

Proposed Appendix B to MN Rule 5205.XXXX

Employee Standard Summary

This appendix summarizes key provisions of the standard that you as an employee should become familiar with.

I. Permissible Exposure Limit (PEL) -- subsection (c)

The standard sets a permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air (50 µg/m³), calculated as an 8-hour time-weighted average (TWA). Your lead exposure over your entire workday, when calculated as an 8-hour TWA, cannot be higher than the PEL. However, since the PEL is an 8-hour TWA, short exposures above the PEL are permitted so long as for each workday your average exposure does not exceed the PEL.

II. Exposure Monitoring -- subsection (d)

If lead is present in any quantity in the workplace where you work, your employer is required to make an initial determination of whether the action level (10 µg/m³ calculated as an 8-hour TWA) is exceeded for any employee. This initial determination must include instrument monitoring of the air for the presence of lead and must cover the exposure of a representative number of employees who are reasonably believed to have the highest exposure levels. If your employer has conducted appropriate air sampling for lead in the past year, they may use these results. If there have been any employee complaints of symptoms which may be attributable to exposure to lead or if there is any other information or observations which would indicate employee exposure to lead, this must also be considered as part of the initial determination. If this initial determination shows that a reasonable possibility exists that any employee may be exposed, without regard to the use of respirators, over the action level, your employer must set up an air monitoring program to determine the exposure level of every employee exposed to lead at your workplace.

In carrying out this air monitoring program, your employer is not required to monitor the exposure of every employee but must monitor a representative number of employees and job types. Enough sampling must be done to enable each employee's exposure level to be reasonably represented by at least one full-shift air sample. In addition, these air samples must be taken under conditions which represent each employee's regular, daily exposure to lead.

The standard includes a classification for work with lead that may result in significant employee exposure to airborne lead. In the standard, this work is referred to as presumed significant lead work (PSLW). PSLW includes altering or disturbing material that contains or is likely to contain at least 0.5% lead by weight; and torch cutting any scrap metal. In the standard, "altering or disturbing" means "subjecting to a process that may result in the release of lead dust, lead mist, lead fume, or other lead particles. Such processes include, but are not limited to, welding, torch cutting, brazing, torch soldering, melting, pouring, spraying, cutting, shredding, crushing, baling, grinding, polishing, machining, drilling, scraping, sanding, abrading, sweeping, raking, and shoveling." Examples

of materials that are likely to contain at least 0.5% lead include scrap lead, lead solder, lead bullet fragments and dust, lead sheeting, lead cable housing, and lead billets. Because scrap metal is likely to contain lead, and it is not easy to tell if there is lead in a piece of scrap metal, all torch cutting of scrap metal is classified as PSLW.

There is an exception to what counts as PSLW. Altering or disturbing material, or torch cutting any scrap metal, is not PSLW when the total combined duration of lead exposure resulting from altering, disturbing, and torch cutting is less than 8 hours during any 30-day period.

If you are performing PSLW, your employer must provide you, as interim protection, with appropriate respiratory protection, protective clothing and equipment, medical surveillance, training and posted signs, until your employer conducts an exposure assessment and determines actual employee exposure, as required under subsection (d) of the lead standard. Once an exposure assessment has been completed, your employer must provide you with the appropriate protections, based on your level of exposure to lead, as required by the standard.

If you are exposed to lead and air sampling is performed, your employer is required to notify you in writing within 15 working days of the air monitoring results which represent your exposure. If the results indicate your exposure exceeds the PEL (without regard to your use of respirators), then your employer must also notify you of this in writing and also provide you with a description of the corrective action that has been or will be taken to reduce your exposure.

Your exposure must be rechecked by monitoring, at least every 6 months if your exposure is at or above the action level (10 µg/m³ as an 8-hour TWA) but below 50 µg/m³ as an 8-hour TWA. Your employer may discontinue monitoring for you if two consecutive measurements, taken at least 7 days apart, are below the action level. Air monitoring must be repeated every 3 months if you are exposed at or above 50 µg/m³ as an 8-hour TWA. Your employer must continue monitoring for you every 3 months until two consecutive measurements, taken at least 7 days apart, are below 50 µg/m³ as an 8-hour TWA.

