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Monitoring Waivers under The Lead and Copper Rule Minor Revisions for Systems Serving 3,300 or Fewer People



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Monitoring Waivers under the Lead and Copper Rule Minor Rule Revisions for Systems Serving 3,300 or Fewer People

What is the Purpose of this Guidance Document?

On June 7, 1991, the Environmental Protection Agency or EPA published in the *Federal Register*, a regulation to control lead and copper in drinking water. This regulation is known as the Lead and Copper Rule. EPA also refers to this rule as the LCR or 1991 Rule. On January 12, 2000, EPA published minor revisions to the 1991 Rule. The purpose of the Lead and Copper Rule Minor Revisions (LCRMR) is to eliminate unnecessary requirements, streamline and reduce reporting burden, and promote consistent national implementation.

This guidance document may apply to owners and operators of water systems that serve 3,300 or fewer people. The LCRMR include a new provision that allows States to grant monitoring waivers if systems have very low lead and/or copper 90th percentile levels and meet certain plumbing material restrictions. If a system receives a waiver, it can collect lead and/or copper samples once every 9 years. Under the 1991 Rule, systems were required to collect these samples at least once every 3 years.

This guidance document provides a detailed discussion of monitoring waivers to help systems understand if they might qualify for a waiver and how to apply for it. However, a system should first check with the State before applying for a monitoring waiver. The State may be unable to grant waivers until its drinking water regulations include specific monitoring waiver language.

How is this Guidance Document Organized?

EPA has tried to anticipate the type of information that a system will need to better understand monitoring waivers. To do this, EPA have structured this guidance document in a question and answer format. This document is designed to answer the following questions:

- ⇒ What Special Terms Does A System or State Need to Know to Understand this Guidance Document?
- → What Is A Monitoring Waiver?
- ➤ How Do Systems Apply for A Monitoring Waiver?
- → How Will the State Evaluate A System's Application to Grant the Waiver?
- ⇒ What Are A System's Monitoring and Reporting Requirements If It Receives A Waiver?
- → How Does A System Renew or Modify An Existing Waiver?
- → What Must A System Do If the System Has Changed?
- ⇒ What Must A System Do If Its Waiver Has Been Revoked?
- ➤ What Key Points Should A System Remember?

This document includes citations in brackets at the end of some of the sentences (e.g., [See §141.86(g)]). Wherever this document mentions a requirement that the system or the State *must* follow, EPA has included, in brackets, the citation from the federal regulations that contains the requirement. EPA also has included two appendices to this document. Appendix A contains examples of waiver application forms that a system can use to apply for a monitoring waiver and instructions on how to complete them. EPA has provided three examples of this form, based on different types of waivers for which a system may be eligible. Appendix B contains federal regulatory language from the LCRMR that explains the monitoring waiver requirements.

Remember: The State's drinking water regulation may contain slightly different wording, and may even be more stringent than the federal regulations. In addition, the State's regulation may be organized differently than in the federal regulation contained in Appendix B of this document. A system should contact the appropriate State agency for a copy of its regulations.

What Special Terms Does A System or State Need to Know to Understand this Guidance Document?

Term	Definition
1991 Rule	This refers to the Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper. This regulation was published in the <i>Federal Register</i> on June 7, 1991 (56 FR 26460). EPA modified this rule with technical amendments that were published in the <i>Federal Register</i> on July 15, 1991 (56 FR 32113), June 29, 1992 (57 FR 28786), and June 30, 1994 (59 FR 33860).
90th Percentile Value	The highest concentration of lead or copper in tap water that is exceeded by 10 percent of the sites sampled during a monitoring period. This value is compared to the lead action level or the copper action level, to determine whether an action level has been exceeded.
Action Level	The concentration of lead or copper in tap water which determines whether a system may be required to install corrosion control treatment, collect water quality parameter samples, collect lead and copper source water samples, replace lead service lines, and/or deliver public education about lead. <i>The action level for lead is 0.015 mg/L. The action level for copper is 1.3 mg/L.</i>

Term	Definition
Endpoint device	This term refers to a device typically installed within the last one liter of the water distribution system of a building. Endpoint devices include kitchen and bar faucets, lavatory faucets, water dispensers, drinking fountains, water coolers, glass fillers, residential refrigerator ice makers, supply stops and endpoint control valves.
Federal Register	This publication is used by the federal government to keep the public informed of regulations that the government is planning, is proposing, or has finalized. A rule is considered officially promulgated or finalized on the day that it is published in the <i>Federal Register</i> .
First-draw sample	This refers to a one-liter sample of tap water that has been standing motionless in plumbing pipes at least 6 hours and is collected without flushing the tap.
Flux	A substance applied during soldering to facilitate the flow of solder. Flux often contains lead.
Free of copper- containing materials	This means that the water system's distribution system, service lines, and all drinking water supply plumbing meet the copper materials criteria. (See the definition for Materials Criteria below.)
Free of lead- containing materials	This means that the water system's distribution system, service lines, and all drinking water supply plumbing meet the lead materials criteria. (See the definition for Materials Criteria below.)
Full waiver	This waiver allows a small system to collect both lead and copper tap samples at a frequency of once every 9 years at a reduced number of sites. To receive this waiver a system must meet the monitoring and materials criteria for both lead and copper [See $\$141.86(g)(1)$ and (2)].
In-line device	This refers to any device measuring or controlling the flow of water, that is installed on a service line or building distribution system downstream of the water main and upstream from endpoint devices.
LCR	An acronym for the Lead and Copper Rule. Also referred to in this document as the 1991 Rule.
LCRMR	An acronym for the Lead and Copper Rule Minor Revisions that were published in the <i>Federal Register</i> on January 12, 2000.
Lead free	This term applies to any solders or flux that contain no more than 0.2 percent lead, pipes, and pipe fittings that contain no more than 8.0 percent lead.
Lead service line	Means a service line made of lead which connects the water main to the building inlet. It also includes any lead pigtail, gooseneck, or other fitting which is connected to the lead service line.

