate removal by physicial and biological mechanisms.

"Standard Methods" means "Standard Methods for the Examination of Water and Wastewater," seventeenth edition, American Public Health Association, 1015 15th Street, N.W., Washington, D.C. 20005 (1989).

"Standard sample" means the aliquot of finished drinking water that is examined for the presence of coliform bacteria.

"Standard specifications" means those specifications submitted to the department for use as a reference in reviewing future plans for proposed construction.

"Supplier of water" means any person who owns or operates a public water supply system.

"Surface water" means all water which is open to the atmosphere and subject to surface runoff.

"Ten States Standards" means the "Recommended Standards for Water Works," 1982 edition as adopted by the Great Lakes—Upper Mississippi River Board of State Sanitary Engineers.

"Too numerous to count" means that the total number of bacterial colonies exceeds 200 on a 47-mm diameter membrane filter used for coliform detection.

"Total trihalomethanes" (TTHM) means the sum of the concentration in milligrams per liter of the trihalomethane compounds trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform), rounded to two significant figures.

"Trihalomethane" (THM) means one of the family of organic compounds, named as derivatives of methane, wherein three of the four hydrogen atoms in methane are each substituted by a halogen atom in the molecular structure.

"Virus" means a virus of fecal origin which is infectious to humans by waterborne transmission.

"Waterborne disease outbreak" means the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a public water system which is deficient in treatment, as determined by the Iowa department of public health.

"Water main pipe" means a water main complying with the department's standards for water main construction.

567—40.3(17A,455B) Forms. The following forms are used by the public to apply for department approvals and to report on activities related to the public water supply program of the department. All forms may be obtained from the Environmental Protection Division, Administrative Support Station, Iowa Department of Natural Resources, Henry A. Wallace Building, 900 East Grand, Des Moines, Iowa 50319-0032. Properly completed application forms should be submitted to the Water Supply Section, Environmental Protection Division. Reporting forms should be submitted to the appropriate field office (see rule 1.4(455B)).

40.3(1) *Construction permit application forms.* Schedules "1" through "16d" are required.

"1"	— General Information	542-3178
"1a"	— Fee Schedule	542-3179
"1b"	— Certification of Project Design	542-3174
"2a"	— Water Mains, General	542-3030
"2b"	— Water Mains, Specifications	542-3031
"3a"	— Water System, Preliminary Data	542-3032
"3b"	— Water Quality Data	542-3029
"3c"	— Surface Water Quality Data	542-3028
"4"	— Site Selection	542-3078
"5a"	— Well Construction	542-1005
"5b"	— Well Appurtenances	542-3026
"5c"	— Well Profile	542-1006
"5d"	— Surface Water Supply	542-3139
"6a"	— Distribution Water Storage Facilities	542-3140
"6b"	— Distribution Pumping Station	542-3141
"7"	— Schematic Flow Diagram	542-3142
"8"	— Aeration	542-3143
"9"	— Clarification/Sedimentation	542-3144
"10"	— Suspended Solids Contact	542-3145
"11"	— Cation Exchange Softening	542-3146
"12"	— Filters	542-3147
"13a"	— Chemical Addition	542-3141
"13b"	— Dry Chemical Addition	542-3130
"13c"	— Gas Chlorination	542-3131
"13d"	— Fluoridation	542-3132
"13e"	— Sampling and Tests	542-3133
"14"	— Pumping Station	542-3134
"15"	— Process Water Storage Facilities	542-3135
"16a"	— Wastewater, General	542-3136
"16b"	— Waste Treatment Ponds	542-3137
"16c"	— Filtration and Mechanical	542-3138
"16d"	— Discharge to Sewer	542-3103

40.3(2) *Operation permit application forms.*

a. Form 13-1—community

b. Form 13-2—noncommunity

40.3(3) *Public water supply reporting forms.*

a. Form 14 — plant operation	542-3104
b. Form 15 — analyses by certified laboratories	
(1) Individual bacterial analysis reporting — Form 15-1a	542-3195
(2) Summary bacterial analysis reporting — Form 15-1b	542-3196
(3) Chemical analysis reporting — Form 15-2	542-3166
(4) Corrosivity analysis reporting — Form 15-3	542-3193

567—40.4(17A,455B) Public water supply construction permit application procedures.

40.4(1) *General procedures.* Applications for written approval from the department for any new construction or for reconstruction pursuant to Chapter 41 shall consist of complete plans and specifications, application fee, and appropriate water supply construction permit application schedules. Upon review, the department will issue a construction permit for approval of a project if the review shows that the project meets all departmental design standards and the correct fee has been submitted in accordance with 41.12(3). Upon notice of insuf-

ficient fee payment, the applicant will have 60 days to submit the correct fee. Failure to submit the correct fee will result in voiding the application and loss of all prior payments. Approval of a project which does not meet all department design standards will be denied unless a variance as provided by 41.12(2)"*c*" is granted. A variance may be requested at the time plans and specifications are submitted or after the design discrepancy is pointed out to the applicant.

The department may review submitted project plans and specifications and provide comments and recommendations to the applicant. Departmental comments and recommendations are advisory, except when departmental review determines that a facility does not comply with the plans or specifications as approved by the department or comply with the design standards pursuant to the criteria for certification of project design. The owner of the system must correct the deficiency in a timely manner as set forth by the department.

40.4(2) *Public water sources and below-ground level water storage facilities—site survey.* For public water sources and for below-ground level finished water storage facilities, a site survey and approval must be made by the department. The manner and procedures for applying for and processing a site survey are the same as in 40.4(1) except that the following information must be submitted by the applicant's engineer.

a. A preliminary engineering report or a cover letter which contains a brief description of the proposed source or storage facility, and assurance that the project is in conformance with the long range planning of the area.

b. Completed Schedule 1 — General Information

c. Completed Schedule 4 — Water Supply Facility Site Selection

d. A detailed map showing all potential sources of contamination (see chapter 41, Table C) within:

(1) 1,000 feet of a proposed well location. The scale shall not be smaller than 1 inch = 200 feet.

(2) 200 feet of a proposed below-ground level finished water storage facility.

(3) 2,500 feet from a proposed surface water source and a plat showing all facilities more than 2,500 feet from an impoundment (within the drainage area) that may be potential sources of contamination. The scale shall not be smaller than 1 inch = 660 feet.

(4) Six miles upstream of a proposed river intake.

40.4(3) *Modifications of an approved water supply construction project.* Persons seeking to make modifications to a water supply construction project after receiving a prior construction permit from the department shall submit an addendum to plans and specifications, a change order or revised plans and specifications at least 30 days prior to planned construction. The department shall review the submitted material within 30 days of submission and shall issue a supplemental permit if the proposed modifications meet departmental standards.

40.4(4) *Certification of project design.* A permit shall be issued for the construction, installation or modification of a public water supply system or part of a system or for a water supply distribution system extension if a qualified, registered engineer certifies that the plans and specifications comply with federal and state law and regulations or that a variance to standards has been granted by the department. Schedule 1b.

567—40.5(17A,455B) Public water supply operation permit application procedures. A person required to obtain or renew a water supply operation permit pursuant to 41.6(455B) must complete the appropriate application form, which will be provided by the department upon request. Upon receipt of a complete application and the appropriate fee, the department shall review the application and if approvable shall prepare and issue a water supply operation permit or draft permit, as applicable, and transmit it to the applicant. A permit or renewal will be denied when the applicant does not meet one or more requirements for issuance or renewal of such permit.

These rules are intended to implement Iowa Code section 17A.3(1)"*b*", and chapter 455B, division III, part 1.

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CHAPTER 41
WATER SUPPLIES

[These rules transferred from Health Department, 1971 IDR (Title II, Chs 1 and 2)]
[Prior to 7/1/83, DEQ Ch 22]
[Prior to 12/3/86, Water, Air and Waste Management[900]]

567—41.1(455B) Primary drinking water regulations—coverage. Rules 41.2(455B) to 41.5(455B) and 43.2(455B) shall apply to each public water supply system, unless the public water supply system meets all of the following conditions:

1. Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);
2. Obtains all of its water from, but is not owned or operated by, a public water supply system to which such regulations apply;
3. Does not sell water to any person; and
4. Is not a carrier which conveys passengers in interstate commerce.

567—41.2(455B) Biological maximum contaminant levels (MCL) and monitoring requirements.

41.2(1) *Coliforms, fecal coliforms and E. coli.*

a. Applicability. These rules apply to all public water supply systems.

b. Maximum contaminant levels (MCL) for total coliforms, fecal coliforms/*E. coli.*

(1) The MCL is based on the presence or absence of total coliforms in a sample. The system is in compliance with MCL requirements for total coliform if it meets the following requirements:

1. For a system which collects 40 samples or more per month, no more than 5.0 percent of the samples collected during a month may be total coliform-positive.
2. For a system which collects less than 40 samples per month, no more than one sample collected during a month may be total coliform-positive.

(2) Any fecal coliform-positive repeat sample or *E. coli*-positive repeat sample, or any total coliform-positive repeat sample following a fecal coliform-positive or *E. coli*-positive routine sample constitutes a violation of the MCL for total coliforms. For purposes of the public notification requirements in 41.5(2)*"a"*(2), this is a violation that may pose an acute risk to health.

(3) Compliance of a system with the MCL for total coliforms in 41.2(1)*"b"*(1) and (2) is based on each month in which the system is required to monitor for total coliforms.

(4) Results of all routine and repeat samples not invalidated by the department or laboratory must be included in determining compliance with the MCL for total coliforms.

c. Monitoring requirements.

(1) Routine total coliform monitoring.

1. Public water supply systems must collect total coliform samples at sites which are representative of water throughout the distribution system according to a written sample siting plan. The plan shall be reviewed or updated by the public water supply system every two years and shall be retained on file at the facility. Major elements of the plan shall include, but are not limited to, a map of the distribution system, notation or a list of routine sample location(s) for each sample period, resample locations for each routine sample, and a log of samples taken. The plan must be made available to the department upon request and during sanitary surveys and must be revised by the system as directed by the department.
2. The public water supply system must collect samples at regular time intervals throughout the month, except that a system which uses only groundwater (except groundwater under the direct influence of surface water, as defined in 43.5(1)*"b"*), and serves 4,900 persons or fewer, may collect all required samples on a single day if they are taken from different sites.

3. Community water systems. The monitoring frequency for total coliforms for community water systems and noncommunity water systems serving schools, to include preschools and day care centers, is based on the population served by the system as listed below, until June 29, 1994. Public water systems which do not collect five or more routine samples each month must undergo an initial sanitary survey by June 29, 1994. After June 29, 1994, the monitoring frequency for systems serving less than 4,101 persons shall be a minimum of five routine samples per month unless the department determines, after completing sanitary surveys (at intervals not to exceed five years), that the monitoring frequency may continue as listed below. The monitoring frequency for regional water systems shall be as listed in 41.2(1)"c"(1)"4" but in no instance less than that required by the population equivalent served.

Total Coliform Monitoring Frequency for Community Water Systems and Noncommunity Schools

Population Served	Minimum Number of Samples Per Month
25 to 1,000*	1
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120
220,001 to 320,000	150
320,001 to 450,000	180
450,001 to 600,000	210
600,001 to 780,000	240
780,001 to 970,000	270

*Includes public water supply systems which have at least 15 service connections, but serve fewer than 25 persons

4. Regional water systems. The supplier of water for a regional water system as defined in rule 567—40.2(455B) shall sample for coliform bacteria at a frequency indicated in the following chart until June 29, 1994, but in no case shall the sampling frequency for a regional water system be less than as set forth in 41.2(1)"c"(1)"3," based on the population equivalent served. Public water systems which do not collect five or more routine samples each month must undergo an initial sanitary survey by June 29, 1994. After June 29, 1994, the monitoring frequency of systems with less than 82 miles of pipe shall be a minimum of five routine

samples per month unless the department determines, after completing sanitary surveys (at intervals not exceeding five years), that the monitoring frequency may continue as listed below. The following chart represents sampling frequency per miles of distribution system and is determined by calculating one-half the square root of the miles of pipe.

Total Coliform Monitoring Frequency for Regional Water Systems

Miles of Pipe	Minimum Number of Samples Per Month
0 - 9	1
10 - 25	2
26 - 49	3
50 - 81	4
82 - 121	5
122 - 169	6
170 - 225	7
226 - 289	8
290 - 361	9
362 - 441	10
442 - 529	11
530 - 625	12
626 - 729	13
730 - 841	14
842 - 961	15
962 - 1,089	16
1,090 - 1,225	17
1,226 - 1,364	18
1,365 - 1,521	19
1,522 - 1,681	20
1,682 - 1,849	21
1,850 - 2,025	22
2,026 - 2,209	23
2,210 - 2,401	24
2,402 - 2,601	25
2,602 - 3,249	28
3,250 - 3,721	30
3,722 - 4,489	33
4,490 - 5,041	35

5. Noncommunity water systems. The monitoring frequency for total coliforms for noncommunity water systems is as listed in the four unnumbered paragraphs below until June 29, 1999. Public water systems which do not collect five or more routine samples each month must undergo an initial sanitary survey by June 29, 1999. After June 29, 1999, the minimum number of samples shall be five routine samples per month unless the department determines, after completing sanitary surveys (at intervals not exceeding five years), that the monitoring frequency may continue as listed below.

A noncommunity water system using only groundwater (except groundwater under the direct influence of surface water, as defined in 567—43.5(1)*"b"*) and serving 1,000 persons or fewer must monitor each calendar quarter that the system provides water to the public. Systems serving more than 1,000 persons during any month must monitor at the same frequency as a like-sized community water system, as specified in 41.2(1)*"c"*(1)"3."

A noncommunity water system using surface water, in total or in part, must monitor at the same frequency as a like-sized community water system, as specified in 41.2(1)"c"(1)"3," regardless of the number of persons it serves.

A noncommunity water system using groundwater under the direct influence of surface water, as defined in 567—43.5(1)"b," must monitor at the same frequency as a like-sized community water system, as specified in 41.2(1)"c"(1)"3." The system must begin monitoring at this frequency beginning six months after the department determines that the groundwater is under the direct influence of surface water.

A noncommunity water system serving schools must monitor at the frequency as a like-sized community water system, as specified in 41.2(1)"c"(1)"3."

6. If the department, on the basis of a sanitary survey, determines that some greater frequency of monitoring is more appropriate, that frequency shall be the frequency required under these regulations. This frequency shall be confirmed or changed on the basis of subsequent surveys.

7. Special purpose samples, such as those taken to determine whether disinfection practices are sufficient following pipe placement, replacement, or repair, shall not be used to determine compliance with the MCL for total coliforms in 41.2(1)"b." Repeat samples taken pursuant to 41.2(1)"c"(2) are not considered special purpose samples, and must be used to determine compliance with the MCL for total coliforms in 41.2(1)"b."

(2) Repeat total coliform monitoring.

1. Repeat sample time limit and numbers. If a routine sample is total coliform-positive, the public water supply system must collect a set of repeat samples within 24 hours of being notified of the positive result and in no case more than 24 hours after being notified by the department. A system which collects more than one routine sample per month must collect no fewer than three repeat samples for each total coliform-positive sample found. A system which collects one routine sample per month or fewer must collect no fewer than four repeat samples for each total coliform-positive sample found. The department may extend the 24-hour limit on a case-by-case basis if the system has a logistical problem in collecting the repeat samples within 24 hours that is beyond its control. In those cases, the public water supply system must report the circumstances to the department no later than the end of the next business day after receiving the notice to repeat sample and initiate the action directed by the department. In the case of an extension, the department will specify how much time the system has to collect the repeat samples.

2. Repeat sample location(s). The system must collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken, and at least one repeat sample at a tap within five service connections upstream and at least one repeat sample at a tap within five service connections downstream of the original sampling site. If a total coliform-positive sample is at the end of the distribution system, or at the first or last service connection, the system will be required to collect the repeat samples from the original sampling site and locations only upstream or downstream.

3. The system must collect all repeat samples on the same day, except that the department may allow a system with a single service connection to collect the required set of repeat samples over a four-day period. "System with a single service connection" means a system which supplies drinking water to consumers through a single service line.

4. Additional repeat sampling. If one or more repeat samples in the set is total coliform-positive, the public water supply system must collect an additional set of repeat samples in the manner specified in 41.2(1)"c"(2)"1" to 41.2(1)"c"(2)"3." The system must repeat this process until either total coliforms are not detected in one complete set of repeat samples or the system determines that the MCL for total coliforms in 41.2(1)"b" has been exceeded, notifies the department, and provides public notification to its users.

5. If a system collecting fewer than five routine samples per month has one or more total coliform-positive samples and the department does not invalidate the sample(s) under 41.2(1)*"c"*(3), it must collect at least five routine samples during the next month the system provides water to the public. For systems monitoring on a quarterly basis, the additional five routine samples may be required to be taken within the same quarter in which the original total coliform-positive occurred.

The department may waive the requirement to collect five routine samples the next month the system provides water to the public if the department has determined why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. In this case, the department must document this decision to waive the following month's additional monitoring requirement in writing, have it approved and signed by the supervisor of the water supply section and the department official who recommends such a decision, and make this document available to the EPA and public. The written documentation will generally be provided by the public water supply system in the form of a request and must describe the specific cause of the total coliform-positive sample and what action the system has taken to correct the problem. The department will not waive the requirement to collect five routine samples the next month the system provides water to the public solely on the grounds that all repeat samples are total coliform-negative. Under this paragraph, a system must still take at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with the MCL for total coliforms in 41.2(1)*"b."*

(3) Invalidation of total coliform samples. A total coliform-positive sample invalidated under this subparagraph does not count towards meeting the minimum monitoring requirements of 41.2(1)*"c."* The department may invalidate a total coliform-positive sample only if one or more of the following conditions are met.

1. The laboratory establishes that improper sample analysis caused the total coliform-positive result. A laboratory must invalidate a total coliform sample (unless total coliforms are detected, in which case, the sample is valid) if the sample produces a turbid culture in the absence of gas production using an analytical method where gas formation is examined (e.g., the multiple-tube fermentation technique), produces a turbid culture in the absense of an acid reaction in the presence-absence (P-A) coliform test, or exhibits confluent growth or produces colonies too numerous to count with an analytical method using a membrane filter (e.g., membrane filter technique). If a laboratory invalidates a sample because of such interference, the system must collect another sample from the same location as the original sample within 24 hours of being notified of the interference problem, and have it analyzed for the presence of total coliforms. The system must continue to resample within 24 hours and have the samples analyzed until it obtains a valid result. The department may waive the 24-hour time limit on a case-by-case basis.

2. The department, on the basis of the results of repeat samples collected as required by 41.2(1)*"c"*(2)"1" to "4," determines that the total coliform-positive sample resulted from a domestic or other nondistribution system plumbing problem. "Domestic or other nondistribution system plumbing problem" means a coliform contamination problem in a public water supply system with more than one service connection that is limited to the specific service connection from which the coliform-positive sample was taken. The department will not invalidate a sample on the basis of repeat sample results unless all repeat samples collected at the same tap as the original total coliform-positive sample are also total coliform-positive, and all repeat samples collected within five service connections of the original tap are total coliform-negative (e.g., the department will not invalidate a total coliform-positive sample on the basis of repeat samples if all the repeat samples are total coliform-negative, or if the public water supply system has only one service connection).

3. The department has substantial grounds to believe that a total coliform-positive result is due to a circumstance or condition which does not reflect water quality in the distribution system. In this case, the system must still collect all repeat samples required under 41.2(1)"*c*"(2)"1" to "4," and use them to determine compliance with the MCL for total coliforms in 41.2(1)"*b.*" To invalidate a total coliform-positive sample under this paragraph, the decision with the rationale for the decision must be documented in writing, and approved and signed by the supervisor of the water supply section and the department official who recommended the decision. The department must make this document available to EPA and the public. The written documentation generally provided by the public water supply system in the form of a request must state the specific cause of the total coliform-positive sample, and what action the system has taken to correct this problem. The department will not invalidate a total coliform-positive sample solely on the grounds of poor sampling technique or that all repeat samples are total coliform-negative.

(4) Fecal coliforms/*Escherichia coli (E. coli)* testing.

1. If any routine or repeat sample is total coliform-positive, the system must analyze that total coliform-positive culture medium to determine if fecal coliforms are present, except that the system may test for *E. coli* in lieu of fecal coliforms.

2. The department may allow a public water supply system, on a case-by-case basis, to forego fecal coliform or *E. coli* testing on a total coliform-positive sample if that system assumes that the total coliform-positive sample is fecal coliform-positive or *E. coli*-positive. Accordingly, the system must notify the department as specified in 41.2(1)"*c*"(5)"1" and meet the provisions of 567—41.5(455B) pertaining to public notification.

(5) Public water supply system's response to violation.

1. A public water supply system which has exceeded the MCL for total coliforms in 41.2(1)"*b*" must report the violation to the water supply section of the department by telephone no later than the end of the next business day after it learns of the violation, and notify the public in accordance with 41.5(2)"*a.*"

2. A public water supply system which has failed to comply with a coliform monitoring requirement must report the monitoring violation to the department within ten days after the system discovers the violation and notify the public in accordance with 41.5(2)"*b.*"

3. If fecal coliforms or *E. coli* are detected in a routine or repeat sample, the system must notify the department by telephone by the end of the day when the system is notified of the test result, unless the system is notified of the result after the department office is closed, in which case the system must notify the department before the end of the next business day.

d. Best available technology (BAT). The U.S. EPA identifies, and the department has adopted the following as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant level for total coliforms in 41.2(1)"*b.*"

(1) Protection of wells from contamination by coliforms by appropriate placement and construction;

(2) Maintenance of a disinfectant residual throughout the distribution system;

(3) Proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, and continual maintenance of a minimum positive water pressure of 20 psig in all parts of the distribution system; and

(4) Filtration or disinfection of surface water in accordance with 567—43.5(455B) or disinfection of groundwater using strong oxidants such as, but not limited to, chlorine, chlorine dioxide, or ozone.

e. Analytical methodology.

(1) The standard sample volume required for total coliform analysis, regardless of analytical method used, is 100 ml.

(2) Public water supply systems shall determine the presence or absence of total coliforms. A determination of total coliform density is not required.

(3) Total coliform analyses. Public water supply systems must conduct total coliform analyses in accordance with one of the following analytical methods:

1. Multiple-Tube Fermentation (MTF) Technique, as set forth in "Standard Methods," Method 9921, 9921A, and 9921B—pp. 9-66 to 9-75, except that 10 fermentation tubes must be used; or "Microbiological Methods for Monitoring the Environment, Water and Wastes," U.S. EPA, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA-600/8-78-017, December 1978, available from ORD Publications, CERI, U.S. EPA, Cincinnati, Ohio 45268), Part III, Section B.4.1–4.6.4, pp. 114–118 (Most Probable Number Method), except that 10 fermentation tubes must be used; or

2. Membrane Filter (MF) Technique, as set forth in "Standard Methods," Method 9222A, 9222B, and 9222C—pp. 9–82 to 9–93; or "Microbiological Methods for Monitoring the Environment, Water and Wastes," U.S. EPA, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA-600/8-78-017, December 1978, available from ORD Publications, CERI, U.S. EPA, Cincinnati, Ohio 45268), Part III, Section B. 2.1–2.6, pp. 108–112; or

3. Presence-Absence (P-A) Coliform Test, as set forth in "Standard Methods," Method 9921E—pp.9–80 to 9–82; or

4. Minimal Medium ONPG-MUG (MMO-MUG) Test, as set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Detection of Total Coliforms and *Escherichia coli* from Drinking Water: Comparison with Presence-Absence Techniques" (Edberg et al), Applied and Environmental Microbiology, Volume 55, pp. 1003-1008, April 1989. (Note: The MMO-MUG Test is sometimes referred to as the Autoanalysis Colilert System.)

(4) In lieu of the 10-tube MTF Technique specified in 41.2(1)*"e"*(3)"1," a public water supply system may use the MTF Technique using either five tubes (20-ml sample portions) or a single culture bottle containing the culture medium for the MTF Technique, i.e., lauryl tryptose broth (formulated as described in "Standard Methods," Method 9221B—p. 9–68), as long as a 100-ml water sample is used in the analysis.

(5) Fecal coliform analysis. Public water systems must conduct fecal coliform analysis in accordance with the following procedure. When the MTF technique of presence-absence (P-A) coliform test is used to test for total coliforms, shake the lactose-positive presumptive tube or P-A bottle vigorously and transfer the growth with a sterile 3-mm loop or sterile applicator stick into brilliant green lactose bile broth and EC medium to determine the presence of total and fecal coliforms, respectively. For EPA-approved analytical methods which use a membrane filter, remove the membrane containing the total coliform colonies from the substrate with sterile forceps and carefully curl and insert the membrane into a tube of EC medium. (The laboratory may first remove a small portion of selected colonies for verification). Gently shake the inoculated EC tubes to ensure adequate mixing and incubate in a waterbath at 44.5(±) 0.2°C for 24 (±) 2 hours. Gas production of any amount in the inner fermentation tube of the EC medium indicates a positive fecal coliform test. The preparation of EC medium is described in "Standard Methods," Method 9921C—p. 9–75, paragraph 1a. Public water supply systems need only determine the presence or absence of fecal coliforms; a determination of fecal coliform density is not required.

41.2(2) *Giardia.* Reserved.

41.2(3) *Heterotrophic plate count bacteria (HPC).*

a. Applicability. All public water systems that use a surface water source or a groundwater source under the direct influence of surface water must provide treatment consisting of disinfection, as specified in 43.5(2), and filtration treatment which complies with 43.5(3). The het-

erotrophic plate count is an alternate method to demonstrate a detectable disinfectant residual in accordance with 43.5(2)*"d."*

b. Maximum contaminant levels. Reserved.

c. Monitoring requirements. Reserved.

d. BAT. Reserved.

e. Analytical methodology. Public water systems shall conduct heterotrophic plate count bacteria analysis in accordance with 43.5(2) and the following analytical method. Measurements for heterotrophic plate count bacteria must be conducted by a laboratory certified by the department to do such analysis. Until laboratory certification criteria are developed for the analysis of heterotrophic plate count bacteria, any laboratory certified for total coliform analysis by the department is certified for heterotrophic plate count bacteria analysis. After certification criteria have been established, the laboratory shall meet the criteria at renewal of certification.

(1) The heterotrophic plate count shall be performed in accordance with Method 9215B (Pour Plate Method), pp. 9-58 to 9-61, as set forth in "Standard Methods."

(2) Reporting. The public water system shall report the results of heterotrophic plate count in accordance with 43.7(3)*"b."*

41.2(4) *Macroscopic organisms and algae.*

a. Applicability. These rules apply to both community and noncommunity public water supply systems using surface water or groundwater under direct influence of surface as defined by 43.5(1).

b. Maximum contaminant levels (MCL) for macroscopic organisms and algae. Finished water shall be free of any macroscopic organisms such as plankton, worms, or cysts. The finished water algal cell count shall not exceed 500 organisms per milliliter or 10 percent of the total cells found in the raw water, whichever is greater. Compliance with the maximum contaminant level for algal cells is calculated in accordance with 41.2(4)*"c."*

c. Monitoring requirements. Reserved.

d. BAT. Reserved.

e. Analytical methodology. Measurement of the algal cells shall be in accordance with method 10200F, "Standard Methods," pp. 10-23 to 10-28. Such measurement shall be required only when the department determines on the basis of complaints or otherwise that excessive algal cells are present.

567—41.3(455B) Maximum contaminant levels.

41.3(1) *Inorganic chemicals.*

a. The maximum contaminant level for nitrate is applicable to all public water supply systems except, at the department's discretion, a noncommunity water supply may be allowed to exceed the maximum contaminant level, up to twice the MCL, if all the following conditions are met:

(1) The supply does not make water available to infants less than six (6) months of age.

(2) The facility continuously posts a notice, or provides other public notification required by the department, indicating the maximum contaminant level has been exceeded, who may be affected and potential health effects resulting from exposure.

(3) The facility continues to comply with the special monitoring program required by the department.

(4) No adverse health effects shall result.

The levels for the other inorganic chemicals apply only to community water systems. Compliance with maximum contaminant levels for inorganic chemicals is calculated pursuant to 41.4(3).

b. The following are the maximum contaminant levels for inorganic chemicals:

Contaminant	Level milligrams per liter
Arsenic	0.05
Barium	1
Cadmium	0.010
Chromium	0.05
*Flouride	4.0
Lead	0.05
Mercury	0.002
Nitrate (as N)	10
**Nitrate (as NO_3)	45
Selenium	0.01
Silver	0.05

*The recommended fluoride level is 1.1 milligrams per liter. At this optimum level in drinking water fluoride has been shown to have beneficial effects in reducing the occurrence of tooth decay.

**Nitrate analytical results reported as 45 mg/l as NO_3 is equivalent to 10 mg/l as N.

41.3(2) *Organic chemicals.* The following are the maximum contaminant levels for organic chemicals.

a. Chlorinated hydrocarbons: The maximum contaminant levels apply to all community water systems. Compliance with the maximum contaminant levels is calculated pursuant to 41.4(4).

	Level in milligrams per liter
Endrin (1,2,3,4,10, 10-hexachloro-6, 7-epoxy-1,4, 4a,5,6,7,8,8a-octa-hydro-1,4-endo, endo-5,8-dimethano naphthalene).	0.0002
Lindane (1,2,3,4,5,6-hexachloro-cyclohexane, gamma isomer).	0.004
Methoxychlor (1,1,1-Trichloro-2, 2-bis [p-methoxyphenyl] ethane).	0.1
Toxaphene ($C_{10}H_{10}Cl_8$-Technical chlorinated camphene, 67-69 percent chlorine).	0.005

b. Chlorophenoxys: The maximum contaminant levels apply to all community water systems. Compliance with the maximum contaminant level is calculated pursuant to 41.4(4).

	Level in milligrams per liter
2,4-D (2,4-Dichlorophenoxyacetic acid).	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid).	0.01

	Level in milligrams per liter
c. Total trihalomethanes	0.10

The maximum contaminant level for total trihalomethanes applies to community water systems which serve a population of 10,000 or more individuals and which add a disinfectant (oxidant) to the water in any part of the treatment process. Compliance with the maximum contaminant level is calculated pursuant to 41.4(6). Total trihalomethanes is the sum of the concentrations of bromodichloromethane, dibromochloromethane, tribromomethane (bromoform) and trichloromethane (chloroform).

d. Synthetic organic chemicals. The maximum contaminant levels for synthetic organic chemicals (SOC) apply to community water systems and nontransient noncommunity water systems. Compliance with the maximum contaminant level is calculated pursuant to 41.4(5)*"i"*.

	Level in milligrams per liter
Benzene	0.005
Vinyl chloride	0.002
Carbon tetrachloride	0.005
1,2-Dichloroethane	0.005
Trichloroethylene	0.005
1,1-Dichloroethylene	0.007
1,1,1-Trichloroethane	0.20
para-Dichlorobenzene	0.075

41.3(3) *Turbidity.* The requirements in this subrule apply to public water supplies using surface water until June 29, 1993. The maximum contaminant levels for turbidity are applicable to both community water systems and noncommunity water systems using surface water sources in whole or in part. The maximum contaminant levels for turbidity in drinking water, measured at a representative entry point(s) to the distribution system, are:

a. One turbidity unit (TU), as determined by a monthly average pursuant to 41.4(2), except that five or fewer turbidity units may be allowed if the supplier of water can demonstrate to the department that the higher turbidity does not do any of the following:

(1) Interfere with disinfection;

(2) Prevent maintenance of an effective disinfectant agent throughout the distribution system; or

(3) Interfere with microbiological determinations.

b. Five turbidity units based on an average for no more than two consecutive days pursuant to 41.4(2).

41.3(4) *Microbiological organisms.* Rescinded, IAB 12/12/90.

41.3(5) ***Radium-226, radium-228, and gross alpha particle radioactivity in community water systems.*** The following are the maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity:

a. Combined radium-226 and radium-228—5 pCi/1.

b. Gross alpha particle activity (including radium-226 but excluding radon and uranium)—15 pCi/1.

41.3(6) ***Beta particle and photon radioactivity from man-made radionuclides in community water systems.***

a. The average annual concentration of beta particle and photon radioactivity from man-made radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year.

b. Except for the radionuclides listed in Table A, the concentration of man-made radionuclides causing 4 mrem total body or organ dose equivalents shall be calculated on the basis of a 2 liter per day drinking water intake using the 168 hour data listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," NBS Handbook 69 as amended August 1963, U.S. Department of Commerce. If two or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ shall not exceed 4 millirem/year.

TABLE A. — Average annual concentrations assumed to produce a total body or organ dose of 4 mrem/yr.

Radionuclide	Critical Organ	pCi per liter
Tritium	Total body	20,000
Strontium-90	Bone marrow	8

41.3(7) *Macroscopic organisms and algae.* Rescinded IAB 12/12/90.

567—41.4(455B) Sampling and analytical requirements.

41.4(1) *Microbiological contaminant sampling and analytical requirements.* Rescinded IAB 12/12/90.

41.4(2) *Turbidity sampling and analytical requirements.* The requirements in this subrule apply to public water supplies using surface water until June 29, 1993.

a. The requirements of this subrule shall apply only to public water supply systems which use water obtained in whole or in part from surface water sources.

b. A supplier of water serving a population or population equivalent of greater than 100,000 persons shall provide a continuous or rotating cycle turbidity monitoring and recording device or take hourly grab samples to determine compliance with 41.3(3).

c. For the purpose of making turbidity measurements to determine compliance with 41.3(3), samples shall be taken by the suppliers of water for both community water systems and noncommunity water systems at a representative entry point(s) to the water distribution system at least once per day, except under the following conditions:

(1) Systems required to be monitored under 41.4(2)*"b"*; or

(2) Noncommunity systems, upon approval by the department, may be permitted to reduce their sampling frequency if they can demonstrate that no risk to health will result and they are maintaining a continuous chlorine residual as specified in 41.14(2)*"a."*

All turbidity measurement shall be made by the nephelometric method in accordance with the recommendations set forth in "Standard Methods," pp. 132–134; or "Methods of Chemical Analysis of Water and Wastes," EPA Environmental Monitoring and Support Laboratory, March 1979, Method 180.1 — Nephelometric Method. Calibration of the turbidimeter shall be made either by the use of a formazin standard as specified in the cited reference or a styrene divinylbenzene polymer standard (Amco-AEPA-1 Polymer) commercially available from Amco Standards International, Inc., 230 Polaris Avenue, No. C, Mountain View, California 94043.

d. If the results (other than results monitored under 41.4(2)*"b"*) of a turbidity analysis indicate that the maximum allowable limit has been exceeded, the sampling and measurement shall be confirmed by resampling as soon as practicable and preferably within one hour. If the repeat sample confirms that the maximum allowable limit has been exceeded, the supplier of water shall report to the department within forty-eight hours. The repeat sample shall be the sample used for the purpose of calculating the monthly average. If the monthly average of the daily samples exceeds the maximum allowable limit, or if the average of two samples taken on consecutive days exceeds 5 TU, the supplier of water shall report to the department and notify the public as directed in 41.5(1) and 41.5(2).

41.4(3) *Inorganic chemical sampling and analytical requirements.*

a. Analyses for the purpose of determining compliance with 41.3(1) are required as follows:

(1) Analyses for all community water systems utilizing surface water sources shall be completed at yearly intervals.

(2) Analyses for all community water systems utilizing only ground water sources shall be completed at three-year intervals.

(3) For noncommunity water systems, whether supplied by surface or ground water sources, analyses for nitrate shall be completed at three-year intervals.

b. If the results of an analysis made pursuant to paragraph *"a"* indicate that the level of nitrate is greater than 5 mg/l as N, or 22 mg/l as NO_3, analyses shall be completed each calendar quarter until:

(1) The results of four consecutive quarterly analyses indicate that the maximum contaminant level has not been exceeded in any sample; and

(2) The average nitrate level as determined by four consecutive quarterly samples does not exceed 5 mg/l as N, or 22 mg/l as NO_3.

c. If the result of an analysis made pursuant to paragraph *"a"* indicates that the level of any contaminant listed in 41.3(1), with the exception of nitrate, exceeds the maximum contaminant level, the supplier of water shall initiate three additional analyses at the same sampling point within one month. The original and the three rechecks will then be used to determine compliance pursuant to paragraph *"d."* If the result of an analysis made pursuant to paragraph *"a"* indicates the nitrate maximum contaminant level has been exceeded, a second analysis shall be initiated within twenty-four hours after receipt of the recheck container.

d. When the average of the analyses made pursuant to paragraph *"c,"* rounded to the same number of significant figures as the maximum contaminant level for the substance in question, exceeds the maximum contaminant level, the supplier of water shall give notice to the public pursuant to 41.5(2). Monitoring after public notification shall be at a frequency designated by the department and shall continue until the maximum contaminant level has not been exceeded in two successive samples or until a monitoring schedule as a condition to an operation permit or enforcement action shall become effective.

e. Analyses conducted to determine compliance with 41.3(1) shall be made in accordance with the following methods:

(1) Arsenic — Method[1] 206.2, Atomic Absorption Furnace Technique; or Method[1] 206.3, or Method[4] D-2972-78A, or Method 301.A VII, pp. 159–162, or Method[3] I-1062-78, pp. 62–63, Atomic Absorption — Gaseous Hydride; or Method[1] 206.4, or Method[4] D-2972-78A, or Method[2] 404-A and 404-B(4), Spectrophotometric, Silver Diethyldithiocarbonate.

(2) Barium — Method[1] 208.1, or Method[2] 301-A IV, pp. 152–155, Atomic Absorption — Direct Aspiration; or Method[1] 208.2, Atomic Absorption Furnace Technique.

(3) Cadmium — Method[1] 213.1, or Method[4] 3447-78A or B, or Method[2] 301-A II or III, pp. 148–152, Atomic Absorption — Direct Aspiration; or Method[1] 213.2, Atomic Absorption Furnace Technique.

(4) Chromium — Method[1] 218.1, or Method[4] D-1687-77D, or Method 301.A II or III, pp. 148–152, Atomic Absorption — Direct Aspiration; or Chromium — Method[1] 218.2, Atomic Absorption Furnace Technique.