However, whenever there is a production, process, control, or personnel change at your workplace which may result in new or additional exposure to lead, or whenever there is any other reason to suspect a change which may result in new or additional exposure to lead, your employer must perform additional monitoring.

III. Compliance -- subsection (e)

Your employer is required to ensure that no employee is exposed to lead above the PEL. The lead standard requires employers to institute engineering and work practice controls, including administrative controls, to the extent feasible to reduce employee exposure to lead. Where such controls are feasible but not adequate to reduce exposures to at or below the PEL, they must be used to reduce exposures to the lowest level that can be accomplished by these means.

Your employer must also develop and implement a written compliance program to reduce exposures to or below the PEL, using only engineering and work practice controls. The standard identifies the various elements that must be included in the program. For example, employers are required to include a description of operations in which lead is emitted, detailing other relevant information about the operation such as the type of equipment used, the type of material involved, crew size, employee job responsibilities, operating procedures and maintenance practices. In addition, your employer's compliance program must specify the means that will

be used to achieve compliance and, where engineering controls are required, include any engineering plans or studies that have been used to select the control methods. If engineering and work practice controls were considered but not put in place, the program must include a report that shows how they were demonstrated not to be feasible. Also, if administrative controls involving job rotation are used to reduce employee exposure to lead, the job rotation schedule must be included in the compliance program. The program must also detail the type of protective clothing and equipment, including respirators, housekeeping, and hygiene practices that will be used to protect you from the adverse effects of exposure to lead.

The written compliance program must be made available, upon request, to affected employees and their designated representatives, the Commissioner, and the National Institute for Occupational Safety and Health (NIOSH). The program must be reviewed and updated at least every 12 months to ensure it reflects the current status of exposure control.

IV. Respiratory Protection -- subsection (f)

Your employer is required to provide and ensure your use of respirators when your exposure to lead is not controlled below the action level ($10 \mu\text{g}/\text{m}^3$) by other means, and as interim protection if you perform PSLW and an exposure assessment has not been completed. The employer must pay the cost of the respirator. Whenever you request one, your employer is also required to provide you a respirator even if your air exposure level is not above the action level. You might want a respirator when, for example, you intend to have children in the near future, and want to reduce the level of lead in your body to minimize adverse reproductive effects. While respirators are the least satisfactory means of controlling your exposure, they are capable of providing significant protection when properly chosen, fitted, worn, cleaned, and maintained and are replaced when they stop providing adequate protection.

Your employer is required to select respirators as specified in the Respiratory Protection standard, 29 CFR 1910.134. If your employer selects filtering facepiece respirators for protection against lead, they shall be N100, R100, or P100. Any respirator chosen must be approved by NIOSH under the provisions of 42 CFR part 84. Your employer may select a type of respirator that provides greater protection than that required by the standard; that is, one recommended for a higher concentration of lead than that to which you are exposed.

An air-purifying respirator works by removing particles, gases, or vapors from the air you breathe, if the correct type of filter, cartridge, or canister is used with the facepiece. The typical air-purifying respirator is a negative pressure respirator because it requires the force of your inhalation to draw air through the purifying element. A powered air-purifying respirator (PAPR) is much more protective than a typical negative pressure respirator, and may also be more comfortable to wear. A PAPR also has a filter, cartridge, or canister to clean the air, and a power source which continuously blows filtered air into your breathing zone. A PAPR may ease the burden of having to wear a negative pressure air-purifying respirator for long periods of time. The standard requires that your employer must provide you with a PAPR upon request. Your employer also must provide high-efficiency particulate air (HEPA) filters for PAPRs and N100, R100, or P100 filters for non-powered air-purifying respirators. In addition, if you are exposed to lead aerosols that cause eye or skin irritation at the use concentrations, your employer must provide you with a full facepiece respirator instead of a half mask respirator.

A supplied-air respirator (SAR) can also be more protective than a typical negative pressure respirator. A SAR is supplied with breathing-quality air from a source such as an air compressor or compressed air cylinder. Three types of supplied-air respirators are demand, pressure-demand, and continuous flow. The demand-type

provides protection equivalent to that of a non-powered negative pressure air-purifying respirator of the same facepiece type. Greater protection is provided by either the pressure-demand or continuous-flow types because positive air pressure exists within the respirator at all times.