Term	Definition
Materials Criteria	These criteria specify the types of materials that a small system cannot have in its distribution system, service lines, and drinking water supply plumbing, if it is to qualify for a lead and/or copper monitoring waiver [See §141.86(g)(1)].
	To meet the materials criteria for lead, these plumbing materials must contain no plastic pipes which contain lead plasticizers, or plastic service lines which contain lead plasticizers; and must be free of lead service lines, lead pipes, lead soldered pipe joints, and leaded brass or bronze alloy fittings and fixtures, unless the fittings and fixtures meet the specifications of any standard established by SDWA section 1417(e) [See §141.86(g)(1)(i)].
	To meet the materials criteria for copper, these plumbing materials cannot contain any copper pipes or copper service lines [See §141.86(g)(1)(ii)].
Monitoring Criteria	This term applies to the lead and/or copper 90 th percentile levels that a small system must have to qualify for a monitoring waiver under the LCRMR. To qualify for a full waiver, or a lead waiver, the system's 90th percentile lead level cannot be greater than 0.005 mg/L. To qualify for a full waiver, or a copper waiver, the system's 90th percentile copper level cannot be higher than 0.65 mg/L [See $141.86(g)(2)$].
Monitoring Waiver	This is a new provision under the LCRMR. Systems that serve 3,300 or fewer people that meet specific materials and monitoring criteria can receive a waiver from the State. This waiver would allow systems to collect lead and/or copper once every 9 years at a reduced number of sites [See §141.86(g)].
National Sanitation Foundation International (NSF)	NSF is an organization that is focused on public health, safety, and protection of the environment. They have established standards based on health effects for lead leaching for faucets and other drinking water plumbing components.
NSF Standard 61, Section 9	This standard meets the requirements of SDWA section 1417(e) and limits the amount of lead that is allowed to be released (or leached) into drinking water from endpoint devices (such as faucets) used to dispense drinking water. NSF, Underwriters Laboratories Inc. (UL), and other organizations test products such as faucets to determine whether they meet this standard. Those products that meet this standard carry a certification mark.
Partial Waiver	This type of waiver may be granted if a small system meets the materials and monitoring criteria for either lead or copper, but not both. It allows the system to monitor once every 9 years at a reduced number of sites for the contaminant for which it receives the waiver. The State may elect not to grant partial waivers [See §141.86(g)].
Pre-existing Waiver	A monitoring waiver that was granted for lead and copper tap monitoring prior to April 11, 2000.

Term	Definition
Safe Drinking Water Act (SDWA)	Refers to the legislative act most recently amended by Congress on August 6, 1996, that grants EPA and the States the authority to implement the drinking water regulations. The SDWA was signed into law on December 19, 1974, and was first amended on June 19, 1986.
Small water system	A water system that serves 3,300 or fewer persons.
Solder	A metallic compound used to seal joints in plumbing. Until recently, most solder contained about 50 percent lead.
State	Refers to the government agency that enforces compliance with drinking water regulations and assists systems in understanding and implementing these regulations. For most systems, this is an organization within the State government (e.g., Department of Natural Resources, Department of Environmental Quality, Department of Health). For DC, WY, and Native American Lands, the contact is often from the respective EPA Regional Office.
Waiver Revocation	The State may decide that a system's waiver is no longer valid. This will occur if the system no longer meets the materials or monitoring criteria, or for any reasons specified by the State in writing.
Water distribution system	Refers to the piping, devices, and related fittings that are used to carry a system's drinking water to its users. It includes the treatment plant, distribution system, water meter, water meter setting equipment, piping and plumbing that conveys drinking water, and individual fixtures.

What Is A Monitoring Waiver?

A monitoring waiver is a legally recognized document from the State to the water system. It allows the system to reduce the frequency of required monitoring for lead and/or copper at the tap to once every 9 years, if the system can demonstrate that it does not have sources of lead and/or copper contamination.

Why are monitoring waivers granted?

Small systems often have limited resources (time, dollars, and technical support). EPA believes that there is no reason to require small water systems that serve 3,300 or fewer people to monitor frequently, if they can demonstrate that sources of lead and/or copper contamination are not present.

What are the types of Monitoring Waivers?

<u>Full Waiver</u>. A full waiver is granted if a system meets the materials and monitoring criteria for **both** lead and copper. It allows the system to monitor once every 9 years for both contaminants.

<u>Partial Waiver</u>. A partial waiver is granted if a system demonstrates to the State that it meets the materials and monitoring criteria for *one*, but not both lead and copper. It allows the system to monitor once at 9-year intervals for the waivered contaminant. A State may elect not to grant partial waivers. <u>Pre-existing Waiver</u>. This is a waiver that was granted by the State prior to April 11, 2000.