(5) Fluoride — Electrode Method, or SPADNS Method, Method 414-B and C, pp. 391–394, or Method[1] 340.1, "Colorimetric SPADNS with Bellack Distillation," or Method[1] 340.2, "Potentimetric Ion Selective Electrode"; or ASTM Method[4] D-1179-72; Method[2] 603, Automated Complexone Method (Alizarin Fluoride Blue) pp. 614–616; or Automated Electrode Method, "Fluoride in Water and Wastewater," Industrial Method #380-75WE, Technicon Industrial Systems, Tarrytown, New York 10591, February 1976, or "Fluoride in Water and Wastewater Industrial Method #129-71W," Technicon Industrial Systems, Tarrytown, New York 10591, December 1972; or Fluoride, total Colorimetric, Zirconium — Eriochrome Cyanine R Method[3] — I-3325-78, pp. 365–367.

(6) Lead — Method[1] 239.1, or Method[4] D-3559-78A or B, or Method[2] 301-A II or III, pp. 148–152, Atomic Absorption — Direct Aspiration; or Method[1] 239.2, Atomic Absorption Furnace Technique.

(7) Mercury — Method[1] 245.1, or Method[4] D-3223-79, or Method[2] 301-A VI, pp. 156–159, Manual Cold Vapor Technique; or Method[1] 245.2, Automated Cold Vapor Technique.

(8) Nitrate — Method[1] 352.1, or Method[4] D-992-71, or Method[2] 419-D, pp. 427–429, Brucine Colorimetric Brucine; or Method 353.3, or Method[4] D-3867-79B, or Method[2] 419-C, pp. 423–427, Spectrometric, Cadmium Reduction; Method[1] 353.1, Automated Hydrazine Reduction; or Method[1] 353.2, or Method[4] D-3867-79A, or Method[2] 605, pp. 620–624, Automated Cadmium Reduction.

(9) Selenium — Method[1] 270.2, Atomic Absorption Technique; or Method[1] 270.3, or Method[3] I-1667-78, pp. 237-239, or Method[4] D-3859-79, or Method[2] 301-A VII, pp. 159-162, Hydride Generation — Atomic Absorption Spectrophotometry.

(10) Silver — Method[1] 272.1, or Method[2] 301-A II, Atomic Absorption, p. 146 — Direct Aspiration; or Method[1] 272.2, Atomic Absorption Techniques Furnace Technique.

[1]"Methods of Chemical Analysis of Water and Wastes," EPA Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA — 600/4-79-020), March 1979. Available from ORD Publications, CERI, EPA, Cincinnati, Ohio 45268. For approved analytical procedures for metals, the technique applicable to total metals must be used.

[2]"Standard Methods."

[3]"Techniques of Water — Resources Investigation of the United States Geological Survey, Chapter A-1," "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," Book 5, 1979, Stock #024-001-03177-9. Available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

[4]"Annual Book of ASTM Standards," Part 31, Water, American Society for Testing and Materials, 1976, Race Street, Philadelphia, Pennsylvania, 19103.

f. Fluoride. In addition to complying with paragraphs *"a"* through *"e"* of this subrule, systems monitoring for fluoride must comply with the requirements of this paragraph.

(1) Where the system draws water from more than one source, the system must sample each source at the entry points to the distribution system.

(2) If the system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods representative of the maximum fluoride levels occurring under normal operation conditions.

(3) The department may alter the frequencies for fluoride monitoring as set out in paragraph *"a"* of this subrule. Any increase or decrease in monitoring under this subparagraph will be designated in an operation permit or administrative order. To increase or decrease such frequency, consider the following factors:

1. Reported concentrations from previously required monitoring,
2. The degree of variation in reported concentrations,
3. Blending or treatment processes conducted for the purpose of complying with the MCL, and
4. Other factors which may affect fluoride concentrations include changes in pumping rates in groundwater supplies or significant changes in the system's configuration, operating procedures, source of water and changes in stream flows.

(4) Monitoring may be decreased from the frequencies specified in paragraph *"a"* of this subrule upon application in writing by water systems, if the state determines the system is unlikely to exceed the MCL, considering the factors listed in subparagraph (3) of paragraph *"f"* of this subrule. This determination shall be in writing and set forth the basis for the determination. In no case shall monitoring be reduced to less than one sample every ten years. For systems monitoring once every ten years, the state shall review the monitoring results every ten years to determine whether more frequent monitoring is necessary.

(5) Effective October 2, 1987, analysis for fluoride under this subrule shall only be used for determining compliance if conducted by a certified laboratory as prescribed in 41.4(13) that has analyzed Performance Evaluation samples to within ±10 percent of the reference value at fluoride concentrations from 1.0 mg/1 to 10.0 mg/1 within the last 12 months.

(6) Compliance with the MCL shall be determined based on each sampling point. If any sampling point is determined to be out of compliance, the system is deemed to be out of compliance.

41.4(4) *Organic chemical other than trihalomethane sampling and analytical requirements.*

a. An analysis of substances for the purpose of determining compliance with 41.3(2)*"a"* and *"b"* shall be made as follows:

(1) For all community water systems utilizing surface water sources, samples analyzed shall be collected during the period of the year designated by the department as the period when contamination by pesticides is most likely to occur. These analyses shall be repeated at intervals specified by the department but in no event less frequently than at three-year intervals.

(2) For community water systems utilizing only ground water sources, analyses may be required for those systems specified by the department at a frequency specified by the department.

b. If the result of an analysis made pursuant to paragraph *"a"* indicates that the level of any contaminant listed in 41.3(2)*"a"* and *"b"* exceeds the maximum contaminant level, the supplier of water shall initiate three additional analyses within one month.

c. When the average of four analyses made pursuant to paragraph *"b,"* rounded to the same number of significant figures as the maximum contaminant level for the substance in question, exceeds the maximum contaminant level, the supplier of water shall give notice to the public pursuant to 41.5(2). Monitoring after public notification shall be at a frequency designated by the department and shall continue until the maximum contaminant level has not been exceeded in two successive samples or until a monitoring schedule as a condition to an operation permit or enforcement action shall become effective.

d. Analyses made to determine compliance with 41.3(2)*"a"* shall be made in accordance with "Methods for Organochlorine Pesticides and Chlorophenoxy Acid Herbicides in Drinking Water and Raw Source Water," available from ORD Publications, CERI, EPA, Cincinnati, Ohio 45268; or "Organochlorine Pesticides in Water," 1977 Annual Book of ASTM Standards, Part 31, Water, Method D-3088; or Method 509-A, pp. 555-565[2]; or Gas Chromatographic Methods for Analysis of Organic Substances in Water[5], USGS, Book 5, Chapter 4-3, pp. 24-39.

e. Analyses made to determine compliance with 41.3(2)*"b"* shall be conducted in accordance with "Methods for Organochlorine Pesticides and Chlorophenoxy Acid Herbicides in Drinking Water and Raw Source Water," available from ORD Publications, CERI, EPA, Cincinnati, Ohio 45268; or "Chlorinated Phenoxy Acid Herbicides in Water," 1977 Annual Book of ASTM Standards, Part 31, Method D-3478; or Method 509-B, pp. 555-569[2]; or Gas Chromatographic Methods for Analysis of Organic Substances in Water[5], USGS, Book 5

[2]"Standard Methods."

[5]"Techniques of Water — Resources Investigation of the United States Geological Survey, Chapter A-3," Methods for Analysis of Organic Substances in Water, Book 5, 1972, Stock #2401-1227. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

41.4(5) Analysis of the contaminants listed in 41.3(2)*"d"* for purposes of determining compliance with the maximum contaminant levels shall be conducted as follows:

a. Groundwater systems shall sample at points of entry to the distribution system representative of each well after any application of treatment. Sampling must be conducted at the same location(s) or more representative location(s) every three months for one year except as provided in subparagraph *"h"*(1) of this subrule.

b. Surface water systems shall sample at points in the distribution system representative of each source or at entry points to the distribution system after any application of treatment every three months except as provided in subparagraph *"h"*(2) of this subrule. Sampling must be conducted at the same location or a more representative location each quarter.

c. If the system draws water from more than one source and sources are combined before distribution, the system must sample at the entry point to the distribution system. The sample must be collected during periods of normal operating conditions.

d. All community water systems and nontransient noncommunity water systems serving more than 10,000 people shall analyze all distribution or entry-point samples, as appropriate, representing all source waters beginning no later than 45 days after the effective date of these rules [September 14, 1988]. All community water systems and nontransient noncommunity water systems serving from 3,300 to 10,000 people shall analyze all distribution or entry-point samples, as required in this subparagraph during the calendar quarter that begins January 1, 1989. All other community and nontransient noncommunity water systems shall analyze distribution or entry-point samples, as required in this paragraph, during the calendar quarter that begins January 1, 1991.

e. The department may require confirmation samples for positive or negative results. If a confirmation sample(s) is required by the department, then the sample result(s) shall be averaged with the first sampling result and used for compliance determination in accordance with paragraph *"i"* of this subrule. The department has the discretion to delete results of sampling errors from this calculation.

f. Analysis for vinyl chloride is required for groundwater systems and surface water systems that have detected one or more of the following two-carbon organic compounds: trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichlorethylene, trans-1,2-dichloroethylene or 1,1-dichloroethlyene. The analysis for vinyl chloride is required at each entry point to the distribution system at which one or more of the two-carbon organic compounds were found. If the first analysis does not detect vinyl chloride, the department may reduce the frequency of vinyl chloride monitoring to once every three years for that sample location or other sample locations which are more representative of the same source.

g. Upon request, the department may allow public water supply systems to composite up to five samples from one or more sources. Compositing of samples is to be done in the laboratory by the procedures listed below. Samples must be analyzed within 14 days of collection. If any organic contaminant listed in 41.3(2)*"d"* is detected in the original composite sample, a sample from each source that made up the composite sample must be reanalyzed individually within 14 days from sampling. The sample for reanalysis cannot be the original sample, but can be a duplicate sample. If duplicates of the original samples are not available, new samples must be taken from each source used in the original composite and analyzed for the SOCs specified in 41.3(2)*"d."* Reanalysis must be accomplished within 14 days of the second sample. To composite samples, the following procedure must be followed:

(1) Compositing samples prior to gas chromatograph analysis.

Add 5 ml or equal larger amounts of each sample (up to five samples are allowed) to a 25-ml glass syringe. Special precautions must be made to maintain zero headspace in the syringe.

The samples must be cooled at 4° C. during this step to minimize volatilization losses.

Mix well and draw out a 5-ml aliquot for analysis.

Follow sample introduction, purging, and desorption steps described in the method.

If less than five samples are used for compositing, a proportionately smaller syringe may be used.

(2) Compositing samples prior to gas chromatograph/mass spectrometric analysis.

Inject 5 ml or equal larger amounts of each aqueous sample (up to five samples are allowed) into a 25-ml purging device using the sample introduction technique described in the method.

The total volume of the sample in the purging device must be 25 ml.

Purge and desorb as described in the method.

h. The department may reduce the monitoring frequency specified in paragraphs *"a"* and *"b"* of this subrule.

(1) The monitoring frequency for groundwater systems is as follows:

When SOCs are not detected in the first sample (or any subsequent samples that may be taken) and the system is not vulnerable as defined in subparagraph *"h"*(4) of this subrule, monitoring may be reduced to one sample and must be repeated every five years.

When SOCs are not detected in the first sample (or any subsequent sample that may be taken) and the system is vulnerable as defined in subparagraph *"h"*(4) of this subrule,

Monitoring (i.e., one sample) must be repeated every three years for systems with greater than 500 service connections; and

Monitoring (i.e., one sample) must be repeated every five years for systems with less than 501 service connections.

If SOCs are detected in the first sample (or any subsequent sample that may be taken), regardless of vulnerability, monitoring must be repeated every three months, as required under paragraph *"a"* of this subrule.

(2) The repeat monitoring frequency for surface water systems is as follows:

When SOCs are not detected in the first year of quarterly sampling (or any other subsequent sample that may be taken) and the system is not vulnerable as defined in subparagraph *"h"*(4), monitoring is required every five years.

When SOCs are not detected in the first year of quarterly sampling (or any other subsequent sample that may be taken) and the system is vulnerable as defined in subparagraph *"h"*(4) of this subrule,

Monitoring must be repeated every three years for systems with greater than 500 service connections; and

Monitoring must be repeated every five years for systems with less than 501 service connections.

When SOCs are detected in the first year of quarterly sampling (or any other subsequent sample that may be taken), regardless of vulnerability, monitoring must be repeated every three months, as required under paragraph *"b"* of this subrule.

(3) The department may reduce the frequency of monitoring to once per year for a groundwater system or surface water system detecting SOCs at levels consistently less than the MCL for three consecutive years.

(4) Vulnerability of each public water system shall be determined by the department based upon an assessment of the following factors.

Previous monitoring results. A system will be classified vulnerable if any sample was analyzed to contain one or more contaminants listed in 41.3(2)*"d"* or 41.4(7)*"e"* except for trihalomethanes or other demonstrated disinfection by-products.

Proximity of surface water supplies to commercial or industrial use, disposal or storage of volatile synthetic organic chemicals. Surface waters which withdraw water directly from reservoirs are considered vulnerable if the drainage basin upgradient and within two miles of the shoreline at the maximum water level contains major transportation facilities such as primary highways or railroads or any of the contaminant sources listed in this subparagraph. Surface water supplies which withdraw water directly from flowing water courses are considered vulnerable if the drainage basin upgradient and within two miles of the water intake structure contains major transportation facilities such as primary highways or railroads or any of the contaminant sources listed in this subparagraph.

Proximity of groundwater supplies to commercial or industrial use, disposal or storage of volatile synthetic organic chemicals. Wells that are not separated from sources of contamination by at least the following distances will be considered vulnerable.

Sources Of Contamination	Shallow Wells as defined in 40.2(455B)	Deep Wells as defined in 40.2(455B)
Sanitary and industrial point discharges	400 ft.	400 ft.
Mechanical waste treatment plants	400 ft.	200 ft.
Lagoons	1,000 ft.	400 ft.
Chemical & mineral storage (above ground)	200 ft.	100 ft.
Chemical & mineral storage including underground storage tanks on or below ground	400 ft.	200 ft.
Solid waste disposal site	1,000 ft.	1,000 ft.

(5) A system is deemed to be vulnerable for a period of three years after any positive measurement of one or more contaminants listed in 41.3(2)*"d"* or 41.4(7)*"e"* or *"j"* except for trihalomethanes or other demonstrated disinfection by-products.

i. Compliance with 41.3(2)*"d"* shall be determined based on the results of running annual average of quarterly sampling for each sampling location. If one location's average is greater than the MCL, then the system shall be deemed to be out of compliance. If a public water system has a distribution system separable from other parts of the distribution system with no interconnections, only that part of the system that exceeds any MCL as specified in 41.3(2)*"d"* will be deemed out of compliance. The department may reduce the public notice requirement to that portion of the system which is out of compliance. If any one sample result would cause the annual average to be exceeded, then the system shall be deemed to be out of compliance immediately. For systems that only take one sample per location because no SOCs were detected, compliance shall be based on that one sample.

j. Analysis under this paragraph shall be conducted using the following approved methods or their equivalent as approved by the department. These methods are contained in "Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water," September 1966, available from Environmental Monitoring and Support Laboratory (EMSL), EPA, Cincinnati, Ohio 45268 or the department.

(1) Method 502.1, "Volatile Halogenated Organic Chemicals in Water by Purge and Trap Gas Chromatography."

(2) Method 503.1, "Volatile Aromatic and Unsaturated Organic Compounds in Water by Purge and Trap Gas Chromatography."

(3) Method 524.1, "Volatile Organic Compounds in Water by Purge and Trap Gas Chromatography/Mass Spectrometry."

(4) Method 524.2, "Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography/Mass Spectrometry."

(5) Method 502.2, "Volatile Organic Compounds in Water by Purge and Trap Capillary Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series."

k. Analysis under this subrule shall only be conducted by laboratories that have received conditional approval by the department according to the following conditions:

(1) To receive conditional approval to conduct analyses for benzene, vinyl chloride, carbon tetrachloride, 1,2-dichloroethane, trichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, and paradichlorobenzene the laboratory must:

Analyze performance evaluation samples which include these substances provided by EPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the department.

Achieve the quantitative acceptance limits under this subparagraph for at least six of the seven subject organic chemicals.

Achieve quantitative results on the analyses performed under this subparagraph that are within ±20 percent of the actual amount of the substances in the performance evaluation sample when the actual amount is greater than or equal to 0.010 mg/l.

Achieve quantitative results on the analyses performed under this subparagraph that are within ±40 percent of the actual amount of the substances in the performance evaluation sample when the actual amount is less than 0.010 mg/l.

Achieve a method detection limit of 0.0005 mg/l, according to the procedures in 40 CFR, Appendix B of Part 136, June 30, 1986.

Be currently approved by the department for the analyses of trihalomethanes under 41.4(6).

(2) To receive conditional approval for vinyl chloride, the laboratory must:

Analyze performance evaluation samples provided by EPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the department.

Achieve quantitative results on the analyses performed under this subparagraph that are within ±40 percent of the actual amount of vinyl chloride in the performance evaluation sample.

Achieve a method detection limit of 0.0005 mg/l, according to the procedures in 40 CFR, Appendix B of Part 136, June 30, 1986.

Receive approval or be currently approved by the department under subparagraph *"k"*(1) of this subrule.

l. The department may allow the use of monitoring data collected after January 1, 1983, for purposes of monitoring compliance. If the data is consistent with the other requirements in this paragraph, the department may use that data to represent the initial monitoring if the system is determined by the department not to be vulnerable under the requirements of this subrule. In addition, the results of the U.S. Environmental Protection Agency's Groundwater Supply Survey can be used in a similar manner for systems supplied by a single well.

m. The department may increase required monitoring where necessary to detect variations within the system.

n. The department may determine compliance or initiate enforcement action based upon analytical results and other information compiled by their sanctioned representatives and agencies.

o. Each approved laboratory must determine the method detection limit (MDL), as defined in 40 CFR, Appendix B of Part 136, June 30, 1986, at which it is capable of detecting SOCs. The acceptable MDL is 0.0005 mg/l. This concentration is the detection level for purposes of paragraphs *"e," "f," "g"* and *"h"* of this subrule.

41.4(6) *Total trihalomethanes sampling, analytical and other requirements.*

a. Community water systems which serve a population of 10,000 or more individuals and which add disinfectant (oxidant) to the water in any part of the drinking water treatment process shall analyze for total trihalomethanes in accordance with this subrule. For the purpose of this subrule, samples to be taken by the system shall be based on the number of treatment plants used by the system, except that multiple wells drawing water from a single aquifer may, with approval of the department, be considered as one treatment plant for determining the minimum number of samples. All samples required within a calendar quarter shall be collected within a 24-hour period.

b. General sampling requirements.

(1) For all community water systems utilizing surface water sources in whole or in part, and for all community water systems utilizing only ground-water sources that have not been determined by the department to qualify for the monitoring requirements of paragraph "*c*" of this subrule, analyses for total trihalomethanes shall be performed at quarterly intervals on at least four water samples for each treatment plant used by the system. At least 25 percent of the samples shall be taken at locations within the distribution system reflecting the maximum residence time of the water in the system. The remaining 75 percent shall be taken at representative locations in the distribution system, taking into account number of persons served, different sources of water and different treatment methods employed. The results of all analyses per quarter shall be arithmetically averaged. All samples collected shall be used in the computation of the average, unless the analytical results are invalidated for technical reasons. Sampling and analyses shall be conducted in accordance with the methods listed in paragraph "*e*" of this subrule.

(2) The department may allow a community water system to reduce the monitoring frequency required by 41.4(6)"*b*"(1) to a minimum of one sample analyzed for TTHMs per quarter taken at a point in the distribution system reflecting the maximum residence time of the water in the system, upon a determination by the department that the data from at least one year of monitoring in accordance with 41.4(6)"*b*"(1) and local conditions demonstrate that total trihalomethane concentrations will be consistently below the maximum contaminant level.

(3) If at any time during which the reduced monitoring frequency prescribed under 41.4(6)"*b*"(2) applies, the results from any analysis exceed 0.10 mg/l of TTHMs and such results are confirmed by at least one check sample taken promptly after such results are received, or if the system makes any significant change to its source of water or treatment program, the system shall immediately begin monitoring in accordance with the requirements of 41.4(6)"*b*"(1) which monitoring shall continue for at least one year before the frequency may be reduced again. The department may increase a system's monitoring frequency above the minimum in those cases where the department determines it is necessary to detect variations of TTHM levels within the distribution system.

c. Groundwater sampling requirements.

(1) The department may allow a community water system utilizing only groundwater sources to reduce the monitoring frequency required by 41.4(6)"*b*"(1) to a minimum of one sample for maximum TTHM potential per year for each treatment plant used by the system taken at a point in the distribution system reflecting maximum residence time of the water in the system. The system's monitoring frequency may only be reduced upon a determination by the department that, based upon the data submitted by the system, the system has a maximum

TTHM potential of less than 0.10 mg/l and that, based upon an assessment of the local conditions of the system, the system is not likely to approach or exceed the maximum contaminant level for TTHMs. All samples collected shall be used for determining whether the system must comply with the monitoring requirements of 41.4(6)*"b,"* unless the analytical results are invalidated for technical reasons. Sampling and analyses shall be conducted in accordance with the methods listed in 41.4(6)*"e."*

(2) If at any time during which the reduced monitoring frequency prescribed under 41.4(6)*"c"*(1) applies, the results from any analysis taken by the system for the maximum TTHM potential are equal to or greater than 0.10 mg/l, and such results are confirmed by at least one check sample taken promptly after such results are received, the system shall immediately begin monitoring in accordance with the requirements of 41.4(6)*"b,"* and such monitoring shall continue for at least one year before the frequency may be reduced again. In the event of any significant change to the system's raw water or treatment program, the system shall immediately analyze an additional sample for maximum TTHM potential taken at a point in the distribution system reflecting maximum residence time of the water in the system for the purpose of determining whether the system must comply with the monitoring requirements of 41.4(6)*"b."* The department may increase monitoring frequencies above the minimum in those cases where the department determines it is necessary to detect variation of TTHM levels within the distribution system.

d. Compliance with 41.3(2)*"c"* shall be determined based on a running annual average of quarterly samples collected by the system as prescribed in 41.4(6)*"b"*(1) or 41.4(6)*"b"*(2). If the average of samples covering any twelve-month period exceeds the maximum contaminant level, the supplier of water shall notify the public pursuant to 41.5(2). Monitoring after public notification shall be at a frequency designated by the department and shall continue until a monitoring schedule as a condition to an operation permit or enforcement action shall become effective.

e. Sampling and analyses made pursuant to this subrule shall be conducted by one of the following approved methods:

(1) "The Analysis of Trihalomethanes in Finished Waters by the Purge and Trap Method," Method 501.1, EMSL, EPA, Cincinnati, Ohio.

(2) "The Analysis of Trihalomethanes in Drinking Water by Liquid/Liquid Extraction," Method 501.2, EMSL, EPA, Cincinnati, Ohio.

Samples for TTHM shall be dechlorinated upon collection to prevent further production of trihalomethanes, according to the procedures described in the above two methods. Samples for maximum TTHM potential should not be dechlorinated, and should be held for seven days at 25°C prior to analysis, according to the procedures described in the above two methods.

f. Before a community water system makes any modifications to its existing treatment process for the purposes of achieving compliance with 41.3(2)*"c,"* such system must submit and obtain department approval of a plan setting forth its proposed modification and any safeguards that it will implement to ensure that the bacteriological quality of the drinking water served by such system will not be adversely affected by such modification.

Each system shall comply with the provisions set forth in the department approved plan. At a minimum, a department approved plan shall require any system modifying its disinfection practice to:

(1) Evaluate the water system for sanitary defects and evaluate the source for biological quality;

(2) Evaluate its existing treatment practices and consider improvements that will minimize disinfectant demand and optimize finished water quality throughout the distribution system;

(3) Provide baseline water quality survey data of the distribution system required by the department;

(4) Conduct any additional monitoring determined by the department to be necessary to assure continued maintenance of optimal biological quality in the finished water;

(5) Demonstrate an active disinfectant residual throughout the distribution system at all times during and after the modification.

Before a community water system makes any modifications to its existing physical treatment plant for the purpose of achieving compliance with 41.3(2)*"c,"* such system must obtain department approval in conformance with 41.12(455B).

41.4(7) *Special monitoring for organic chemicals.*

a. All community and nontransient noncommunity water systems shall monitor for the contaminants listed in paragraph *"e"* in this subrule by the date specified below:

Number of Persons Served	Monitoring to begin no later than
Over 10,000	Oct. 29, 1988
3,300 to 10,000	Jan. 1, 1989
Less than 3,300	Jan. 1, 1991

b. Surface water systems shall sample at points in the distribution system representative of each water source or at entry points to the distribution system after any application of treatment. The minimum number of samples is one year of quarterly samples per water source.

c. Groundwater systems shall sample at points of entry to the distribution system representative of each well after any application of treatment. The minimum number of samples is one sample per entry point of the distribution system.

d. The department may require confirmation samples for positive or negative results.

e. Community water systems and nontransient noncommunity water systems shall monitor for the following contaminants except as provided in paragraph *"f"* of this subrule.

(1) Chloroform
(2) Bromodichloromethane
(3) Chlorodibromomethane
(4) Bromoform
(5) trans-1,2-Dichloroethylene
(6) Chlorobenzene
(7) m-Dichlorobenzene
(8) Dichloromethane
(9) cis-1,2-Dichloroethylene
(10) o-Dichlorobenzene
(11) Dibromomethane
(12) 1,1-Dichloropropene
(13) Tetrachloroethylene
(14) Toluene
(15) p-Xylene
(16) o-Xylene
(17) m-Xylene
(18) 1,1-Dichloroethane
(19) 1,2-Dichloropropane
(20) 1,1,2,2-Tetrachloroethane
(21) Ethylbenzene
(22) 1,3-Dichloropropane
(23) Styrene
(24) Chloromethane
(25) Bromomethane
(26) 1,2,3-Trichloropropane
(27) 1,1,1,2-Tetrachloroethane
(28) Chloroethane

(29) 1,1,2-Trichloroethane
(30) 2,2-Dichloropropane
(31) o-Chlorotoluene
(32) p-Chlorotoluene
(33) Bromobenzene
(34) 1,3-Dichloropropene
(35) Ethylene dibromide (EDB)
(36) 1,2-Dibromo-3-chloropropane (DBCP)

f. Community water systems and nontransient noncommunity water systems must monitor for ethylene dibromide (EDB) and 1,2-Dibromo-3-chloropropane (DBCP) only if the department determines they are vulnerable to contamination by either or both of these substances. For the purpose of this paragraph, a vulnerable system is defined as a system which is potentially contaminated by EDB and DBCP, including surface water systems where these two compounds are applied, manufactured, stored, disposed of, or shipped upstream, and for groundwater systems in areas where the compounds are applied, manufactured, stored, disposed of, or shipped in the groundwater recharge basin, or for groundwater systems, shallow wells as defined in 40.2(455B) that are less than 400 feet and deep wells as defined in 40.2(455B) that are less than 200 feet from underground storage tanks that contain leaded gasoline.

g. Analysis under this subrule shall be conducted using the recommended methods as follows, or their equivalent as determined by the department: 502.1, "Volatile Halogenated Organic Compounds in Water by Purge and Trap Gas Chromatography," 503.1, "Volatile Aromatic and Unsaturated Organic Compounds in Water by Purge and Trap Gas Chromatography," 524.1, "Volatile Organic Compounds in Water by Purge and Trap Gas Chromatography/Mass Spectrometry," 524.2, "Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography/Mass Spectrometry, or 502.2, "Volatile Organic Compounds in Water by Purge and Trap Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series." These methods are contained in "Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water," September 1986, available from Environmental Monitoring and Support Laboratory (EMSL), EPA, Cincinnati, Ohio 45268. Analysis of 1,2-Dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (ECB) shall be conducted by Method 504, "Measurement of 1,2-Dibromoethane (EDB) and 1,2-Dibromo-3-chloropropane (DBCP) in Drinking Water by Microextraction and Gas Chromatography," September 1986, available from EMSL, Cincinnati, Ohio 45268.

h. Analysis under this subrule shall only be conducted by laboratories approved under 41.4(5)*"k."* In addition to the requirements of 41.4(5)*"k,"* each laboratory analyzing for ethylene dibromide (EDB) and 1,2-Dibromo-3-chloropropane (DBCP) must achieve a method detection limit for EDB and DBCP of 0.00002 mg/l, according to the procedures in 40 CFR Appendix B of part 136, June 20, 1986.

i. Public water supply systems may use monitoring data collected anytime after January 1, 1983, to meet the requirements for unregulated monitoring, provided that the monitoring program was consistent with the requirements of this subrule. In addition, the results of EPA's Ground Water Supply Survey may be used in a similar manner for systems supplied by a single well.

j. Monitoring for the following compounds is required at the discretion of the department.
(1) 1,2,4-Trimethylbenzene
(2) 1,2,4-Trichlorobenzene
(3) 1,2,3-Trichlorobenzene
(4) n-Propylbenzene
(5) n-Butylbenzene
(6) Naphthalene
(7) Hexachlorobutadiene
(8) 1,3,5-Trimethylbenzene
(9) p-Isopropyltoluene
(10) Isopropylbenzene

(11) Tert-butylbenzene
(12) Sec-butylbenzene
(13) Fluorotrichloromethane
(14) Dichlorodifluoromethane
(15) Bromochloromethane

k. Instead of performing the monitoring required by this subrule, a community water system or nontransient noncommunity water system serving fewer than 150 service connections may send a letter to the department stating that its system is available for sampling. The letter must be sent to the state no later than January 1, 1991. The system shall not send such samples to the department, unless requested to do so by the department. All community and nontransient noncommunity water systems shall repeat the monitoring required in this subrule no less frequently than every five years from the dates specified in 41.4(7)*"a."*

l. The department or the public water supply systems may composite up to five samples when monitoring for the substances in 41.4(7)*"e"* or *"j."*

41.4(8) *Analytical methods for radioactivity.*

a. The methods specified in Interim Radiochemical Methodology for Drinking Water, Environmental Monitoring and Support Laboratory, EPA-600/4-75-008, USEPA, Cincinnati, Ohio 45268, or those listed below, are to be used to determine compliance with 41.3(5) and 41.3(6) (radioactivity) except in cases where alternative methods have been approved in accordance with 41.4(11).

(1) Gross alpha and beta—Method 703, "Gross Alpha and Beta Radioactivity in Water", "Standard Methods".
(2) Total Radium—Method 705, "Radium in Water by Precipitation", *Ibid.*
(3) Radium-226—Method 706, "Radium-226 by Radon in Water", *Ibid.*
(4) Strontium-89,90—Method 704, "Total Strontium and Strontium-90 in Water", *Ibid.*
(5) Tritium—Method 707, "Tritium in Water", *Ibid.*
(6) Cesium-134—ASTM D-2459, "Gamma Spectrometry in Water", 1975 Annual Book of ASTM Standards, Water and Atmospheric Analysis, Part 31, American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103 (1975).
(7) Uranium—ASTM D-2907, "Microquantities of Uranium in Water by Fluorometry", *Ibid.*

b. When the identification and measurement of radionuclides other than those listed in paragraph *"a"* is required, the following references are to be used, except in cases where alternative methods have been approved in accordance with 41.4(11).

(1) "Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solutions", H. L. Krieger and S. Gold, EPA-R4-73-014, Environmental Protection Agency, Cincinnati, Ohio 45268 (May, 1973).
(2) "HASL Procedure Manual", edited by John H. Harley. HASL 300, ERDA Health and Safety Laboratory, New York, N.Y. (1973).

c. For the purpose of monitoring radioactivity concentration in drinking water, the required sensitivity of the radioanalysis is defined in terms of a detection limit. The detection limit shall be that concentration which can be counted with a precision of plus or minus 100 percent at the 95 percent confidence level (1.96 o where o is the standard deviation of the net counting rate of the sample).

(1) To determine compliance with 41.3(5)*"a"* the detection limit shall not exceed 1 pCi/1. To determine compliance with 41.3(5)*"b"* the detection limit shall not exceed 3 pCi/1.
2. To determine compliance with 41.3(6) the detection limits shall not exceed the concentrations listed in Table B.

TABLE B.—Detection Limits for Man-Made Beta Particle and Photon Emitters.

Radionuclide	Detection Limit
Tritium	1,000 pCi/1
Strontium-89	10 pCi/1
Strontium-90	2 pCi/1
Iodine-131	1 pCi/1
Cesium-134	10 pCi/1
Gross beta	4 pCi/1
Other radionuclides	1/10 of the applicable limit

d. To judge compliance with the maximum contaminant levels listed in 41.3(5) and 41.3(6) averages of data shall be used and shall be rounded to the same number of significant figures as the maximum contaminant level for the substance in question.

41.4(9) *Monitoring frequency for radioactivity in community water systems.*

a. Monitoring requirements for gross alpha particle activity, radium-226 and radium-228.

(1) Initial sampling to determine compliance with 41.3(5) shall begin by June 24, 1979, and the analysis shall be completed by June 24, 1980. Compliance shall be based on the analysis of an annual composite of four consecutive quarterly samples or the average of the analyses of four samples obtained at quarterly intervals.

A gross alpha particle activity measurement may be substituted for the required radium-226 and radium-228 analysis, provided, that the measured gross alpha particle activity does not exceed 5 pCi/1 at a confidence level of 95 percent (1.65 o where o is the standard deviation of the net counting rate of the sample). In localities where radium-228 may be present in drinking water, radium-226 or radium-228 analyses are required when the gross alpha particle activity exceeds 2 pCi/1.

When the gross alpha particle activity exceeds 5 pCi/1, the same or an equivalent sample shall be analyzed for radium-226. If the concentration of radium-226 exceeds 3 pCi/1 the same or an equivalent sample shall be analyzed for radium-228.

(2) For the initial analysis required by 41.4(9)*"a"*(1), data acquired on or after June 24, 1976, may be substituted at the discretion of the department.

(3) Suppliers of water shall monitor at least once every four years following the procedure required by 41.4(9)*"a"*(1). At the discretion of the department, when an annual record taken in conformance with 41.4(9)*"a"*(1) has established that the average annual concentration is less than half the maximum contaminant levels established by 41.3(5), analysis of a single sample may be substituted for the quarterly sampling procedure required by 41.4(9)*"a"*(1).

More frequent monitoring shall be conducted when requested by the department in the vicinity of mining or other operations which may contribute alpha particle radioactivity to either surface or ground water sources of drinking.

A supplier of water shall monitor in conformance with 41.4(9)*"a"*(1) within one year of the introduction of a new water source for a community water system. More frequent monitoring shall be conducted when requested by the department in the event of possible contamination or when changes in the distribution system or treatment processing occur which may increase the concentration of radioactivity in finished water.

A community water system using two or more sources having different concentrations of radioactivity shall monitor source water, in addition to water from a free-flowing tap, when requested by the department.

Monitoring for compliance with 41.3(5) after the initial period need not include radium-228 except when required by the department, provided, that the average annual concentration of radium-228 has been assayed at least once using the quarterly sampling procedure required by 41.4(9)*"a"*(1).

Suppliers of water shall conduct annual monitoring of any community water system in which the radium-226 concentration exceeds 3 pCi/1, when requested by the department.

(4) If the average annual maximum contaminant level for gross alpha particle activity or total radium as set forth in 41.3(5) is exceeded, the supplier of a community water system shall notify the public as required by 41.5(2). Monitoring at quarterly intervals shall be continued until the annual average concentration no longer exceeds the maximum contaminant level or until a monitoring schedule as a condition of an operation permit or enforcement action shall become effective.

b. Monitoring requirements for man-made radioactivity in community water systems.

(1) Systems using surface water sources and serving more than 100,000 persons and such other community water systems as are designated by the department shall be monitored for compliance with 41.3(6) by analysis of a composite of four consecutive quarterly samples. Compliance with 41.3(6) may be assumed without further analysis if the average annual concentration of gross beta particle activity is less than 50 pCi/1 and if the average annual concentrations of tritium and strontium-90 are less than those listed in Table A, provided, that if both radionuclides are present the sum of their annual dose equivalents to bone marrow shall not exceed 4 millirem/year.

If the gross beta particle activity exceeds 50 pCi/1, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses shall be calculated to determine compliance with 41.3(6).

Suppliers of water shall conduct additional monitoring, as requested by the department, to determine the concentration of man-made radioactivity in principal watersheds designated by the department.

At the discretion of the department, suppliers of water utilizing only ground waters may be required to monitor for man-made radioactivity.

(2) For the initial analysis required by 41.4(9)*"b"*(1) data acquired on or after June 24, 1976, may be substituted at the discretion of the department.

(3) After the initial analysis required by 41.4(9)*"b"*(2) suppliers of water shall monitor at least every four years following the procedure given in 41.4(9)*"b"*(2).

(4) The supplier of any community water system designated by the department as utilizing waters contaminated by effluents from nuclear facilities shall initiate quarterly monitoring for gross beta particle and iodine-131 radioactivity and annual monitoring for strontium-90 and tritium.

Quarterly monitoring for gross beta particle activity shall be based on the analysis of monthly samples or the analysis of a composite of three monthly samples. The former is recommended. If the gross beta particle activity in a sample exceeds 15 pCi/1, the same or an equivalent sample shall be analyzed for strontium-89 and cesium-134. If the gross beta particle activity exceeds 50 pCi/1, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses shall be calculated to determine compliance with 41.3(6).

For iodine-131, a composite of five consecutive daily samples shall be analyzed once each quarter. As requested by the department, more frequent monitoring shall be conducted when iodine-131 is identified in the finished water.

Annual monitoring for strontium-90 and tritium shall be conducted by means of the analysis of a composite of four consecutive quarterly samples or analysis of four quarterly samples. The latter procedure is recommended.

The department may allow the substitution of environmental surveillance data taken in conjunction with a nuclear facility for direct monitoring of man-made radioactivity by the supplier of water where the department determines such data is applicable to a particular community water system.

(5) If the average annual maximum contaminant level for man-made radioactivity set forth in 41.3(6) is exceeded, the operator of a community water system shall give notice to the public as required by 41.5(2). Monitoring at monthly intervals shall be continued until the concentration no longer exceeds the maximum contaminant level or until a monitoring schedule as a condition of an operation permit or enforcement action becomes effective.