Your employer must implement a Respiratory Protection Program in accordance with 29 CFR 1910.134. This program must include written procedures for proper respirator selection, medical evaluations, fit testing, use, cleaning, storage, and maintenance of respirators, and training, as well as procedures to ensure adequate air quality, quantity and flow for supplied-air respirators.

Your employer must ensure that your respirator facepiece fits properly. Proper fit of a respirator facepiece is critical and no single facepiece fits all facial configurations equally well. Obtaining a proper fit thus may require your employer to make available two or three different mask types, in various sizes, in order that facepiece leakage is minimized for each employee. In order to ensure that your respirator fits properly and that facepiece leakage is minimized, your employer must give you either a quantitative or qualitative fit test as specified in Appendix A of 29 CFR 1910.134, Respiratory Protection.

You must also receive from your employer proper training in the use of respirators. Your employer is required to teach you how to wear a respirator, to know why it is needed, and to understand its limitations.

The standard provides that if your respirator uses filter elements, you must be given an opportunity to change the filter elements whenever an increase in breathing resistance is detected. You also must be permitted to periodically leave your work area to wash your face and respirator facepiece whenever necessary to prevent skin irritation. Before you begin using a respirator, and again if you ever have difficulty in breathing during a fit test or while using a respirator, your employer must make a medical examination available to you to determine whether you can safely wear a respirator. The result of this examination may be to give you a positive pressure respirator (which reduces breathing resistance) or to provide alternative means of protection.

V. Protective Work Clothing and Equipment -- subsection (g)

If you are exposed to lead above the action level or perform PSLW and an exposure assessment has not been completed, or if you are exposed to lead compounds such as lead arsenate or lead azide which can cause skin and eye irritation, your employer must provide you with protective work clothing and equipment appropriate for the hazard. If work clothing is provided, it must be provided in a clean and dry condition at least weekly, and daily if your exposure to airborne lead without regard to respirator use is greater than 30 µg/m³. Appropriate protective work clothing and equipment includes, but is not limited to, coveralls or similar full-body work clothing, hats or other head coverings, shoes or disposable shoe coverlets, and where needed, gloves, face shields or vented goggles, or other protective equipment. Your employer is required to provide all such equipment at no cost to you. Your employer is responsible for providing repairs and replacement as necessary, and also is responsible for the cleaning, laundering or disposal of protective clothing and equipment. Contaminated work clothing or equipment must be removed in change rooms and not be brought home or into personal vehicles or you will extend your exposure and expose your family since lead from your clothing can accumulate in your house, car, etc. Contaminated clothing which is to be cleaned, laundered or disposed of must be placed in closed containers in the change room. At no time may lead be removed from protective clothing or equipment by any means which disperses lead into the workroom air.

VI. Housekeeping -- subsection (h)

Your employer must establish a housekeeping program sufficient to maintain all surfaces as free as practicable of accumulations of lead dust. HEPA vacuuming is the preferred method of meeting this requirement, and the use of compressed air to clean floors and other surfaces is absolutely prohibited. Dry or wet sweeping, shoveling, or brushing may not be used except where vacuuming or other equally effective methods have been tried and do not work. Vacuums must be equipped with a HEPA filter or a filter at least as effective as a HEPA filter and be used and emptied in a manner which minimizes the reentry of lead into the workplace.

VII. Hygiene Facilities and Practices -- subsection (i)

In areas where employees are exposed to lead, the employer must ensure that food and beverage is not present or consumed, tobacco products are not present or used, and cosmetics are not applied. There is one exception to these requirements. In areas where employees are exposed to lead at or below 50 µg/m³ without regard to the use of respirators, the employer may provide employees access to potable drinking water if the employer has trained on, implemented and is ensuring compliance with written safe hydration procedures which, when followed, ensure that employees are not exposed to lead above the PEL in accordance with subsection (I)(1)(i) and that the manner in which water is consumed prevents lead ingestion.

The standard requires that washing facilities be provided, and used, where occupational exposure to lead occurs. Employees exposed to lead must wash their hands, exposed arms, and faces prior to entering eating areas, eating, drinking, smoking or applying cosmetics, and at the end of their shift.