Is a system eligible for a monitoring waiver, regardless of where the water system is located?

No. The system should first check with the State in which the system is located to see if the State has the ability to grant monitoring waivers. It is also up to the State whether it will grant partial waivers. A State also may have granted pre-existing waivers prior to adopting the LCRMR.

How Does A System Apply for A Monitoring Waiver?

What criteria must a system meet to be considered for a Monitoring Waiver?

A system must meet both materials and monitoring criteria to be considered for a waiver [See \$\$141.86(g)(1) and (2)]. There are separate criteria for lead and copper. The types of monitoring waivers that may be available to a system are listed in Table 1.

Table 1Types of Monitoring Waivers	
If a system is applying for a:	Then the system must meet the materials and monitoring criteria for:
Full waiver	both lead and copper
Partial waiver for lead	lead only
Partial waiver for copper	copper only



Remember: A system should first check with the State before applying for a waiver to be sure that the State can grant waivers.

What are the materials criteria and to what do they apply?

The materials criteria apply to all plumbing that is used to carry drinking water to a system's users *as well as* the plumbing used to convey the drinking water inside *all* of the residences and buildings that the system serves. Therefore, to meet the criteria, the system must be able to identify the composition of all the materials in its distribution system, service lines, and drinking water plumbing [See \$141.86(g)(1)]. The types of plumbing that the system must evaluate include not only the pipes, but the solder, flux, fittings, and faucets [See \$141.86(g)(1)].

Remember: A system must be able to verify the drinking water plumbing in all the buildings that it serves, not just in those locations where the system collects lead and copper tap samples [See §141.86(g)(1)].

If a system applies for a lead waiver, the system must certify and document that these plumbing materials meet *all* the lead material criteria listed in Table 2 [See §141.86(g)(1)(i)]. These criteria are based on the definition established under the Safe Drinking Water Act (SDWA) Amendments of 1986 and the lead-leaching standard required under the SDWA Amendments of 1996.

Table 2Materials Criteria for a Lead Waiver

- No plastic pipes that contain lead plasticizers,
- No plastic service lines that contain lead plasticizers,
- No lead service lines,
- No lead pipes that contain over 8% lead,
- No lead pipe fittings that contain over 8% lead,
- No lead solder containing over 0.2% lead,
- No lead flux containing over 0.2% lead, *and*
- No leaded brass or bronze alloy fittings and fixtures, including faucets, that are intended by the manufacturer to be used to dispense drinking water, unless:
 - S they contain less than 8% lead, and
 S meet the standards and testing protocols for the leaching of lead established by qualified third-party certifiers in the development of voluntary standards as required in SDWA section 1417(e). Currently, EPA recognizes NSF Standard 61, Section 9, to meet these voluntary requirements. NSF Standard 61, Section 9 includes a list of plumbing fittings and fixtures that are subject to this requirement.

The year that the plumbing material was produced is one factor that may help a system determine whether the system's drinking water plumbing materials and those used in the buildings it serves meet the lead materials criteria. This is due to laws that were passed to help limit the amount of lead that can be contained in drinking water plumbing materials. The following further describes the laws that limit the use of leadcontaining plumbing devices.

The 1986 amendments to the SDWA require the use of "lead-free" pipes, solder, and flux in the installation or repair of any public water system or any plumbing in other facilities connected to a public water system.

According to these amendments, solders and flux are considered "lead-free" when they contain not more than 0.2 percent lead. (In the past, solder normally contained about 50 percent lead.) Pipes and fittings are considered "lead-free" when they contain not more than 8.0 percent lead. These requirements went into effect in June 1986. The law gave State governments until June 1988 to implement and enforce these new limitations. Thus, any plumbing installed after June 1988 must contain these "leadfree" materials. The system should check with the State to determine when these new requirements took effect.

The SDWA 1996 Amendments set an even stricter lead-leaching standard. After August 6, 1998, only pipes and plumbing fittings and fixtures, that meet this new leadleaching standard are legally allowed to be imported, manufactured, processed, or sold. Devices that met the requirements of the SDWA 1986 Amendments may not meet the current lead leaching standards set by the 1996 Amendments.

Section 1417(e) of the 1996 SDWA Amendments also require EPA to work with third party certifiers to establish voluntary standards and testing protocols for the

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leaching of lead from new plumbing fittings and fixtures to be used to dispense drinking water. The American National Standards Institute/ National Sanitation Foundation (ANSI/NSF) Standard 61, Section 9 is recognized by EPA as a lead-leaching standard. It limits the amount of lead that can leach into water from faucets, drinking fountains, and other endpoint devices.

Products certified against the ANSI/NSF standard carry a certification mark of the certifying organization. NSF International and Underwriters Laboratories (UL) publish listing books of products that they have tested and certified against the ANSI/NSF Standard. Both organizations also maintain these listings through their Internet sites. Systems can obtain listing books from NSF International at 1-800-NSF-MARK, or visit their website at www.nsf.org. Systems can also contact UL at 847-272-8800 or visit their website at www.ul.com.

If a system applies for a copper waiver, it must certify and document that the water system (including all plumbing that conveys drinking water in all residences and buildings connected to the system) meets *all* the criteria in Table 3 [See §141.86(g)(1)(ii)]:

Table 3Materials Criteria for a Copper Waiver

- No copper pipes, and
- No copper service lines.