41.4(10) *Macroscopic organisms and algae.* Rescinded IAB 12/12/90.

41.4(11) *Special monitoring for sodium.* Suppliers of water for community public water systems shall collect and have analyzed one sample per source or plant, for the purpose of determining the sodium concentration in the distribution system. Systems utilizing multiple wells, drawing raw water from a single aquifer may, with departmental approval, be considered as one source for determining the minimum number of samples to be collected. Sampling frequency and approved analytical methods are as follows:

a. Systems utilizing a surface water source, in whole or in part, shall monitor for sodium at least once annually;

b. Systems utilizing ground water sources shall monitor at least once every three years;

c. Suppliers may be required to monitor more frequently where sodium levels are variable;

d. Analyses for sodium shall be performed using the flame photometric method in accordance with the procedures described in "Standard Methods," pp. 250–253; or by Method 273.1, Atomic Absorption — Direct Aspiration or Method 273.2, Atomic Absorption — Graphite Furnace, in "Methods for Chemical Analysis of Water and Waste," EMSL, Cincinnati, EPA, 1979; or by Method D1428-64(a) in Annual Book of ASTM Standards, Part 31, Water.

41.4(12) *Special monitoring for corrosivity characteristics.* Suppliers of water for community public water systems shall collect samples from a representative entry point to the water distribution system for the purpose of analysis to determine the corrosivity characteristics of the water. The determination of corrosivity characteristics of water shall only include one round of sampling, except in cases where the department concludes additonal monitoring is necessary due to variability of the raw water sources. Sampling requirements and approved analytical methods are as follows:

a. Systems utilizing a surface water source either in whole or in part, shall collect two samples per plant for the purpose of determining the corrosivity characteristics. One of these samples is to be collected during the midwinter months and the other during midsummer.

b. Systems utilizing ground water sources shall collect one sample per plant or source, except systems with multiple plants that do not alter the corrosivity characteristics identified in 41.4(12)*"c"* or systems served by multiple wells drawing raw water from a single aquifer may, with departmental approval, be considered one treatment plant or source when determining the number of samples required.

c. Determination of corrosivity characteristics of water shall include measurements of pH, calcium hardness, alkalinity, temperature, total dissolved solids (total filterable residue), and calculation of the Langelier Index. In addition, sulfate and chloride monitoring may be required by the department.

At the department's discretion, the Aggressive Index test may be substituted for the Langelier Index test. The following analytical methods must be used by an approved laboratory, except for temperature which should be measured by the supplier using the approved method.

(1) Langelier Index — "Standard Methods," Method 203, pp. 61–63.

(2) Aggressive Index — "AWWA Standard for Asbestos-Cement Pipe, 4 in. through 24 in. for Water and Other Liquids," AWWA C400-77, Revision of C400-75, AWWA, Denver, Colorado.

(3) Total Filterable Residue — "Standard Methods," Method 208B, pp. 92–93; or "Methods for Chemical Analysis of Water and Wastes," Method 160.1.

(4) Temperature — "Standard Methods," Method 212, pp. 125–126.

(5) Calcium — EDTA Titrimetric Method "Standard Methods," Method 306C, pp. 189–191; or "Annual Book of ASTM Standards," Method D1126-67(8); "Methods for Chemical Analysis of Water and Waste," Method 215.2.

(6) Alkalinity — Methyl Orange and paint pH 4.5. "Standard Methods," Method 403, pp. 278–281; or "Annual Book of ASTM Standards," Method D1067-70B; or "Methods for Chemical Analysis of Water and Wastes," Method 310.1.

(7) pH — "Standard Methods," Method 424, pp. 460–485; or "Methods for Chemical Analysis of Water and Wastes," Method 150.1; or "Annual Book of ASTM Standards," Method D129378 A or B.

(8) Chloride — Potentiometric Method, "Standard Methods," p. 306.

(9) Sulfate — Turbidimetric Method, "Methods for Chemical Analysis of Water and Wastes," pp. 277–278, EPA, Office of Technology Transfer, Washington, D.C. 20460, 1974, or "Standard Methods," pp. 496–498.

d. Community water supply systems shall, when requested by the department and where records are available, identify whether the following construction materials are present in their distribution system and report to the department:

(1) Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing.

(2) Copper from piping and alloys, service lines, and home plumbing.

(3) Galvanized piping, service lines, and home plumbing.

(4) Ferrous piping materials such as cast iron and steel.

(5) Asbestos cement pipe.

(6) Vinyl lined asbestos cement pipe.

(7) Coal tar lined pipes and tanks.

41.4(13) *Certification of laboratories.* For the purpose of determining compliance with 41.4(1) through 41.4(12), samples may be considered only if they have been analyzed by a laboratory currently certified by the department except that measurements for turbidity, temperature, pH and free chlorine residual may be performed by any person acceptable to the department.

a. Procedure for laboratory certification. Upon written request to the department by a laboratory desiring certification, a representative of the director will contact the laboratory and a date will be established for an on-site survey. The on-site survey requirements will be waived for out-of-state laboratories desiring certification where the resident state has been granted approval authority by EPA, or EPA has conducted a survey and a copy can be provided to the department.

If it is determined that the physical facilities and equipment of the laboratory meet all of the requirements set forth in the "Manual for the Certification of Laboratories Analyzing Drinking Water," EPA document 570/9-82-002, October 1982, and the laboratory personnel have properly demonstrated proficiency with the procedures specified in "Standard Methods," or other analytical procedures approved by the department, the laboratory will be issued a letter of certification. The letter of certification shall state the parameters, personnel and analytical procedures for which the laboratory is certified.

b. Period of validity. Certification under 41.4(13)*"a"* shall be valid for a period not to exceed two years from the date of issuance without a renewal, except in the case of reciprocal certification of an out-of-state laboratory. Certification in this case shall be valid for a period equal to that of the resident state in which they perform analytical work.

c. Revocation of laboratory certification. The director may revoke a laboratory certification if it is determined:

(1) The laboratory has failed to maintain adequate physical facilities or equipment;

(2) Laboratory personnel have failed to conform to requirements or procedures specified in "Standard Methods" or other analytical procedures approved by the director;

(3) The laboratory fails to report analytical results as described in 41.4(13)*"d";* or

(4) The individual approved as the laboratory supervisor is no longer in charge and the laboratory fails to notify the designated laboratory appraisal officer or the department.

d. Reporting requirements. Certified laboratories must report to the department or an approved designee, on forms provided by the department, all analytical test results for public water supplies. Certified laboratories must also report all analytical test results to the supplier of water for which the analysis was performed. Results must be reported by the seventh of the month following the month in which the samples were analyzed except for positive coliform bacteria samples and their associated recheck samples; these samples must be reported to the department and the supplier of water for whom they were analyzed, within twenty-four hours of analyses.

41.4(14) *Alternative analytical techniques.* With the written permission of the department, concurred in by the Administrator of the U.S. Environmental Protection Agency, an alternative analytical technique may be employed. An alternative technique shall be acceptable only if it is substantially equivalent to the prescribed test in both precision and accuracy as it relates to the determination of compliance with any maximum contaminant level. The use of the alternative analytical technique shall not decrease the frequency of monitoring required by 41.4(455B).

41.4(15) *Monitoring of interconnected public water supply systems.* When a public water supply system supplies water to one or more other public water supply systems, the department may modify the monitoring requirements imposed by this part to the extent that the interconnection of the systems justifies treating them as a single system for monitoring purposes. Any modified monitoring shall be conducted pursuant to a schedule specified by the department and concurred in by the Administrator of the U.S. Environmental Protection Agency.

41.4(16) *Department analytical results used to determine compliance.* Analytical results or other information compiled by departmental staff may be used to determine compliance with the maximum contaminant levels listed in 41.3(455B) or for initiating remedial action with respect to these violations.

41.4(17) *Monitoring of other contaminants.* If the department determines that other contaminants are present in a public water supply, and the contaminants are known to pose or scientific evidence strongly suggests that they pose a threat to human health, the supplier of water may be required to monitor for such contaminants. The supplier of water will monitor at a frequency and in a manner which will adequately identify the magnitude and extent of the contamination. The monitoring frequency and sampling location will be determined by the department. All analytical results will be obtained using approved EPA methods and all analytical results will be submitted to the department for review and evaluation. Any monitoring required under this paragraph will be incorporated into an operation permit or an order.

567—41.5(455B) Reporting, public notification and recordkeeping.

41.5(1) *Reporting requirements.*

a. When required by the department, the supplier of water shall report to the department within ten days following a test, measurement or analysis required to be made by this chapter, the results of that test, measurement or analysis in the form and manner prescribed by the department.

b. Except where a different reporting period is specified in this subrule, the supplier of water shall report to the department, within 48 hours after any failure to comply with the monitoring requirements set forth in this rule. The supplier of water shall also notify the department within 48 hours of failure to comply with any primary drinking water regulations.

c. The public water supply system, within ten days of completion of each public notification required pursuant to subrule 41.5(2), shall submit to the department a representative copy of each type of notice distributed, published, posted, or made available to the persons served by the system or to the media.

41.5(2) *General public notification requirements:*

a. Maximum contaminant level (MCL), treatment technique and compliance schedule violations. The owner or operator of a public water supply system which fails to comply with

an applicable MCL established by 41.3(455B), treatment technique established by 41.12(10) or which fails to comply with the requirements of any compliance schedule prescribed pursuant to 41.6(5), shall notify persons served by the system as follows:

(1) By publication in a daily newspaper of general circulation in the area served by the system as soon as possible, but in no case later than 14 days after the violation or failure, and by mail delivery (by direct mail, with the water bill, or by hand delivery) not later than 45 days after the violation or failure. The department may waive mail delivery if it determines that the owner or operator of the public water system in violation has corrected the violation or failure within the 45-day period. The department must make the waiver in writing and within the 45-day period.

If the area served by a public water supply system is not served by a daily newspaper of general circulation, notice shall instead be given by publication in a weekly newspaper of general circulation serving the area and by mail delivery.

(2) For violations of the MCLs of contaminants that may pose an acute risk to human health, the owner or operator of a public water supply system shall, as soon as possible but in no case later than 72 hours after the violation, furnish a copy of the notice to the radio and television stations serving the area served by the public water system in addition to meeting the requirements of 41.5(2)*"a"*(1). The following violations are acute violations:

1. Any violations specified by the department as posing an acute risk to human health.
2. Violation of the MCL for nitrate as established in 41.3(1) and determined according to 41.4(3)*"c."*
3. Violation of the MCL for total coliforms, when fecal coliforms or *E. coli* are present in the water distribution system, as specified in 41.2(1)*"b"*(2).
4. Occurrence of a waterborne disease outbreak, as defined in 567—40.2(455B), in an unfiltered system subject to the requirements of 567—43.5(455B), after December 30, 1991.

(3) Following the initial notice given under 41.5(2)*"a"*(1) and (2), the owner or operator of the public water supply system must give notice at least once every three months by mail delivery (by direct mail, with the water bill, or by hand delivery), for as long as the violation or failure exists.

(4) The owner or operator of a community water system in an area that is not served by a daily or weekly newspaper of general circulation must, in lieu of the requirements of 41.5(2)*"a"*(1), (2) and (3) give notice within 14 days (72 hours for an acute violation) after the violation or failure by hand delivery or by continuous posting in conspicuous places within the area served by the system. Hand delivery must be repeated every three months or posting must continue for as long as the violation or failure exists.

(5) The owner or operator of a noncommunity water system may, in lieu of the requirements of 41.5(2)*"a"*(1), (2) and (3), give notice within 14 days (72 hours for an acute violation) after the violation or failure by hand delivery or by continuous posting in conspicuous places within the area served by the system. Hand delivery must be repeated every three months or posting must continue for as long as the violation or failure exists.

b. Other violations. The owner or operator of a public water supply system which fails to perform monitoring required by rule 41.4(455B), fails to comply with a testing procedure established in 567—Chapter 41, is subject to an interim contaminant level or compliance schedule pursuant to 41.5(3), or an unregulated contaminant is detected and the department advises that public notification is necessary, shall notify persons served by the system within three months by the methods described in 41.5(2)*"a"*(1) by newspaper only or by applicable methods described in 41.5(2)*"a"*(4) or (5). Notice must continue by methods described in 41.5(2)*"a"* for as long as the violation exists, an interim contaminant level or compliance schedule remains in effect or the unregulated contaminant is detected.

c. Notice of available information. The owner or operator of a public water supply system shall notify persons served by the system of the availability of the results of sampling conducted for synthetic organic chemicals, under 41.4(7), by including a notice in the first set of water bills issued by the system after the receipt of the results or written notice within three months.

For surface water supply systems, public notification is required only after the first quarter's monitoring and must include a statement that additional monitoring will be conducted for three or more quarters with the results available upon request. The owner or operator shall also provide to all new billing units or new hookups prior to or at the time service begins, a copy of the most recent public notice for any outstanding violation of any maximum contaminant level established by 41.3(455B), results of sampling conducted under 41.4(7), any notice of a treatment technique requirement established by 41.12(10) and notice of any failure to comply with the requirements of any schedule prescribed pursuant to 41.6(5). The notice shall provide a person and telephone number to contact for information.

d. General content of public notice. Each notice required by this subrule must provide a clear and readily understandable explanation of the violation, any potential adverse health effects, the population at risk, the steps that the public water system is taking to correct the violation, the necessity for seeking alternative water supplies, if any, and any preventive measures the consumer should take until the violation is corrected. Each notice shall be conspicuous and shall not contain unduly technical language, unduly small print, or similar problems that frustrate the purpose of the notice. Each notice shall include the telephone number of the owner, operator, or designee of the public water supply system as a source of additional information concerning the notice. Where appropriate, the notice shall be multilingual.

e. Mandatory health effects language. When providing the information on potential adverse health effects required by paragraph *"d"* of this subrule in notices of violations of maximum contaminant levels or treatment techique requirements, or notices of the granting or the continued existence of interim contaminant levels or compliance schedules, or notices of failure to comply with an interim contaminant level or compliance schedule, the owner or operator of the public water system shall include the language specified below for each contaminant. (If language for a particular contaminant is not specified below at the time notice is required, this paragraph does not apply.)

(1) Benzene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that benzene is a health concern at certain levels of exposure. This chemical is used as a solvent and degreaser of metals. It is also a major component of gasoline. Drinking water contamination generally results from leaking underground gasoline and petroleum tanks or improper waste disposal. This chemical has been associated with significantly increased risks of leukemia among certain industrial workers who were exposed to relatively large amounts of this chemical during their working careers. This chemical has also been shown to cause cancer in laboratory animals when the animals are exposed at high levels over their lifetimes. Chemicals that cause increased risk of cancer among exposed industrial workers and in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for benzene at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in humans and laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(2) Carbon tetrachloride. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that carbon tetrachloride is a health concern at certain levels of exposure. This chemical was once a popular household cleaning fluid. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for carbon tetrachloride at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(3) 1,2-Dichloroethane. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,2-dichloroethane is a health concern at certain levels of exposure. This chemical is used as a cleaning fluid for fats, oils, waxes, and resins. It generally gets into drinking water from improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for 1,2-dichloroethane at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(4) 1,1-Dichloroethylene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,1-dichloroethylene is a health concern at certain levels of exposure. This chemical is used in industry and is found in drinking water as a result of the breakdown of related solvents. The solvents are used as cleaners and degreasers of metals and generally get into drinking water by improper waste disposal. This chemical has been shown to cause liver and kidney damage in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals which cause adverse effects in laboratory animals also may cause adverse health effects in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for 1,1-dichloroethylene at 0.007 parts per million (ppm) to reduce the risk of these adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(5) Fluoride. The U.S. Environmental Protection Agency requires that we send you this notice on the level of fluoride in your drinking water. The drinking water in your community has a fluoride concentration of _____ (the public water supply shall insert the compliance result which triggered notification under this subrule) milligrams per liter (mg/l).

Federal regulations require that fluoride, which occurs naturally in your water supply, not exceed a concentration of 4.0 mg/1 in drinking water. This is an enforceable standard called a Maximum Contaminant Level (MCL), and it has been established to protect the public health. Exposure to drinking water levels above 4.0 mg/1 for many years may result in some cases of crippling skeletal fluorosis, which is a serious bone disorder.

Federal law also requires that we notify you when monitoring indicates that the fluoride in your drinking water exceeds 2.0 mg/l. This is intended to alert families about dental problems that might affect children under nine years of age. The fluoride concentration of your water exceeds this federal guideline.

Fluoride in children's drinking water at levels of approximately 1 mg/1 reduces the number of dental cavities. However, some children exposed to levels of fluoride greater than about 2.0 mg/l may develop dental fluorosis. Dental fluorosis, in its moderate and severe forms, is a brown staining or pitting of the permanent teeth.

Because dental fluorosis occurs only when developing teeth (before they erupt from the gums) are exposed to elevated fluoride levels, households without children are not expected to be affected by this level of fluoride. Families with children under the age of nine are encouraged to seek other sources of drinking water for their children to avoid the possibility of staining and pitting.

Your water supplier can lower the concentration of fluoride in your water so that you will still receive the benefits of cavity prevention while the possibility of stained and pitted teeth is minimized. Removal of fluoride may increase your water costs. Treatment systems are also commercially available for home use. Information on such systems is available at the address given below. Low fluoride bottled drinking water that would meet all standards is also commercially available.

For further information, contact _____ (the public water supply shall insert the name, address, and telephone number of a contact person at the public water system) at your water system.

(6) Para-dichlorobenzene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that para-dichlorobenzene is a health concern at certain levels of exposure. This chemical is a component of deodorizers, mothballs, and pesticides. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause liver and kidney damage in laboratory animals such as rats and mice when the animals are exposed to high levels over their lifetimes. Chemicals which cause adverse effects in laboratory animals also may cause adverse health effects in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for para-dichlorobenzene at 0.075 parts per million (ppm) to reduce the risk of these adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(7) 1,1,1-Trichloroethane. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,1,1-trichloroethane is a health concern at certain levels of exposure. This chemical is used as a cleaner and degreaser of metals. It generally gets into drinking water by improper waste disposal. This chemical has been shown to damage the liver, nervous system, and circulatory system of laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during their working careers also suffered damage to the liver, nervous system, and circulatory system. Chemicals which cause adverse effects among exposed industrial workers and in laboratory animals also may cause adverse health effects in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for 1,1,1-trichloroethane at 0.2 parts per million (ppm) to protect against the risk of these adverse health effects which have been observed in humans and laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(8) Trichloroethylene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that trichloroethylene is a health concern at certain levels of exposure. This chemical is a common metal cleaning and dry-cleaning fluid. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set forth the enforceable drinking water standard for trichloroethylene at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(9) Vinyl chloride. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that vinyl chloride is a health concern at certain levels of exposure. This chemical is used in industry and is found in drinking water as a result of the breakdown of related solvents. The solvents are used as cleaners and degreasers of metals and generally get into drinking water by improper waste disposal. This chemical has been associated with significantly increased risks of cancer among certain industrial workers who were exposed to relatively large amounts of this chemical during their working careers. This chemical has also been shown to cause cancer in laboratory animals when the animals are exposed at high levels over their lifetimes. Chemicals that cause increased risk of cancer among exposed industrial workers and in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for vinyl chloride at 0.002 parts per million (ppm) to reduce the

risk of cancer or other adverse health effects which have been observed in humans and laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(10) Microbiological contaminants (for use when there is a violation of the treatment technique requirements for filtration and disinfection in 567—43.5(455B). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of microbiological contaminants is a health concern at certain levels of exposure. If water is inadequately treated, microbiological contaminants in that water may cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than drinking water. EPA has set enforceable requirements for treating drinking water to reduce the risk of these adverse health effects. Treatment such as filtering and disinfecting the water removes or destroys microbiological contaminants. Drinking water which is treated to meet EPA requirements is associated with little or no risk and should be considered safe.

(11) Total coliforms (to be used when there is a violation of 41.2(1)*"b"*(1) and not a violation of 41.2(1)*"b"*(2). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of total coliforms is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with water treatment or the pipes which distribute the water and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than the drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than 5.0 percent of the samples collected during a month can contain these bacteria, except that systems collecting fewer than 40 samples/month that have one total coliform-positive sample per month are not violating the standard. Drinking water which meets this standard is usually not associated with a health risk from disease-causing bacteria and should be considered safe.

Fecal coliforms/*E. coli* (to be used when there is a violation of 41.2(1)*"b"*(2) or both 41.2(1)*"b"*(1) and (2). The United States Environmental Protection Agency (EPA) set drinking water standards and has determined that the presence of fecal coliforms or *E. coli* is a serious health concern. Fecal coliforms and *E. coli* are generally not harmful themselves, but their presence in drinking water is serious because they usually are associated with sewage or animal wastes. The presence of these bacteria in drinking water is generally a result of a problem with water treatment or the pipes which distribute the water and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than the drinking water. EPA has set an enforceable drinking water standard for fecal coliforms and *E. coli* to reduce the risk of these adverse health effects. Under this standard all drinking water samples must be free of these bacteria. Drinking water which meets this standard is associated with little or none of this risk and should be considered safe. State and local health authorities recommend that consumers take the following precautions: (to be inserted by the public water supply system, according to instructions from state or local authorities).

f. Special notice requirements.

(1) Public notices for fluoride.

1. Community water systems as defined in 40.2(455B) that exceed the fluoride maximum contaminant level established by 41.3(1), are issued an interim contaminant level or compliance schedule pursuant to 41.6(5) or violate an interim contaminant level or compliance schedule pursuant to 41.6(5) shall issue the public notice prescribed by 41.5(2)*"e"*(5) including the language necessary to replace the superscripts plus a description of any steps which the system is taking to come into compliance.

2. Public notification requirements for violations of the secondary fluoride maximum contaminant level. Community water systems as defined in 40.2(455B) that exceed the secondary maximum contaminant level of 2.0 mg/l for fluoride as determined by the last single sample taken in accordance with the requirements of 41.4(3), but do not exceed the maximum contaminant level for fluoride as specified by 41.3(1), shall provide the notice prescribed in 41.5(2)*"e"*(5) to all billing units annually, all new billing units at the time service begins, and to the director of the Iowa public health department. The notice shall contain the language specified in 41.5(2)*"e"*(5) in addition to the language necessary to replace the superscripts.

(2) Public notification requirements pertaining to lead.

1. By October 14, 1988, the owner or operator of each community water system and each nontransient noncommunity water system shall, except as provided in 41.5(2)*"f"*(2)"2," issue a notice to persons served by the system that may be affected by lead contamination of their drinking water. The department may require subsequent notices. The owner or operator shall provide notice under this subparagraph even if there is no violation of the lead maximum contaminant level as prescribed in 41.3(1).

2. Notice required under 41.5(2)*"f"*(2)"1" is not required if the system demonstrates to the department that the water system, including the residential and nonresidential portions connected to the water system, are lead-free as defined in 40.2(455B).

3. Manner of notice. Notice shall be given to persons served by the system either by three newspaper notices (one for each of three consecutive months and the first no later than October 14, 1988); or once by mailing the notice with the water bill or in a separate mailing by October 14, 1988; or once by hand delivery by October 14, 1988. For nontransient noncommunity water systems, notice may be given by continuous posting. If posting is used, the notice shall be posted in a conspicuous place in the area served by the system and start no later than October 14, 1988, and continue for three months.

4. Notices issued under this subparagraph shall provide a clear and readily understandable explanation of the potential sources of lead in drinking water, potential adverse health effects, reasonably available methods of mitigating known or potential lead content in drinking water, any steps the water system is taking to mitigate lead content in drinking water, and the necessity for seeking alternative water supplies, if any. Use of the mandatory language in 41.5(2)*"f"*(2)"6" in the notice will be sufficient to explain potential adverse health effects.

5. Each notice shall also include specific advice on how to determine if materials containing lead have been used in homes or the water distribution system and how to minimize exposure to water likely to contain high levels of lead. Each notice shall be conspicuous and shall not contain unduly technical language, unduly small print, or similar problems that frustrate the purpose of the notice. Each notice shall contain the telephone number of the owner, operator, or designee of the public water system as a source of additional information regarding the notice. Where appropriate, the notice shall be multilingual.

6. Mandatory health effects information. When providing the information in public notices required under 41.5(2)*"f"*(2)"4" on the potential adverse health effects of lead in drink-

ing water, the owner or operator of the water system shall include the following specific language in the notice:

"The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.

"Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.

"EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.

"Lead levels in your drinking water are likely to be highest:

—if your home or water system has lead pipes, or

—if your home has copper pipes with lead solder, and

—if the home is less than five years old, or

—if you have soft or acidic water, or

—if water sits in the pipes for several hours."

g. Public notification by the department. The department may give notice to the public required by this subrule on behalf of the owner or operator of the public water system if the department complies with the requirements of this subrule. However, the owner or operator of the public water system remains legally responsible for ensuring that the requirements of this subrule are met.

41.5(3) *Required public notification for operation permits.* When the director determines that a public water supply cannot promptly comply with one or more maximum contaminant levels of 41.3(455B) and that there is no immediate, unreasonable risk to the health of persons served by the system, a draft operation permit or modified permit will be formulated, which may include interim contaminant levels or a compliance schedule. Prior to issuance of a final permit, notice and opportunity for public participation must be given in accordance with this paragraph. The notice shall be circulated in a manner designed to inform interested and potentially interested persons of any proposed interim contaminant level or compliance schedule.

a. The public notice shall be prepared by the department and circulated by the applicant within its geographical area as described in 41.5(2). The public notice shall be mailed by the department to any person upon request.

b. The department shall provide a period of not less than 30 days following the date of the public notice during which time interested persons may submit their written views on the tentative determinations with respect to the operation permit. All written comments submitted during the 30-day comment period shall be retained by the department and considered by the director in the formulation of the director's final determinations with respect to the operation permit. The period for comment may be extended at the discretion of the department.

c. The contents of the public notice of a proposed operation permit shall include at least the following:

(1) The name, address, and phone number of the department.

(2) The name and address of the applicant.

(3) A statement of the department's tentative determination to issue the operation permit.

(4) A brief description of each applicant's water supply operations which necessitate the proposed permit conditions.

(5) A brief description of the procedures for the formulation of final determinations, including the 30-day comment period required by 41.5(3)*"b."*

(6) The right to request a public hearing pursuant to this paragraph and any other means by which interested persons may influence or comment upon those determinations.

(7) The address and phone number of places at which interested persons may obtain further information, request a copy of the draft permit prepared pursuant to this paragraph, and inspect and copy the application forms and related documents.

d. Public hearings on proposed operation permits. The applicant or any interested agency, person or group of persons may request or petition for a public hearing with respect to the proposed action. Any such request shall clearly state issues and topics to be addressed at the hearing. Any such request or petition for public hearing must be filed with the director within the 30-day period prescribed in 41.5(3)*"b"* and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted. The director shall hold an informal and noncontested case hearing if there is a significant public interest (including the filing of requests or petitions for such hearing) in holding such a hearing. Frivolous or insubstantial requests for hearing may be denied by the director. Instances of doubt should be resolved in favor of holding the hearing. Any hearing held pursuant to this subrule shall be held in the geographical area of the system, or other appropriate area at the discretion of the director, and may, as appropriate, consider related groups of permit applications.

e. Public notice of public hearings.

(1) Public notice of any hearing held pursuant to this paragraph shall be circulated at least as widely as was the notice under 41.5(3)*"a,"* at least 30 days in advance of the hearing.

(2) The contents of public notice of any hearing held pursuant to this paragraph shall include at least the following:

1. The name, address, and phone number of the department;
2. The name and address of each applicant whose application will be considered at the hearing;
3. A brief reference to the public notice previously issued, including identification number and date of issuance;
4. Information regarding the time and location for the hearing;
5. The purpose of the hearing;
6. A concise statement of the issues raised by the person requesting the hearing;
7. The address and phone number of the premises where interested persons may obtain further information, request a copy of the draft operation permit or modification prepared pursuant to this paragraph, and inspect and copy the application forms and related documents; and
8. A brief description of the nature of the hearing, including the rules and procedures to be followed.

f. Decision by the director. Within 30 days after the termination of the public hearing held pursuant to this paragraph, or if no public hearing is held, within 30 days after the termination of the period for requesting a hearing, the director shall issue or deny the operation permit.

41.5(4) *Record maintenance requirements.* Any owner or operator of a public water system subject to the provisions of this rule shall retain on its premises or at a convenient location near its premises the following records:

a. Records of bacteriological analyses made pursuant to this rule shall be kept for not less than five years. Records of chemical analyses made pursuant to 567—Chapter 41 shall be kept for not less than ten years. Actual laboratory reports shall be kept, or data may be transferred to tabular summaries, provided that the following information is included:

(1) The date, place, and time of sampling, and the name of the person who collected the sample;

(2) Identification of the sample as to whether it was a routine distribution system sample, check sample, raw or process water sample or other special purpose sample;

(3) Date of analysis;

(4) Laboratory and person responsible for performing analysis;

(5) The analytical technique or method used; and

(6) The results of the analysis.

b. Records of action taken by the system to correct violations of primary drinking water regulations shall be kept for a period not less than three years after the last action taken with respect to the particular violation involved.

c. Copies of any written reports, summaries or communications relating to sanitary surveys of the system conducted by the system itself, by a private consultant, or by any local, state or federal agency, shall be kept for a period of not less than ten years after completion of the sanitary survey involved.

d. Records concerning a permit issued pursuant to 41.5(3) to the system shall be kept for a period ending not less than five years after the system achieves compliance with 41.3(455B).

567—41.6(455B) Permit to operate. Renumbered as 567—43.2(455B), IAB 12/12/90.

567—41.7(455B) Physical properties maximum contaminant levels (MCL or treatment technique requirement) and monitoring requirements.

41.7(1) *Turbidity.*

a. Applicability. The maximum contaminant levels (treatment technique requirements) for turbidity are applicable to community and noncommunity public water supply systems using surface water or groundwater under the direct influence of surface water in whole or in part. A system providing filtration on or before December 30, 1991, shall meet the requirements of this subrule on June 29, 1993. A system providing filtration after December 30, 1991, shall meet the requirements of this subrule when filtration is installed. The department may require and the system shall comply with any interim turbidity requirements the department deems necessary. Failure to meet any requirement of this subrule, in accordance with 567—43.5(455B), after the date specified in this paragraph is a treatment technique violation.

b. Maximum contaminant levels (MCL or treatment technique requirement) for turbidity. The maximum contaminant levels (treatment technique requirements) for turbidity in drinking water, measured at representative entry point(s) to the distribution system, are as follows:

(1) Conventional filtration treatment or direct filtration.

1. For systems using conventional filtration or direct filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to 0.5 nephelometric turbidity units (NTU) in at least 95 percent of the measurements taken each month when measured as specified in 41.7(1)*"c"* and *"e."*

2. The turbidity level of representative samples of a system's filtered water must at no time exceed 5 NTU when measured as specified in 41.7(1)*"c"* and *"e."*

(2) Slow sand filtration.

1. For systems using slow sand filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to 1 NTU in at least 95 percent of the measurements taken each month when measured as specified in 41.7(1)*"c"* and *"e."*

2. The turbidity level of representative samples of a system's filtered water must at no time exceed 5 NTU when measured as specified in 41.7(1)*"c"* and *"e."*

(3) Diatomaceous earth filtration.

1. For systems using diatomaceous earth filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to 1 NTU in at least 95 percent of the measurements taken each month when measured as specified in 41.7(1)*"c"* and *"e."*

2. The turbidity level of representative samples of a system's filtered water must at no time exceed 5 NTU when measured as specified in 41.7(1)*"c"* and *"e."*

(4) Other filtration technologies. A public water system may use either a filtration technology not listed in 41.7(1)*"b"*(1) to 41.7(1)*"b"*(3) or a filtration technology listed in 41.7(1)*"b"*(1) and (2) at a higher turbidity level if it demonstrates to the department through a preliminary report submitted by a registered professional engineer, using pilot plant studies or other means, that the alternative filtration technology in combination with disinfection treatment

that meets the requirements of 43.5(2), consistently achieves 99.9 percent removal or inactivation of *Giardia lamblia* cysts and 99.99 percent removal or inactivation of viruses. For a system that uses alternative filtration technology and makes this demonstration, the maximum contaminant levels (treatment technique requirements) for turbidity are as follows:

1. The turbidity level of representative samples of a system's filtered water must be less than or equal to 1 NTU in at least 95 percent of the measurements taken each month when measured as specified in 41.7(1)*"c"* and *"e."*

2. The turbidity level of representative samples of a system's filtered water must at no time exceed 5 NTU when measured as specified in 41.7(1)*"c"* and *"e."*

c. Monitoring requirements.

(1) Routine turbidity monitoring. Turbidity measurements as required by 43.5(3) must be performed on representative samples of the system's filtered water every four hours (or more frequently) that the system serves water to the public. A public water system may substitute continuous turbidity monitoring for grab sample monitoring if it validates the continuous measurement for accuracy on a regular basis using a calibration protocol approved by the department and audited for compliance during sanitary surveys. Major elements of the protocol shall include, but are not limited to: method of calibration, calibration frequency, calibration standards, documentation, data collection and data reporting. For any systems using slow sand filtration or filtration treatment other than conventional treatment, direct filtration, or diatomaceous earth filtration, the department may reduce the sampling frequency to once per day if it determines that less frequent monitoring is sufficient to indicate effective filtration performance. For systems serving 500 or fewer persons, the department may reduce the turbidity sampling frequency to once per day, regardless of the type of filtration treatment used, if the department determines that less frequent monitoring is sufficient to indicate effective filtration performance. Approval shall be based upon documentation provided by the system, acceptable to the department and pursuant to the conditions of an operation permit.

(2) A supplier of water serving a population or population equivalent of greater than 100,000 persons shall provide a continuous or rotating cycle turbidity monitoring and recording device or take hourly grab samples to determine compliance with 41.7(1)*"b."*

d. Reserved.

e. Analytical methodology. Public water systems shall conduct turbidity analysis in accordance with 43.5(4) and the following analytical method. Measurements for turbidity shall be conducted by a grade II, III or IV operator meeting the requirements of 567—Chapter 81, any person under the supervision of a grade II, III, or IV operator meeting the requirements of 567—Chapter 81, or a laboratory certified by the department to perform analysis under 41.4(13)*"a."*

(1) Turbidity monitoring shall be conducted in accordance with Method 2130B (Nephelometric Method), pp. 2-13 to 2-16, as set forth in "Standard Methods."

(2) Reporting. The public water supply system shall report the results of the turbidity analysis in accordance with 43.7(1) and 43.7(3).

41.7(2) *Residual disinfectant.*

a. Applicability. Public water supply systems which apply chlorine shall monitor, record, and report the concentrations daily in accordance with 43.7(2)*"a."* In addition, all public water supply systems that use a surface water source or a groundwater source under the direct influence of surface water must provide treatment consisting of disinfection, as specified in 43.5(2), and filtration treatment, as specified in 43.5(3), and shall monitor for the residual disinfectant concentration in both the water entering the distribution system and in the distribution system and shall report the results of that analysis in accordance with 43.7(3).

b. Maximum contaminant levels. Reserved.

c. Monitoring requirements. Public water supplies that use surface water or groundwater under the direct influence of surface water shall monitor for the residual disinfectant concen-

tration in both the water entering the distribution system and in water in the distribution system so as to demonstrate compliance with 43.5(2).

(1) Disinfectant residual entering system. Residual disinfectant concentration of the water entering the distribution system shall be monitored continuously, and the lowest value recorded each day, except that if there is a failure in the continuous monitoring equipment, grab sampling every four hours may be conducted in lieu of continuous monitoring, but not to exceed five working days following the failure of the equipment. Systems serving 3,300 or fewer persons may take grab samples in lieu of providing continuous monitoring on an ongoing basis at the frequencies prescribed below:

System size (persons served)	Samples/ day(*)
<500	1
501 to 1,000	2
1,001 to 2,500	3
2,501 to 3,300	4

(*) When more than one grab sample is required/day, the day's samples cannot be taken at the same time. The sampling intervals must be at a minimum of four-hour intervals.

If at any time the disinfectant concentration falls below 0.3 mg/l in a system using grab sampling in lieu of continuous monitoring, the system shall take a grab sample every four hours until the residual disinfectant concentration is equal to or greater than 0.3 mg/l.

(2) Disinfectant residual in system. The residual disinfectant concentration must be measured at least at the same points in the distribution system and at the same time as total coliforms are sampled, as specified in 41.2(1)*"c,"* except that the department may allow a public water system which uses both a surface water source or a groundwater source under direct influence of surface water, and a groundwater source to take disinfectant residual samples at points other than the total coliform sampling points, if these points are included as a part of the coliform sample site plan meeting the requirements of 41.2(1)*"c"*(1)"1" and the department determines that such points are more representative of treated (disinfected) water quality within the distribution system. Heterotrophic bacteria, measured as heterotrophic plate count as specified in 41.2(3), may be measured in lieu of residual disinfectant concentration.

d. BAT. Reserved.

e. Analytical methodology. Measurements for residual disinfectant concentration shall be conducted by a grade II, III or IV operator meeting the requirements of 567—Chapter 81, any person under the supervision of a grade II, III, or IV operator meeting the requirements of 567—Chapter 81, or a laboratory certified by the department to perform analysis under 41.4(13)*"a."*

(1) Residual disinfectant concentrations for free chlorine and combined chlorine (chloramines) must be measured by Method 4500-Cl D. and E. (Amperometric Titration Method), pp. 4-54 to 4-58, Method 4500-Cl F. (DPD Ferrous Titrimetric Method), pp. 4-58 to 4-62, Method 4500—Cl G. (DPD Colorimetric Method), pp. 4-62 to 4-65 "Standard Methods," 17th edition or (Method 408F (Leuco Crystal Violet Method), pp. 310-313, as set forth in "Standard Methods," 16th edition. Residual disinfectant concentrations for free chlorine and combined chlorine may also be measured by using DPD colorimetric test kits. Residual disinfectant concentrations for ozone must be measured by the Indigo Method as set forth in Bader, H., Hoigne, J., "Determination of Ozone in Water by the Indigo Method; A Submitted Standard Method"; Ozone Science and Engineering, Vol. 4, pp. 169-176, Pergamon Press Ltd., 1982, or automated methods which are calibrated in reference to the results obtained by the Indigo Method on a regular basis.