In addition, clean change rooms, showers, and lunchrooms must be made available to and used by employees exposed to lead above the action level without regard to the use of respirators. Where employee exposures are greater than the action level but not greater than 50 µg/m³ without regard to the use of respirators, these requirements are effective one year after this standard is in effect.

After showering, no clothing or equipment worn during the shift may be worn home. Your own clothing worn during the shift should be carried home and cleaned carefully so that it does not contaminate your home. Lunchrooms may not be entered with protective clothing or equipment unless surface dust has been removed by HEPA vacuuming, downdraft booth, or other cleaning method.

All of the facilities and hygiene practices just discussed are essential to minimize additional sources of lead absorption from inhalation or ingestion of lead that may accumulate on you, your clothes, or your possessions. Strict compliance with these provisions can virtually eliminate several sources of lead exposure which significantly contribute to excessive lead absorption.

VIII. Medical Surveillance -- subsection (j)

The medical surveillance program is part of the standard's comprehensive approach to the prevention of lead-related disease. Its purpose is to supplement the main thrust of the standard which is aimed at minimizing airborne concentrations of lead and sources of ingestion. Only medical surveillance can determine if the other provisions of the standard have effectively protected you as an individual. Compliance with the standard's provisions will protect most employees from the harmful effects of lead exposure, but may not be satisfactory to protect individual employees (1) who have high body burdens of lead acquired over past years, (2) who have additional uncontrolled sources of non-occupational lead exposure, (3) who absorb lead at an unusually high

rate, or (4) who have specific non-work related health-related conditions which could be aggravated by lead exposure (e.g., kidney disease, anemia). In addition, control systems may fail, or hygiene and respirator programs may be inadequate. Periodic medical surveillance of individual employees will help detect those failures. Medical surveillance is also important to protect your reproductive health, regardless of your gender.

All medical surveillance required by the standard must be performed by a physician or other licensed health care professional (PLHCP). The employer must provide required medical surveillance without cost to the employees and at a reasonable time and place. The standard's medical surveillance program has two parts, blood lead testing and medical examinations.

A. Blood Lead Testing

Blood lead testing must be made available to you when you are assigned to work in which you may be exposed to lead at or above the action level, and as interim protection, if you perform PSLW. Blood lead test results show your blood lead level (BLL). BLL means the concentration of lead measured in whole blood, expressed as micrograms per deciliter ($\mu\text{g}/\text{dl}$).

Blood lead testing must be made available to you prior to assignment to lead work, or as soon as possible thereafter. There is an exception to this requirement. Blood lead testing is not required prior to assignment to lead work if you had a blood lead test in the preceding two months.

Additional blood lead testing under the standard must be provided on the following schedule: at least every two months for the first 6 months after initial placement, and also for the 6 months after any change in task resulting in higher exposure; and at least every 6 months thereafter. If your last BLL is at or above $10 \mu\text{g}/\text{dl}$ but below $20 \mu\text{g}/\text{dl}$, the testing frequency must be at least every 2 months and not reduced until two consecutive tests, taken at least 30 days apart, indicate a blood lead level below $10 \mu\text{g}/\text{dl}$. Blood lead testing then must be provided as described in the schedule given at the start of this paragraph. If your last BLL is at or above $20 \mu\text{g}/\text{dl}$, or you are removed from exposure to lead due to an elevated BLL, blood lead testing must be provided to you at least monthly.

Each time your BLL is tested, your employer must notify you of the results in writing within five working days of their receipt of the test results. The employer must also inform you that the standard requires temporary medical removal with economic protection when your BLL exceeds certain criteria (see Part IX below, Medical Removal Protection). Finally, if you have a BLL at or above $10 \mu\text{g}/\text{dl}$, your employer must establish and implement a written elevated blood lead level response plan designed to reduce and maintain your BLL below $10 \mu\text{g}/\text{dl}$. There is an exception to this requirement. A written elevated blood lead level response plan is not required when a blood lead level at or above $10 \mu\text{g}/\text{dl}$ is detected only in your blood lead test done prior to your first assignment to lead work.

B. Medical Examination and Consultation

An examination and consultation must be made available to you when you are assigned to work in which you may be exposed to lead at or above the action level, and as interim protection, if you perform PSLW.

Medical examinations must be made available to you prior to assignment for the first time to an area where the concentration of airborne lead may be at or above the action level.