Copper pipes and service lines are easy to spot from just a visual inspection. A homeowner should be able to tell the system whether he/she has copper piping that is connected to his/her kitchen or bathroom faucet.

If a system applies for a waiver for lead and copper, also known as a full waiver, the system must meet the materials criteria for both lead and copper, that are listed in Tables 2 and 3 [See §§141.86(g)(1)(i) and (ii)].

What are the monitoring criteria that a system must meet to qualify for a waiver?

To qualify for a full or partial monitoring waiver the system must also show that it has very low levels of lead and/or copper at the tap [See 141.86(g)(2)]. To do this, the system must have at least one set of samples that:

1. Has been collected at the standard number of sites listed in Table 4 [See §141.86(g)(2)].

Table 4Standard Number of Sites	
If the system serves:	Then Collect Samples from:
100 or fewer people	5 sites
101 to 500 people	10 sites
501 to 3,300 people	20 sites

- 2. Was collected after the system determined that it met the materials criteria for lead and/or copper, depending on the type of waiver [See §141.86(g)(2)].
- 3. Meets the lead and/or copper monitoring criteria in Table 5 [See §141.86(g)(2)].

Table 5 Monitoring Criteria		
If a system is applying for a:	then the system's 90 th percentile level must be:	
Full waiver or lead waiver	less than or equal to 0.005 mg/L of lead [See §141.86(g)(2)(i)]	
Full waiver or copper waiver	less than or equal to 0.65 mg/L of copper [See §141.86(g)(2)(ii)]	

Remember: If a system applies for a full waiver it must meet the materials and monitoring criteria for both lead and copper [See §§141.86(g)(1) and (2)].

What documentation does a system need to submit to the State to be considered for a Monitoring Waiver?

The system's monitoring waiver application must include the following:

- Monitoring waiver application form that contains a materials certification,
- Monitoring results, and

• Supporting documentation [See §§141.86(g)(1) and (2)].

Each of these is discussed in more detail below.

Monitoring Waiver Application Form

Depending on the State's regulations, a system may apply for a full monitoring waiver, a lead monitoring waiver, or a copper monitoring waiver. Appendix A contains separate application forms for these three types of waivers. They are:

- Monitoring waiver application form for lead and copper,
- Monitoring waiver application form for lead only, and
- Monitoring waiver application form for copper only.

If a system would like to apply for a waiver, it must submit the appropriate documentation [See §§141.86(g)(1) and (2)]. The system can use one of the waiver application forms in Appendix A, based on the type of waiver for which the system is applying, or use the form provided by the State.

Each of the monitoring waiver application forms contain a materials certification. By signing this form, the system is certifying that it has performed the needed steps to verify that its distribution system, service lines, and the plumbing used to convey the drinking water inside the residences and buildings that it serves meets the materials criteria for lead, copper, or both. The monitoring waiver application form is a legal document. The form should only be signed and submitted to the State if the system is certain that it can certify and document that it meets the materials criteria.

Monitoring Results

The system must provide to the State, a copy of the monitoring results that demonstrate that the system meets the monitoring criteria [See \$141.90(a)(4)(i)]. The system should provide the results of all samples collected and not just the 90th percentile value.

Supporting Documentation

A system is required to provide supporting documentation to the State to show that the system meets the materials criteria for lead and/or copper [See 141.86(g)(1)]. This documentation could include:

- Construction permit that lists the types of materials that are used in the construction of the water system;
- Signed statements from the system's users that their drinking water plumbing is free of lead- and/or copper-containing materials;
- Plumbing codes;
- Plumbing permits;
- Distribution maps and drawings;
- Inspection and maintenance records;
- Capital improvement and master plans;
- Operation and maintenance manuals;
- Interviews with senior personnel and building inspectors; and
- Community surveys.

Is a system eligible for a waiver if the plumbing in the system has lead plasticizers?

No. A system is not eligible for a monitoring waiver if any of its distribution or service lines or any drinking water supply plumbing, including that used inside the buildings that it serves, contain plastic pipes which contain lead plasticizers, or plastic service lines which contain lead plasticizers.

Is a system eligible for a waiver if it has leaded brass or bronze alloy fittings or fixtures?

If a water system has leaded brass or bronze alloy fittings and fixtures, the system may be eligible for a monitoring waiver if it meets *all* the following criteria:

- 1. All leaded brass or bronze alloy fittings and fixtures comply with ANSI/NSF Standard 61, section 9. This standard covers endpoint devices. The NSF Standard defines endpoint devices as mechanical plumbing devices, components, and materials which are typically installed within the last liter of the distribution system and are intended by the manufacturer to dispense drinking water. The devices include kitchen and bar faucets, lavatory faucets, water dispensers, drinking fountains, water coolers, glass fillers, residential refrigerator ice makers, supply stops and endpoint control valves.
- 2. Meets the "lead free" requirements that solders and flux may not contain more than 0.2 percent lead, and pipes, pipe fittings may not contain more than 8.0 percent lead.
- 3. Meets all of the materials criteria in Table 2 and monitoring criteria for lead in Table 5.

Is a system eligible for a waiver if it has in-line devices, such as valves or meters, that contain lead or copper? Yes. A water system with in-line devices that contain lead or copper may apply for a waiver, and may be granted a waiver if it meets the other requirements for materials and monitoring results [See 141.86(g)(1)].

Is a system eligible for a waiver if it cannot identify all drinking water plumbing materials used in all buildings connected to the water system?