Note: The Indigo Method has been published in the 17th edition of "Standard Methods," pp. 4-162 to 4-165; the Iodemetric Method in the 16th edition may not be used.

Residual disinfectant concentrations for chlorine dioxide must be measured by Method 4500-ClO_2 C. (Amperometric Method) or Method 45-ClO_2 D. (DPD Method) pp. 4-78 to 4-80, as set forth in "Standard Methods."

(2) Reporting. The public water supply system shall report the results in compliance with 43.7(1) and 43.7(3).

41.7(3) *Temperature.*

a. Applicability. Reserved.

b. Maximum contaminant levels. Reserved.

c. Monitoring requirements. Reserved.

d. BAT. Reserved.

e. Analytical methodology. Measurements for temperature must be conducted by a grade II, III or IV operator meeting the requirements of 567—Chapter 81, any person under the supervision of a grade II, III or IV operator meeting the requirements of 567—Chapter 81 or a laboratory certified by the department to perform analysis under 41.4(13). Temperature shall be determined in compliance with Method 2550 (Temperature), pp. 2-80 to 2-81, as set forth in "Standard Methods."

41.7(4) *Hydrogen power (pH).*

a. Applicability. Reserved.

b. Maximum contaminant levels. Reserved.

c. Monitoring requirements. Reserved.

d. BAT. Reserved.

e. Analytical methodology. Measurements for pH shall be conducted by a grade II, III or IV operator meeting the requirements of 567—Chapter 81, any person under the supervision of a grade II, III, or IV operator meeting the requirements of 567—Chapter 81 or a laboratory certified by the department to perform analysis under 41.4(13)*"a."* pH shall be determined in compliance with Method 4500-H^+ (pH Value), pp. 4-94 to 4-102, as set forth in "Standard Methods."

41.8 to **41.10** Reserved.

567—41.11(455B) Emergency actions regarding water supplies. Renumbered as 567—43.1(1), IAB 12/12/90.

567—41.12(455B) Public water supply system construction. Renumbered as 567—43.3(455B), IAB 12/12/90.

567—41.13(455B) Certification of completion. Renumbered as 567—43.4(455B), IAB 12/12/90.

567—41.14(455B) Operation and maintenance for public water supplies. Renumbered as 567—43.7(455B), IAB 12/12/90.

41.14(3) *Cross-connection control.* Renumbered as 567—43.1(4), IAB 12/12/90.

567—41.15(455B) Prohibition on the use of lead pipes, solder and flux. Renumbered as 567—43.1(2), IAB 12/12/90.

567—41.16(455B) Use of noncentralized treatment devices. Renumbered as 567—43.1(3), IAB 12/12/90.

TABLE C
SEPARATION DISTANCES FROM WELLS
Transferred to 567—Ch 43, Table A, IAB 12/12/90

TABLE D
Minimum Self-Monitoring Requirements
Public Water Supply Systems

Transferred to 567—Ch 43, Table B, IAB 12/12/90

These rules are intended to implement Iowa Code chapter 455B, division III, part 1.

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CHAPTER 42
WATER SUPPLY GRANTS
(Authorized Under 455E.11)

567—42.1(455B,455E) Authority, purpose and applicability.

42.1(1) *Authority.* Pursuant to 1987 Iowa Code supplement section 455E.11, a groundwater fund is created from moneys received from the tonnage fee and from other sources designated for purposes related to groundwater monitoring and groundwater quality standards. Twenty-five percent of the moneys received from the tonnage fee, beginning July 1, 1987, and ending June 30, 1988, is reserved for the purpose of providing grants to public water supply systems to abate or eliminate threats to public health and safety resulting from contamination of the water supply source.

42.1(2) *Purpose.* The purpose of these rules is to provide the procedures to apply for grant funds and to provide the method by which applications will be evaluated and grants awarded. It is the intent of these rules to award grants to projects that will result in abatement or elimination of a problem within a short time after the grant has been awarded. Projects for which grants are awarded shall be completed no later than December 31, 1990.

42.1(3) *Applicability.* The requirements of this chapter apply to all water supply grant requests authorized under 1987 Iowa Code supplement section 455E.11 regardless of the type or size of water system for which the grant is being requested.

567—42.2(455B,455E) Definitions. When used in this chapter, unless the context otherwise requires:

"Abate or eliminate threats from contamination" means to reduce the contaminant level in the finished water to a level below the maximum contaminant level pursuant to 567—Chapter 41 or to a level considered acceptable by the department.

"Application" means a request for grant funds including the required form and any attachments.

"Department" means the Iowa department of natural resources.

"Eligible applicant" means any public water supply system located within the state of Iowa and having a valid department water supply operation permit.

"Grant" means funds received pursuant to 1987 Iowa Code supplement section 455E.11.

"Maximum contaminant level goal" means a nonenforceable contaminant limit that has been set at a level at which no known or anticipated adverse effects on the health of the public will occur and which contains an adequate margin of safety.

"Project" means an activity or activities funded with 455E.11 grant funds.

"Recipient" means an eligible applicant receiving funds under this program.

"Unexpended funds" means any surplus grant funds available after all grants have been awarded.

567—42.3(455B,455E) Eligible projects and costs.

42.3(1) Projects assisted by this program must be for the abatement or elimination of a threat to the public health and safety resulting from contamination of the water supply source.

42.3(2) Eligible projects shall be limited to construction related projects. The grant-eligible portion of a project shall be limited to the actual construction costs. All other types of projects or project activities are not grant-eligible.

42.3(3) Examples of grant-eligible projects include, but are not limited to:

a. Construction costs to provide a replacement well or for reconstruction of an existing well.

b. Construction costs to provide a new water treatment facility or for reconstruction or modification of an existing facility to eliminate contamination.

c. Construction costs to connect to an alternate public water supply.

42.3(4) Examples of grant-ineligible projects or project costs include, but are not limited to:

a. Projects related to improving the aesthetic quality of the water.

42.9(2) Representatives of the state auditor's office and the department of natural resources or the department's designee shall have access to all books, accounts, documents, records, and the construction site pertaining to the project under these rules.

42.9(3) The department may perform any reviews or field inspections it deems necessary or require the applicant to perform and submit tests results (including water quality analyses) it deems necessary to ensure that water supply contamination problems have been eliminated or abated. If problems are noted, the department may require remedial actions to be taken.

567—42.10(455B,455E) Forfeiture of grant funds.

42.10(1) Forfeiture of a portion of or the entire grant may result if moneys awarded are not spent by the grant expiration date.

42.10(2) Forfeiture of a portion of or the entire grant will result for the following reasons:

a. The grant will be forfeited if it is determined that the grant was obtained by fraud or misrepresentation regardless of whether grant moneys have already been given to the grantee. Any grant received or spent shall be repaid to the state.

b. The grant will be forfeited if it is determined that the grantee did not incur costs for which grant payments were made and moneys received or spent and shall be repaid to the state.

42.10(3) The grant recipient cannot receive more grant moneys for the grant-eligible portion of the project than the cost of those items. The grant will be reduced or forfeited so that the grant award applies to only the unfunded portion of the project. Any grant moneys received or spent in excess of the grant-eligible portion of the project shall be repaid to the state.

These rules are intended to implement Iowa Code chapter 455B, Division III, Part I, and 1987 Iowa Code supplement section 455E.11 as amended by 1988 Iowa Acts, Senate File 2250, section 10.

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CHAPTER 43
WATER SUPPLIES—DESIGN AND OPERATION

[Prior to 12/12/90, portions of this chapter appeared in 567—ch 41]

567—43.1(455B) General information.

43.1(1) *Emergency actions regarding water supplies.* When, in the opinion of the director, an actual or imminent hazard exists, the supplier of water shall comply with the directives or orders of the director necessary to eliminate or minimize that hazard.

43.1(2) *Prohibition on the use of lead pipes, solder and flux.* Any pipe, solder or flux which is used in the installation or repair of any public water supply system or any plumbing in a residential or nonresidential facility providing water for human consumption which is connected to a public water supply system shall be lead free as defined in 40.2(455B). This action shall not apply to leaded joints necessary for the repair of cast iron pipe.

43.1(3) *Use of noncentralized treatment devices.*

a. Public water systems shall not use bottled water, point-of-use (POU) or point-of-entry (POE) devices to achieve compliance with a maximum contaminant level in 41.3(2)*"d."*

b. The department may require a public water system exceeding a maximum contaminant level specified in 41.3(2)*"d"* to use bottled water as a condition of an interim compliance schedule or as a temporary measure to avoid an unreasonable risk to health. The system must meet the following requirements:

(1) Submit for approval to the department a monitoring program for bottled water. The monitoring program must provide reasonable assurances that the bottled water meets all the maximum contaminant levels in 41.3(455B). The public water system must monitor a representative sample of bottled water for all contaminants regulated under 41.3(2)*"d"* the first quarter that it supplies the bottled water to the public, and annually thereafter. Results of the monitoring program shall be provided to the department annually.

(2) The public water system must receive a certification from the bottled water company that the bottled water supplied has been taken from an "approved source" as defined in 21 CFR, Part 129, Subpart A, Section 129.3(a), revised as of March 6, 1979; the bottled water company has conducted monitoring in accordance with 21 CFR, Part 129, Subpart E, Sections 129.80(g)(1) through (3), revised as of March 6, 1979; and the bottled water does not exceed any maximum contaminant levels or quality limits as set out in 21 CFR, Part 103, Subpart B, Section 103.35, revised as of March 19, 1984; 21 CFR revised as of June 19, 1986, Part 110 and 21 CFR, Part 129 revised as of March 6, 1979. The public water system shall provide the certification to the department the first quarter after it supplies bottled water and annually thereafter.

(3) The public water system is fully responsible for the provision of sufficient quantities of bottled water to every person supplied by the public water system, via door-to-door bottled water delivery.

43.1(4) *Cross-connection control.* To prevent backflow or backsiphonage of contaminants into a public water supply, connection shall not be permitted between a public water supply and any other system which does not meet the monitoring or drinking water standards required by this chapter except as provided below in *"a"* and *"b."*

a. Piping systems or plumbing equipment carrying nonpotable water, contaminated water, stagnant water, liquids, mixtures or waste mixtures shall not be connected to a public water supply unless properly equipped with an antisiphon device or backflow preventer approved by the department.

b. Positive separation shall be provided through the use of an air gap separation or an approved backflow preventer at all loading stations for bulk transport tanks.

(1) The minimum required air gap shall be twice the diameter of the discharge pipe.

(2) An approved backflow preventer for this application shall be a reduced pressure backflow preventer or an antisiphon device which complies with the standards of the American Water Works Association and has been approved by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California.

When, in the opinion of the department, evidence clearly indicates the source of contamination within the system is the result of a cross-connection, the department may require a public water supply to identify and eliminate the connection.

567—43.2(455B) Permit to operate.

43.2(1) Except as provided in 43.2(2) and 43.2(3), no person shall operate any public water supply system or part thereof without, or contrary to any condition of, an operation permit issued by the director.

43.2(2) The owner of any community water system or part thereof operating on or before December 31, 1982, must make application for an operation permit no later than June 30, 1983. No such system shall be operated without an operation permit after June 30, 1983, unless proper application has been made. The time requirement for having a valid operation permit is automatically extended until the application has either been approved or disapproved by the director.

43.2(3) The owner of any noncommunity water system or part thereof operating on or before December 31, 1983, must make application for an operation permit no later than June 30, 1984. No such system shall be operated without an operation permit after June 30, 1984, unless proper application has been made. The time requirement for having a valid operation permit is automatically extended until the application has either been approved or disapproved by the director.

43.2(4) Application and issuance.

a. Application for operation permits must be made on forms provided by the department and shall be accompanied by the fee specified in paragraph *"b."* The application for an operation permit for a community water system not in operation on or before December 31, 1982, or a noncommunity water system not in operation on or before December 31, 1983, shall be filed at least 90 days prior to the date operation is scheduled to begin unless a shorter time is approved by the director. Except as provided in 41.7(455B), the director shall issue or deny operation permits for facilities which began operation after said dates within 60 days of receipt of a completed application, unless a longer period is required and the applicant is so notified. The director may require the submission of additional information deemed necessary to evaluate the application. If the application is incomplete or otherwise deficient, processing of the application shall not be completed until such time as the applicant has supplied the missing information or otherwise corrected the deficiency.

b. Fees. A nonrefundable fee for administration and enforcement of operation permits shall be paid with the application. The fee for a noncommunity water system shall be $30. The fee for a community water system shall be based on the population served, as follows:

Under 500 —	$ 60
500 - 1,000 —	$ 100
1,001 - 5,000 —	$ 200
5,001 - 10,000 —	$ 500
10,001 - 50,000 —	$1,000
50,001 - 100,000 —	$1,500
Over 100,000 —	$2,000

Where a system provides water to another public water supply system which is required to have an operation permit, the population of the recipient water supply shall not be counted for purposes of calculating the fee.

c. Late fees. When the owner of a public water supply fails to make timely application or payment of fees, the department shall follow a standard series of actions, consisting of a first, second, and third written notice of delinquency, an administrative order under Iowa Code section 455B.175(1) and referral to the Attorney General under Iowa Code section 455B.175(3) as necessary. The department shall allow a minimum of 30 days between each successive action.

A fee shall be paid for each administrative action of the department to collect the required fee after a first written notice of delinquency has been issued, in accordance with the following schedule:

Second written notice of delinquency — $15
Third written notice of delinquency — $15
Administrative order — $35
Referral to the Attorney General — $70

These fees are in addition to any penalties otherwise provided by law, if referral to the Attorney General is necessary.

d. Identity of signatories of operation permit applications. The person who signs the application for an operation permit shall be:

(1) *Corporation.* In the case of a corporation, a principal executive officer of at least the level of vice president.

(2) *Partnership.* In the case of a partnership, a general partner.

(3) *Sole proprietorship.* In the case of a sole proprietorship, the proprietor.

(4) *Public facility.* In the case of a municipal, state or other public facility, by either the principal executive officer or the ranking elected official.

e. Appeal. The denial of a permit, or any permit condition, may be appealed by the applicant to the commission pursuant to chapter 7.

43.2(5) Permit conditions.

a. Operation permits may contain such conditions as are deemed necessary by the director to assure compliance with all applicable rules of the department, to assure that the public water supply system is properly operated and maintained, to assure that potential hazards to the water consumer are eliminated promptly, and to assure that the requirements of the Safe Drinking Water Act are met.

b. Where one or more maximum contaminant levels of 41.3(455B) cannot be met immediately, a compliance schedule for achieving compliance with standards may be made a condition of the permit, subject to 41.7(455B). A compliance schedule requiring alterations in accordance with the standards for construction in 43.3(2) may also be included for any supply that, in the opinion of the director, contains a potential hazard.

c. If the department determines that a treatment method identified in 43.3(10) is technically feasible, the department may require the system to install or use that treatment method in connection with a compliance schedule issued under the provisions of 41.6(5). The department's determination shall be based upon studies by the system and other relevant information.

43.2(6) The owner of a public water supply system shall notify the director within 30 days of any change in conditions identified in the permit application. This notice does not relieve the owner of the responsibility to obtain a construction permit as required by 43.3(455B).

43.2(7) Renewal of operation permits. Operation permits must be renewed every two years after initial issuance in order to remain valid. The renewal date shall be specified in the permit or in any renewal. Application for renewal must be received by the director, or postmarked, 60 days prior to the renewal date, on forms provided by the department and shall be accompanied by the fee specified in 41.6(4)*"b."* The procedures and late fees of 41.6(4)*"c"* shall also apply, provided that the second notice of delinquency shall not be issued until the permit has expired.

43.2(8) The director may deny renewal of, modify, suspend or revoke, in whole or in part, any operation permit for good cause. Denial of renewal or modification of a permit,

may be appealed to the commission pursuant to 567—Chapter 7. Suspension or revocation may occur after hearing, pursuant to 567—Chapter 7. Good cause includes the following:

a. Violation of any term or condition of the permit.

b. Obtaining a permit by misrepresentation of fact or failure to disclose fully all material facts.

c. A change in any condition that requires either a permanent or temporary modification of a permit condition.

d. Failure to submit such records and information as the director may require both generally and as a condition of the operation permit in order to assure compliance with conditions specified in the permit.

567—43.3(455B) Public water supply system construction.

43.3(1) *Standards for public water supplies.* Any public water supply that does not meet the drinking water standards contained in 41.3(455B) shall make the alterations in accordance with the standards for construction contained in 43.3(2) necessary to comply with the drinking water standards unless the public water supply has been granted a variance from a maximum contaminant level or treatment technique as a provision of its operation permit pursuant to 43.2(455B), provided that the public water supply meets the schedule established pursuant to 43.2(455B). Any public water supply that, in the opinion of the director, contains a potential hazard shall make the alterations in accordance with the standards for construction contained in 43.3(2) necessary to eliminate or minimize that hazard.

43.3(2) *Standards for construction.*

a. The standards for a project are the department's "Iowa Water Supply Facilities Design Standards," the Ten States Standards, the American Water Works Association (AWWA) Standards as adopted through 1982 and 43.3(7) to 43.3(9). To the extent of any conflict between the Ten States Standards or the American Water Works Association Standards and the "Iowa Water Supply Facilities Design Standards," and 43.3(7) to 43.3(9), the standards of the "Iowa Water Supply Facilities Design Standards," and 43.3(7) to 43.3(9) shall prevail.

b. The chapters of the "Iowa Water Supply Facilities Design Standards" that apply to public water supply system projects and the date of adoption are:

Chapter	Date of Adoption
1. Project submittals	January 24, 1979*
2. General design consideration	Reserved
3. Source development	April 25, 1979
4. Treatment	Reserved
5. Chemical application	Reserved
6. Pumping facilities	Reserved
7. Finished water storage	April 25, 1979
8. Iowa Standards for Water Supply Distribution Systems	September 6, 1978*

c. When engineering justification satisfactory to the director is provided substantially demonstrating that variation from the design standards will result in either 1) at least equivalent effectiveness while significantly reducing costs, or 2) improved effectiveness, such a variation from design standards may be accepted by the director. A denial of a variance may be appealed to the commission pursuant to chapter 7.

43.3(3) *Construction permits.* No person shall construct, install or modify any project without first obtaining, or contrary to any condition of, a construction permit issued by the director or by a local public works department authorized to issue permits under 567—Chapter 9 except as provided in 43.3(3)*"b,"* 43.3(4) and 43.3(6).

a. A permit to construct shall be issued by the director if the director concludes from the application and specifications submitted pursuant to 43.3(4)*"b"* and 40.4(455B) that the project

*Available upon request to the department.

will comply with the rules of the department.

b. Application for any project shall be submitted to the department at least 30 days prior to the proposed date for commencing construction or awarding of contracts. This requirement may be waived when it is determined by the department that an imminent health hazard exists to the consumers of a public water supply. Under this waiver, construction, installation, or modification may be allowed by the department prior to review and issuance of a permit if all the following conditions are met:

(1) The construction, installation or modification will alleviate the health hazard;

(2) The construction is done in accordance with the standards for construction pursuant to 43.3(2);

(3) Plans and specifications are submitted within 30 days after construction;

(4) An engineer, registered in the state of Iowa, supervises the construction; and

(5) The supplier of water receives approval of this waiver prior to any construction, installation or modification.

All applications shall be accompanied by a nonrefundable fee, as specified below:

Type of Construction	Fee
Distribution System	$ 50
Treatment Units	$ 75
per unit, not to exceed ($225 total)	
Storage Facilities	$100
New Water Source	$125

43.3(4) *Waiver from engineering requirements.* The requirement for plans and specifications prepared by a registered engineer may be waived for the following types of projects, provided the improvement complies with the standards for construction pursuant to 42.12(2). This waiver does not relieve the supplier of water from meeting the application and permit requirements pursuant to 43.3(3), except that the applicant need not obtain a written permit prior to installing the equipment.

a. Simple chemical feed, if all the following conditions are met:

(1) The improvement consists only of a simple chemical solution application or installation, which in no way affects the performance of a larger treatment process, or is included as part of a larger treatment project;

(2) The chemical application is by a positive displacement pump;

(3) The supplier of water provides the department with a schematic of the installation and manufacturer's specifications sufficient enough to determine if the simple chemical feed installation meets, where applicable, standards for construction pursuant to 43.3(2); and

(4) The final installation is approved based on an on-site review and inspection by department staff.

b. Self-contained treatment unit, if all the following conditions are met:

(1) The installation is proposed for the purpose of eliminating a maximum contaminant level violation and is of a type which can be purchased off the shelf, is self-contained requiring only a piping hook-up for installation and operates throughout a range of 35 to 80 pounds per square inch;

(2) The plant is designed to serve no more than an average of 250 individuals per day;

(3) The department receives adequate information from the supplier of water on the type of treatment unit, such as manufacturer's specifications, a schematic indicating the installation's location within the system and any other information necessary for review by the department to determine if the installation will alleviate the maximum contaminant level violation; and

(4) The final installation is approved based on an on-site inspection by department staff.

43.3(5) *Project planning and basis of design.* An engineering report containing information and data necessary to determine the conformance of the project to the standards for construction and operation in 43.3(2) and the adequacy of the project to supply water in sufficient quantity and at sufficient pressure and of a quality that complies with 41.3(455B), must be submitted to the department either with the project or in advance.

a. Such information and data must supply pertinent information as set forth in chapter 1 of the "Iowa Water Supply Facilities Design Standards".

b. The department may reject receipt or delay review of the plans and specifications until an adequate basis of design is received.

43.3(6) *Standard specifications for water main construction.* Standard specifications for water main construction by an entity may be submitted to the department or an authorized local public works department for approval. Such approval shall apply to all future water main construction by or for that entity for which plans are submitted with a statement requiring construction in accordance with all applicable approved standard specifications unless the standards for public water supply system specified in 43.3(2) are modified subsequent to such approval and the standard specifications would not be approvable under the modified standards. In those cases where such approved specifications are on file, construction may commence 30 days following receipt of such plans by the department or an authorized local public works department, if no response has been received indicating construction shall not commence until a permit is issued.

43.3(7) *Proposed raw or finished water site approval.*

a. Approval required. The site for each proposed raw water supply source or finished water below-ground level storage facility must be approved by the department prior to the submission of plans and specifications.

b. Criteria for approval. A site may be approved by the director if the director concludes that the criteria in this paragraph are met.

(1) A well site must be separated from sources of contamination by at least the distances specified in Table A.*

Drainage must be away from the well in all directions for a minimum radius of 15 feet.

After the well site has received preliminary approval from the department, the owner of the proposed public well shall submit proof of legal control of contiguous land, through purchase, lease, easement, ordinance, or other similar means that insures that the siting criteria for distances of 200 feet or less described in the above table will be maintained for the life of the well. Such control shall also provide for a minimum separation distance of at least 200 feet between a public well and sources of contamination listed in Table A* with distances equal to or greater than 200 feet. Proof of legal control should be submitted as part of the construction permit application and shall be submitted prior to issuance of a permit to construct.

When a proposed well is located in an existing well field and will withdraw water from the same aquifer as the existing well or wells, individual separation distances may be waived if substantial historical data is available indicating that no contamination has resulted.

(2) The applicant must submit proof, including analysis of four consecutive quarterly samples, that a proposed surface water source can, through readily available treatment, comply with 41.3(455B) and that the raw water source is adequately protected against potential health hazards including, but not limited to, point source discharges, hazardous chemical spills, and the potential sources of contamination listed in Table A.*

The quarterly samples for all proposed surface water sources shall be collected in March, June, September and December, unless otherwise specified by the department. Samples shall be collected at a location representative of the raw water at the point of withdrawal. The June sample shall be analyzed for the contaminants listed in 41.3(1)*"b,"* 41.3(2)*"a"* and *"b,"* 41.3(5) and 41.3(6). All quarterly samples shall be analyzed for specific conductance, solids (filterable, nonfilterable, volatile, fixed and settleable), turbidity, hardness,

*See end of chapter for Table A.

alkalinity, pH, color, algae (qualitative and quantitative), total organic carbon, biochemical oxygen demand (five day), dissolved oxygen, surfactants, nitrogen series (organic, ammonia, nitrite and nitrate), phosphate, calcium, chloride, iron, magnesium, manganese, sodium, sulfate, carbonate and bicarbonate.

After a surface water impoundment has received preliminary approval from the department for use as a raw water source, the owner of the water supply system shall submit proof of legal control through ownership, lease, easement, or other similar means, of contiguous land for a distance of 400 feet from the shoreline at the maximum water level. Legal control shall be for the life of the impoundment and shall control location of sources of contamination within the 400 foot distance. Proof of legal control should be submitted as part of the construction permit application and shall be submitted prior to issuance of a permit to construct.

(3) The minimum separation between a below-ground level finished water storage facility and any source of contamination, listed in Table A as being 50 feet or more, shall be 50 feet. Separation distances listed in Table A as being less than 50 feet shall apply to a belowground level finished water storage facility.

(4) Greater separation distances may be required where necessary to assure that no adverse effects to water supplies or the existing environment will result. Lesser separation distances may be considered if detailed justification is provided by the applicant's engineer showing that no adverse effects will result from a lesser separation distance, and the regional staff recommends approval of the lesser distance. Such exceptions must be based on special construction techniques or localized geologic or hydrologic conditions.

43.3(8) *Water vessel coating, water vessel preservative; and all chemical addition.* Any water vessel coating, water vessel preservative or any chemical added to the raw, partially treated, or finished water must be suitable for the intended use in a potable water system. The person seeking to supply or use the coating, preservative, or chemical has the burden of proof that the chemical or coating or preservative is not toxic or otherwise a potential hazard in a potable public water supply system. The department may require complete chemical analysis of the chemical, coating or preservative.

43.3(9) *Water treatment filter media material.* For single media filters, grain sizes up to 0.8 mm effective size may be approved for filters designed to remove constituents other than those contained in the primary drinking water standards. Pilot or full-scale studies demonstrating satisfactory treatment efficiency and operation with the proposed media will be required prior to issuing any construction permits which allow filter media sizes greater than 0.55 mm.

43.3(10) *Best available treatment technology.*

a. The department identifies the following as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant level for synthetic organic chemicals listed in 41.3(2)*"d"*: Central treatment using packed tower aeration or central treatment using granular activated carbon for all these chemicals except vinyl chloride.

b. The department shall require community water systems and nontransient noncommunity water systems to install and use any treatment method identified in 43.3(10) as a condition for granting an interim contaminant level except as provided in paragraph *"c."* If, after the system's installation of the treatment method, the system cannot meet the maximum contaminant level, the system shall be eligible for a compliance schedule with an interim contaminant level granted under the provisions of 41.5(3).

c. If a system can demonstrate through comprehensive engineering assessments, which may at the direction of the department include pilot plant studies, that the treatment methods identified in 43.3(10) would only achieve a de minimis reduction in contaminants, the department may issue a schedule of compliance that requires the system being granted the interim contaminant level to examine other treatment methods as a condition of obtaining an interim contaminant level.

d. If the department determines that a treatment method identified in paragraph *"c"* of this subrule is technically feasible, the department may require the system to install or use

that treatment method in connection with a compliance schedule issued under the provisions of 41.7(455B). The department's determination shall be based upon studies by the system and other relevant information.

This rule is intended to implement Iowa Code section 455B.173.

567—43.4(455B) Certification of completion. Within 30 days after completion of construction, installation or modification of any project, the permitholder shall submit a certification by a registered professional engineer that the project was completed in accordance with the approved plans and specifications except pursuant to 43.3(4).

567—43.5(455B) Filtration and disinfection.

43.5(1) *Applicability/general requirements.*

a. These rules apply to community and noncommunity public water supply systems using surface water or groundwater under the direct influence of surface water in whole or in part. The rules establish criteria under which filtration is required as a treatment technique. In addition, these rules establish treatment technique requirements in lieu of maximum contaminant levels for *Giardia lamblia,* heterotrophic bacteria, Legionella, viruses and turbidity. Each public water system with a surface water source or a groundwater source under the direct influence of surface water must provide treatment of that source water which complies with these treatment technique requirements. The treatment technique requirements consist of installing and properly operating water treatment processes which reliably achieve:

(1) At least 99.9 percent (3-log) removal or inactivation of *Giardia lamblia* cysts between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer; and

(2) At least 99.99 percent (4-log) removal or inactivation of viruses between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer.

b. Criteria for identification of groundwater under the direct influence of surface water. "Groundwater under the direct influence of surface water" means any water beneath the surface of the ground with: (1) significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia;* or (2) significant and relatively rapid shifts in water characteristics such as turbidity (particulate content), temperature, conductivity, or pH which closely correlate to climatological or surface water conditions. Direct influence must be determined for individual sources in accordance with criteria established by the department. The department determination of direct influence may be based on site-specific measurements of water quality or documentation of well construction characteristics and geology with field evaluation. Only surface water and groundwater sources under the direct influence of surface water that are at risk to the contamination from *Giardia* cysts are subject to the requirements of this rule. Groundwater sources shall not be subject to this rule. The evaluation process shall be used to delineate between surface water, groundwater under the direct influence of surface water and groundwater. The identification of a source as surface water and groundwater under the direct influence of surface water shall be determined for an individual source, by the department, in accordance with the following criteria. The public water supply shall provide to the department that information necessary to make the determination. The evaluation process will involve one or more of the following steps:

(1) Preliminary review. The department shall conduct a preliminary evaluation of information on the source provided by the public water supply to determine if the source is an obvious surface water (i.e., pond, lake, stream, etc.) or groundwater under the direct influence of surface water. The source shall be evaluated during that period of highest susceptibility to influence from surface water. The preliminary evaluation may include a review of surveys, reports, geological information of the area, physical properties of the source, and a review of departmental and public water system records. If the source is identified as a surface water no additional evaluation shall be conducted. If the source is a groundwater and identified as a deep

well, it shall be classified as a groundwater not under the direct influence of surface water and no additional evaluation shall be conducted, unless through direct knowledge or documentation the source does not meet the requirements of 43.5(1)*"b"*(2). The deep well shall then be evaluated in accordance with 43.5(1)*"b"*(3). If the source is a shallow well, the source shall be evaluated in accordance with 43.5(1)*"b"*(2). If the source is a spring, infiltration gallery, Ranney well, or any other subsurface source it shall be evaluated in accordance with 43.5(1)*"b"*(3).

(2) Well source evaluation. Shallow wells greater than 50 feet in lateral distance from a surface water source shall be evaluated for direct influence of surface water through a review of departmental or public water system files in accordance with 43.5(1)*"b"*(2)"1," first unnumbered paragraph, and 43.5(1)*"b"*(2)"2." Sources that meet the criteria shall be considered to be not under the direct influence of surface water. No additional evaluation will be required. Shallow wells 50 feet or less in lateral distance from a surface water shall be in accordance with 43.5(1)*"b"*(3) and (4).

1. Well construction criteria. The well shall be constructed so as to include:

— A surface sanitary seal using bentonite clay, concrete, or other acceptable material.

— The well casing shall penetrate a confining bed.

— The well casing shall be perforated or screened only below a confining bed.

2. Water quality criteria. Water quality records shall indicate:

— No record of total coliform or fecal coliform contamination in untreated samples collected over the past three years.

— No history of turbidity problems associated with the well, other than turbidity as a result of inorganic chemical precipitates.

— No history of known or suspected outbreak of *Giardia* or other pathogenic organisms associated with surface water (e.g., *Cryptosporidium*) which has been attributed to well.

3. Other available data. If data on particulate matter analysis of the well are available, there shall be no evidence of particulate matter present that is associated with surface water. If information on turbidity or temperature monitoring of the well and nearby surface water is available, there shall be no data on the source which correlates with that of a nearby surface water.

4. Wells that do not meet all the requirements listed shall require further evaluation in accordance with 43.5(1)*"b"*(3) and (4).

(3) Formal evaluation. The evaluation shall be conducted by the department or registered engineer at the direction of the public water supply. The evaluation shall include:

1. Complete file review. In addition to the information gathered in 43.5(1)*"b"*(1), the complete file review shall consider but not be limited to: design and construction details; evidence of direct surface water contamination; water quality analysis; indications of waterborne disease outbreaks; operational procedures; and customer complaints regarding water quality or water-related infectious illness. Sources other than a well source shall be evaluated in a like manner to include a field survey.

2. Field survey. A field survey shall substantiate findings of the complete file review and determine if the source is at risk to pathogens from direct surface water influence. The field survey shall examine the following criteria for evidence that surface water enters the source through defects in the source which include but are not limited to: a lack of a surface seal on wells, infiltration gallery laterals exposed to surface water, springs open to the atmosphere, surface runoff entering a spring or other collector, and distances to obvious surface water sources.

A report summarizing the findings of the complete file review and field survey shall be submitted to the department for final review and classification of the source. If the complete file review or field survey demonstrates conclusively that the source is subject to the direct surface water influence, the source shall be classified as under the direct influence of surface water. Either method or both may be used to demonstrate that the source is a surface water or groundwater under the direct influence of surface water. If the findings do not demonstrate conclusive evidence of direct influence of surface water, the analysis outlined in 43.5(1)*"b"*(4) should be conducted.

(4) Particular analysis and physical properties evaluation.

1. Surface water indicators. Particulate analysis shall be conducted to identify organisms which only occur in surface waters as opposed to groundwaters, and whose presence in a groundwater would indicate the direct influence of surface water.

— Identification of a *Giardia* cyst, live diatoms, and blue-green, green, or other chloroplast containing algae in any source water shall be considered evidence of direct surface water influence.

— Rotifers and insect parts are indicators of surface water. Without knowledge of which species is present, the finding of rotifers indicates that the source is either directly influenced by surface water, or the water contains organic matter sufficient to support the growth of rotifers. Insects or insect parts shall be considered strong evidence of surface water influence, if not direct evidence.

— The presence of coccidia (e.g., *Cryptosporidium*) in the source water is considered a good indicator of direct influence of surface water. Other macroorganisms (>7 um) which are parasitic to animals and fish such as, but not limited to, helminths (e.g., tapeworm cysts), ascaris, and *Diphyllobothrium,* shall be considered as indicators of direct influence of surface water.

2. Physical properties. Turbidity, temperature, pH and conductivity provide supportive, but less direct, evidence of direct influence of surface water. Turbidity fluctuations of greater than 0.5–1 NTU over the course of a year may be indicative of direct influence of surface water. Temperature fluctuations may also indicate surface water influence. Changes in other chemical parameters such as pH, conductivity, hardness, etc. may also give an indirect indication of influence by nearby surface water.

c. A public water system using a surface water source or a groundwater source under the direct influence of surface water is considered to be in compliance with the requirements of this subrule if it meets the filtration requirements in 43.5(3) and the disinfection requirements in 43.5(2) in accordance with the effective dates specified within the respective subrules.

d. Each public water system using a surface water source or a groundwater source under the direct influence of surface water must be operated by a certified operator who meets the requirements of 567—Chapter 81.

43.5(2) *Disinfection.* All community and noncommunity public water supply systems using surface water or groundwater under the direct influence of surface water in whole or in part shall be required to provide disinfection in compliance with this subrule and filtration in compliance with 43.5(3). If the department has determined that filtration is required, the system must comply with any interim disinfection requirements the department deems necessary before filtration is installed. A system providing filtration on or before December 30, 1991, must meet the disinfection requirements of this subrule beginning June 29, 1993. A system providing filtration after December 30, 1991, must meet the disinfection requirements of this subrule when filtration is installed. Failure to meet any requirement of this subrule after the applicable date specified in this subrule is a treatment technique violation. The disinfection requirements are as follows:

a. The disinfection treatment must be sufficient to ensure that the total treatment processes of that system achieve at least 99.9 percent (3-log) inactivation or removal of *Giardia lamblia* cysts and at least 99.99 percent (4-log) inactivation or removal of viruses, acceptable to the department.

b. The disinfection system must include:

(1) Redundant components, including an auxiliary power supply with automatic start-up and alarm to ensure that disinfectant application is maintained continuously while water is being delivered to the distribution system, or

(2) Automatic shut-off of delivery of water to the distribution system whenever there is less than 0.3 mg/l of residual disinfectant concentration in the water. If the department determines that automatic shut-off would cause unreasonable risk to health or interfere with fire protection, the system must comply with 43.5(2)*"b"*(1).

c. Disinfectant residual entering system. The residual disinfectant concentration in the water entering the distribution system, measured as specified in 41.7(2)*"c"* and *"e,"* cannot be less than 0.3 mg/l for more than 4 hours.

d. Disinfectant residual in the system. The residual disinfectant concentration in the distribution system, measured as total chlorine, combined chlorine, or chlorine dioxide, as specified in 41.7(2)*"c"* and *"e,"* cannot be undetectable in more than 5 percent of the samples each month for any two consecutive months that the system serves water to the public. Water in the distribution system with a heterotrophic bacteria concentration less than or equal to 500/ml, measured as heterotrophic plate count (HPC) as specified in 41.2(3)*"e,"* is deemed to have a detectable disinfectant residual for purposes of determining compliance with this requirement. Therefore, the value "V" in the following formula cannot exceed 5 percent in one month for any two consecutive months.

$$V = \frac{c+d+e}{a+b} \times 100$$

where:

a = number of instances where the residual disinfectant concentration is measured;
b = number of instances where the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;
c = number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;
d = number of instances where no residual disinfectant concentration is detected and where the HPC is >500/ml; and
e = number of instances where the residual disinfectant concentration is not measured and HPC is >500/ml.

43.5(3) *Filtration.* A public water system that uses a surface water source or a groundwater source under the direct influence of surface water must provide treatment consisting of both disinfection, as specified in 43.5(2), and filtration treatment which complies with the turbidity requirements of subrule 41.7(1). A system providing or required to provide filtration on or before December 30, 1991, must meet the requirements of 41.7(1) by June 29, 1993. A system providing or required to provide filtration after December 30, 1991, must meet the requirement of 41.7(1) when filtration is installed. A system shall install filtration within 18 months after the department determines, in writing, that filtration is required. The department may require and the system shall comply with any interim turbidity requirements the department deems necessary. Failure to meet any requirements of the referenced subrules after the dates specified is a treatment technique violation.