The initial examination will provide information to establish a baseline with which subsequent data can be compared.

A medical examination and consultation beyond the initial one must be made available on an annual basis if your blood lead level is 20 µg/dl or greater at any time during the preceding year. This medical examination must be made available as soon as possible upon receiving a blood lead test result of 20 µg/dl or greater if you have not had a lead-specific medical examination in the last 12 months.

In addition, a medical examination or consultation beyond the initial one must be made available as soon as possible if you notify your employer that you are experiencing signs or symptoms commonly associated with lead poisoning or that you have difficulty breathing while wearing a respirator or during a respirator fit test. You must also be provided a medical examination or consultation beyond the initial one if you notify your employer that you desire medical advice concerning the effects of current or past exposure to lead on your ability to procreate a healthy child.

Finally, beyond the initial medical examination or consultation, appropriate follow-up medical examinations or consultations must also be provided for employees who have been temporarily removed from exposure under the medical removal protection provisions of the standard (see Part IX below, Medical Removal Protection).

The standard specifies the minimum content of pre-assignment and annual medical examinations. The content of other types of medical examinations and consultations is left up to the sound discretion of the examining PLHCP. Pre-assignment and annual medical examinations must include (1) a detailed work history and medical history; (2) a thorough physical examination, including an evaluation of your pulmonary status if you will be using a respirator; (3) a blood pressure measurement; (4) a series of laboratory tests designed to check your blood chemistry and your kidney function; and (5) a zinc protoporphyrin level if your last blood lead level was at or above 20 µg/dl. In addition, at any time upon your request, a laboratory evaluation of male fertility will be made (microscopic examination of a sperm sample), or a pregnancy test will be given.

The standard does not require that you participate in any of the medical procedures, tests, etc. which your employer is required to make available to you. Medical surveillance can, however, play a very important role in protecting your health. You are strongly encouraged, therefore, to participate in a meaningful fashion. The standard contains a multiple PLHCP review mechanism which provides you with the right to a second medical opinion from a PLHCP of your choice if you are dissatisfied with an examination by a PLHCP chosen by your employer. The standard requires the two PLHCPs to attempt a resolution of any difference in their opinions. If any dispute remains unresolved, the standard provides that a third PLHCP, selected by you and your employer, shall make a final, binding medical determination unless you and your employer reach an agreement which is otherwise consistent with the recommendations of one of the PLHCPs. Generally, your employer will choose the PLHCP who conducts medical surveillance under the lead standard, unless you and your employer otherwise agree on the choice of a PLHCP or PLHCPs. Some companies and unions have agreed in advance, for example, to use certain independent medical laboratories or panels of PLHCPs. Any of these arrangements are acceptable so long as required medical surveillance is made available to employees.

The standard requires your employer to provide certain information to a PLHCP to aid in their examination of you. This information includes (1) the standard and these appendices, (2) a description of your duties as they relate to lead exposure, (3) your exposure level, (4) a description of personal protective equipment you wear, (5) prior blood lead level results, (6) prior written medical opinions concerning you that the employer may have,

and (7) a copy of your employer's written elevated blood lead level response plan (required when an employee's BLL is at or above 10 µg/dl).

After a medical examination or consultation the PLHCP must prepare a written opinion for your employer which must contain (1) the PLHCP's opinion as to whether you have any health-related condition which places your health, including the ability to procreate a healthy child, at increased risk of material impairment from exposure to lead, (2) any recommended special protective measures to be provided to you, (3) blood lead test results, and (4) any recommended limitation on your use of respirators. This last element must include a determination of whether you can wear a powered air-purifying respirator (PAPR) if you are found unable to wear a negative pressure respirator. Your employer must ensure that you also receive a copy of the PLHCP's written medical opinion. In addition, the PLHCP who conducts your medical examination will explain the results of your medical examination to you and provide you with a separate written medical report within 30 days of your medical exam. This report will contain the information in the PLHCP's written medical opinion, plus additional information, including a determination of whether you should wear a PAPR instead of a non-powered (negative pressure) air-purifying respirator, any recommended follow-up blood lead testing or medical exams, and the PLHCP's opinion as to whether you have any health-related condition, work-related or not for which you should have a further medical examination or treatment.