No. A system must identify all plumbing materials used in all buildings that are connected to the system, in order to be eligible for a waiver.

Is a system still eligible for the waiver if it adds a new source or changes treatment?

Maybe. It is up to the State to decide this. A system must notify the State in writing within 60 days or earlier (if required by te State) after adding a new source or changing treatment, and describe what has changed [See 141.86(g)(4)(iii)]. Based on the specific situation, the waiver may be modified or revoked. The State also may require the system to perform additional monitoring or other activities, to minimize the risk of introducing lead or copper into the tap water.

Does a system have to collect samples while its waiver application is being reviewed by the State?

Yes. A system must continue monitoring for lead and copper at the tap on the system's current schedule [See §141.86(g)(3)]. For example, if a system is collecting samples on an annual basis, it is still required to monitoring annually, until it receives the State's *written* approval of the monitoring waiver request [See §141.86(g)(3)].

The materials criteria seems very difficult to meet. What kind of system could qualify?

EPA recognizes that the materials criteria will be difficult to meet for many systems, because of the age of the water system and the requirement to identify drinking water plumbing materials in the buildings to which a system provides drinking water. EPA believes that only systems that can demonstrate that they are essentially free of lead and/or copper should be allowed to monitor on a 9-year cycle.

EPA expects that some newer systems, with limited distribution systems, such as a nontransient non-community water system or very small community water systems that serve a trailer park may qualify. These systems are more likely to use PVC, or materials meeting the lead free and lead leaching-standards, and to be able to identify the materials used in all the buildings they serve.

How long does a waiver last?

The waiver should last for 9 years, unless the system no longer meets the materials or monitoring criteria.

How Will the State Evaluate A System's Waiver Application?

What criteria will the State use to evaluate an application for a waiver?

The State will review the system's waiver application, materials certification, sampling results, and any other information that it may require from the system, to determine if the system is free of sources of lead and/or copper contamination.

How will a system know if the State has approved its waiver application?

The State will notify the system in writing. The State will tell the system whether or not it has granted the waiver, reasons for its decision, and any conditions of the waiver. A State may require a system to perform specific activities, such as additional monitoring or the delivery of information to customers to remind them to avoid installation of materials that might void the waiver.

What Are A System's Monitoring and Reporting Requirements If It Receives A Waiver?

What must a system do if it receives a full waiver?

The State will specify the exact conditions of the waiver. In general, the system will be required to monitor for lead and copper at the tap at least every 9 years at the same number of sites allowed under annual or triennial monitoring [See §141.86(g)(4)]. (For example, if a system with a waiver monitors in June 2000, it must monitor again in June 2009 or earlier.) For systems serving 101 to 3,300 people, this is a reduction in the number of sites from that required during the standard six-month monitoring cycle. The minimum number of sites is shown in Table 6.

Table 6Reduced Number of Sites	
If a system serves:	Then it must Collect Samples from:
100 or fewer people	5 sites
101 to 500 people	5 sites
501 to 3,300 people	10 sites

What must a system do if it receives a partial waiver?

The waiver will apply to lead or copper only and the State will specify the exact conditions of the waiver. In general, the system will be required to monitor for the waivered contaminant at least every 9 years at the number of sites shown in Table 6 [See §141.86(g)(4)]. For the contaminant for which the system did not receive a waiver, the monitoring schedule is not affected.

How Does A System Renew or Modify An Existing Waiver?

How does a system renew its waiver?

If a system continues to comply with the criteria for materials and monitoring results, its waiver will be renewed. The system is still required every 9 years to submit its monitoring results and to re-certify that it still meets the criteria for a monitoring waiver [See §141.86(g)(4)].

The Monitoring Waiver Application Form in Appendix A can also be used as a recertification form, by checking the box labeled, "Renewal of existing waiver". However, if a system no longer meets these criteria, its waiver will be either modified or revoked. In either case, the State will notify the system in writing to explain the system's new requirements or reasons why the waiver was revoked. For more information on waiver revocation, refer to the section, entitled, "What Must A System Do If Its Waiver Has Been Revoked?".

What must a system do if it has a preexisting waiver?

If The State Required Monitoring

Some States issued waivers to systems before April 11, 2000. In some instances, the State required the system to collect at least one round of monitoring. If this is the case, the system's waiver will still be in effect if the results of its lead 90th percentile level does not exceed 0.005 mg/L and its copper 90th percentile level does not exceed 0.65 mg/L [See \$141.86(g)(7)(i)].

If a system satisfies these criteria, it will be required to monitor no later than 9 years after the last time it monitored for lead and copper [See §141.86(g)(7)(i)]. For example, assume a system monitored in June 1996. The system would be required to conduct its next round of lead and copper tap monitoring by June 2005. In addition, the system will be required to submit these results to the State along with a certification that it meets the materials criteria for lead and copper [See §§141.86(g)(1) and (2)]. The Monitoring Waiver Application Form in Appendix A can also be used to renew existing waivers, by marking the box, "Renewal of pre-existing waiver".

If The State Did Not Require Monitoring

If a system was not required to conduct monitoring as a condition of receiving the waiver, its waiver will remain in effect if it conducts at least one set of lead and copper samples at the tap at the standard number of sites (refer to Table 4) by September 30, 2000. The results of this monitoring must meet the monitoring criteria for both lead and copper (refer to Tables 2 and 3) [See §141.86(g)(7)(ii)].