43.5(4) *Analytical and monitoring requirements.*

a. Analytical requirements. Only the analytical method(s) specified in this paragraph, or otherwise approved by the department, may be used to demonstrate compliance with the requirements of 43.5(2) and 43.5(3). Measurements for pH, temperature, turbidity, and residual disinfectant concentrations must be conducted by a grade II, III or IV operator meeting the requirements of 567—Chapter 81, any person under the supervision of a grade II, III, or IV operator meeting the requirements of 567—Chapter 81, or a laboratory certified by the department to perform analysis under 41.4(13)*"a."* Measurements for heterotrophic plate count bacteria must be conducted by a laboratory certified by the department to do such analysis. Until laboratory certification criteria are developed for the analysis of heterotrophic plate count bacteria, any laboratory certified for total coliform analysis by department is certified for heterotrophic plate count bacteria analysis unless notified otherwise by the department. The procedures shall be performed in accordance with 567—Chapter 41 as listed below and the referenced publications.

(1) Heterotrophic plate count - 567—41.2(3)
(2) Turbidity - 567—41.7(1)

(3) Residual disinfectant concentration - 567—41.7(2)
(4) Temperature - 567—41.7(3)
(5) pH - 567—41.7(4).

b. Monitoring requirements. A public water system that uses a surface water source or a groundwater source under the influence of surface water must monitor in accordance with this paragraph or some interim requirements required by the department, until filtration is installed.

(1) Turbidity measurements to demonstrate compliance with 43.5(3) shall be performed in accordance with 41.7(1).

(2) Residual disinfectant concentration of the water entering the distribution system to demonstrate compliance with 43.5(2)*"d"* shall be monitored in accordance with 41.7(2)*"c"*(1).

(3) The residual disinfectant concentration of the water in the distribution system to demonstrate compliance with 43.5(2)*"d"* shall be monitored in accordance with 41.7(2)*"c"*(2).

(4) Reporting and response to violation. Public water supplies shall report the results of routine monitoring required to demonstrate compliance with 567—43.5(455B) and treatment technique violations as follows.

1. Each system, upon discovering that a waterborne disease outbreak potentially attributable to that water system has occurred, must report that occurrence to the department as soon as possible, but no later than by the end of the next business day.

2. If at any time the turbidity exceeds 5 NTU, the system must inform the department as soon as possible, but no later than the end of the next business day.

3. If at any time the residual falls below 0.3 mg/l in the water entering the distribution system, the system must notify the department as soon as possible, but no later than by the end of the next business day. The system also must notify the department by the end of the next business day whether or not the residual was restored to at least 0.3 mg/l within 4 hours.

4. Routine monitoring results shall be provided as part of the monthly operation reports in accordance with 43.7(3).

567—43.6(455B) Disinfectant and disinfectant by-products. Reserved.

567—43.7(455B) Operation and maintenance for public water supplies.

43.7(1) *Records of operation required.*

a. Monthly records of operation shall be completed by all public water supplies, on forms provided by the department or on similar forms, unless a public water supply meets all of the following conditions:

(1) Supplies an annual average of not more than 25,000 gpd or serves no more than an average of 250 individuals daily;

(2) Does not provide any type of treatment;

(3) Does not utilize surface water either in whole or in part as a water source.

The reports shall be completed as described in 43.7(1)*"b"* and maintained at the facility for inspection by the department for a period of five years.

b. Monthly operation reports shall be completed as follows:

(1) Pumpage. Noncommunity supplies shall measure and record the total water used each week. It is recommended that a daily measurement and recording be made. Community supplies shall measure and record daily water used. Reporting of pumpage may be required in an operation permit where needed to verify MCL compliance.

(2) Treatment effectiveness. Where treatment is practiced, the intended effect of the treatment shall be measured at locations and by methods which best indicate effectiveness of the treatment process. These measurements shall be made pursuant to Table B* of this rule.

(3) Treatment effectiveness for a primary standard. Where the raw water does not comply with 41.3(455B) and treatment is practiced for the purpose of complying with a primary drinking

*See end of chapter for Table B.

water standard, daily measurement of the primary standard constituent or an appropriate indicator constituent designated by the department shall be recorded. The department may require reporting of these results in the operation permit to verify MCL compliance.

(4) Treatment effectiveness for a secondary standard. Where treatment is practiced for the purpose of achieving the recommended level of any constituent designated in the federal secondary standards, measurements shall be recorded as specified in Table B.*

(5) Chemical application. Chemicals such as fluoride, iodine, bromine and chlorine, which are potentially toxic in excessive concentration, shall be measured and recorded daily. Recording shall include the amount of chemical applied each day. Where the supplier of water is attempting to maintain a residual of the chemical throughout the system, such as fluoride or chlorine, the residual in the system shall be recorded daily. The quantity of all other chemicals applied shall be measured and recorded at least once each week.

(6) Static water levels and pumping water levels must be measured and recorded once per month for all groundwater sources in accordance with guidelines provided by the department. More or less frequent measurements may be approved by the department where historical data justifies it.

43.7(2) *Chemical application.* The supplier of water shall keep a record of all chemicals used. This record should include a clear identification of the chemical by brand or generic name and the dosage rate. When chemical treatment is applied with intent of obtaining an in-system residual, the residuals will be monitored regularly. When chemical treatment is applied and in-system residuals are not expected, the effectiveness of the treatment will be monitored through an appropriate indicative parameter.

a. Continuous disinfection.

(1) When required. Continuous disinfection must be provided at all public water supply systems, except for: Groundwater supplies that have no treatment facilities or have only fluoride, sodium hydroxide or soda ash addition and that meet the bacterial standards as provided in 41.3(455B) and do not show other actual or potential hazardous contamination by microorganisms.

(2) Method. Chlorine is the preferred disinfecting agent. Chlorination may be accomplished with liquid chlorine, calcium or sodium hypochlorites or chlorine dioxide. Other disinfecting agents will be considered, provided a residual can be maintained in the distribution system, reliable application equipment is available and testing procedures for a residual are recognized in "Standard Methods."

(3) Chlorine residual. A minimum free available chlorine residual of 0.3 mg/l or a minimum total available chlorine residual of 1.5 mg/l must be continuously maintained throughout the water distribution system, except for those points on the distribution system that terminate as dead ends or areas that represent very low use when compared to usage throughout the rest of the distribution system as determined by the department.

(4) Test kit. A test kit capable of measuring free and combined chlorine residuals in increments no greater than 0.1 mg/l in the range below 0.5 mg/l, and in increments no greater than 0.2 mg/l in the range from 0.5 mg/l to 1.0 mg/l, and in increments no greater than 0.3 mg/l in the range from 1.0 mg/l to 2.0 mg/l must be provided at all chlorination facilities. The test kit must use a method of analysis that is recognized in "Standard Methods."

(5) Leak detection, control and operator protection. A bottle of at least fifty-six percent (56%) ammonium hydroxide must be provided at all gas chlorination installations for leak detection. Leak repair kits must be available where ton chlorine cylinders are used.

(6) Other disinfectant residuals. If an alternative disinfecting agent is approved by this department the residual levels and type of test kit used will be assigned by the department in accordance with and based upon analytical methods contained in "Standard Methods."

b. Phosphate compounds.

*See end of chapter for Table B.

(1) When phosphate compounds are to be added to any public water supply system which includes iron or manganese removal or ion exchange softening, such compounds must be applied after the iron or manganese removal or ion exchange softening treatment units, unless the director has received and approved an engineering report demonstrating the suitability for addition prior to these units in accordance with the provisions of subrule 41.12(2). The department may require the discontinuance of phosphate addition where it interferes with other treatment processes, the operation of the water system or if there is a significant increase in biological populations associated with phosphate application.

(2) The total phosphate concentration in the finished water must not exceed 10 mg/l as PO_4.

(3) Chlorine shall be applied to the phosphate solution in sufficient quantity to give an initial concentration of 10 mg/l in the phosphate solution. A chlorine residual must be maintained in the phosphate solution at all times.

(4) Test kits capable of measuring polyphosphate and orthophosphate in a range from 0.0 to 10.0 mg/l in increments no greater than 2.0 mg/l must be provided.

(5) Continuous application or injection of phosphate compounds directly into a well is prohibited.

c. Hydrofluosilicic acid. Where hydrofluosilicic acid is added to a public water supply, the operator shall be equipped with a fluoride test kit with a minimum range of from 0.0 to 2.0 mg/l in increments no greater than 0.1 mg/l. Distilled water and standard fluoride solutions of 0.2 mg/l and 1.0 mg/l must be provided.

43.7(3) *Reporting and record-keeping requirements for systems using surface water and groundwater under the direct influence of surface water.* In addition to the monitoring requirements required by 43.7(1) and 43.7(2), a public water system that uses a surface water source or a groundwater source under the direct influence of surface water must report monthly to the department the information specified in this subrule beginning June 29, 1993, or when filtration is installed, whichever is later.

a. Turbidity measurements as required by 41.7(1) and 43.5(3) must be reported within ten days after the end of each month the system serves water to the public. Information that must be reported includes:

(1) The total number of filtered water turbidity measurements taken during the month.

(2) The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to the turbidity limits specified in 41.7(1)"b" for the filtration technology being used.

(3) The date and value of any turbidity measurements taken during the month which exceed 5 NTU.

b. Disinfection information specified in 41.7(2) and 43.5(2) must be reported to the department within ten days after the end of each month the system serves water to the public. Information that must be reported includes:

(1) For each day, the lowest measurement of residual disinfectant concentration in mg/l in water entering the distribution system.

(2) The date and duration of each period when the residual disinfectant concentration in water entering the distribution system fell below 0.3 mg/l and when the department was notified of the occurrence.

(3) The following information on the samples taken in the distribution system in conjunction with total coliform monitoring pursuant to 41.2(1)*"c"*:

1. Number of instances where the residual disinfectant concentration is measured;

2. Number of instances where the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;

3. Number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

4. Number of instances where no residual disinfectant concentration is detected and where HPC is >500/ml;

5. Number of instances where the residual disinfectant concentration is not measured and HPC is >500/ml; and

6. For the current and previous month the system serves water to the public, the value of "V" in the following formula:

$$V = \frac{c+d+e}{a+b} \times 100$$

where

a = the value in *"b"*(3)"1" of this subrule,
b = the value in *"b"*(3)"2" of this subrule,
c = the value in *"b"*(3)"3" of this subrule,
d = the value in *"b"*(3)"4" of this subrule, and
e = the value in *"b"*(3)"5" of this subrule.

TABLE A
SEPARATION DISTANCES FROM WELLS

[Prior to 12/12/90, appeared in 567—Ch 41, Table C]

	SOURCE OF CONTAMINATION		DISTANCES (FT.)								
			5	10	25	50	75	100	200	400	1000
WASTEWATER STRUCTURES	POINT DISCHARGE TO GROUND SURFACE	Well house floor drains	A								
		Water treatment plant wastes				A					
		Sanitary & industrial discharges								A	
	SEWERS AND DRAINS	Well house floor drains to surface	A→SA→WM→A			SP→A		unknown			
		Well house floor drains to sewers			A→WM→		A→SP→		A→unknown		
		Water plant wastes			A→WM→		A→SP→		A→unknown		
		Sanitary & storm sewers, drains			A→WM→		A→SP→		A→unknown		
		Sewer force mains					A→WM→		A→SP→		
	LAND DISPOSAL OF WASTES	Land application of solid wastes						D	S		
		Irrigation of wastewater						D	S		
	Concrete vaults & septic tanks							D	S		
	Mechanical wastewater treatment plants								D	S	
	Cesspools & earth pit privies								D	S	
	Soil absorption fields								D	S	
	Lagoons									D	S
CHEM.	Chemical application to ground surface							D	S		
	CHEMICAL AND MINERAL STORAGE	Above ground						D	S		
		On or under ground							D	S	
ANIMALS	Animal pasturage					A					
	Animal enclosure							D	S		
	ANIMAL WASTES	Land application of solids						D	S		
		Land appl. of liquid or slurry						D	S		
		Storage tank						D	S		
		Solids stockpile							D	S	
		Storage basin or lagoon								D	S
	Earthen silage storage trench or pit							D	S		
MISC.	Basements, pits, sumps			A							
	Flowing streams or other surface water bodies					A					
	Cisterns					D		S			
	Cemeteries								A		
	Private wells								D	S	
	Solid waste disposal sites										A

KEY

D - Deep well
S - Shallow well
A - All wells

WM - Pipe of water main specifications
SP - Pipe of sewer pipe specifications
ENC.WM - Encased in 4" of concrete

TABLE B

Minimum Self-Monitoring Requirements
Public Water Supply Systems

[Prior to 12/12/90, appeared in 567—Ch 41, Table D]

CATEGORY	TREATMENT TYPE WATER PUMPAGE[1]	PLANT GRADE	MONITORING PARAMETER	MONITORING FREQUENCY	SAMPLE LOCATION
1.	Iron or manganese removal; aeration; chlorination; fluoridation; stabilization; any other chemical addition; or any combination of these processes.		Flow	daily	Raw, Final
			Residual Chlorine	daily	Final, Distr. System
			Fluoride	daily	Final
			Fluoride	1/month	Raw
			Iron	1/week	Raw, Final
			Manganese	1/week	Raw, Final
	0.025 to less than 0.1 MGD	I	pH	1/week	Final
			Phosphate (PO_4)	1/week	Final
1.	Iron or manganese removal; aeration; chlorination; fluoridation; stabilization; any other chemical addition; or any combination of these processes.		Flow	daily	Raw, Final
			Residual Chlorine	daily	Final, Distr. System
			Fluoride	daily	Final
			Fluoride	1/month	Raw
			Iron	2/week	Raw, Final
			Manganese	2/week	Raw, Final
	0.1 to 1.5 MGD	II	pH	2/week	Final
			Phosphate (PO_4)	2/week	Final
1.	Iron or manganese removal; aeration; chlorination; fluoridation; stabilization; any other chemical addition; or any combination of these processes.		Flow	daily	Raw, Final
			Residual Chlorine	daily	Final, Distr. System
			Fluoride	daily	Final
			Fluoride	2/month	Raw
			Iron	daily	Raw, Final
			Manganese	daily	Raw, Final
	greater than 1.5 MGD	III	pH	daily	Final
			Phosphate (PO_4)	daily	Final

1. Where the pumpage is unknown, the plant grade will be determined from the population and an evaluation of industrial users.

TABLE B (Continued)

Minimum Self-Monitoring Requirements
Public Water Supply Systems

CATEGORY	TREATMENT TYPE WATER PUMPAGE[1]	PLANT GRADE	MONITORING PARAMETER	MONITORING FREQUENCY	SAMPLE LOCATION
2.	Ion exchange softening.	II	pH	2/week	Final
			Hardness	2/week	Raw, Final
	0.025 to 0.5 MGD		Alkalinity	1/week	Raw, Final
			Flow	daily	Raw, Bypass, Final
			Sodium	annual	or Treated
2.	Ion exchange softening.		pH	daily	Final
			Hardness	daily	Raw, Final
	Greater than 0.5 MGD	III	Alkalinity	daily	Raw, Final
			Flow	daily	Raw, Bypass or
			Sodium	annual	Treated, Final
3.	Direct surface water filtration.		Turbidity	daily	Final
				2/week	Raw
	0.025 to 0.5 MGD	II	pH	daily	Raw, Final
			Flow	daily	Raw, Final
			Temperature	daily	Raw
			Alkalinity	daily	Raw, Final
3.	Direct surface water filtration.		Turbidity	daily	Raw, Final
			pH	daily	Raw, Final
	Greater than 0.5 MGD	III	Flow	daily	Raw, Final
			Temperature	daily	Raw
			Alkalinity	daily	Raw, Final

TABLE B (Continued)
Minimum Self-Monitoring Requirements
Public Water Supply Systems

CATEGORY	TREATMENT TYPE WATER PUMPAGE[1]	PLANT GRADE	MONITORING PARAMETER	MONITORING FREQUENCY	SAMPLE LOCATION
4.	Utilization of lime, soda ash or other chemical additions for pH adjustment in the precipitation and coagulation of iron or manganese.		Flow	daily	Raw, Final
			Iron	1/week	Raw, Final
			Manganese	1/week	Raw, Final
			pH*	daily	Final
			pH	1/week	Raw
	0.025 to 0.5 MGD	II	Alkalinity	1/week	Final
4.	Utilization of lime, soda ash or other chemical additions for pH adjustment in the precipitation and coagulation of iron or manganese.		Flow	daily	Raw, Final
			Iron	1/week	Raw
			Iron	daily	Final
			Manganese	1/week	Raw
			Manganese	daily	Final
	Greater than 0.5 MGD	III	pH	1/week	Raw
			pH	daily	Final
			Alkalinity		

TABLE B (Continued)
Minimum Self-Monitoring Requirements
Public Water Supply Systems

CATEGORY	TREATMENT TYPE WATER PUMPAGE[1]	PLANT GRADE	MONITORING PARAMETER	MONITORING FREQUENCY	SAMPLE LOCATION
5.	Complete surface water clarification or lime softening of surface water.		Flow	daily	Raw, Final
			Turbidity	daily	Raw, Final
			pH	daily	Raw, Final
	0.0 to less than 0.1 MGD	III	Color	daily	Final
			Odor	daily	Final
5.	Complete surface water clarification or lime softening of surface water.		Flow	daily	Raw, Final
			Turbidity	daily	Raw, Final
			pH	daily	Raw, Final
	0.1 to 1.5 MGD	III	Color	daily	Final
	Greater than 1.5 MGD	IV	Odor	daily	Final
			Temperature	daily	Raw
			Alkalinity (P&M)	daily	Raw, Final
			Hardness	daily	Raw, Final
5.	Lime softening of groundwater.		Flow	daily	Raw, Final
			pH	1/week	Raw
	0.0 to 1.5 MGD	III	pH	daily	Final
	Greater than 1.5	IV	Temperature	1/week	Raw
			Alkalinity	1/week	Raw
			Alkalinity	daily	Final
			Hardness	1/week	Raw
			Hardness,	daily	Final
			Fluoride[2]	daily	Raw, Final

2. Sampling required if fluoride reduction is being utilized to comply with the MCL.

TABLE B (Continued)
Minimum Self-Monitoring Requirements
Public Water Supply Systems

CATEGORY	TREATMENT TYPE WATER PUMPAGE[1]	PLANT GRADE	MONITORING PARAMETER	MONITORING FREQUENCY	SAMPLE LOCATION
6.	Reverse osmosis and electrodialysis.		Flow	daily	Raw, Reject, Final
			TDS (filterable residue)	daily	Raw, Final
	0.025 to less than 0.5 MGD	II	pH	1/week	Raw
	0.5 to 1.5 MGD	III	pH	daily	Final
	Greater than 1.5 MGD	IV	Alkalinity (P&M)	daily	Final
			Hardness (T)	1/week	Raw
			Hardness (T)	daily	Final
			Designated by department	X	X
7.	Demineralization or NO_3 reduction by ion exchange.		Flow	daily	Raw, Bypass, Final
			NO_3	daily	Raw, Final
			SO_4	1/week	Raw, Final
	0.025 to less than 0.5 MGD	II	pH	1/week	Raw, Final
	0.5 to 1.5 MGD	III	Designated by department	X	X
	Greater than 1.5 MGD	IV			
8.	Activated carbon for THM or synthetic organics removal.		Total organic carbon as designated by department	1/3 mo. X	Raw, Final X
	0.025 to 1.5 MGD	III			
	Greater than 1.5 MGD	IV			

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CHAPTERS 44 to 46
Reserved

Iowa Water Quality Standards
Water Use Designations

e.

WESTERN IOWA RIVER BASINS

Western Iowa River Basins (Missouri, Big Sioux, and Little Sioux Rivers)

The streams or stream segments named below in alphabetical order are referenced within the Water Use Designations for Western Iowa River Basins. Reference numbers provided in the alphabetical list correspond to numbered strean segments in the Water Use Designations.

Big Sioux River - 6
Boyer River - 3
Deep Creek - 5b
Floyd River - 5
Little Sioux River - 7, 8, 9
Missouri River - 1, 2
Soldier River - 4
Willow Creek - 5a
Wiskey Creek - 10

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Missouri R.								
1.	Iowa-Missouri State Line to confluence with the Big Sioux R.	X	X						
2.	City of Council Bluffs Water Works Intakes						X		
	Boyer R.		X						
3.	Mouth (Pottawattamie Co.) to confluence with the East Boyer R. (Crawford Co.)								
	Soldier R.								
4.	Mouth (Harrison Co.) to confluence with E. Soldier R.		X						
	Floyd R.								
5.	Mouth (Woodbury Co.) to confluence with N. Br. Floyd R. (Plymouth Co.)		X						
	Willow Cr.								
5a.	Mouth (Plymouth Co.) to confluence with an unnamed tributary (NE 1/4, Sec. 11, T93N, R44W, Plymouth Co.)			X					
	Deep Cr.								
5b.	Mouth (Plymouth Co.) to confluence with an unnamed tributary (NE 1/4, Sec. 11, T93N, R44W, Plymouth Co.)			X					
	Big Sioux R.								
6.	Mouth (Woodbury Co.) to Iowa-Minnesota State Line	X	X						
	Little Sioux R.								
7.	Mouth (Harrison Co.) to Hwy. 3 in Cherokee (S26, T92N, R40W, Cherokee Co.)		X	X					
8.	Hwy. 3 in Cherokee (S26, T92N, R40W, Cherokee Co.) to Linn Grove Dam (Buena Vista Co.)	X	X						X
9.	Linn Grove Dam (Buena Vista Co.) to Clay Co., S17, T96N, R36W (east corporate limit, Spencer)		X						X
	Wiskey Cr.								
10.	Mouth (Plymouth Co.) to confluence with an unnamed tributary (NW 1/4, Sec. 11, T93N, R44W, Plymouth Co.)			X					

Iowa Water Quality Standards
Water Use Designations

SOUTHERN IOWA RIVER BASINS

The streams or strean segments naned below in alphabetical order are referenced within the Water Use Designations for Southern Iowa River Basins. Reference nunbers provided in the alphabetical list correspond to nunbered strean segnents in the Water Use Designations.

Chariton River - 1 to 4
East Fork 102 River - 5
East Nishnabotna River - 9
Nishnabotna River - 8
Nodaway River - 6, 7
Silver Creek - 11
West Nishnabotna River - 10, 10a

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Chariton R.								
1.	Iowa-Missouri State Line (Appanoose Co.) to Hwy. 2 (Appanoose Co., S27, T69N, R17W)		X						
2.	Hwy. 2 (Appanoose Co., S27, T69N, R17W) to Rathbun Reservoir Dan (Appanoose Co., S35, T69N, R18W)		X						X
3.	Rathbun Regional Water Company water supply intake						X		
4.	Rathbun Reservoir	X	X						X
	Dan to Appanoose-Wayne Co. Line								
5.	E. FK. 102 R.								
	City of Bedford Water Works Intake						X		
	Nodaway R.								
6.	Iowa-Missouri State Line (Page Co.) to confluence of Middle Nodaway R. and the W. Nodaway R. (Montgomery Co.)		X						
7.	City of Clarinda Water Works intake						X		
	Nishnabotna R.								
8.	Iowa-Missouri State Line (Fremont Co.) to confluence of the E. Nishnabotna R. and the W. Nishnabotna R. (Fremont Co.)		X						
	E. Nishnabotna R.								
9.	Mouth (Fremont Co.) to confluence of Troublesome Creek (Cass Co.)		X						
	W. Nishnabotna R.								
10.	Mouth (Fremont Co.) to confluence with W Fk. of W Nishnabotna R. (Shelby Co.)		X						
10a.	Confluence with Elk Cr. (Sec. 36, T81N, R36W, Shelby Co.) to confluence with an unnamed tributary (Sec. 34, T83N, R36W, Carroll Co.)			X					
	Silver Cr.								
11.	Mouth (Mills Co.) to Hwy. 41 (Mills Co.)		X						

Iowa Water Quality Standards
Water Use Designations

DES MOINES RIVER BASIN

Des Moines River Basin (Lower Des Moines River, Upper Des Moines River, East Fork Des Moines River, Blue Earth River, and Raccoon River Subbasins).

The streams or stream segments named below in alphabetical order are referenced within the Water Use Designations the Des Moines River Basin. Reference numbers provided in the alphabetical list correspond to numbered stream segments in the Water Use Designations.

Big Creek Lake - 14
Boone River - 15, 16, 17
Brushy Creek - 31
Cedar Creek - 2c
Des Moines River - 1, 2, 4 to 13
East Fork Des Moines River - 18, 19, 20
Miller Creek - 2a
Middle Raccoon River - 27, 28, 29, 30, 31
Middle River - 3
Muchakinock Creek - 2b
North Raccoon River - 24, 25
Raccoon River - 21, 22, 23
Short Creek - 25a
South Raccoon River - 24

	Water uses							
	A	B(WW)	B(LR)	B(LM)	B(CW)	C	HQ	HQR
LOWER DES MOINES RIVER SUBBASIN								
Des Moines R.								
1. Mouth (Lee Co.) to confluence with the Raccoon River (includes Red Rock Reservoir)	X	X						
2. Ottumwa Municipal Water Works intake						X		
Miller Cr.								
2a. Mouth (Wapello Co.) to confluence with an unnamed tributary (Sec. 29, T73N, R16W, Monroe Co.)			X					
Muchakinock Cr.								
2b. Confluence with an unnamed tributary (N 1/2, Sec. 2, T75N, R16W, Mahaska Co.) to confluence with Little Muchakinock (Sec. 34, T75N, R16W, Mahaska Co.)			X					
Cedar Cr.								
2c. Confluence with Bee Branch (Sec. 3, T72N, R18W, Monroe Co.) to Hwy 34 bridge crossing (Monroe Co.)			X					
Middle R.								
3. Mouth (Warren Co.) to confluence with Pletcher Br. (Madison co.)		X						
UPPER DES MOINES RIVER SUBBASIN								
Des Moines R.								
4. Raccoon R. to Center St. Dam in Des Moines		X						
5. Center St. Dam in Des Moines to Hwy. I-80/I-35 (S17, T97N, R24W, Polk Co.)	X	X						
6. Des Moines Water Works Intake, Prospect Park (NE 1/4, S28, T79N, R24W, Polk Co.)						X		
7. Hwy. I-80/I-35 to Saylorville Reservoir Dam		X						
8. Saylorville Reservoir Dam to Polk-Dallas Co. Line	X	X						
9. Saylorville Reservoir to Fraser Dam (S2, T84N, R27W, Boone Co.)		X						

	Water Uses							
	A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
10. Fraser Dan (Boone Co.) to W. line of S15, T88N, R28W, Webster Co.		X						X
Des Moines R.								
11. West line of S15, T88N, R28W (Webster Co.) to dam of upper impoundment at Fort Dodge		X						
12. Upper impoundment at Fort Dodge	X	X						
13. Fort Dodge Upper impoundment to Humboldt Dam		X						
Big Cr. Lake Outlet								
14. Big Cr. Lake	X	X						
Boone R.								
15. Mouth (Webster Co.) To State Hwy. 17 (S18, T88N, R25W, Hamilton Co.)	X	X						X
16. State Hwy. 17 to confluence with Brewers Creek (Hamilton Co.)		X						X
17. Confluence with Brewers Creek to confluence with Otter Creek (Wright Co.)		X						
EAST FORK DES MOINES RIVER SUBBASIN								
E Fk. Des Moines R.								
18. Mouth (Humboldt Co.) to Divine bridge access Hwy. 169 (S26, T94N, R29W, Kossuth Co.)	X	X						X
19. Divine bridge access Hwy. 169 (S26, T94N, R29W, Kossuth Co.) to County Rd. B63 (S23, T94N, R29W, Kossuth Co.)		X						X
20. County Rd. B63 (Kossuth Co.) to confluence with Buffalo Cr. (Kossuth Co.)		X						
RACCOON RIVER SUBBASIN								
Raccoon R.								
21. Mouth (Polk Co.) to Polk-Dallas County line	X	X						
22. City of Des Moines Water Works intake						X		
23. Polk-Dallas Co. line to confluence of N. Raccoon R. and S. Raccoon R.	X	X						X
N. Raccoon R.								
24. Mouth (Dallas Co.) to Hwy. 286 (S17, T85N, R33W, Carroll Co.)	X	X						X
25. Hwy. 286 (Carroll Co.) to Sac. Co. Rd. N54 (S24, T88N, R36W, Sac Co.)	X	X						
Short Cr.								
25a. Mouth (Greene Co.) to confluence with an unnamed tributary (S21, T84N, R31W, Greene Co.)			X					

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	B_Q	B_{QR}
	S. Raccoon R.								
26.	Mouth (Dallas Co.) to confluence with Brushy Cr. (Guthrie Co.)		X						
	Middle Raccoon R.								
27.	Mouth (Dallas Co.) to Redfield Dam (S5, T78N R29W, Dallas Co.)	X	X						
27.	Redfield Dam (Dallas Co.) to Lake Panorama Dam (S31, T80N, R30W, Guthrie Co.)	X	X						X
28.	City of Panora Water Works Intakes						X		X
29.	Lake Panorama	X	X						X
30.	Lake Panorama to Guthrie-Carroll County line	X							
	Brushy Creek								
31.	Mouth (Guthrie Co.) to the Guthrie-Audubon Co. Line		X						

Iowa Water Quality Standards
Water Use Designation

SKUNK RIVER BASIN

The streams or stream segments named below in alphabetical order are referenced within the Water Use Designations for the Skunk River Basin. Reference numbers provided in the alphabetical list correspond to numbered stream segments in the Water Use Designations.

Bear Creek - 14
Cedar Creek - 9
Mississippi River - 1, 2, 3
Skunk River - 4, 5, 6, 7, 8
Sugar Creek - 15
South Skunk River - 11, 12, 13
West Fork Crooked Creek - 10

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Mississippi R.								
1.	Iowa-Missouri State Line to confluence with the Skunk R.	X	X						
2.	Keokuk Municipal Water Works intakes						X		
3.	Fort Madison Municipal Water Works intakes						X		
	Skunk R.								
4.	Mouth to Oakland Mills Dan		X						
	Oakland Mills Impoundment								
5.	Dam to N line of S14, T71N, R7W, Henry Co.	X	X						
6.	City of Mt. Pleasant Water Works intake						X		
7.	Oakland Mills Impoundment to Henry Co. Rd. (S3, T71, R7W)		X						
8.	Henry Co. Rd. (S3, T73N, R7W) to confluence of N Skunk R. and S Skunk R.		X						X
	Cedar Cr.								
9.	Confluence with Little Cedar Cr. (S26, T73N, R13W) to confluence with an unnamed tributary (NW 1/4 of the NE 1/4, S24, T74N, R15W, Mahaska Co.)			X					
	W. Fk. Crooked Cr.								
10.	Mouth (Washington Co.) to confluence with an unnamed tributary (SW 1/4, S21, T76N, R9W, Washington Co.)			X					
	S Skunk R.								
11.	Mouth (Keokuk Co.) to Hwy. 21 (S34, T75N, R13W, (Keokuk Co.)		X						X
12.	Hwy. 21 (Keokuk Co.) to confluence with Indian Cr. (Jasper Co.)		X						
13.	At Oskaloosa						X		
	Bear Cr.								
14.	Mouth (Story Co.) to N line of Sec. 32, T85N, R23W, Story Co.			X					
	Sugar Cr.								
15.	Interstate 80 bridge crossing to confluence with an unnamed tributary (SW 1/4, Sec. 24, T80N, R17W, Jasper Co.)			X					

Iowa Water Quality Standards
Water Use Designations

IOWA-CEDAR RIVER BASIN

The streams or stream segments named below in alphabetical order are referenced within the Water Use Designations for the Iowa-Cedar River Basin. Reference numbers provided in the alphabetical list correspond to numbered stream segments in the Water Use Designations.

Beaver Creek - 38
Beeds Lake - 44
Big Creek - 31
Black Hawk Creek - 34, 35
Burr Oak Creek - 37
Cedar River - 16 to 28
Cone Lake - 29
Honey Creek - 13b
Iowa River - 3 to 13
Lime Creek - 32a, 32b
Little Bear Creek - 13a
Little Cedar River - 36
Lower Pine Lake - 14
Mississippi River - 1, 2
Prairie Creek - 32
Rock Creek - 30a
Rock Creek - 39, 40
Shell Rock River - 45, 46, 47
Spring Creek - 41
Sugar Creek - 30
Turtle Creek - 42
Upper Pine Lake - 15
West Fork Cedar River - 43
Winnebago River - 48, 49
Wolf Creek - 33

		Water Uses						
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Mississippi R.								
1.	Skunk R. to confluence with Iowa R.	X	X						
2.	Burlington Municipal Water Works intakes						X		
	IOWA RIVER SUBBASIN								
	(Mississippi R. Tributaries)								
	Iowa R.								
3.	Mouth (Louisa Co.) to Louisa County, Section 35, T74N, R3W, (south corporate limit, Wapello).	X	X						X
4.	South corporate limit, Wapello to confluence with Cedar River (Louisa County, Section 20, T75N, R4W)	X	X						
5.	Confluence with Cedar River to Johnson-Washington County line	X	X						X
6.	Johnson-Washington County line to Hwy. 149 (Iowa County, Section 35, T81N, R9W) (includes Coralville Reservoir)	X	X						
7.	University of Iowa Water Works intake						X		
8.	City of Iowa City Water Works intakes						X		
9.	Hwy. 149 to confluence with Asher Creek (Marshall County, Section 27, T84N, R18W)	X	X						X
10.	Confluence with Asher Creek to Marshall-Hardin County line.	X	X						
11.	Marshall-Hardin County line to Hardin County, Section 20, T89N, R20W, (east corporate limit, Iowa Falls	X	X						X

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
12.	East corporate limit Iowa Falls to Hwy. 69 bridge (Section 30, T93N, R23W, Wright Co.)	X	X						
13.	Hwy. 69 bridge to confluence of E Fk. Iowa R. and W Fk. Iowa R. (Wright Co.)		X						
	Little Bear Cr.								
13a.	Mouth (Poweshiek Co.) to confluence with an unnamed tributary (SW 1/4, Sec. 13, T80N, R10W, Buchanan Co.)			X					
	Honey Cr.								
13b.	Mouth (Marshall Co.) to confluence with an unnamed tributary (Sec. 15, T86N, R20W, Hardin Co.)			X					
14.	Lower Pine Lake	X	X						
15.	Upper Pine Lake	X	X						
CEDAR RIVER SUBBASIN									
	Cedar R.								
16.	Mouth (Louisa Co.) to Hwy. 30 (Linn County, Section 9, T82N, R6W)	X	X						X
17.	Hwy. 30 to bridge crossing in LaPorte City (Section 19, T87N, R11W, Black Hawk Co.)	X	X						
18.	Cedar Rapids Municipal Water Works intake						X		
19.	Bridge crossing in LaPorte City to the dam at Cedar Falls		X						
20.	Cedar Falls impoundment Dam to W line of Section 2, T89N, R14W, Black Hawk Co.	X	X						
21.	Cedar Falls impoundment to Black Hawk County, Section 34, T90N, R14W (confluence with Beaver Creek)		X						
22.	Confluence with Beaver Creek to Dam at Waverly		X						X
23.	Waverly impoundment Dam to W line of Section 35, T92N, R14W, Bremer Co.	X	X						X
24.	Waverly impoundment to Chickasaw County, Section 29, T94N, R14W (south corporate limits, Nashua)	X							X
25.	South corporate limits of Nashua to dam at Nashua	X							
26.	Nashua impoundment Dam to Chickasaw-Floyd Co. Line	X	X						
27.	Nashua impoundment to Charles City Dam # 2		X						
28.	Charles City impoundment Dam #2 to Iowa-Minnesota State Line	X	X						
	Pike Cr.								
29.	Cone Lake	X	X						

		Water Uses						
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Sugar Cr.								
30.	Mouth (Muscatine Co.) to confluence with Mud Cr. (Muscatine Co.)		X						
	Rock Cr.								
30a.	County Rd. F28 bridge to the confluence with an unnamed tributary (SW 1/4, Sec. 13, T80N, R16W, Poweshiek Co.)			X					
	Big Cr.								
31.	Mouth (Linn Co.) to confluence with Abbe Cr. (Linn Co.)		X						
	Prairie Cr.								
32.	Mouth (Linn Co.) to confluence with Mud Cr. (Benton Co.)		X						
	Lime Cr.								
32a.	Mouth (Benton Co.) to confluence with an unnamed tributary (Sec. 1, T87N, R10W, Buchanan Co.)		X						
32b.	Confluence with an unnamed tributary (Sec. 1, T87N, R10W, Buchanan Co.) to confluence with an unnamed tributary (SW 1/4, Sec. 11, T88N, R10W, Buchanan Co.)			X					

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Wolf Cr.								
33.	Mouth (Black Hawk Co.) to confluence with Twelve Mile Cr. (Tama Co.)		X						
	Black Hawk Creek								
34.	Mouth (Black Hawk Co.) to Hwy 58 (E half of Section 27, T88N, R14W, Black Hawk Co.)	X	X						
35.	Hwy. 58 to confluence with N. Black Hawk Cr. (Grundy Co.)		X						
	Little Cedar R.								
36.	Mouth (Chickasaw Co.) to Iowa-Minn. State Line		X						
	Burr Oak Cr.								
37.	Mitchell Co. Rd. T46 to N line of S5, T98N, R16W, Mitchell Co.					X			X
	Beaver Cr.								
38.	Mouth (Mitchell Co.) to Mitchell Co. Rd. A31 (N line of S19, T99N, R15W, Mitchell Co.)					X			X
	Rock Cr.								
39.	Mouth (Floyd Co.) to confluence with Goose Cr. (S35, T98N, R18W, Mitchell Co.)		X						
40.	Confluence with Goose Cr. (Mitchell Co.) to Hwy. 9 (N line of S26, T98N, R18W, Mitchell Co.					X			X
	Spring Cr.								
41.	Mouth (Mitchell Co.) to N line of S8, T97N R16W, Mitchell Co.					X		X	
	Turtle Cr.								
42.	Mouth (Mitchell Co.) to E line of Section 7, T99, R17W, Mitchell Co.					X		X	
	WEST FORK CEDAR RIVER SUBBASIN								
	W. Fk. Cedar R.								
43.	Mouth (Black Hawk Co.) to confluence with Maynes Creek (Butler County, S7, T91N, R1W)		X						X
44.	Beeds Lake Dam to W line of S16, T92N, R20W, Franklin Co.	X	X						
	SHELL ROCK RIVER SUBBASIN								
	Shell Rock R.								
45.	Mouth (Black Hawk Co.) to Butler County, Section 12, T91N, R15W, (south corporate limits, Shellrock)		X						X
46.	South corporate limit of Shellrock to confluence with the Winnabago R.		X						
47.	Winnabago R. to Iowa-Minn. State Line	X	X						

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
HINNEBAGO RIVER SUBBASIN									
	Hinnebago R. (aka Line Cr.)								
48.	Mouth (Floyd Co.) to dam at Fertile (S34 T98N, R22W, Worth Co.)		X						
49.	Mill Pond at Fertile	X	X						

Iowa Water Quality Standards

Water Use Designations

NORTHEASTERN IOWA RIVER BASINS

Northeastern Iowa River Basins (Wapsipinicon River, Maquoketa River, North Fork Maquoketa River, Turkey River, Volga River, Yellow River, and Upper Iowa River Subbasins).

The streams or stream segments named below in alphabetical order are referenced within the Water Use Designations for Northeastern Iowa River Basins. Reference numbers provided in the alphabetical list correspond to numbered stream segments in the Water Use Designations.

Alderson Hollow - 81
Barber Creek - 7a
Baron Spring - 82a
Bass Creek - 73
Bear Creek - 24
Bear Creek - 79
Bear Creek - 87
Bear Creek - 119, 120
Beaver Creek - 145
Bell Creek - 71
Bigalk Creek - 144
Bloody Run - 46
Bloody Run - 57
Bloody Run - 95
Bohemian Creek - 74
Brophy Creek - 6
Brownfield Creek - 63
Brush Creek - 22, 23
Brush Creek - 86
Buck Creek - 91
Buffalo Creek - 8, 9
Casey Spring Creek - 138
Canoe Creek - 127
Catfish Creek - 42, 43
Cedar Creek - 30
Cedar Creek - 59
Chlalk Creek - 75
Clear Creek - 112
Clear Creek - 117
Cloie Branch - 47
Cold Water Creek - 142
Coon Creek - 130
Cota Creek - 107
Cox Creek - 81
Deep Creek - 21
Dousman Creek - 99
Dry Mill Creek - 68
Dry Run - 135
East Pine Creek - 141
Elk Creek - 60
Elk River - 13
Ensign Creek - 84
Ensign Hollow - 84
Fenchel Creek - 27
Fountain Spring Creek - 65
French Creek - 116
Grannis Creek - 88
Grimes Hollow - 57
Hewett Creek - 83
Hickory Creek - 102
Hogans Branch - 49
Irish Hollow Creek - 115
Kleiniein Creek - 82
Little Maquoketa River - 44, 45
Little Mill Creek - 38
Little Paint Creek - 106
Little Turkey River - 55
Little Turkey River - 72
Little Volga River - 89
Little Wapsipinicon River - 12
Lytle Creek - 31
Maquoketa River - 14 to 20
Martha Creek - 143
Middle Bear Creek - 123
Middle Fk. Little Maquoketa R. - 48
Mill Creek - 12a
Mill Creek - 36, 37
Miners Creek - 90
Mink Creek - 85
Mississippi River - 1, 2
Mossey Glen Creek - 80
Nichols Creek - 144
Norfolk Creek - 103
North Bear Creek - 122
North Canoe Creek - 129
North Cedar Creek - 93
North Fork Maquoketa River - 28, 29
Odell Branch - 65
Otter Creek - 10, 11, 11a, 11b
Otter Creek - 69
Ozark Spring Run - 33
Paint Creek - 104, 105
Paint Creek - 124
Patterson Creek - 126
Pecks Creek - 58
Pine Creek - 62
Pine Creek - 128
Pine Creek - 140
Pleasant Creek - 35
Plum Creek - 25
Point Hollow Creek - 56
Ram Hollow - 57a
Rogers Creek - 73a
Schechtman Branch - 67
Silver Creek - 7
Silver Creek - 118
Silver Creek - 139, 139a
Smith Creek - 132
Sny Magill Creek - 92
South Branch Fountain Spring Creek - 66
South Cedar Creek - 59
South Fork Big Mill Creek - 39
Spring Creek - 26
Spring Creek - 82
Staff Creek - 146
Steeles Branch - 61
Storybrook Hollow - 40
Suttle Creek - 100
Ten Mile Creek - 137
Trout Creek - 131
Trout Creek - 133
Trout River - 132
Trout Run - 111
Trout Run - 134
Turkey River - 50 to 54
Twin Springs Creek - 64
Twin Springs Creek - 136
Unnamed Creek - 32
Unnamed Creek - 39
Unnamed Creek - 40
Unnamed Creek - 41
Unnamed Creek - 70
Unnamed Creek - 94
Unnamed Creek - 101
Unnamed Creek - 110
Unnamed Creek - 125
Unnamed Creek - 138
Unnamed Creek - 142
Unnamed Creek - 134

Iowa Water Quality Standards
Water Use Designations

NORTHEASTERN IOWA RIVER BASINS

Upper Iowa River - 113, 114
Village Creek - 109
Volga River - 76 to 78
Wapsipinicon River - 3, 4, 5
Waterloo Creek - 121
Wexford Creek - 108
Whitewater Creek - 34
White Pine Creek - 56
Yellow River - 96,97,98

		Water Uses						
	A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
Mississippi R.								
1. Iowa R. to the Iowa-Minnesota State Line	X	X						
2. Davenport Water Company Water Works intake						X		
WAPSIPINICON RIVER SUBBASIN								
(Mississippi R. Tributaries)								
Wapsipinicon R.								
3. Mouth (Scott-Clinton Co. Line) to Snyder Access, Section 34, T93N, R12W, Brener Co.	X	X						X
4. Snyder Access (Section 24, T93N, R12W, Brener Co.) to confluence with the Little Wapsipinicon (Chickasaw Co.)		X						
5. Town of McIntire to N line of Section 20, T100N, R15W, Mitchell Co.		X					X	
Brophy Cr.								
6. Mouth (Clinton Co.) to confluence with Cherry Cr. (Clinton Co.)		X						
Silver Cr.								
7. Mouth (Clinton Cr.) to confluence with Clear Cr. (Clinton Co.)		X						
Barber Cr.								
7a. Mouth (Clinton Co.) to bridge crossing (SW 1/4, Sec. 33, T81N, R3E, Clinton Co.)			X					
Buffalo Cr.								
8. Mouth (Jones Co.) to the dam at Coggon (Linn Co.)		X						
9. Coggon Impoundment	X	X						
Otter Cr.								
10. Mouth (Buchanan Co.) to Dam at Lake Oelwein		X						
11. Lake Oelwein to N line of Section 33, T91N, R9W, Fayette Co.	X	X						
11a. N. line of Sec. 33, T91N, R9W, Fayette Co. to confluence with an unnamed tributary (Sec. 29, T91N, R9W, Fayette Co.)		X						
11b. Confluence with an unnamed tributary (Sec. 29, T91N, R9W, Fayette Co.) to confluence with an unnamed tributary (Sec. 18, T91N, R9W, Fayette Co.)			X					

	Water Uses							
	A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
Little Wapsipinicon R.								
12. Mouth (Buchanan Co.) to confluence with Buck Cr. (Buchanan Co.)		X						
Mill Cr.								
12a. Mouth (Clinton Co.) to confluence with an unnamed tributary (Sec. 26, T82N, R6E, Clinton Co.)			X					
MAQUOKETA RIVER SUBBASIN								
(Mississippi R. Tributaries)								
Elk R.								
13. Mouth (Clinton Co.) to confluence with N Br. Elk R. (Clinton Co.)		X						

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Maquoketa R.								
14.	Mouth (Jackson Co.) to confluence with Deep Cr. Jackson Co., Section 18, T84N, R5E	X	X						
15.	Confluence with Deep Creek to confluence with Plum Creek (Delaware Co., Section 11, T87N, R4W)	X	X						X
16.	Confluence with Plum Creek to Quaker Mills Dam (Delaware County, Section 19, T89N, R5W)	X	X						
17.	Quaker Mills Impoundment	X	X						
18.	Quaker Mills Impoundment to Forestville Dam at Backbone Lake		X						
19.	Backbone Lake Dam to boundry of Backbone State Park	X	X						
20.	Mouth of S Fk. Maquoketa R. (S16, T90N, R6W, Delaware Co.) to Hwy. 3 (N line of Section 24, T91N, R7W, Fayette Co.)					X		X	
	Deep Cr.								
21.	Mouth (Jackson Co.) to confluence with Sugar Cr. (Jackson Co.)		X						
	Brush Cr.								
22.	Mouth (Jackson Co.) to N line of Section 23, T85N, R3E, Jackson Co.		X						
23.	N. line of Section 23, T85N, R3E to N line of Section 1, T85N, R3E, Jackson Co.					X		X	
	Bear Cr. (aka Big Bear Cr.)								
24.	Mouth (Jackson Co.) to confluence with Beers Cr. (Jackson Co.)		X						
	Plun Cr.								
25.	Mouth (Delaware Co.) to N line of S25, T89N, R4W, Delaware Co.		X						
	Spring Br.								
26.	Mouth (S10, T88N, R5W, Delaware Co.) to spring source (Section 35, T89N, R5W, Delaware Co.)					X		X	
	Fenchel Cr.								
27.	Mouth (S5, T90N, R6W, Delaware Co.) to Richmond Springs (center of S4, T90N, R6W, Delaware Co.)					X		X	
	NORTH FORK MAQUOKETA RIVER SUBBASIN								
	N. Fk. Maquoketa R.								
28.	Mouth (Jackson Co.) to confluence with White Water Cr. (Jones Co., Section 10, T86N, R1W)		X						X
29.	Confluence with White Water Cr. to confluence with Bear Cr. (Dubuque Co.)		X						
	Cedar Cr.								
30.	Mouth (S30, T85N, R3E, Jackson Co.) to E line of Section 29, T85N, R3E, Jackson Co.)					X			X

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	BQ	BQR
	Pecks Cr.								
58.	Mouth (Clayton Co.) to S line of Section 15, T91N, R3W, Clayton Co.					X			X
	S Cedar Cr. (aka Cedar Cr.)								
59.	N line if S7, T92N, R3W, Clayton Co. to N line of S30, T93N, R4W, Clayton Co.					X			X
60.	Elk Cr. Mouth to confluence with Steeles Br. (Clayton Co.)								
	Steeles Br.								
61.	Mouth (S26, T91N, R4W, Clayton Co.) to W line of Section 5, T90N, R4W, Delaware Co.		X			X			X
	Pine Cr.								
62.	Mouth (S26, T91N, R4W, Clayton Co.) to confluence with Brownfield Cr. (S25, T91N, R4W, Clayton Co.)					X			X
	Brownfield Cr.								
63.	Mouth (Clayton Co.) to spring source (S31, T91N, R3W, Clayton Co.)					X			X
	Twin Springs Cr.								
64.	Mouth (S2, T90N, R4W, Delaware Co.) to spring source (S12, T90N, R4W, Delaware Co.)					X			X
	Fountain Spring Cr. (aka Odell Br.)								
65.	Mouth (S10, T90N, R4W, Delaware Co.) to W line of Section 16, T90N, R4W, Delaware Co.					X		X	
	S Br. Fountain Spring Cr.								
66.	Mouth (S16, T90N, R4W, Delaware Co.) to W line of Section 16, T90N, R4W, Delaware Co.					X			X
	Schechtman Br.								
67.	Mouth (Delaware Co.) to S line of Section 14, T90N, R4W, Delaware Co.					X			X
	Volga R. (See Volga R. Subbasin)								
	Dry Mill Cr.								
68.	Mouth (S25, T94N, R5W, Clayton Co.) to W line of Section 9, T93N, R4W, Clayton Co.					X			X
	Otter Cr.								
69.	Mouth (Fayette Co.) to Confluence with Unnamed Cr. (aka Glovers Cr., S22, T94N, R8W, Fayette Co.)					X		X	
	Unnamed Cr.								
70.	Mouth to W line of S15, T94N, R8W, Fayette Co.					X		X	
	Bell Cr.								
71.	Mouth (S10, T94N, R7W, Fayette Co.) to W line of Section 8, T94N, R7W, Fayette Co.					X			X

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Little Turkey R.								
72.	Mouth (Fayette Co) to Fayette-Winneshiek Co. line		X						
	Bass Cr.								
73.	Mouth (S3, T95N, R9W, Fayette Co.) to W line of Section 3, T95N, R9W, Fayette Co.					X			X
	Rogers Cr.								
73a.	Mouth (Winneshiek Co.) to confluence with Goddard Cr. and Krumm Cr.			X					
	Bohemian Cr.								
74.	Mouth (Winneshiek Co.) to Howard Co. Rd. V58 (W line of Section 2, T97N, R11W, Howard Co.)					X		X	
	Chlalk Cr.								
75.	Mouth (Section 1, T98N, R11W, Howard Co.) to N line of Section 36, T99N, R11W, Howard Co.					X			X
VOLGA RIVER SUBBASIN									
	Volga R.								
76.	Mouth (Clayton Co.) to bridge crossing in Volga, (Section 3-10, T92N, R6W, Clayton Co.)	X	X						X
77.	Bridge crossing in Volga Fayette County, S28, T93N, R8W, (E. Corporate limit, Fayette)		X						X
78.	East corporate limit, Fayette, to confluence with Little Volga R. (Fayette Co.)		X						
	Bear Cr.								
79.	S line of Section 18, T91N, R4W, to W line of Section 23, T91N, R5W, Clayton Co.					X			X
	Mossey Glen Cr.								
80.	Mouth (S3, T91N, R5W, Clayton Co.) to S line of Section 10, T91N, R5W, Clayton Co.					X			X
	Cox Cr. (aka Alderson Hollow)								
81.	Klelniein Cr. to S line of Section 12, T91N, R6W, Clayton Co.					X			X
	Klelniein Cr. (aka Spring Cr.)								
82.	Mouth (Clayton Co.) to spring source (S10, T91N, R6W, Clayton Co.)					X			X
	Baron Spring					X		X	
82a.	Mouth (S2, T91N, R6W, Clayton Co.) to spring source (S4, T91N, R6W, Clayton Co.)								
	Hewett Cr.								
83.	Mouth (Clayton Co.) to S line of Section 29, T92N, R6W, Clayton Co.					X			X
	Ensign Cr. (aka Ensign Hollow)								
84.	Mouth (Section 28, T92N, R6W, Clayton Co.) to spring source (S29, T92N, R6W, Clayton Co.)					X		X	
	Mink Cr.								
85.	Mouth (S30, T93N, R6W, Clayton Co.) to W line of Section 15, T93N, R7W, Fayette Co.					X		X	
	Brush Cr.								
86.	Bear Cr. to E line of Section 17, T92N, R7W, Fayette Co.					X			X

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Clear Cr.								
117.	Mouth (Allamakee Co.) to N line of Section 15, T100N, R5W, Allamakee Co.					X			X
	Silver Cr.								
118.	Mouth (Allamakee Co.) to S line of Section 31, T99N, R5W, Allamakee Co.					X		X	
	Bear Cr.								
119.	Mouth (Allamakee Co.) to confluence with N Bear Cr. (S25, T100N, R7W, Winneshiek Co.)		X						
120.	N Bear Cr. to spring source (Mestad Spring) Section 29, T100N, R7W, Winneshiek Co.					X		X	
	Waterloo Cr.								
121.	Mouth (S35, T100N, R6W, Allamakee Co.) to Iowa-Minnesota State Line					X		X	
	N. Bear Cr.								
122.	Mouth (S25, T100N, R7W, Winneshiek Co.) to Iowa-Minnesota State Line					X		X	
	Middle Bear Cr.								
123.	Mouth (S14, T100N, R7W, Winneshiek Co.) to N line of Section 16, T100N, R7W, Winneshiek Co.					X			X
	Paint Cr. (aka Pine Cr.)								
124.	Mouth (Section 9, T99N, R6W, Allamakee Co.) to confluence with Unnamed Cr. (SE 1/4 of Section 11, T99N, R7W, Winneshiek Co.					X			X
	Unnamed Cr.								
125.	Mouth (SE 1/4, S11, T99N, R7W, Winneshiek Co.) to N line of Section 12, T99N, R7W, Winneshiek Co.					X			X
	Patterson Cr.								
126.	Mouth (Allamakee Co.) to E line of Section 3, T98N, R6W, Allamakee Co.					X		X	
	Canoe Cr.								
127.	(aka W. Canoe Cr.) Winneshiek Co. Rd. W38 to W line of Section 8, T99N, R8W, Winneshiek Co.					X		X	
	Pine Cr.								
128.	Mouth (S26, T99N, R7W, Winneshiek Co.) to N line of Section 21, T99N, R7W, Winneshiek Co.					X			X
	N Canoe Cr.								
129.	Mouth (S22, T99N, R8W, Winneshiek Co.) to N line of Section 2, T99N, R8W, Winneshiek Co.					X			X
	Coon Cr.								
130.	Mouth (Winneshiek Co.) to Rd. crossing in S13, T98N, R7W, Winneshiek Co.					X		X	

		Water Uses							
		A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
	Trout Cr.								
131.	Mouth (S9, T98N, R7W, Winneshiek Co.) to confluence with Smith Cr. (S21, T98N, R7W, Winneshiek Co.)					X			X
	Smith Cr. (aka Trout River)								
132.	Mouth (Section 21, T98N, R7W, Winneshiek Co.) to S line of S33, T98N, R7W, Winneshiek Co.)					X		X	
	Trout Cr.								
133.	Mouth (S23, T98N, R8W, Winneshiek Co.) to confluence with Unnamed Stream (aka Trout Run) (S27, T98N, R8W, Winneshiek Co.)					X			X
	Unnamed Stream (aka Trout Run)								
134.	Mouth to S line of S27, T98N, R8W, Winneshiek Co.					X		X	
	Dry Run								
135.	Mouth (S17, T98N, R8W, Winneshiek Co.) to W line of Section 36, T98N, R9W, Winneshiek Co.					X			X
	Twin Springs Cr								
136.	Mouth (S17, T98N, R8W, Winneshiek Co.) to springs in Twin Springs Park (S20, T98N, R8W, Winneshiek Co.)					X		X	
	Ten Mile Cr.								
137.	Mouth (Winneshiek Co.) to confluence with Walnut Cr. (S18, T98N, R9W, Winneshiek Co.)					X			X
	Unnamed Cr. (aka Casey Spring Cr.)								
138.	Mouth (S25, T99N, R9W, Winneshiek Co.) to W line of Section 26, T99N, R9W, Winneshiek Co.					X			X
	Silver Cr.								
139.	Mouth (S10, T99N, R9W, Winneshiek Co.) to N line of Section 26, T100N, R9W, Winneshiek Co.					X			X
139a.	N line of Sec. 26, T100N, R9W, Winneshiek Co. to Hwy. 52 bridge crossing (Winneshiek Co.)			X					
	Pine Cr.								
140.	Mouth (Winneshiek Co.) to Iowa-Minnesota State Line					X			X
	E Pine Cr.								
141.	Mouth (S28, T100N, R9W, Winneshiek Co.) to Iowa-Minnesota State Line.								
142.	Unnamed Cr. (aka Cold Water Cr.) Mouth (S32, T100N, R9W, Winneshiek Co.) to N line of Section 31, T100N, R9W, Winneshiek Co.					X		X	
	Martha Cr.								
143.	Mouth (S6, T99N, R9W, Winneshiek Co.) to W line of Section 13, T99N, R10W, Winneshiek Co.					X			X
	Nichols Cr. (aka Bigalk Cr.)								
144.	Mouth (S18, T100N, R10W, Winneshiek Co.) to W line of Section 23, T100N, R11W, Howard Co.					X		X	

Lakes

County	Lake	Location R.	T.	S.	Water Uses A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
Warren												
	Lake Ahquabi	24	75	14	X			X		X		
	Banner Pits	23	77	30				X				
	Hooper Area Pond	24	75	26				X				
Washington												
	Lake Darling	9	74	21	X			X		X		
	Foster Woods Pond	9	77	26				X				
	Iowa Township Pond	6	77	7				X				
	Marr Park Pond	6	75	19				X				
	Sokun Ridge Pond	7	75	15				X				
Wayne												
	Bob White Lake	22	68	4	X			X		X		
	Corydon Reservoir	22	69	24	X			X		X		
	Humeston Reservoir	23	70	9	X			X		X		
	Lineview Reservoir	23	67	16				X		X		
	Seymour Reservoir	20	68	23	X			X		X		
Webster												
	Badger Lake	28	90	19	X			X				
	Lizard Creek Game Area Ponds	29	89	33	X			X				
	Lake Ole	28	86	16				X				
Winnebago												
	Ambrosson Pits	24	98	11	X			X				
	Lake Catherine	25	98	35	X			X				
	Florence Park Pond	25	99	26	X			X				
	Harmon Lake	24	100	21				X				
	Myre Slough	25	98	22				X				
	Rice Lake	23	99	13	X			X				
Winneshiek												
	Cardinal Marsh	10	98	7				X				
	Lake Meyers	9	97	34	X			X				
	Silver Springs Pond	8	96	15				X				
Woodbury												
	Browns Lake	47	87	32	X			X				
	Little Sioux Park Lake	42	89	12	X			X				
	Snyder Bend Lake	47	86	17	X			X				
	Winnebago Bend Lake	47	86	28	X			X				
	Midway Park Lake	44	89	10	X			X				
Worth												
	Elk Creek Marsh	22	99	5				X				
	Mill Pond (refer to Iowa-Cedar River Basin)											
	Silver Lake	22	100	14	X			X				X
	Silver Lake Marsh	22	100	10				X				X
	Worth County Lake	20	99	26	X			X				

Lakes

County	Lake	Location R.	T.	S.	Water Uses A	B(WW)	B(LR)	B(LW)	B(CW)	C	HQ	HQR
Wright												
	Big Wall Lake	24	90	14				X				
	Lake Cornelia	24	92	16	X			X				
	Elm Lake	24	92	21				X				X
	Horse Lake	24	93	28				X				

This rule is intended to implement Iowa Code chapter 455B, division I, and division III, part 1.

61.4 Rescinded 8/16/76.

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DENTAL EXAMINERS BOARD[650]

[Prior to 5/18/88, Dental Examiners, Board of(320)]

CHAPTER 22
MINIMUM TRAINING STANDARDS FOR DENTAL ASSISTANTS ENGAGING IN DENTAL RADIOGRAPHY

[Prior to 5/18/88, Dental Examiners, Board of(320)]

650—22.1(153) Definitions. As used this chapter:

"Approved program or course of study" means didactic and clinical training the Iowa board of dental examiners has determined to be adequate to train students to meet the requirements specified in subrules 22.3(1) to 22.3(3).

"Clinical experience" means direct and personal participation of the student in radiographic procedures incident to patient diagnostic problems.

"Dental radiography" means the application of X-radiation to human teeth and supporting structures for diagnostic purposes only.

"Student" means a person enrolled in or participating in such an approved program or course of study.

650—22.2(153) Minimum eligibility requirements. Each student shall submit to the Iowa board of dental examiners satisfactory documentation evidencing:

22.2(1) Graduation from high school or its equivalent.

22.2(2) Attainment of eighteen years of age.

22.2(3) Freedom from physical or mental impairment which would interfere with performance of duties or otherwise constitute a hazard to the health or safety of patients.

650—22.3(153) Training requirements. No person shall operate radiation emitting equipment for purposes of dental radiography without having first successfully completed an approved program or course of study which includes the following:

22.3(1) Theoretical considerations underlying radiation hygiene and radiological practices including radiation protection of patients and workers, monitoring, shielding, units of measurement and permissible levels, biological effects of radiation , and technical considerations in reducing radiation exposure and frequency of retakes.

22.3(2) Expose, process, evaluate for quality, mount, and file radiographic projections usually involved in dental radiography

22.3(3) Clinical experience sufficient to demonstrate proficiency.

650—22.4(153) Exemptions.

22.4(1) An applicant for qualification in dental radiography shall be deemed eligible for examination upon compliance with the provisions of subrules 22.3(1) to 22.3(3).

22.4(2) Students enrolled in an approved accredited dental assistant program who, as part of their course of study, apply ionizing radiation.

22.4(3) Dental assistants under student status who are enrolled in a board-approved dental radiography home/office study program who, as a part of their home/office study, apply ionizing radiation to a human being while under the direct supervision of a licensed dentist, in a dental office, provided the course of study is completed in not more than six months from its inception. Prior to engaging in home/office study, the dental assistant must make application for student status to the board on the form approved by the board.

22.4(4) Students enrolled in a board accredited school of dentistry or dental hygiene.

650—22.5(153) Approval of programs. A program of learning may be approved by the board if the program:

22.5(1) Constitutes an organized program of learning which contributes to the proficiency and skills of an individual operating radiation emitting equipment or otherwise engaging in dental radiography; and

22.5(2) Is conducted by individuals having special education, training and experience by reason of which said individuals may be deemed qualified to conduct the program in dental radiography; and

22.5(3) Meets the requirements of subrules 22.3(1) to 22.3(3).

22.5(4) Application for approval of a program of learning shall be made to the board.

650—22.6(153) Examination and proficiency evaluation. Except as otherwise provided in this chapter, no person shall operate radiation emitting equipment in any dental office without first having successfully completed a written examination approved by the board and who presents to the board satisfactory evidence that an Iowa licensed dentist attests to the reasonable clinical proficiency of that person observed over not less than one month, which shall be, for the purpose of this rule only, deemed a continuation of the person's status as a student under subrule 22.4(2) or 22.4(3).

22.6(1) In the event a dental assistant under student status pursuant to subrule 22.4(3) fails twice to successfully complete the examination, a third examination may be taken so long as the third examination is taken within 60 days after expiration of the six-month period of student status. In the event the dental assistant fails the third examination, student status shall be revoked and the dental assistant shall be deemed ineligible to participate in dental radiography under student status unless the student status is obtained pursuant to 22.4(2).

22.6(2) A dental assistant who completes a formal course of study pursuant to 22.4(2) or a dental assistant who takes the examination for issuance of a renewal of a certificate is allowed to take the examination not more than two times. The board may require the dental assistant to take remedial training prior to being allowed to retake the examination. Dental assistants in this category may not participate in dental radiography before successful completion of the examination and issuance of a certificate of qualification or issuance of a renewal of an existing certificate of qualification.

650—22.7(153) Application for board qualification. Applications for issuance of a certificate of qualification shall be made to the board on the form provided by the board and must be completely answered.

22.7(1) Applications must be filed with the board along with:

a. Proof that training and experience qualify the applicant to engage in dental radiography.

b. Proof that the applicant has successfully completed the Dental Radiation Health and Safety Examination of the Dental Assisting National Board, if taken after January 1, 1986, or proof of having successfully completed the written examination approved by the board.

c. Signed verification as to the truth of the statements and that the applicant has read the requirements of these rules and understands the regulations pertaining to dental radiography.

d. Signature of an Iowa licensed dentist attesting to the reasonable clinical proficiency of the applicant having observed the applicant for a period not less than 30 days. An applicant who meets all requirements except the 30-day clinical proficiency requirement may petition the board for a waiver of this requirement.

e. The fee as specified in these rules.

f. Additional information the board may require relating to character, education and experience as may be necessary to pass upon the applicant's qualification.

22.7(2) Any person who does not meet the requirements of subrule 22.7(1) may apply for student status as defined in subrule 22.4(3).

650—22.8(153) Renewal requirements.

22.8(1) Commencing in 1993, certificates shall be renewed biennially.

22.8(2) The renewal application shall be made in writing to the board at least 30 days before the current certificate expires.

22.8(3) Attendance once every four years at an updating seminar in dental radiography approved by the board shall be required for renewal. At the time of renewal the dental assis-

tant shall be required to sign a statement that the dental assistant has attended the required course during the previous four-year period. Proof of attendance at such course of study shall be retained by the dental assistant and submitted to the board as further proof of compliance at the request of the board.

22.8(4) All certificates shall expire on June 30, 1993, and every two years thereafter.

22.8(5) The appropriate fee as specified in this chapter shall accompany the application for renewal. A penalty shall be assessed by the board for failure to renew within 30 days after expiration as specified in this chapter.

22.8(6) The holder of a certificate who fails to renew within 90 days after its expiration may obtain a renewal certificate only by following the procedures for application and testing provided in these rules.

22.8(7) Any dental assistant who ceases to participate in dental radiography for more than one year shall obtain a renewal certificate only by following procedures for application and testing provided in these rules.

22.8(8) The board may require recertification, qualification and clinical evaluation of a dental assistant holding a certificate of qualification in dental radiography if the board, in its discretion, believes such action is necessary for the protection of the public.

650—22.9(136C) Certificate of qualification in dental radiography—fees.

22.9(1) The fee for application for a certificate of qualification or student status leading to qualification shall be $25.

22.9(2) The fee for renewal of a certificate shall be $10.

22.9(3) The fee for renewal if the applicant has failed to renew the certificate within 30 days after expiration shall be $35.

650—22.10(153) Responsibilities of certificate holder.

22.10(1) The dental assistant holding a certificate of qualification issued by the board shall conspicuously display the certificate in the office of employment.

22.10(2) The dental assistant holding a certificate of qualification issued by the board shall notify the office of the board of any address change within 60 days.

650—22.11(153) Enforcement.

22.11(1) Any individual except a licensed dentist or a licensed dental hygienist who participates in dental radiography in violation of this chapter or Iowa Code chapter 136C shall be subject to the criminal and civil penalties set forth in Iowa Code sections 136C.4 and 136C.5.

22.11(2) Any licensed dentist who permits a person to engage in dental radiography contrary to this chapter or Iowa Code chapter 136C shall be subject to discipline by the board pursuant to 650—Chapter 30.

These rules are intended to implement Iowa Code section 136C.3 and chapter 153.

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CHAPTERS 23 and 24
Reserved

TITLE V
PROFESSIONAL STANDARDS

CHAPTER 25
CONTINUING EDUCATION
[Prior to 5/18/88, Dental Examiners, Board of(320)]

650—25.1(153) Definitions. For the purpose of these rules on continuing education, definitions shall apply:

"Advisory committee." An advisory committee on continuing education shall be formed to review and advise the board with respect to applications for approval of sponsors or activities and requests for postapproval of activities. Its members shall be appointed by the board and consist of a member of the board, two licensed dentists with expertise in the area of professional continuing education, and two licensed dental hygienists with expertise in the area of professional continuing education. The advisory committee on continuing education may tentatively approve or deny applications or requests submitted to it pending final approval or disapproval of the board at its next meeting.

"Approved program or activity" means a continuing education program activity meeting the standards set forth in these rules which has received advanced approval by the board pursuant to these rules.

"Approved sponsor" means a person or an organization sponsoring continuing education activities which has been approved by the board as a sponsor pursuant to these rules. During the time an organization, educational institution, or person is an approved sponsor, all continuing education activities of such person or organization may be deemed automatically approved provided they meet the continuing education guidelines of the board.

"Board" means the board of dental examiners.

"Continuing dental education" consists of education activities designed to review existing concepts and techniques and to update knowledge on advances in dental and medical sciences. The objective is to improve the knowledge, skills, and ability of the individual to deliver the highest quality of service to the public and professions.

Continuing dental education should favorably enrich past dental education experiences. Programs should make it possible for practitioners to attune dental practice to new knowledge as it becomes available. All continuing dental education should strengthen the skills of critical inquiry, balanced judgment and professional technique.

"Hour" of continuing education means one unit of credit which shall be granted for each hour of contact instruction and shall be designated as a "clock hour." This credit shall apply to either academic or clinical instruction.

"Licensee" means any person licensed to practice dentistry or dental hygiene in the state of Iowa.

650—25.2(153) Continuing education requirements for licensees.

25.2(1) Beginning January 1, 1979, each person licensed to practice dentistry or dental hygiene in this state shall complete during each calendar year a minimum of 15 hours of continuing education approved by the board. Compliance with the requirement of continuing education is a prerequisite for license renewal in each subsequent license renewal year.

Beginning January 1, 1984, each person licensed to practice dentistry or dental hygiene in this state shall complete during the biennium ending December 31, 1985, and each biennium thereafter a minimum of 30 hours of continuing education approved by the board.

25.2(2) The biennial continuing education compliance period shall extend from January 1 to December 31 of the second following year during which period attendance at approved continuing education programs may be used as evidence of fulfilling continuing education requirements for the subsequent biennial license renewal period beginning July 1 and expiring June 30 of the second year thereafter.

25.2(3) Hours of continuing education credit may be obtained by attending and participating in a continuing education activity, either previously approved by the board or which otherwise meets the requirement herein and is approved by the board pursuant to subrule 25.3(5).

25.2(4) It is the responsibility of each licensee to finance the costs of continuing education. All fees for continuing education courses shall be remitted by licensee directly to the sponsor or as the board may otherwise direct.

25.2(5) Every licensee shall maintain a record of all courses attended by keeping the certificates of attendance for four years after the end of the year of attendance. The board reserves the right to require any licensee to submit the certificates of attendance for the continuing education courses attended as further evidence of compliance for any year no more than four years previously.

25.2(6) Licensees are responsible for obtaining proof of attendance forms when attending courses. Clock hours must be verified by the sponsor with the issuance of proof of attendance forms to the licensee.

25.2(7) Each licensee shall file a signed continuing education record form no later than January 31 following the end of the two-year period in which claimed continuing education hours were completed or at the time of application for renewal. The form shall be sent to the Iowa Board of Dental Examiners, Executive Hills West, 1209 East Court, Des Moines, Iowa 50319.

25.2(8) No carryover of credits from one calendar biennium period to the next will be allowed.

25.2(9) Licensees shall complete training relating to the identification and reporting of child abuse and dependent adult abuse pursuant to the requirements set forth by Iowa Code section 232.69(3) and chapter 235B.

650—25.3(153) Approval of programs and activities. A continuing education activity shall be qualified for approval if the board determines that:

25.3(1) It constitutes an organized program of learning (including a workshop or symposium) which contributes directly to the professional competency of the licensee; and

12.4(6) Fraud in representations as to skill or ability. Fraud in representations as to skill or ability includes, but is not limited to, a physician having made misleading, deceptive or untrue representations as to the physician's competency to perform professional services for which the physician is not qualified to perform by training or experience.

12.4(7) Use of untruthful or improbable statements in advertisements. Use of untruthful or improbable statements in advertisement includes, but is not limited to, an action by a physician in making information or intention known to the public which is false, deceptive, misleading or promoted through fraud or misrepresentation and includes statements which may consist of, but are not limited to:

1. Inflated or unjustified expectations of favorable results.
2. Self-laudatory claims that imply that the physician is a skilled physician engaged in a field or specialty of practice for which the physician is not qualified.
3. Representations that are likely to cause the average person to misunderstand; or
4. Extravagant claims or to proclaim extraordinary skills not recognized by the medical profession.

12.4(8) Willful or repeated violations of the provisions of these rules and Iowa Code chapters 147 and 148. Willful or repeated violations of the provisions of these rules and chapters 147 and 148 include, but are not limited to, a physician's having intentionally or repeatedly violated a lawful rule or regulation promulgated by the board of medical examiners or the Iowa department of public health or violated a lawful order of the board or the Iowa department of public health in a disciplinary hearing or has violated the provisions of Title VIII (Practice Acts), Code of Iowa, as amended.

12.4(9) Violating a statute or law of this state, another state, or the United States, without regard to its designation as either felony or misdemeanor, which statute or law relates to the practice of medicine.

12.4(10) Failure to report a license revocation, suspension or other disciplinary action taken by a licensing authority of another state, territory or country within 30 days of the final action by such licensing authority. A stay by an appellate court shall not negate this requirement; however, if such disciplinary action is overturned or reversed by a court of last resort, such report shall be expunged from the records of the board.

12.4(11) Failure of a licensee or an applicant for licensure in this state to report any voluntary agreement to restrict the practice of medicine and surgery, osteopathic medicine and surgery or osteopathy entered into in another state, district, territory or country.

12.4(12) Knowingly aiding, assisting, procuring, or advising a person to unlawfully practice medicine and surgery, osteopathic medicine and surgery or osteopathy.

12.4(13) Being guilty of a willful or repeated departure from, or the failure to conform to, the minimal standard of acceptable and prevailing practice of medicine and surgery, osteopathic medicine and surgery or osteopathy in which proceeding actual injury to a patient need not be established; or the committing by a physician of an act contrary to honesty, justice or good morals, whether the same is committed in the course of their practice or otherwise, and whether committed within or without this state.

12.4(14) Inability to practice medicine and surgery, osteopathic medicine and surgery or osteopathy with reasonable skill and safety by reason of a mental or physical impairment or chemical abuse.

12.4(15) Willful or repeated violation of lawful rule or regulation adopted by the board.

12.4(16) Violating a lawful order of the board, previously entered by the board in a disciplinary or licensure hearing, or violating the terms and provisions of a consent agreement or informal settlement between a licensee and the board.

12.4(17) Being adjudged mentally incompetent by a court of competent jurisdiction. Such adjudication shall automatically suspend a license for the duration of the license unless the board orders otherwise.

12.4(18) Making suggestive, lewd, lascivious or improper remarks or advances to a patient.

12.4(19) Indiscriminately or promiscuously prescribing, administering or dispensing any drug for other than lawful purpose. Indiscriminately or promiscuously prescribing, administering or dispensing includes, but is not limited to:

a. The prescribing, administering or dispensing for the treatment of obesity any stimulant anoretic agent classified as Schedule II in Iowa Code section 204.206, or Schedule IIN of the Federal Controlled Substance Act. An anoretic agent includes, but is not limited to:

(1) Amphetamine, its salts, optical isomers, and salts of its optical isomers, as a single agent or in combination with other agents.

(2) Methamphetamine, its salts, and salts of isomers, as a single agent or in combination with other agents.

(3) Phenmetrazine and its salts, as a single agent or in combination with other agents.

(4) Methylphenidate as a single agent or in combination with other agents.

(5) Any other stimulant anoretic agents added to the above schedules.

b. Reserved.