The system must report the monitoring results to the State within 10 days following the end of the monitoring period [See §141.90(a)(1)]. So, for example, if a system's monitoring period ended September 30, 2000, it must report its sampling results to the State by October 10, 2000. In addition, the system must continue to monitor at intervals of at least 9 years from when it last sampled for lead and/or copper, and to certify that it meets the materials criteria for lead and copper in order to maintain its waiver [See §141.86(g)(7)(ii)].

What Must A System Do If The System Has Changed?

What must a system do if it adds a new source or changes treatment?

A system must provide written documentation describing its new source or change in treatment to the State within 60 days or earlier (if earlier notification is required by the State) [See §§141.86(g)(4)(iii) & §141.90(a)(3)].

The State may add or modify the conditions of the waiver (e.g., require re-certification that the system is free of lead-containing materials or does not contain copper materials, require additional rounds of monitoring), if it considers these steps necessary to adequately address the changes in source or treatment in the system.

What must a system do if it finds out that it is no longer free of lead- or coppercontaining materials?

Over time, a system may change (e.g., due to new construction, repairs), and leadcontaining or copper-containing materials may be added. A system must notify the State in writing no later than 60 days after becoming aware of such a change [See \$141.86(g)(4)(iv)].

What Must A System Do If Its Waiver Has Been Revoked?

Why would a waiver be revoked?

The State must revoke a full waiver or a partial waiver for lead if:

- The system is no longer free of lead-containing materials,
- The system has a 90th percentile value over 0.005 mg/L for lead, or
- The State has provided the system with a letter informing the system that its waiver was revoked and the reasons why [See §§141.86(g)(5)(i) and (iii)].

The State must revoke a full waiver or a partial waiver for copper if:

- The system now contains copper pipes or copper service lines,
- The system has a 90th percentile value over 0.65 mg/L for copper, or
- The State has provided the system with a letter informing the system that its waiver was revoked and the

reasons why [See §§141.86(g)(5)(ii) and (iii)].

What is a system required to do if its waiver is revoked due to a 90th percentile value above the monitoring waiver level?

This depends on whether the 90th percentile lead or copper level is above the action level, as explained in more detail below.

If A System Exceeds An Action Level

If the 90th percentile lead level exceeds 0.015 mg/L or the 90th percentile copper level exceeds 1.3 mg/L, the system must begin corrosion control treatment steps [See §141.86(g)(6)(i)]. The requirements for corrosion control treatment are contained in §141.81(e) of the LCRMR and have been provided in Appendix B for convenience. The LCRMR do not change the requirements contained in §141.81(e) from those originally required under the 1991 Rule.

If A System is At Or Below Both Action Levels

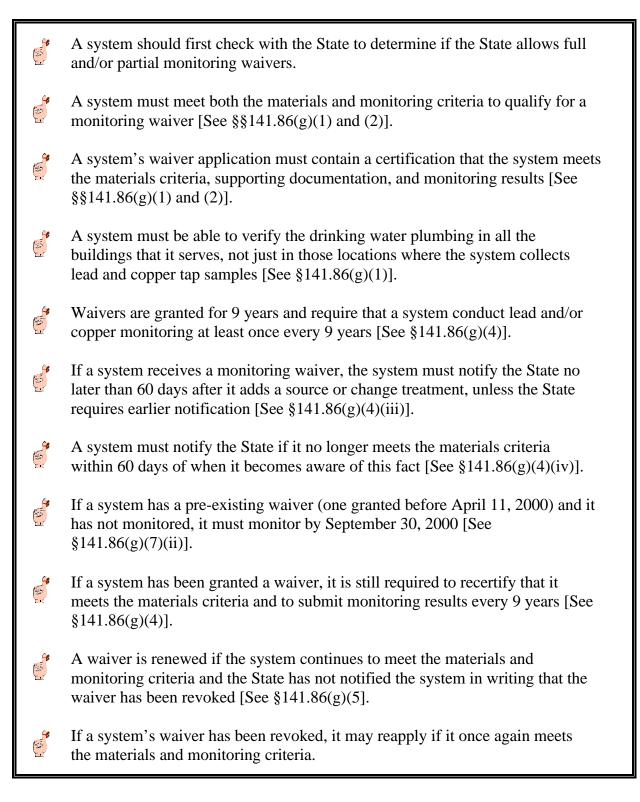
If the 90th percentile values for BOTH lead and copper are **at or below** the action levels, the system must monitor at least once every 3 years at the number of sites specified in Table 6 [See 141.86(g)(6)(ii)]. A summary of these requirements are provided in Table 7.

Table 7Monitoring Requirements If A SystemNo Longer Meets the MonitoringCriteria	
If a system's 90 th percentile level for:	The system must:
lead exceeds 0.015 mg/L, <i>or</i> copper exceeds 1.3 mg/L	begin corrosion control treatment steps [See §141.86(g)(6)(i)]
lead exceeds 0.005 mg/L but is 0.015 mg/L or less, <i>or</i> copper exceeds 0.65 mg/L but is 1.3 mg/L or less	monitor at least once every 3 years at the number of sites, listed in Table 6 [See §141.86(g)(6)(ii)].

May a system re-apply for a waiver if its waiver has been revoked?