12.4(20) Knowingly submitting a false report of continuing education or failure to submit the annual report of continuing education.

12.4(21) Failure to notify the board within 30 days after occurrence of any judgment or settlement of a malpractice claim or action.

12.4(22) Failure to comply with a subpoena issued by the board.

12.4(23) Failure to file the reports required by rule 12.12(258A) concerning acts or omissions committed by another licensee.

12.4(24) Willful or repeated gross malpractice.

12.4(25) Willful or gross negligence.

12.4(26) Obtaining any fee by fraud or misrepresentation.

12.4(27) Negligence in failing to exercise due care in the delegation of medical services to or supervision of nurses, physician's assistants, employees or other individuals, whether or not injury results.

12.4(28) Violating any of the grounds for the revocation or suspension of a license listed in Iowa Code sections 147.55 and 148.6.

This rule is intended to implement Iowa Code sections 148.6, 148.7, 258A.3 to 258A.5.

653—12.5(258A) Procedure for peer review. A complaint made to the board by any person relating to licensure or concerning the professional conduct of a licensee may be assigned to a peer review committee for review, investigation and report to the board.

653—12.6(258A) Peer review committees.

12.6(1) The board may establish and register peer review committees.

12.6(2) The board shall determine which peer review committee will review a case and what complaints or other matters shall be referred to a peer review committee for investigation, review, and report to the board.

12.6(3) The board may provide investigatory and related services to peer review committees upon request.

12.6(4) Members of the peer review committees shall not be liable for acts, omissions or decisions made in connection with service on the peer review committee. However, such immunity from civil liability shall not apply if such act is done with malice.

653—12.7(258A) Duties of peer review committee.

12.7(1) The peer review committees shall observe the requirements of confidentiality imposed by Iowa Code section 258A.6.

12.7(2) The peer review committees shall thoroughly investigate all complaints and make written recommendations to the board.

a. Written recommendations shall contain a statement of facts, the recommendation for disposition, and the rationale supporting the recommendation.

STORAGE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS ON FARMS AND ISOLATED CONSTRUCTION PROJECTS

5.400(101) Rules generally
5.401 to 5.449 Reserved

TRANSPORTATION AND DELIVERY OF FLAMMABLE AND COMBUSTIBLE LIQUIDS BY TANK VEHICLES

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CHILD CARE CENTER

5.500(100) Definitions
5.501(100) Child care centers in mixed occupancies
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HEALTH CARE FACILITIES

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EXISTING AND NEW INTERMEDIATE CARE FACILITIES AND SKILLED NURSING FACILITIES

5.600(100) Definitions
5.601(100) Existing care facilities and skilled nursing facilities
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RESIDENTIAL FACILITIES

5.607(100) Scope
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5.610(100) Detection, alarm and communications
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5.612(100) Building service
5.613(100) Evacuation plan and fire drills
5.614 to 5.619 Reserved
5.620(100) General requirements for small group homes (specialized licensed facilities) for the mentally retarded
5.621 to 5.649 Reserved

FIRE SAFETY RULES FOR SCHOOL AND COLLEGE BUILDINGS

5.650(100) General requirements
5.651(100) Definitions
5.652(100) Exits
5.653(100) Corridors
5.654(100) Doors
5.655(100) Windows
5.656(100) Stairway enclosures and floor cutoffs
5.657(100) Interior finishes
5.658(100) Construction
5.659(100) Fire alarm systems
5.660(100) Electrical wiring
5.661(100) Heating equipment
5.662(100) Gas piping
5.663(100) Fire extinguishers
5.664(100) Basement, underground and windowless educational buildings
5.665(100) Fire hazard safeguards in new and existing buildings
5.666(100) Automatic sprinklers
5.667(100) Open plan buildings
5.668 to 5.699 Reserved

CHAPTER 25
PUBLIC RECORDS AND FAIR INFORMATION PRACTICES
(Uniform Rules)

5.106 to 5.229 Reserved.

[Filed 4/7/83, Notice 3/2/83—published 4/27/83*, effective 6/2/83]
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[Filed 2/2/89, Notice 12/28/88—published 2/22/89, effective 3/29/89]

661—5.230(100) High-rise buildings. This rule establishes requirements relating to the installation of an automatic fire extinguishing system in high-rise buildings are required by Iowa Code section 100.39.

5.230(1) *Definitions.* Automatic fire extinguishing system is an approved system of devices and equipment which automatically detects a fire and discharges an approved fire extinguishing agent onto or in the area of a fire.

5.230(2) *Compliance.* Buildings that are required to be equipped with an automatic fire extinguishing system shall meet the standard for the "Installation of Sprinkler Systems" No. 13, 1987 edition of the National Fire Protection Association together with its reference to other specific standards referred to and contained within the volumes of the National Fire Code 1988 edition of the National Fire Protection Association published in 1988.

A copy of these standards is available for review in the state fire marshal's office or may be obtained from National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269.

5.230(3) *Approval.* Plans for a building required to have an automatic fire extinguishing system shall be approved prior to construction. Approval shall be obtained from the fire marshal, a designee of the state fire marshal or the authority having jurisdiction.

Subject to the approval of the fire marshal, automatic fire extinguishing systems that use water may be omitted in rooms or areas where they are considered undesirable because of the nature of the contents. The fire marshal may require the use of another automatic extinguishing agent or the installation of an automatic detection system.

5.230(4) *Existing buildings.* Buildings or structures to which additions, alterations, or repairs are made shall comply with all of the requirements for new buildings or structures. Buildings in existence at the time of adoption of this code may have their existing use or occupancy continued, if this occupancy was legal at the time of the adoption of this code, and provided such continued use is not dangerous to life.

5.230(5) *Parking garages.* Open parking garages over four stories in height are exempt from automatic fire extinguishing requirements, provided they are of noncombustible construction and house no occupancy above the open parking garage.

NOTE: An open parking garage shall meet the definition and requirements as spelled out in the Uniform Building Code (1988 Edition) Section 709(b).

Any level which does not qualify as an open parking garage and all levels below shall have an approved automatic fire extinguishing system.

All other parking structures shall comply with the standards for "Parking Structures" No. 88A, 1985 Edition of the National Fire Protection Association.

This rule is intended to implement Iowa Code section 100.39.

5.231 to 5.249 Reserved.

[Filed 6/22/76, Notice 5/17/76—published 7/12/76, effective 8/16/76]
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*Tables published in 6/8/83 IAB

LIQUEFIED PETROLEUM GASES

661—5.250(101) Rules generally. The standards of "Storage and Handling of Liquefied Petroleum Gases," No. 58, 1986 edition of the National Fire Protection Association and "National Fuel Gas Code," No. 54, 1984 edition of the National Fire Protection Association together with their references to other specific pamphlets referred to and contained within the volumes of the National Fire Code, 1988 edition of the National Fire Protection Association published in 1988, shall be the rules governing liquefied petroleum gases in the state of Iowa.

This rule is intended to implement Iowa Code chapter 101.

661—5.251(101) Transfer into container. No person shall transfer any liquefied petroleum gas into a container, regardless of size, if the container has previously been used for the storage of any other product until the container has been thoroughly purged, inspected for contamination, provided with proper valves, and determined to be suitable for use as a container for liquefied petroleum gas as prescribed in the standards established under 5.250(101).

5.252 to 5.274 Reserved.

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LIQUEFIED NATURAL GAS

661—5.275(101) Rules generally. The standard of "Production, Storage and Handling of Liquefied Natural Gas (LNG)", No. 59A, 1985 edition of the National Fire Protection Association together with its reference to other specific standards referred to and contained within the volumes of the National Fire Code 1988 edition of the National Fire Protection Association published in 1988 shall be the rules governing liquefied natural gas in the state of Iowa.

The standard of "Liquefied Natural Gas Facilities: Federal Safety Standards" 49 CFR, Part 193, October 1, 1987, shall be the rules governing liquefied natural gas facilities in the state of Iowa.

This rule is intended to implement Iowa Code section 101.1.

5.276 to 5.299 Reserved.

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[Filed 2/2/89, Notice 12/28/88—published 2/22/89, effective 3/29/89]

FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE

661—5.300(101) Rules generally. The standard of "Flammable and Combustible Liquids Code," No. 30, 1987 edition of the National Fire Protection Association with the exception of section 2-2.7.1, together with its reference to other specific standards and as provided in the following rules, shall be the rules governing flammable and combustible liquids in the state of Iowa.

5.304(3) Hold-open devices on automatic nozzles shall be prohibited at installations where product flow is achieved through use of a solenoid valve or other remote action. A dispensing system with a listed hold-open device that requires release before product flow can be resumed may be permitted.

5.304(4) Marine dispensing nozzles used at marine service stations shall be of the automatic-closing type.

5.304(5) The standard of Automotive and Marine Service Station Code, No. 30A, 1987 edition of the National Fire Protection Association together with its reference to other specific standards, shall be the rules governing automotive and marine service stations.

661—5.305(101) Aboveground tank motor fuel dispensing. The dispensing of flammable or combustible liquids from aboveground tanks into the fuel tanks of motor driven vehicles shall not be permitted except in conformity with Section 8-3.5, National Fire Protection Association No. 30A, 1987 edition, or the standards for the storage of flammable and combustible liquids on farms and isolated construction projects, No. 395, 1984 edition.

For installations other than those provided for in National Fire Protection Association No. 30A, Section 8-3.5 or No. 395 see National Fire Protection Association No. 30, 1987 edition, Section 1-1.5.

Nothing in these rules shall prohibit the sharing of aboveground tanks by governmental subdivisions.

661—5.306(101) Minimum rules for aboveground gasoline and diesel fuel tanks and dispensing at service stations located in cities of 1000 or less population.

5.306(1) Definitions. For the purpose of these rules, certain terms are defined as follows:

"Automotive service station" is that portion of a property where liquids used as motor fuels are stored and dispensed from fixed equipment into the fuel tanks of motor vehicles or approved containers and shall include any facilities available for the sale and service of tires, batteries and accessories, and for minor automotive maintenance work. Major automotive repairs, painting, body and fender work are excluded.

"Bulk plant" is that portion of a property where liquids are received by tank vessel, pipelines, tank car, or tank vehicle, and are stored or blended in bulk for the purpose of distributing such liquids by tank vessel, pipeline, tank car, tank vehicle, portable tank, or container.

"Class I and Class II liquids" are defined in NFPA No. 30, 1987 edition.

"NFPA" refers to the National Fire Protection Association.

5.306(2) The property for the service station shall be located only in an area zoned for or approved for use as an automotive service station. Written approval shall be obtained from the local governing body before approval will be considered by the state fire marshal.

5.306(3) Aboveground tanks located at a bulk plant shall not be connected by piping to a service station. Tanks and apparatus used to dispense flammable and combustible liquids into the fuel tanks of motor vehicles of the public shall not be allowed at a bulk plant unless a physical separation such as a fence or similar barrier separates the two operations.

5.306(4) There shall be no aboveground tanks located closer than 150 feet from a private residence, apartments, church, school or other place of assembly as listed in Iowa Code section 100.35.

5.306(5) Aboveground tanks shall be of steel or approved noncombustible material in accordance with Chapter 2 of NFPA No. 30, 1987 edition. All aboveground steel tanks greater than 1100 gallons shall be not less than one-fourth inch thickness.

5.306(6) Where aboveground tanks are permitted at automotive service stations, aboveground tanks containing Class I and Class II liquids shall not exceed 6000 gallon individual or 18,000 gallon aggregate capacity.

5.306(7) All aboveground containers or tanks greater than 120 gallons at a service station approved for use in this rule shall be located in a liquid tight dike or enclosure. The capacity of the enclosure shall be at least 110 percent of the capacity of the largest single tank. The dike or enclosure may be of six-inch poured concrete with one-eighth inch wire mesh or one-fourth inch steel re-rod or concrete filled block. Dikes or enclosures under three feet in height must have tank protection from motor vehicles of at least four-inch concrete filled posts, buried

four feet in the ground and spaced not more than four feet apart with an aboveground height of at least four feet or other method approved by the authority having jurisdiction.

5.306(8) Distance factors for fuel tanks shall be as follows:

a. From buildings—40 feet

b. From property line that may be built upon—40 feet

c. From sidewalks, alleys, public ways—25 feet

d. Tanks shall be spaced at least 3 feet apart.

5.306(9) Kerosene tanks greater than 120 gallons are not permitted inside a service station building. Kerosene tanks greater than 120 gallons and less than 661 gallons shall be located not less than 10 feet from any building and be contained and protected from spills or leaks as required by subrule 5.306(7). Kerosene tanks greater than 660 gallons shall meet the requirements of 5.306(1) to 5.306(20).

5.306(10) All aboveground tanks shall be equipped with normal and emergency venting as required by Sections 2-2.4 and 2-2.5, NFPA No. 30, Chapter 2, 1987 edition. Working pressure vacuum vents shall terminate not less than 12 feet above the adjacent ground level on tanks with Class I liquids. All working vents shall be equipped with approved flame arrestors.

5.306(11) Required special devices for aboveground tanks.

a. All tank fill lines shall be equipped with a check valve for automatic protection against backflow if the piping arrangement is such that backflow from the system is possible. Check valves shall be in accordance with Section 3-6, NFPA No. 30, 1987 edition.

b. An approved internal check valve is required in the tank at each pipeline connection below the normal liquid level in accordance with subrule 5.302(2).

c. An approved external control valve is required for connections located below the normal liquid level in accordance with subrule 5.302(1).

d. Approved pipeline leak detection is required if submersible pumps are located at the tank. Leak detection shall be in accordance with Section 4-3.3, NFPA No. 30A, 1987 edition.

e. An approved rigidly anchored emergency shutoff valve shall be installed in the supply line at the base of each individual island-type dispenser or at the inlet of each overhead dispensing device in accordance with Section 4-3.6, NFPA No. 30A, 1987 edition.

f. An approved breakaway device is required on a dispensing hose in accordance with Section 4-2.7, NFPA No. 30A, 1987 edition.

g. An approved electric solenoid valve shall be installed on the downstream side of the internal check valve to stop flow of product in case of a line leak or breakaway of dispenser in accordance with Section 2-1.7, NFPA No. 30A, 1987 edition.

h. An approved pressure regulator/antisiphoning device with a shear section shall be installed under all suction-type pumps.

5.306(12) All dispensers of Class I and II liquids at aboveground locations shall be located at least 25 feet from buildings and at least 10 feet from adjoining property lines, sidewalks, or public ways. All vehicles being served for fuel shall be located on the station property only. Dispensers shall be mounted and secured on a noncombustible steel or concrete island not less than six inches high and be protected from motor vehicle damage to the satisfaction of the authority having jurisdiction.

5.306(13) Dispensing devices used to fill portable containers with home heating fuels shall not be located on the same island where Class I liquids are dispensed. Class I dispensers shall not be located on the same island as LP-gas dispensing operations.

5.306(14) All horizontal tanks shall be set on saddles, or otherwise protected from corrosion by supports. Steel supports, if used, must not raise the bottom of the tank more than 12 inches from the ground. All tanks shall be bonded and grounded, as required in Section 2-6 of NFPA No. 30, 1987 edition. Vertical tanks shall be set on footings and must be set on at least six inches of clean washed sand between concrete or other approved protection from corrosion.

5.306(15) All piping shall be of materials required in Chapters 3 of NFPA No. 30 and No. 30A, 1987 edition. When steel is used it shall be cathodically protected. All piping shall be surrounded by at least six inches of clean washed sand and be spaced at least four inches apart. Depth of piping shall not be less than 24 inches from the top of the pavement or covered

3. Installed with pipe section having 0.020-inch maximum slots with the slots extending to within approximately 12 inches of grade.
4. Capped and protected from traffic.

5.314 to **5.349** Reserved.

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OIL BURNING EQUIPMENT

661—5.350(101) Rules generally. "The Standard for the Installation of Oil Burning Equipment," No. 31, 1987 edition of the National Fire Protection Association, together with its reference to other specific standards referred to and contained within the volumes of the National Fire Code 1988 edition of the National Fire Protection Association published in 1988 shall be the rules governing oil burning equipment in the state of Iowa.

5.350(1)to **5.350(6)** Rescinded, effective 8/6/86.

This rule is intended to implement Iowa Code chapter 101.

5.351 to **5.399** Reserved.

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Editor's Note: Subrule 5.305(3) which was delayed 70 days from November 8, 1979, is renumbered and amended at 5.305(2) to be effective January 17, 1980. Subrule 5.305(2) renumbered as 661—5.305(100), 7/15/87.

*Effective date of 5.300, 5.301.6, 5.301(7), 5.302, 5.304(2)"c"(2), 5.304(3), 5.304(4), 5.305, 5.350 and 5.351 delayed by the administrative rules review committee seventy days.

5.550(14) The term *"approved"* when used in these standards shall mean acceptable to the state fire marshal.

a. "Approved standards" shall mean any standard or code prepared and adopted by any nationally recognized association.

b. "Approved equipment and material" shall mean any equipment or material tested and listed by a nationally recognized testing laboratory.

c. "Approved" is defined as being acceptable to the state fire marshal. Any equipment, device or procedure which bears the stamp of approval or meets applicable standards prescribed by an organization of national reputation such as the Underwriters Laboratories, Inc., Factory Mutual Laboratories, American Society for Testing Materials, American Insurance Association, National Fire Protection Association, American Society of Mechanical Engineers or American Standards Association, which undertakes to test and approve or provide standards for equipment, devices or procedures of the nature prescribed in these regulations shall be deemed acceptable to the state fire marshal.

5.550(15) *"Types of construction"* shall be as defined in National Fire Protection Association Pamphlet No. 220, published in 1985.

5.550(16) A *"story"* shall mean that part of a building comprised between a floor and the ceiling next above. The first story shall be that story which is of such height above the ground that it does not come within the definition of a basement or cellar. However, if part of a basement qualifies for patient area, it shall be considered the first story.

5.550(17) The term *"attic"* when used in these standards shall mean the space between the ceiling beams of the top habitable story and the roof rafters.

5.550(18) A *"basement"* or cellar, for these regulations, shall mean that part of a building where the finish floor is more than thirty inches below the finish grade of the building.

5.550(19) *"Exit"* is that portion of a means of egress which is separated from all other spaces of the building or structure by construction or equipment as required in these regulations to provide a protected way of travel to the exit discharge.

5.550(20) *"Exit access"* is that portion of a means of egress which leads to an entrance to an exit.

5.550(21) *"Exit discharge"* is that portion of a means of egress between the termination of an exit and a public way.

5.550(22) The term *"fire partition"* shall mean a partition which subdivides a story of a building to provide an area of refuge or to restrict the spread of fire for a minimum of one hour.

5.550(23) The term *"fire door"* shall mean a door and its assembly, so constructed and assembled in place as to give protection against the passage of fire, equal to surrounding construction.

5.550(24) The term *"fire-resistance"* shall mean that property of materials or assemblies which prevents or retards the passage of excessive heat, hot gases or flames under condition of use. The terms "fire-resistant" and "fire-resistive" shall mean the same as "fire-resistance".

5.550(25) The term *"fire-resistance rating"* shall mean the time in hours or fractions thereof that materials or their assemblies will resist fire exposure as determined by fire tests conducted in compliance with approved standards.

5.550(26) The term *"fire wall"* shall mean a wall of approved material having adequate fire-resistance and structural stability under fire conditions to accomplish the purpose of completely subdividing a building or of completely separating adjoining buildings to resist the spread of fire. A fire wall shall extend continuously through all stories from foundation to or above the roof.

5.550(27) The term *"sprinklered"* shall mean to be completely protected by an approved system of automatic sprinklers installed and maintained in accordance with approved standards.

5.550(28) The term *"automatic sprinkler system"* shall mean an arrangement of piping and sprinklers designed to operate automatically by the heat of fire and to discharge water upon the fire, according to the standards of the National Fire Protection Association.

5.550(29) *Interior finish.* See Table 5-C following 661—5.105(100).

5.551 Rescinded May 25, 1977.

661—5.552(100) Residential care facilities.

5.552(1) *Classification.*

a. Frame or ordinary construction not over two stories in height: Class 1A shall include 15 or fewer residents and shall be equipped with an approved automatic fire detection and alarm system. Class 2A shall include 16 or more residents and shall be equipped with an approved automatic sprinkler system.

b. One-hour protected frame construction:

Class 1B shall be one story only and be equipped with an approved automatic fire detection and alarm system.

Class 2B shall be two story, with twenty or less residents, and shall be equipped with an approved automatic fire detection and alarm system. Homes with twenty-one or more residents shall be equipped with an approved automatic sprinkler system.

c. Noncombustible construction:

Class 1C shall be one- or two-story homes and shall be equipped with an approved automatic fire detection and alarm system.

Class 2C shall be more than two stories and shall be equipped with an approved automatic sprinkler system.

d. Fire-resistive construction any height:

Class 1D shall be fire-resistive construction, any height, and shall be equipped with an approved automatic fire detection and alarm system.

e. New, or additional, construction, or structural alterations, shall be approved by the state fire marshal prior to work being started. Preliminary plans may be submitted for review. Working plans and specifications shall be submitted to the state fire marshal for review and approval. Written approval by the state fire marshal shall be required prior to construction.

f. Certain occupancies, conditions in the area, or the site may make compliance with the rules impractical or impossible. Certain conditions may justify minor modifications of the rules. In specific cases, variations to the rules may be permitted by the reviewing authority after the following conditions are considered:

(1) Design and planning for the specific property offers improved or compensating features providing equivalent safety.

(2) Alternate or special construction methods, techniques, and mechanical equipment, if proposed, offer equivalent durability, safety, structural strength and rigidity, and quality of workmanship.

(3) Variations permitted do not individually or in combination with others endanger the health, safety or welfare of any patient or resident.

(4) Variations are limited to the specific project under consideration and are not construed as establishing a precedent for similar acceptance in other cases.

(5) Rescinded IAB 12/12/90, effective 1/16/91.

5.552(2) *Floor areas.*

a. All floors having a maximum occupancy above thirty persons, shall be divided into two sections by a one-hour fire wall or fire partition with ample room on each side for the total number of beds on each floor.

b. Corridor length between smokestop partitions, horizontal exits, or from either to the end of the corridor shall not exceed one hundred fifty feet on any resident occupied sleeping floor.

c. Any smokestop partition shall have at least a one-hour fire-resistance rating and shall be continuous from wall to wall and floor to floor or roof arch above. Openings in a smokestop partition shall be protected by fixed wire glass panels in steel frames, maximum size of one thousand two hundred ninety-six square inches each panel or by 1¾-inch solid core wood doors with vision panel in each door, wire glass not over seven hundred twenty square inches. Such doors shall be self-closing or may be so installed that they may be kept in an open position provided they meet the requirements of paragraph *"d"*. Doors in smokestop partitions are not required to swing with exit travel. Ample space shall be provided on each side of the barrier for the total number of occupants on both sides.

d. Any door in a fire separation, horizontal exit or a smokestop partition may be held open only by an approved electrical device. The device shall be so arranged that the operation of the required detection, alarm, or sprinkler system will initiate the self-closing action.

e. Every interior wall and partition in buildings of fire-resistive and noncombustible construction shall be of noncombustible materials.

f. Every resident sleeping room shall have an outside window or outside door arranged and located to permit the venting of products of combustion and to permit any occupant to have access to fresh air in case of emergency. Sill height not to exceed thirty-six inches above floor.

g. Interior finish in exit shall be Class A or B. See Table No. 5-C, following 661—5.105(100).

5.552(3) *Exit details.*

a. Exits shall be of the following types or combinations thereof as defined by the National Fire Protection Association:

(1) Horizontal exits.

(2) Doors leading directly outside the buildings (without stairs).

(3) Ramps.

(4) Stairways, or outside stairs.

(5) Seven-foot spiral slides. Approved only where installed prior to effective date of these regulations.

(6) Exit passageways.

(7) Smoke towers.

b. At least two exits of the above types, remote from each other, shall be provided for every floor or section of the building. At least one exit in every floor or section shall be of type 2, 3, 4, 6 or 7, as listed above. Exterior fire escape stairs may be accepted as a second means of exit.

c. At least one required exit from each floor, resident occupied, above or below the first floor shall lead directly or through an enclosed corridor, to the outside. A second or third required exit, where a more direct exit is impracticable, may lead to a first floor lobby having ample and direct exits to the outside.

d. Travel distance (1) between any room door intended as exit access and an exit shall not exceed one hundred feet; (2) between any point in a room and an exit shall not exceed one hundred fifty feet; (3) between any point in a resident occupied sleeping room or suite and an exit access door of that room or suite shall not exceed fifty feet. The travel distance in (1) or (2) above may be increased by fifty feet in buildings completely equipped with an automatic fire extinguishing system.

e. Exit doors shall not be locked against the egress by bolts, key locks, hooks or padlocks. A latch type lock is permissible that locks against outside entrance. Panic hardware shall be installed on exit doors of facilities with over thirty residents.

5.552(4) *Construction and arrangement.* One of the two or more required exits shall be not less than forty-four-inch wide stairway. The minimum clear width of any additional required stairway shall be not less than thirty inches.

5.552(5) *Access.*

a. Every sleeping room, unless it has a door opening to the ground level, shall have an exit access door leading directly to a corridor which leads to an exit. One adjacent room such as a sitting or anteroom may intervene if all doors along the path of exit travel are equipped with nonlockable hardware.

b. Any required aisle, corridor or ramp shall be not less than thirty-six inches in clear width when serving as means of egress from resident sleeping rooms.

c. Corridors and passageways to be used as a means of exit, or part of a means of exit, shall be unobstructed and shall not lead through any room or space used for a purpose that may obstruct free passage. Corridors and passageways which lead to the outside from any required stairway shall be enclosed as required for stairways.

d. All rooms must be equipped with a door. Divided doors shall be of such type that when the upper half is closed, the lower section shall close.

(1) All doorways to resident occupied spaces, and all doorways from resident occupied spaces, and the required exits shall be no less than thirty-two inches in width; thirty-inch doors may be accepted in existing homes.

(2) Doors to resident rooms shall swing in, unless fully recessed, except any room accommodating more than four persons shall swing with exit travel.

(3) Residential type of occupancy room doors may be lockable by the occupant if they can be unlocked on the corridor side, and keys are carried by attendants at all times.

(4) Doors to basements, furnace rooms and hazardous areas shall be kept closed and marked "FIRE DOOR — PLEASE KEEP CLOSED".

(5) All resident rooms must be equipped with a full door, at least 1¾ inches bonded solid core wood, or equivalent.

5.552(6) *Protection of vertical openings.*

a. Each stairway between stories shall be enclosed with partitions having a one-hour fire-resistance rating, except that where a full enclosure is impractical, the required enclosure may be limited to that necessary to prevent a fire originating in any story from spreading to any other story.

b. All doorways in stairway enclosures or cutoff shall be provided with approved self-closing fire doors, except that no such doors shall be required for doorways leading directly outside the buildings, and all doors shall be kept closed unless held open by an approved electrical device, actuated by an approved smoke detection device located at top of stairwell, and connected to alarm system.

c. Any elevator shaft, light and ventilation shaft, chute, and other vertical opening between stories shall be protected as required above for stairways.

5.552(7) *Sprinkler system.*

a. Automatic fire extinguishing protection when required in 5.552(1), shall be in accordance with approved standards for systems in light hazard occupancies, and shall be electrically interconnected with the manual fire alarm system. The main sprinkler control valve shall be electrically supervised so that at least a local alarm will sound when the valve is closed.

b. The sprinkler piping for any isolated hazardous area which can be adequately protected by a single sprinkler may be connected directly to a domestic water supply system having a flow of at least twenty-two gallons per minute at fifteen pounds per square inch residual pressure at the sprinkler. An approved shut-off valve shall be installed between the sprinkler and the connection to the domestic water supply.

5.552(8) *Fire detection and alarm system.*

a. There shall be an automatic fire detection system in all boarding homes except where there is a sprinkler system which shall include an approved manual fire alarm system.

b. Requirements for automatic fire detection systems. The system shall meet the following standards:

(1) Automatically detect a fire.

(2) Indicate at a central supervised point, the location of the fire.

(3) Sound alarm signal throughout the premises for evacuation purposes.

(4) Provide assurance the system is in operating condition by electric supervision.

(5) Provide auxiliary power supply in the event of main power failure.

(6) Underwriters Laboratory listed equipment to be used throughout system.

(7) Provide a manual test switch.

(8) Installation of equipment and wiring shall be in a neat and workmanship like manner, according to manufacturers instructions.

(9) Shall be tested by competent person at least semiannually. Date of test and name noted.

(10) To include smoke, or products of combustion, detection devices as required by any section of these regulations.

(11) Properly located manual alarm stations.

c. Where fire detection systems are installed to meet the requirements of this regulation, they shall be approved electrically supervised systems protecting the entire building, including unoccupied spaces such as attics. Detectors shall be approved combined rate of rise and fixed temperature type detectors, 135° F., or smoke or products of combustion type, and be properly installed. In spaces where high temperature is normal, devices having a higher operating point may be used. Operation of a detection or alarm device shall cause an alarm which is audible throughout the building. In existing homes where "fixed temperature only type detectors" are already installed they need not be replaced until such time that a new head needs to be installed.

d. Smoke, or products of combustion other than heat, detectors shall be installed at

strategic locations such as corridors, hallways or stairways. The confirmation of compliance with this requirement shall be by the fire marshal.

5.552(9) *Fire extinguishers.*

a. Approved type fire extinguishers shall be provided on each floor, so located that a person will not have to travel more than seventy-five feet from any point to reach the nearest extinguisher. An additional extinguisher shall be provided in, or adjacent to each kitchen or basement storage room.

b. Type and number of portable fire extinguishers shall be determined by the fire marshal.

5.552(10) *Mechanical, electrical and building service equipment.*

a. Air conditioning, ventilating, heating, cooking and other service equipment shall be in accordance with state regulations governing same, or nationally recognized standards such as National Fire Protection Association standards governing the type of equipment, and shall be installed in accordance with the manufacturer's specifications. Central heating plants shall be separated from resident occupied spaces by at least a one-hour fire separation. Activation of the alarm system shall shut down the air distribution system.

b. Portable comfort heating devices are prohibited.

c. Any heating device, other than a central heating plant, shall:

(1) Be so designed and installed that combustible material will not be ignited by it or its appurtenances.

(2) If fuel fired, be chimney or vent connected, take its air for combustion directly from the outside, and be so designed and installed to provide for complete separation of the combustion system from the atmosphere of the occupied area. In addition, it shall have safety devices to immediately stop the flow of fuel and shut down the equipment in case of either excessive temperatures or ignition failure.

EXCEPTIONS:

Approved suspended unit heaters may be used, except in means of egress and resident sleeping areas, provided such heaters are located high enough to be out of the reach of persons using the area and provided they are equipped with the safety devices called for in subparagraph (2) above.

Fireplaces may be installed and used only in areas other than resident areas, provided that these areas are separated from resident sleeping spaces by construction having a one-hour fire-resistance rating and they comply with the appropriate standards. In addition thereto, the fireplace must be equipped with a heat tempered glass fireplace enclosure guaranteed against breakage up to a temperature of 650° F. If, in the opinion of the fire marshal, special hazards are present, a lock on the enclosure and other safety precautions may be required.

d. Combustion and ventilation air for boiler, incinerator, or heater rooms shall be taken directly from and discharged directly to the outside air. No incinerator flue shall connect to boiler or furnace flue.

e. Every incinerator flue, rubbish, trash or laundry chute shall be of a standard type, properly designed and constructed and maintained for fire safety. Any chute other than an incinerator flue shall be provided with automatic sprinkler protection installed in accordance with applicable standards.

An incinerator shall not be directly flue fed. Existing flue fed incinerators shall be sealed by fire-resistive construction to prevent further use. Any trash chute shall discharge into a trash collecting room, used for no other purpose and separated from the rest of the building with construction of at least one-hour fire-resistance rating, and provided with approved automatic sprinkler protection.

f. Cooking shall be prohibited except in approved food preparation areas.

g. The electrical systems, including appliances, cords and switches, shall be maintained to guarantee safe functioning.

5.552(11) *Attendants, evacuation plan.*

a. Every facility shall have at least one attendant on duty. This attendant shall be at least twenty-one years of age and capable of performing the required duties of evacuation. No person other than the management or a person under management control shall be considered as an attendant.

b. Every facility shall formulate a plan for the protection of all persons in the event of fire and for their evacuation to areas of refuge and from the building when necessary. All employees shall be instructed and kept informed respecting their duties under the plan. This plan is to be posted where all employees may readily study it. Fire drills shall be held at least once a month. Infirm or disturbed residents need not exit from building. Records of same to be kept available for inspection.

5.552(12) *Smoking.*

a. Smoking may be permitted in facilities only where proper facilities are provided. Smoking shall not be permitted in sleeping quarters or dormitories. "NO SMOKING" signs shall be posted in all resident rooms, stating the smoking regulations in that particular facility.

b. Ash trays of noncombustible material, and safe design, shall be provided in all areas where smoking is permitted.

5.552(13) *Exit signs and lighting.*

a. Signs bearing the word "EXIT" in plainly legible block letters shall be placed at each exit opening, except at doors directly from rooms to exit corridors or passageways and except at doors leading obviously to the outside from the entrance floor. Additional signs shall be placed in corridors and passageways wherever necessary to indicate the direction of exit. Letters of signs shall be at least six inches high, four and one-half inches if internally illuminated. All exit and directional signs shall be maintained clearly legible by electric illumination or other acceptable means when natural light fails.

b. All stairways and other ways of exit and the corridor or passageways appurtenant thereto shall be properly illuminated at all times to facilitate egress in accordance with the requirements for exit lighting.

c. Emergency lighting system of an approved type shall be installed so as to provide necessary exit illumination in the event of failure of the normal lighting system within the building. An approved rechargeable battery powered, automatically operated device will be acceptable.

5.552(14) *Combustible contents.*

a. Window draperies, and curtains for decorative and acoustical purposes shall be flame retardant.

b. Fresh cut flowers and decorative greens, as well as living vegetation, may be used for decoration, except those containing pitch or resin.

c. Carpeting shall be Class I. See Table No. 5-D following 661—5.105(100).
shall comply with the state fire marshal's specifications pertaining to same.

5.552(15) *Occupancy restrictions.*

a. A resident bedroom shall not be located in a room where the finish floor is more than thirty inches below the finish grade at the building.

b. Occupancies not under the control of, or not necessary to, the administration of residential care facilities, are prohibited therein with the exception of the residence of the owner or manager.

c. Nonambulatory residents shall be housed on the first floor only.

d. Rescinded IAB 12/12/90, effective 1/16/91.

5.552(16) *Maintenance.*

a. All fire and life safety equipment or devices shall be regularly and properly maintained in an operable condition at all times in accordance with nationally recognized standards. This includes fire extinguishing equipment, alarm systems, doors and their appurtenances, cords and switches, heating and ventilating equipment, sprinkler systems, and exit facilities.

b. Storerooms shall be maintained in a neat and proper manner at all times.

c. Excessive storage of combustible materials such as papers, cartons, magazines, paints, sprays, old clothing, furniture and similar materials shall be prohibited at all times in residential care facilities.

Rules 5.550 to 5.552 are intended to implement Iowa Code section 100.35 and 1986 Iowa Acts, chapter 1246, section 206.

5.553 to 5.599 Reserved.

Existing and New Intermediate Care Facilities and Skilled Nursing Facilities

661—5.600(100) Definitions.

5.600(1) In these regulations *"health care facility"* or *"facility"* means any intermediate care facility or skilled nursing facility requiring license by the Iowa department of health in accord with section 135C.6 of the Code.

5.600(2) *"Intermediate care facility"* means any institution, place, building, or agency providing for a period exceeding twenty-four consecutive hours accommodation, board, and nursing services the need for which is certified by a physician, to three or more individuals, not related to the administrator or owner thereof within the third degree of consanguinity, who by reason of illness, disease, or physical or mental infirmity require nursing services which can be provided only under the direction of a registered nurse or a licensed practical nurse.

5.600(3) *"Skilled nursing facility"* means any institution, place, building or agency providing for a period exceeding twenty-four consecutive hours accommodation, board and nursing services the need for which is certified by a physician, to three or more individuals not related to the administrator or owner thereof within the third degree of consanguinity who by reason of illness, disease, or physical or mental infirmity require continuous nursing care services and related medical services, but do not require hospital care. The nursing care services provided must be under the direction of a registered nurse on a twenty-four hour-a-day basis.

5.600(4) Rescinded May 25, 1977.

5.600(5) Rescinded May 25, 1977.

5.600(6) Rescinded May 25, 1977.

5.600(7) *"Patient"* means an individual admitted to an intermediate care facility or skilled nursing facility in the manner described by section 135C.23 for care.

5.600(8) The term *"bed patient"* shall mean a person who is not ambulatory as defined in these standards.

5.600(9) The term *"ambulatory"* when used in these standards shall mean a person who immediately and without aid of another, is physically or mentally capable of walking a normal path to safety including the ascent and descent of stairs.

5.600(10) The term *"nonambulatory"* when used in these standards shall mean a person who immediately and without aid of another is not physically or mentally capable of walking a normal path to safety including the ascent and descent of stairs.

5.600(11) *"State fire marshal"* shall mean the chief officer of the division of fire protection as described in Iowa Code section 100.1 or one authorized to act in the state fire marshal's absence.

5.600(12) *"Fire marshal"* shall mean the state fire marshal, any of the state fire marshal's staff, or "assistant state fire inspectors," carrying authorized cards signed by the state fire marshal.

5.600(13) *Competent.* Having sufficient physical and mental ability to react to an emergency and put into operation a plan for evacuation and extinguishment.

5.600(14) The term *"combustible"* shall mean capable of undergoing combustion.

5.600(15) The term *"combustible or hazardous storage area or room"* shall mean those

5.613(2) Fire exit drills shall be conducted at least twelve times per year, four times a year on each shift with three drills during the first month of operation. The drills may be announced in advance to the residents. The drills shall involve the actual evacuation of all residents to a selected assembly point and shall provide residents with experience in exiting through all exits required by the rules. Actual evacuation may not be required where security may be a problem.

Rules 5.607(100) to 5.613(100) are intended to implement Iowa Code section 135G.4.

5.614 to **5.619** Reserved.