Yes. If a system now meets the criteria for both materials and monitoring results, it may re-apply for a full or partial waiver. The system may use the Waiver Application form in Appendix A by checking the box, labeled "Re-application After Waiver Was Revoked." The system must also complete and sign a new Materials Certification Form and provide monitoring results that demonstrate that the system meets the monitoring criteria [See §§141.86(g)(1) and (2)].

What Key Points Should A System Remember?



APPENDIX A

Monitoring Waiver Application Forms

- Instructions for Completing the Monitoring Waiver Application Form
- Monitoring Waiver Application Form for Both Lead and Copper
- Monitoring Waiver Application Form for Lead Only
- Monitoring Waiver Application Form for Copper Only

Instructions for Completing the Monitoring Waiver Application Form

Please select the appropriate waiver application form for the type of waiver for which you are applying. Depending on your State's drinking water regulations, you can apply for one of three types of monitoring waivers:

- Waiver for both lead and copper,
- Waiver for lead only, or
- Waiver for copper only.

Please provide responses for all requested information, and have an official representative of your water system sign and date the form. Each of the monitoring waiver application forms contains a materials certification. By signing this form, you (or your official representative, if appropriate) are certifying that you have performed all of the steps needed to verify that your distribution system, service lines, and drinking water plumbing in all residences and buildings meet the materials criteria for lead, copper, or both. The monitoring waiver application form is a legal document. It is essential that it be signed by someone who has the authority to make decisions for your system. It should be signed only after you can certify and document that your system and all the drinking water plumbing in the buildings connected to your system, meet the materials criteria.

Please send a signed copy of your completed waiver application form, with supporting documentation, and sampling results to your State. If you have any problems or questions, please call your State.

	System-specific information	
PWSID	This is the unique identification number that has been assigned to your system by your State. If you do not know your water system's identification number, please ask your State.	
System Name	The official name of your water system.	
Contact	As part of the monitoring waiver application process, your State will need to contact someone that can tell them about your water system. So, you need to provide information on your designated contact person as follows: • Mailing address • Contact name • Telephone number • Fax number, if available • e-mail address, if available	

Please provide the following information, so that your State can properly review your application for a monitoring waiver.

Waiver Status. Information you provide on the current status of your waiver will help your State process your monitoring waiver application more quickly. Your waiver application form has four possible options.

Check this box on your form	if:
New	You have never been granted a monitoring waiver.
Renewal of a Pre-Existing Waiver	You have been granted a monitoring waiver prior to April 11, 2000.
Renewal of Existing Waiver	You have previously been granted a waiver after April 11, 2000.
Re-application after Waiver was Revoked	You have previously been granted a waiver, but it has been revoked. Please indicate why your waiver was revoked. Reasons, preceded by circles on your form, are as follows: new source, change treatment, 90 th percentile levels above waiver levels, or Other (please specify). Check all the circles that apply. In order for you to be eligible for a waiver again, the conditions that caused your waiver to be revoked must now be resolved.

Signature of Official Representative. By signing this form, you (or your official representative, if appropriate) are certifying that you have performed all of the steps needed to verify that your distribution system, service lines, and drinking water plumbing in all residences and buildings meet the materials criteria listed on the form.

Supporting Documentation. You must provide your State with supporting documentation that shows that your system meets the materials criteria. Examples of this include construction permits listing the materials used to construct your water system, certificates of lead content that can be obtained from the manufacturer or importer/distributor of your faucets or plumbing devices, and laboratory results from testing faucets/plumbing devices for lead content.

Sampling Results. Sampling results **must** accompany your waiver application. These samples must have been collected after you have determined that your system meets the materials criteria for lead or copper or both, depending on the type of waiver. Your 90th percentile lead level cannot be greater than 0.005 mg/L (if applying for a full waiver or lead waiver) and your copper 90th percentile level cannot be greater than 0.65 mg/L (if applying for a full waiver or copper waiver).

Monitoring Waiver Application Form for Both Lead and Copper

PWS ID:	Contact Person Name:
System Name:	Telephone Number:
Mailing Address:	Fax Number:
	e-mail address:

Waiver Status		
G New	r r	
G Renewal of Pre-Existing Waiver	(check all reasons that apply) F New source	
G Renewal of Existing Waiver	 F Change treatment F 90th percentile values above waiver levels F Other:	

I have verified and hereby certify that all materials in my water system's distribution system and service lines and all drinking water supply plumbing, including plumbing that conveys drinking water inside all residences and buildings connected to my system, meet **ALL** of the following criteria:

Title:

 No plastic pipes that contain lead plasticizers, No plastic service lines that contain lead plasticizers, No lead service lines, No lead solder or lead flux containing over 0.2% lead, 	 No lead pipes or lead pipe fittings containing over 8% lead, No leaded brass or bronze alloy fittings or fixtures that do not meet the standards established in SDWA §1417(e), No copper pipes, AND No copper service lines
Signature:	Date:

Note: You MUST include sampling results for BOTH lead and copper, and supporting documentation with this form to be considered for a monitoring waiver.

Printed Name:

Monitoring Waiver Application Form for Lead Only

PWS ID:	Contact Person Name:
System Name:	Telephone Number:
Mailing Address:	Fax Number:
	e-mail address:

Waiver Status		
G New	G Re-application after Waiver was Revoked (check all reasons why waiver was revoked)	
G Renewal of Pre-Existing Waiver	F New source F Change treatment	
G Renewal of Existing Waiver	 F 90th percentile values above waiver levels F Other: 	

I have verified and hereby certify that all materials in my water system's distribution system and service lines and all drinking water supply plumbing, including plumbing that conveys drinking water inside all residences and buildings connected to my system, meet **ALL** of the following criteria:

- No plastic pipes that contain lead plasticizers,
- No plastic service lines that contain lead plasticizers,
- No lead service lines,
- No lead solder or lead flux containing over 0.2% lead,
- No lead pipes or lead pipe fittings containing over 8% lead, AND
- No leaded brass or bronze alloy fittings or fixtures that do not meet the standards established in SDWA §1417(e).

Signature:	Date:
Printed Name:	Title:

Note: You MUST include sampling results for lead and supporting documentation with this form to be considered for a monitoring waiver.

Monitoring Waiver Application Form for Copper Only

PWS ID:	Contact Person Name:
System Name:	Telephone Number:
Mailing Address:	Fax Number:
	e-mail address:

Waiver Status		
G New	G Re-application after Waiver was Revoked	
G Renewal of Pre-Existing Waiver	(check all reasons that apply) F New source	
G Renewal of Existing Waiver	 F Change treatment F 90th percentile values above waiver level F Other:	ls

I have verified and hereby certify that all materials in my water system's distribution system and service lines and all drinking water supply plumbing, including plumbing that conveys drinking water inside all residences and buildings connected to my system, meet **ALL** of the following criteria:

- No copper pipes, AND
- No copper service lines

Signature:	Date:
Printed Name:	Title:

Note: You MUST include sampling results for copper and supporting documentation with this form to be considered for a monitoring waiver.

APPENDIX B

Lead and Copper Rule Minor Revisions that Relate to Monitoring Waiver Requirements

<i>₩</i>	§141.81(e)
₩₩	§141.86(g)

»→ §§141.90(a)(3) & (4)

§141.81(e): The following section spells out the corrosion control treatment steps and deadlines. The LCRMR do not change these requirements. They have only been included in this appendix for convenience to the reader.

Treatment Steps and deadlines for small and medium-size systems. Except as provided in paragraph (b) of this section, small and medium-size systems shall complete the following corrosion control treatment steps (described in the referenced portions of §§141.82, 141.86 and 141.87) by the indicated time periods.

- (1) *Step 1:* The system shall conduct initial tap sampling (§141.86(d)(1) and §141.87(b)) until the system either exceeds the lead or copper action level or becomes eligible for reduced monitoring under §141.86(d)(4). A system exceeding the lead or copper action level shall recommend optimal corrosion control treatment (§141.82(a)) within six months after it exceeds one of the action levels.
- (2) *Step 2:* Within 12 months after a system exceeds the lead or copper action level, the State may require the system to perform corrosion control studies (§141.82(b)). If the State does not require the system to perform such studies, the State shall specify optimal corrosion control treatment (§141.82(d)) within the following timeframes:
 - (i) For medium-size systems, within 18 months after such system exceeds the lead or copper action level,
 - (ii) For small systems, within 24 months after such system exceeds the lead or copper action level.
- (3) *Step 3:* If the State requires a system to perform corrosion control studies under step 2, the system shall complete the studies (§141.82(c)) within 18 months after the State requires that such studies be conducted.
- (4) *Step 4:* If the system has performed corrosion control studies under step 2, the State shall designate optimal corrosion control treatment (§141.82(d)) within 6 months after completion of step 3.
- (5) *Step 5:* The system shall install optimal corrosion control treatment (§141.82(e)) within 24 months after the State designates such treatment.
- (6) *Step 6:* The system shall complete follow-up sampling (§141.86(d)(2) and §141.87(c)) within 36 months after the State designates optimal corrosion control treatment.
- (7) *Step 7:* The State shall review the system's installation of treatment and designate optimal water quality control parameters (§141.82(f)) within 6 months after completion of step 6.
- (8) *Step 8:* The system shall operate in compliance with the State-designated optimal water quality control parameters (§141.82(g)) and continue to conduct tap sampling (§141.86(d)(3) and §141.87(d)).

\$ **141.86(g)(1)-(2):** The following section contains language that explains the materials and monitoring criteria that a system must meet to qualify for a monitoring waiver.

§§141.86(g)(3)-(4): The following section explains the State approval process for a waiver and the system's monitoring requirements should it receive a waiver.

§§141.86(g)(5)-(7): The following section explains under what circumstances a system remains eligible for a waiver, under what circumstances a system's waiver will be revoked, and requirements if a system were granted a pre-existing waiver.

§141.90(a)(3): The following section requires all systems on reduced monitoring (including those on monitoring waivers) that add a new source or change water treatment to inform the State of 60 days of making this change.

No later than 60 days after the addition of a new source or any change in water treatment, unless the State requires earlier notification, a water system deemed to have optimized corrosion control under §141.81(b)(3), a water system subject to reduced monitoring pursuant to §141.86(d)(4), or a water system subject to a monitoring waiver pursuant to §141.86(g), shall send written documentation to the State describing the change. In those instances where prior State approval of the treatment change or new source is not required, water systems are encouraged to provide the notification to the State beforehand to minimize the risk the treatment change or new source will adversely affect optimal corrosion control.

§141.90(a)(4): The following section explains a system's reporting requirements to the State should the system wish to apply for a waiver, wish to maintain its waiver, or become aware that it no longer meets the materials requirements. It also specifies the reporting requirements for systems with pre-existing waivers.