661—5.620(100) General requirements for small group homes (specialized licensed facilities) for the mentally retarded.

5.620(1) *Scope.* This rule applies to specialized licensed facilities for the mentally retarded with three to five beds.

5.620(2) *Exits.*

a. There shall be a minimum of two approved exits from the main level of the home and from each level with resident sleeping rooms.

b. Interior and exterior stairways shall have a minimum clear width of not less than 30 inches.

5.620(3) *Windows.* Every resident sleeping room shall have an outside window or outside door arranged and located to permit the venting of products of combustion and access to fresh air in the event of an emergency.

a. In new construction, windows shall have a minimum net clear openable area of 5.7 square feet, minimum net clear openable height of 24 inches, minimum net clear openable width of 20 inches and the finished sill height shall be not more than 44 inches above the floor.

b. In existing construction the finished sill height shall be not more than 44 inches above the floor or may be accessible from a platform not more than 44 inches below the window sill.

5.620(4) *Interior finish.* Interior finish in exit shall be Class A, B or C. See Table No. 5-C, following 661—5.105(100).

5.620(5) *Doors.* Doors to resident sleeping rooms shall be a minimum of 1⅜-inch solid core wood or equivalent.

5.620(6) *Vertical separations.* Basement stairs must be enclosed with one-hour rated partitions and 1¾-inch solid core wood doors equipped with self-closers. These doors must be kept closed unless held open by an approved electro-magnetic holder, actuated by an approved smoke detection device located at the top of the stairwell and interconnected with the alarm system.

5.620(7) *Fire detection, fire alarms and sprinklers.*

a. The home shall have smoke detection installed on each occupied floor including basements in accordance with National Fire Protection Association Standard No. 74. Smoke detectors shall be interconnected so that activation of any detector will sound an audible alarm throughout. The system shall be tested by a competent person at least semiannually with date of test and name noted.

b. Homes may be protected with a sprinkler system meeting the requirements of National Fire Protection Association Standard No. 13D, 1989 edition.

5.620(8) *Fire extinguishers.*

a. Approved fire extinguishers shall be provided on each floor, so located that a person will not have to travel more than 75 feet from any point to reach the nearest extinguisher. An additional extinguisher shall be provided in, or adjacent to, each kitchen or basement storage room.

b. Type and number of portable fire extinguishers shall be determined by the fire marshal.

5.620(9) *Mechanical, electrical and building service equipment.*

a. Air conditioning, ventilating, heating, cooking and other service equipment shall be in accordance with state regulations governing same, or nationally recognized standards such as National Fire Protection Association standards governing the type of equipment, and shall be installed in accordance with the manufacturer's specifications. All hazardous areas nor-

mally found in one and two family dwellings, such as laundry, kitchen, heating units and closets need not be separated with walls if all equipment is installed in accordance with the manufacturer's listed instructions.

b. Portable comfort heating devices are prohibited.

5.620(10) *Attendants, evacuation plan.*

a. Every home shall have at least one staff person on the premises at all times while residents are present. This staff person shall be at least 18 years of age and capable of performing the required duties of evacuation. No person other than the management or a person under management control shall be considered as an attendant.

b. Every facility shall formulate a plan for the protection of all persons in the event of fire and for their evacuation to areas of refuge and from the building when necessary. All employees shall be instructed and kept informed respecting their duties under the plan. This plan is to be posted where all employees may readily study it. Fire drills shall be held at least once a month. Records must be kept available for inspection.

5.620(11) *Smoking.*

a. There shall be no smoking in resident sleeping areas and smoking and no smoking policies shall be strictly adhered to.

b. Ashtrays shall be constructed of noncombustible material with self-closing tops and shall be provided in all areas where smoking is permitted.

5.620(12) *Exit illumination.* Approved rechargeable battery powered emergency lighting shall be installed to provide automatic exit illumination in the event of failure of the normal lighting system.

5.620(13) *Occupancy restrictions.*

a. Occupancies not under the control of, or not necessary to, the administration of residential care facilities are prohibited therein with the exception of the residence of the owner or manager.

b. Nonambulatory residents shall be housed only on accessible floors which have direct access to grade which does not involve stairs or elevators.

5.620(14) *Maintenance.*

a. All fire and life safety equipment or devices shall be regularly and properly maintained in an operable condition at all times in accordance with nationally recognized standards. This includes fire extinguishing equipment, alarm systems, doors and their appurtenances, cords and switches, heating and ventilating equipment, sprinkler systems and exit facilities.

b. Storerooms shall be maintained in a neat and proper manner at all times.

c. Excessive storage of combustible materials such as papers, cartons, magazines, paints, sprays, old clothing, furniture and similar materials shall be prohibited at all times.

This rule is intended to implement Iowa Code Supplement section 135C.2(5)*"b."*

5.621 to 5.649 Reserved.

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FIRE SAFETY RULES FOR SCHOOL AND COLLEGE BUILDINGS

661—5.650(100) General requirements.

5.650(1) Every building or structure, new or old, designed for school or college occupancy, shall be provided with exits sufficient to permit the prompt escape of students and teachers in case of fire or other emergency. The design of exits and other safeguards shall be such that reliance for safety to life in case of fire or other emergencies will not depend solely on any single safeguard; additional safeguards shall be provided for life safety in case any single safeguard is ineffective due to some human or mechanical failure.

5.650(2) Every building or structure shall be so constructed, arranged, equipped, maintained and operated as to avoid undue danger to lives and safety of its occupants from fire, smoke, fumes or resulting panic during the period of time reasonably necessary for escape from the building or structure in case of fire or other emergency.

5.650(3) Exits shall be provided of kinds, numbers, location and capacity appropriate to the individual building or structure, with due regard to the character of the occupancy, the number of persons exposed, the fire protection available and the height and type of construction of the building or structure, to afford all occupants convenient facilities for escape.

5.650(4) Fire escapes, where specified, shall be installed and the design and use of materials shall be in accordance with subrule 5.101(4).

5.650(5) All changes or alterations to be made in any school or college building, whether new or existing, shall conform with the applicable provisions of these rules and before any construction of new or additional installation is undertaken, drawings and specifications thereof made to scale shall be submitted to the state fire marshal, in duplicate, for approval. Within a reasonable time (normally ten working days) after receipt of the drawings and specifications, the state fire marshal shall cause the same to be examined and if they conform as submitted or modified with the requirements of this division, the state fire marshal shall signify approval of the application either by endorsement thereon or by attachment thereto, retain one copy for the files and return to the applicant the other copy plus any additional copies submitted by the applicant. If the drawings and specifications do not conform with applicable requirements of this division the state fire marshal shall notify the applicant accordingly.

5.650(6) Each school building of two or more classrooms, not having a principal or superintendent on duty, shall have a teacher appointed by the school officials to supervise school fire drills and be in charge in event of fire or other emergency. This subrule shall not apply to college buildings.

5.650(7) Compliance with these rules shall not be construed as eliminating or reducing the necessity for other provisions for fire safety of persons using a school or college building

under normal occupancy conditions nor shall any provision of these rules be construed as requiring or permitting any conditions that may be hazardous under normal occupancy conditions.

5.650(8) In existing multistoried buildings where there is substantial compliance with these rules, the state fire marshal may waive specific requirements of these rules. Such waivers shall be granted only after taking into consideration: The age of the regular occupants of the building, the use to which the building is put, the potential hazard to occupants occasioned by noncompliance, the design of the building and difficulty of installing the fire safety device, the excessive cost of full compliance and availability of funds therefor.

661—5.651(100) Definitions.

Approved. Approved is defined as being acceptable to the state fire marshal. Any equipment or device which bears the seal of the Underwriters' Laboratories, Inc., Factory Mutual Laboratory, American Standards Association, or the American Gas Association shall be accepted as approved. In the case of standards for safety, the criteria shall be the National Fire codes as published by the National Fire Protection Association.

Basement. A usable or unused floor space not meeting the definition of a story or first story.

Classroom. Any room originally designed, or later suitably adapted to accommodate some form of group instruction on a day-by-day basis, excluding such areas as auditoriums, gymnasiums, lunchrooms, libraries, multipurpose rooms, study halls and similar areas. Storage and other service areas opening into and serving as an adjunct to a particular classroom shall be considered as part of that classroom area.

Elementary school. An elementary school shall be those buildings that include kindergarten through sixth grade (K-6).

Exit. An exit is a way to get from the interior of a building or structure to the open air outside at the ground level. It may comprise vertical and horizontal means of travel such as doorways, stairways, ramps, corridors, passageways and fire escapes. An exit begins at any doorway or other point from which occupants may proceed to the exterior of the building or structure with reasonable safety under emergency conditions.

Fire alarm system. A fire alarm system shall be an electrically energized system approved by the state fire marshal, using component parts approved by the Underwriters' Laboratories, Inc., and providing facilities of a type to warn the occupants of an existence of fire so that they may escape or to facilitate the orderly conduct of fire exit drills.

First story. The lowest story in a building which qualifies as a story, as defined herein, except that a floor level in a building having only one floor level shall be classified as a first story, provided such floor level is not more than four feet below grade, as defined herein, for more than 50 percent of the total perimeter, or not more than eight feet below grade, as defined herein, at any point.

Interior finish. See Table No. 5-C following 661—5.105(100).

Level of exit discharge. The level or levels with direct access to grade which do not involve the use of stairs or ramps. The level with the fewest steps shall be the level of exit discharge when no level exists directly to grade. In the event of a dispute, the state fire marshal shall determine which level is the level of exit discharge.

New construction. Those buildings designed and constructed after the effective date of these rules.

Portable classroom building. A building designed and constructed so that it can be disassembled and transported to another location, or transported to another location without disassembling.

School and college buildings. For the purpose of these rules, school and college buildings are those used as a gathering of groups of six or more persons for more than twelve hours

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Effective date of 5.300, 5.301(6), 5.301(7), 5.302, 5.304(2)"c"(2), 5.304(3), 5.304(4), 5.305, 5.350 and 5.351 delayed by the administrative rules review committee seventy days.

Subrule 5.305(3) which was delayed seventy days from November 8, 1979, is renumbered and amended as 5.305(2) to be effective January 17, 1980.

Effective date of 5.400 and 5.450–5.452 delayed by the administrative rules review committee seventy days. These amendments published in IAC 10/3/79, ARC 0596.

CHAPTER 21
STATE MEDICAL EXAMINER
[Prior to 4/20/88, see Medical Examiner, State, 566—Ch 1]

661—21.1(691) Autopsies for sudden infant deaths—reimbursement.

21.1(1) Autopsies performed on infants under two years of age when the circumstances surrounding the death indicate that sudden infant death syndrome may be the cause of death shall conform to Medical Examiner Forms number 4, 7 A and B.

21.1(2) Counties shall be reimbursed a maximum of $400 for each autopsy.

21.1(3) County auditors should submit a copy of the bill and Forms ME-7 A and B to:

Iowa SIDS Program
Iowa Department of Public Health
Lucas State Office Building
Des Moines, Iowa 50319

21.1(4) A bill must be submitted within 90 days after the autopsy is performed.

This rule is intended to implement Iowa Code section 331.802(3)*"j."*

661—21.2(691) Medical examiner coverage.

21.2(1) When an individual is required to report a death to a medical examiner and the county medical examiner, the state medical examiner or the state medical examiner's designated appointee cannot be located, the individual shall contact the county medical examiner from any adjacent Iowa county to investigate the circumstances of death and to prepare a written report in accordance with Iowa Code section 331.802. The responding medical examiner shall have full authority to conduct any procedures necessary to the investigation of the cause and manner of death.

21.2(2) The responding medical examiner shall be reimbursed by the county for which the service is provided for the investigation, mileage and expenses as is customary for the medical examiner's home county or at a rate agreed upon by the medical examiner and the board of supervisors of the county for which the service is provided.

This rule is intended to implement Iowa Code chapters 80 and 691.

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CHAPTER 22
Reserved

CHAPTER 23
CLOSED CIRCUIT VIDEOTAPE SURVEILLANCE SYSTEMS ON EXCURSION GAMBLING BOATS

661—23.1(99F) Definitions.

"Administrator" means the administrator of the Iowa racing and gaming commission.

"Applicant" means any person applying for an occupational license or applying for a license to operate an excursion gambling boat, or the officers and members of the board of directors of a qualified sponsoring organization located in Iowa.

"Casino" means all areas of an excursion gambling boat where gaming is conducted.

"Commission" means the Iowa racing and gaming commission.

"DCI" means the division of criminal investigation, Iowa department of public safety.

"Gangplank" means the walkways that passengers use to embark and disembark from the excursion gambling boat.

"Land-based facility" means the licensee's operation where the soft count room is located, if other than on an excursion gambling boat.

"Licensee" means a qualified sponsoring organization conducting gambling games on an excursion gambling boat licensed by the Iowa racing and gaming commission under Iowa Code section 99F.7.

"Operator" means an entity licensed to operate an excursion gambling boat by the Iowa racing and gaming commission.

661—23.2(99F) Minimum standards. This chapter sets forth the minimum standards that must be followed by a licensee with respect to casino surveillance systems. The director of the DCI or the administrator may, at the director or administrator's absolute discretion, require a licensee to comply with casino surveillance system requirements that are more stringent than those set forth by these rules.

661—23.3(99F) Closed circuit television. Every licensee shall install, maintain and operate a closed circuit television system according to specifications set forth in these rules and shall provide access at all times to the system or its signal to the commission and the DCI.

661—23.4(99F) Required equipment. The closed circuit television system shall include, but shall not be limited to, the following equipment:

1. Camera—Pan, tilt, zoom, commonly referred to as P.T.Z. cameras, that are light sensitive and capable of being placed behind a dome or one-way mirror which conceals the P.T.Z. cameras from view. Each camera shall have the capability to distinguish a clear, unobstructed view of the table number of the gaming table or slot machine.
2. Video printers—Capable of adjustment and must possess the capability to generate instantaneously upon command a clear, still copy of the image depicted on a videotape recording with a minimum of 128 shades of gray.
3. Video monitors—Each screen must be at least 12 inches measured diagonally and all controls must be front mounted. Solid state circuitry is required.
4. Date and time generators—Each shall be capable of recording both time and date of the recorded events without obstructing the recorded view. This must be in military time.
5. Universal power supply—The system and its equipment must be directly and securely wired in a way to prevent tampering with the system.
6. Domes for cameras—Made of sufficient quality and size to accommodate P.T.Z. cameras, and capable of accommodating clear, unobstructed views.
7. Video switchers—Capable of both manual and automatic sequential switching, for the entire surveillance system.

8. Videotape recorders—Capable of producing high quality, first generation pictures with a horizontal resolution of a minimum of 300 lines nonconsumer, professional grade, and recording standard ½ inch, VHS tape with high-speed scanning and flickerless playback capability in real time. Also, time and date insertion capabilities for taping what is being viewed by any camera in the system. A minimum of one video recorder for every eight video cameras is required.

661—23.5(99F) Required surveillance. Every licensee or operator shall conduct and record as required by either the commission or the DCI surveillance which allows clear, unobstructed views in the following areas of the excursion boats and the land-based facilities:

1. Overall views of the casino pit areas.
2. All gaming or card table surfaces, including table bank trays, with sufficient clarity to permit identification of all chips, cash, and card values, and the outcome of the game. Each gaming table shall have the capability of being viewed by no less than two cameras.
3. Dice in craps games, with sufficient clarity to read the dice in their stopped position after each roll.
4. All roulette tables and wheels, capable of being recorded on a split screen to permit views of both the table and the wheel on one monitor screen.
5. All areas within cashier cages and booths, including, but not limited to, customer windows, employee windows, cash drawers, vaults, safes, counters, chip storage and fill windows. Every transaction occurring within or at the casino cashier cages must be recorded with sufficient clarity to permit identification of currency, chips, tokens, fill slips, paperwork, employees, and patrons.
6. All entrance and exit doors to the casino area shall be monitored by the surveillance system if they are utilized for the movement of uncounted moneys, tokens, or chips. Also, elevators, stairs, gangplanks, and loading and unloading areas shall be monitored if they are utilized for the movement of uncounted moneys, chips, or tokens.
7. All areas within a hard count room and any area where uncounted coin is stored during the drop and count process, including walls, doors, scales, wrapping machines, coin sorters, vaults, safes, and general work surfaces.
8. All areas within a soft count room, including solid walls, doors, solid ceilings, stored drop boxes, vaults, safes, and counting surfaces which shall be transparent.
9. Overall views of patrons, dealers, spectators, and pit personnel, with sufficient clarity to permit identification thereof.
10. Overall views of the movement of cash, gaming chips and tokens, drop boxes and drop buckets.
11. All areas on the general casino floor with sufficient clarity to permit identification of all players, employees, patrons, and spectators.
12. Every licensee who exposes slot machines for play shall install, maintain, and operate at all times a casino surveillance system that possesses the capability to monitor and record clear, unobstructed views of the following:
    - All slot change booths, including their cash drawers, countertops, counting machines, customer windows, and employee windows, recorded with sufficient clarity to permit identification of all transactions, cash, and paperwork therein.
    - The slot machine number.
    - All areas, recorded with sufficient clarity to permit identification of all players, employees, patrons, and spectators.
13. The DCI may require surveillance coverage of any other operation or game on either an excursion gambling boat or a land-based facility.

661—23.6(99F) Equipment in DCI offices. Excursion boat and land-based offices assigned to the DCI shall be equipped with a minimum of two 12-inch monochrome video monitors with control capability of any video source in the surveillance system. The following shall be additional mandatory equipment for said room or rooms:

1. Video printer.
2. Video recorders.
3. Audio pickup of soft count room.
4. Time and date generators, if not in the master surveillance system.
5. Total override surveillance system capabilities.

661—23.7(99F) Camera lenses. All closed circuit cameras shall be equipped with lenses of sufficient quality to allow clarity of the value of gaming chips, tokens, and playing cards. These cameras shall be capable of black and white recording and viewing except those covering exits and entrances of the casino area and gangplank areas, which shall be capable of recording in color.

661—23.8(99F) Lighting. Adequate lighting shall be present in all areas of the casino and count rooms to enable clear video reproductions.

661—23.9(99F) Surveillance room. There shall be provided on each excursion gambling boat a room or rooms specifically utilized to monitor and record activities on the casino floor, count room, cashier cages, gangplank area, and slot cages. These rooms shall have a trained surveillance person present during casino operation hours. The following are requirements for the operation of equipment in the surveillance room:

23.9(1) *Surveillance equipment location.* All equipment that may be utilized to monitor or record views obtained by a casino surveillance system must remain located in the room used exclusively for casino surveillance security purposes, except for equipment which is being repaired or replaced. The entrance to the casino surveillance room must be locked or secured at all times.

23.9(2) *Override capability.* Casino surveillance equipment must have total override capability over any other satellite monitoring equipment in other casino offices, with the exception of the DCI rooms.

23.9(3) *Access.* DCI and commission employees shall at all times be provided immediate access to the casino surveillance room and other casino surveillance areas. Also, all DCI and commission employees shall have access to all records and areas of such rooms.

23.9(4) *Surveillance logs.* Entry in the log shall be required when requested by the DCI or the commission, whenever surveillance is conducted on anyone, or whenever any activity that appears unusual, irregular, illegal or in violation of commission rules is observed. Also, all telephone calls shall be logged.

23.9(5) *Blueprints.* A copy of the configuration of the casino floor shall be posted and updated immediately upon any change. Also included shall be the location of any change, and the location of surveillance cameras, gaming tables and slot machines by assigned numbers. Copies shall also be made available to the DCI room.

23.9(6) *Storage and retrieval.* Surveillance personnel will be required to label and file all videotape recordings. The date, time, and signature of the person making the recording is required. All videotape recordings shall be retained for at least seven days after recording unless a longer period is required by the DCI, the commission, or court order. Original audio tapes and original video tapes shall be released to a DCI agent upon demand.

23.9(7) *Malfunctions.* Each malfunction of surveillance equipment must be repaired within 24 hours of the malfunction. If, after 24 hours, activity in the affected area cannot be monitored, the game or machine shall be closed until such coverage can be provided. A record of all malfunctions shall be kept and reported to the DCI each day.

23.9(8) *Security.* Entry to the surveillance room is limited to persons approved by the DCI or the administrator. A log of personnel entering and exiting the surveillance room shall be maintained and submitted to the DCI every 30 days.

23.9(9) *Playback station.* An area is required to be provided within the DCI room that will include, but is not limited to, a video monitor and a video recorder with the capability of producing first generation videotape copies.

23.9(10) *Additional requirements.*

a. Audio and videotape monitoring will be continuous in the DCI and security detention areas, when someone is being detained. These recordings must be retained for 30 days after the recorded event, unless directed otherwise by the administrator, DCI or court order.

b. The commission, its employees, and DCI agents shall, at all times, be provided immediate access to the surveillance room and all areas of the casino.

23.9(11) *Written plans and alterations.*

a. Every operator or applicant for licensing shall submit to the commission for approval by the administrator and to the DCI for approval by the director of the DCI, a written casino surveillance system plan no later than 60 days prior to the start of gaming operations.

b. A written casino surveillance system plan must include a casino floor plan that shows the placement of all casino surveillance equipment in relation to the locations required to be covered, and a detailed description of the casino surveillance system and its equipment. In addition, the plan may include other information that evidences compliance with these rules by the licensee, operator or applicant.

c. The operator may change the location of table games, slot machines, and other gaming devices. The surveillance system must also be adjusted, if necessary, to provide the coverage required by these rules. A DCI agent must approve the change in surveillance system before the relocated table games, slot machines, or other gaming devices may be placed into operation. The operator must submit any change to the surveillance system showing the change in the location of the gaming devices and related security and surveillance equipment within seven days to the administrator and the director of the DCI.

661—23.10(99F) Nongambling hours. Security surveillance will be required during nongambling hours as follows:

23.10(1) *Cleanup and removal time.* At any time cleanup operations or money removal is being conducted in the casino area, the security surveillance room must be staffed with a minimum of one trained surveillance person.

23.10(2) *Locked down mode.* Anytime the casino is closed and in a locked down mode, sufficient surveillance coverage must be conducted to monitor and record the casino, in general, so that security integrity is maintained. During this period it is not required that a trained security surveillance person be present.

661—23.11(99F) Waivers from requirements. Upon request of an applicant, licensee, or operator, the director may, for just cause, waive any requirement of these rules.

These rules are intended to implement Iowa Code Supplement section 99F.4.

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CHAPTER 24
Reserved

CHAPTER 25
PUBLIC RECORDS AND FAIR INFORMATION PRACTICES

The department adopts portions of the final report of the Governor's Task Force.

PREAMBLE

Scope. These rules are to provide notice of how the department keeps records and what the procedures are for access by the public. Nothing in these rules affects the access of information by law enforcement agencies, agencies of government or persons authorized by chapter 110A or 692 of the Iowa Code to receive information.

661—25.1(17A,22) Definitions. As used in this chapter:
"Agency" means the "department of public safety."

661—25.2(17A,22) Statement of policy. (Uniform rule adopted)

661—25.3(17A,22) Request for access to records.
25.3(1) *Location of record.* A request for access to a record should be directed to the office where the record is kept. If the location of the record is not known by the requester, the request shall be directed to Administrator, Administrative Services Division, Department of Public Safety, Wallace State Office Building, Des Moines, Iowa 50319. The administrative services division will forward the request to the appropriate person.
25.3(2) *Office hours.* Open records shall be made available during customary office hours, which are 8 a.m. to 4:30 p.m. daily, excluding Saturdays, Sundays, and legal holidays.
25.3(3) *Request for access.* (Uniform subrule adopted)
25.3(4) *Response to requests.* (Uniform subrule adopted)
25.3(5) *Security of record.* (Uniform subrule adopted)
25.3(6) *Copying.* (Uniform subrule adopted)
25.3(7) *Fees.*
a. When charged. (Uniform paragraph adopted)
b. Copying and postage costs. (Uniform paragraph adopted)
c. Search and supervisory fees. Fees may be charged for actual agency expenses in searching for and supervising the examination and copying of requested records. The custodian shall notify the requester of the hourly fees to be charged for searching for records and supervision of records during examination and copying. That hourly fee shall not be in excess of the hourly wage of an agency employee who ordinarily would be appropriate and suitable to perform these search and supervisory functions.
d. Advance deposits.
(1) When the estimated total fee chargeable under this subrule exceeds $25, the custodian may require a requester to make an advance payment to cover all or a part of the estimated fee.
(2) When a requester has previously failed to pay a fee chargeable under this subrule, the custodian may require payment of the full amount of any fees previously owed and of any estimated fees for the new request prior to processing any new request from the requester.

661—25.4(17A,22) Procedures for access to confidential records. This rule contains the provisions governing public access to confidential records in addition to those specified for all records in rule 25.3(17A,22). These provisions do not apply to law enforcement agencies, agencies of government or persons authorized by Iowa Code chapter 692 or 100A to receive confidential information.
25.4(1) *Proof of identity.* (Uniform subrule adopted)
25.4(2) *Requests.* (Uniform subrule adopted)
25.4(3) Reserved.
25.4(4) *Request denied.* (Uniform subrule adopted)
25.4(5) *Request granted.* (Uniform subrule adopted)

REVENUE AND FINANCE DEPARTMENT[701]

Created by 1986 Iowa Acts, Chapter 1245.
Rules under this Department "umbrella" will also include Lottery Division

is requesting the information. The agreement will cover the conditions and procedures under which specific information will be released. The following persons do not need written approval from the director or deputy director of revenue and finance to examine state information and returns:

1. Assistant attorneys general assigned to the department of revenue and finance.
2. Local officials acting as representatives of the state in connection with the collection of taxes or in connection with legal proceedings relating to the enforcement of tax laws.
3. The child support recovery unit of the department of human services to secure a taxpayer's name and address per the terms of an interagency agreement. (Also see Iowa Code section 252B.9).
4. The job service division per the terms of an interagency agreement.
5. The legislative fiscal bureau regarding sample individual income tax information to be used for statistical purposes. (Also see Iowa Code section 422.72(1).
6. The auditor of state, to the extent that the information is necessary to complete the annual audit of the department as required by Iowa Code section 11.2. (Also see Iowa Code section 422.72(1).)

Tax information and returns will not be released to officers and employees of the state who do not meet the requirements set forth above. [See Letter Opinions, November 25, 1981, Richards to Bair, Director of Revenue and March 4, 1982, Richards to Johnson, Auditor and Bair, Director of Revenue.]

The director may disclose state tax information, including return information, to tax officials of another state or the United States government for tax administration purposes provided that a reciprocal agreement exists which has laws that are as strict as the laws of Iowa protecting the confidentiality of returns and information.

This rule is intended to implement Iowa Code sections 252B.9, 324.63, 421.18, 421.19, 422.20, and 422.72.

701—6.4(17A) Copies of proposed rules. A trade or occupational association, which has registered its name and address with the department of revenue and finance, may receive, by mail, copies of proposed rules. Registration of the association's name and address with the department is accomplished by written notification to the Deputy Director of Revenue and Finance, P.O. Box 10460, Des Moines, Iowa 50306. In the written notification, the association must designate, by reference to rule 701—7.2(17A), the type of proposed rules and the number of copies of each rule it wishes to receive. If the association wishes to receive copies of proposed rules not enumerated in rule 701—7.2(17A), it may make a blanket written request at the time of registration or at any time prior to the adoption of such rules. A charge of 25 cents per single-sided page shall be charged to cover the actual cost of providing each copy of the proposed rule. In the event the actual cost exceeds 20 cents for a single-sided page, it will be billed accordingly.

This rule does not prevent an association which has registered with the department in accordance with this rule from changing its designation of types of proposed rules or number of copies of proposed rules which the association desires to receive. If an association makes such changed designation, it must do so by written notification to the deputy director of revenue and finance.

This rule is intended to implement Iowa Code section 17A.4.

701—6.5(17A) Regulatory flexibility analysis procedures. Any small business as defined in Iowa Code section 17A.31 or organization of small businesses which has registered its name and address with the department of revenue and finance shall receive by mail a copy or copies of any proposed rule which may have an impact on small business. Registration of the business's or organization's name and address with the department is accomplished by written notification to the Deputy Director of Revenue and Finance, P.O. Box 10460, Des Moines, Iowa 50306. In the written notification, the business or organization must state that it wishes to receive copies of rules which may have an impact on small business, the number of copies of each

rule it wishes to receive, and must also designate, by reference to rule 701—7.2(17A), the types of proposed rules it wishes to receive. If the small business or organization of small businesses wishes to receive copies of proposed rules not enumerated in rule 701—7.2(17A), it may make a blanket written request at the time of registration or at any time prior to the adoption of the rules. A charge of 20 cents per single-sided page shall be imposed to cover the actual cost of providing each copy of the proposed rule. In the event the actual cost exceeds 20 cents for a single-sided page, it will be billed accordingly.

The administrative rules review committee, the governor, a political subdivision, at least 25 persons signing the request who qualify as a small business, or an organization representing at least 25 persons which is registered with the department as provided in this rule may request issuance of a regulatory flexibility analysis by writing to the Director of Revenue and Finance, P.O. Box 10460, Des Moines, Iowa 50306. The request shall contain the following information: The name of the persons qualified as a small business and the name of the small business or the name of the organization as stated in its request for registration and an address; if a registered organization is requesting the analysis, a statement that the registered organization represents at least 25 persons; the proposed rule or portion of the proposed rule for which a regulatory flexibility analysis is requested; the factual situation which gives rise to the business's or organization's difficulties with the proposed rule; any of the methods for reducing the impact of the proposed rule on small business contained in Iowa Code section 17A.31(4) which may be particularly applicable to the circumstances; the name, address and telephone number of any person or persons knowledgeable regarding the difficulties which the proposed rule poses for small business and other information as the business or organization may deem relevant.

This rule is intended to implement Iowa Code sections 17A.31 to 17A.33.

701—6.6(422) Retention of records and returns by the department. The director may destroy any records, returns, reports or communications of a taxpayer after they have been in the custody of the department for three years, or at such later time when the statute of limitations for audit of the returns or reports has expired. The director may destroy any records, returns, reports or communications of a taxpayer before they have been in the custody of the department for three years provided that the amount of tax and penalty due has been finally determined.

This rule is intended to implement Iowa Code section 422.62.

701—6.7(68B) Consent to sell. In addition to being subject to any other restrictions in outside employment, self-employment or related activities imposed by law, an official or employee of the department of revenue and finance may only sell, either directly or indirectly, any goods or services to individuals, associations, or corporations subject to the authority of the department of revenue and finance when granted permission subsequent to completion and approval of an Iowa department of revenue and finance application to engage in outside employment. The application to engage in outside employment must be approved by the employee's immediate supervisor, division administrator, and the administration division administrator. Approval to sell may only be granted when conditions listed in Iowa Code section 68B.4 are met.

This rule is intended to implement Iowa Code section 68B.4 as amended by 1990 Iowa Acts, chapter 1209.

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10.2(8) *Calendar year 1989.* The interest upon all unpaid taxes which are due as of January 1, 1989, will be 9 percent per annum (0.8% per month). This interest rate will accrue on taxes which are due and unpaid as of, or after January 1, 1989. In addition, this interest rate will accrue on tax refunds which by law accrue interest, regardless whether the tax to be refunded is due before, on, or after January 1, 1989. This interest rate of 9 percent per annum, whether for unpaid taxes or tax refunds, will commence to accrue in 1989.

10.2(9) *Calendar year 1990.* The interest upon all unpaid taxes which are due as of January 1, 1990, will be 11 percent per annum (0.9% per month). This interest rate will accrue on taxes which are due and unpaid as of, or after January 1, 1990. In addition, this interest rate will accrue on tax refunds which by law accrue interest, regardless whether the tax to be refunded is due before, on, or after January 1, 1990. This interest rate of 11 percent per annum, whether for unpaid taxes or tax refunds, will commence to accrue in 1990.

10.2(10) *Calendar year 1991.* The interest upon all unpaid taxes which are due as of January 1, 1991, will be 12 percent per annum (1.0% per month). This interest rate will accrue on taxes which are due and unpaid as of, or after, January 1, 1991. In addition, this interest rate will accrue on tax refunds which by law accrue interest, regardless of whether the tax to be refunded is due before, on, or after January 1, 1991. This interest rate of 12 percent per annum, whether for unpaid taxes or tax refunds, will commence to accrue in 1991.

This rule is intended to implement Iowa Code section 421.7 as amended by 1990 Iowa Acts, chapter 1172.

701—10.3(324,422,450) Interest on refunds. For those taxes on which interest accrues on refunds under Iowa Code section 324.65, 422.25(3), 422.28, and 450.94, interest shall accrue through the month in which the refund is mailed to the taxpayer and no further interest will accrue unless the department did not use the most current address as shown on the latest return or refund claim filed with the department.

This rule is intended to implement Iowa Code sections 324.65 as amended by 1986 Iowa Acts, chapter 1246, 422.25(3), 422.28, and 450.94.

701—10.4(421) Frivolous return penalty. A five hundred dollar ($500) civil penalty is imposed on the return of a taxpayer that is considered to be a "frivolous return." A "frivolous return" is: (1) A return which lacks sufficient information from which the substantial correctness of the amount of tax liability can be determined or contains information that on its face indicates that the amount of tax shown is substantially incorrect, or (2) a return which reflects a position of law which is frivolous or is intended to delay or impede the administration of the tax laws of this state.

If the frivolous return penalty is applicable, the penalty will be imposed in addition to any other penalty which has been assessed. If the frivolous return penalty is relevant, the penalty may be imposed even under circumstances when it is determined that there is no tax liability on the return.

The frivolous return penalty is virtually identical to the penalty for frivolous income tax returns which is authorized in section 6702 of the Internal Revenue Code. The department will follow federal guidelines and court cases when determining whether or not the frivolous return penalty should be imposed.

The frivolous return penalty may be imposed on all returns filed with the department and not just individual income tax returns. The penalty may be imposed on an amended return as well as an original return. The penalty may be imposed on each return filed with the department.

10.4(1) *Nonexclusive examples of circumstances under which the frivolous return penalty may be imposed.* The following are examples of returns filed in circumstances under which the frivolous return penalty may be imposed:

a. A return claiming a deduction against income or a credit against tax liability which is clearly not allowed such as a "war," "religious," "conscientious objector" deduction or tax credit.

b. A blank or partially completed return that was prepared on the theory that filing a complete return and providing required financial data would violate the Fifth Amendment privilege against self-incrimination or other rights guaranteed by the Constitution.

c. An unsigned return where the taxpayer refused to sign because the signature requirement was "incomprehensible or unconstitutional" or the taxpayer was not liable for state tax since the taxpayer had not signed the return.

d. A return which contained personal and financial information on the proper lines but where the words "true, correct and complete" were crossed out above the taxpayer's signature and where the taxpayer claimed the taxpayer's income was not legal tender and was exempt from tax.

e. A return where the taxpayer claimed that income was not "constructively received" and the taxpayer was the nominee-agent for a trust.

f. A return with clearly inconsistent information such as when ninety-nine (99) exemptions were claimed but only several dependents were shown.

g. A document filed for refund of taxes erroneously collected with the contention that the document was not a return and that no wage income was earned. This was inconsistent with attached W-2 Forms reporting wages.

10.4(2) *Nonexclusive examples where the frivolous return penalty is not applicable.* The following examples illustrate situations where the frivolous return penalty would not be applicable:

a. A return which includes a deduction, credit, or other item which may constitute a valid item of dispute between the taxpayer and the department.

b. A return which includes innocent or inadvertent mathematical or clerical errors, such as an error in addition, subtraction, multiplication, or division or the incorrect use of a table provided by the department.

c. A return which includes a statement of protest or objection, provided the return contains all required information.

d. A return which show the correct amount of tax due, but the tax due is not paid.

This rule is intended to implement Iowa Code section 421.7 as amended by 1986 Iowa Acts, chapter 1007.

701—10.5(421) Exceptions from penalty provisions for taxes due and payable on or after January 1, 1987. The penalty provided for failure to remit at least ninety percent (90%) of the tax due or of the tax due with the filing of the deposit form or return or to pay at least ninety percent (90%) of the tax required to be shown as due on the return under Iowa Code sections 98.28, 98.46, 324.65, 422.16, 422.25, 422.58, 422.66, 423.18, 435.5, 450.63, 450A.12 or 451.12 shall not be assessed by the department or paid by the taxpayer under any of the following conditions:

1. The taxpayer voluntarily files an amended return and pays all tax shown to be due on the return prior to any contact by the department.

If upon audit of the original and amended returns, additional tax is found to be due and payments made with the original and amended return after application of the payments to penalty, interest, and then tax due, do not equal at least ninety percent (90%) of the tax required to be shown due, penalty will be assessed.

Payments made with the original return include any amounts refunded or credited to a subsequent tax liability.

The term "any contact by the department" means any written correspondence from the department including a notice of adjustment or assessment regarding a return or the scheduling in writing of an audit of a return or commencement of an audit without prior notification.

2. The taxpayer provides written notification to the department of a federal audit while it is in progress and voluntarily files an amended return within sixty (60) days of the final disposition of the federal government's audit and pays all tax shown to be due on the return. A copy of the written notification to the department should be attached to the amended return when it is filed.

3. The return or deposit is timely, but erroneously, mailed with adequate postage to the Internal Revenue Service or another state agency and the taxpayer provides proof of timely mailing with adequate postage. See Iowa Code sections 622.105 and 622.106 for proof of timely mailing.

4. The return or deposit is timely mailed with adequate postage to the department and the taxpayer provides proof of timely mailing with adequate postage. See Iowa Code sections 622.105 and 622.106 for proof of timely mailing.

5. The taxpayer presents proof that the taxpayer relied upon documented written erroneous advice relating to the tax deficiency from the department, county treasurer, or federal Internal Revenue Service, whichever is appropriate.

This rule is intended to implement Iowa Code chapter 421 and 1989 Iowa Acts, chapter 131, section 13, subsection 4; section 29; and section 45, subsection 3, paragraph *"c."*

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MOTELS
See HOTELS AND MOTELS; TAXATION: Hotel and Motel

MOTORCYCLES
See MOTOR VEHICLES

MOTOR VEHICLES
See also BOATS AND BOATING; CARRIERS; MOBILE HOMES; TRANSPORTATION DEPARTMENT
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See also BUSES; CARRIERS
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