C. Additional Information about Medical Surveillance

The medical surveillance program of the lead standard may at some point in time serve to notify certain employees that they have acquired a disease or other adverse health-related condition as a result of occupational lead exposure. If this is true, employees may have legal rights to compensation from public agencies, their employers, firms that supply hazardous products to their employers, or other persons. The results of the medical surveillance program can significantly affect the legal remedies of an employee who has acquired a job-related disease or impairment. Some states have laws, including workers' compensation laws, that disallow an employee who learns of a job-related health impairment to sue, unless the employee sues within a short period of time after learning of the impairment (this period of time may be a matter of months or years). An attorney can be consulted about these possibilities. It should be stressed that MNOSHA is in no way trying to either encourage or discourage claims or lawsuits. However, since results of the standard's medical surveillance program can significantly affect the legal remedies of an employee who has acquired a job-related disease or impairment, it is proper to make you aware of this.

The medical surveillance subsection of the standard also contains provisions dealing with chelation. Chelation is the use of certain drugs (administered in pill form or injected into the body) to reduce the amount of lead absorbed in body tissues. Experience accumulated by the medical and scientific communities has largely confirmed the effectiveness of this type of therapy for the treatment of very severe lead poisoning. On the other hand, it has also been established that there can be a long list of extremely harmful side effects associated with the use of chelating agents. The medical community has balanced the advantages and disadvantages resulting from the use of chelating agents in various circumstances and has established when the use of these agents is acceptable. The standard includes these accepted limitations due to a history of abuse of chelation therapy by some lead companies. The most widely used chelating agents are succimer and calcium disodium EDTA (Ca Na₂ EDTA).

The standard prohibits “prophylactic chelation” of any employee by any person the employer retains, supervises or controls. “Prophylactic chelation” is the routine use of chelating or similarly acting drugs to prevent elevated blood lead levels in employees who are occupationally exposed to lead, or the use of these drugs to routinely lower blood lead levels to predesignated concentrations believed to be ‘safe.’ It should be emphasized that where an employer takes an employee who has no symptoms of lead poisoning and has chelation carried out by a PLHCP (either inside or outside of a hospital) solely to reduce the employee's blood lead level, such practice is generally considered prophylactic chelation. The use of a hospital and a PLHCP does not mean that prophylactic chelation is not being performed. Routine chelation to prevent increased or reduce current blood lead levels is unacceptable whatever the setting.

The standard allows the use of “therapeutic” or “diagnostic” chelation if administered by a PLHCP in a clinical setting with thorough and appropriate medical monitoring. Therapeutic chelation responds to severe lead poisoning where there are marked symptoms. Diagnostic chelation involves giving a patient a dose of the drug then collecting all urine excreted for some period of time as an aid to the diagnosis of lead poisoning.

In cases where the examining PLHCP determines that chelation is appropriate, you must be notified in writing of this fact before such treatment. This will inform you of a potentially harmful treatment and allow you to obtain a second medical opinion if you choose to do so.

IX. Medical Removal Protection -- subsection (k)

Excessive lead absorption subjects you to increased risk of disease. Medical removal protection (MRP) is a means of protecting you when, for whatever reasons, other methods such as engineering and administrative controls, work practices, and respirators have failed to provide the protection you need. MRP involves the temporary removal of an employee from their regular job to a place of significantly lower exposure without any loss of earnings, seniority, or other employment rights or benefits. The purpose of this program is to cease further lead absorption and allow your body to naturally excrete lead which has previously been absorbed. Temporary medical removal can result from an elevated blood lead level, or a medical opinion. Up to 18 months of protection is provided as a result of either form of removal. The vast majority of removed employees, however, will return to their former jobs long before this 18-month period expires. The standard contains special provisions to deal with the extraordinary but possible case where an employee's blood lead level does not adequately decline during 18 months of removal.

Your employer must remove you from work having an exposure to lead at or above the action level of 10 $\mu\text{g}/\text{m}^3$ as an 8-hour TWA, from work altering or disturbing any material containing lead at a concentration greater than or equal to 0.5% by weight, or from work torch cutting any scrap metal on each occasion that your last BLL is 30 $\mu\text{g}/\text{dl}$ or above; or one year after the standard is effective, your last 2 blood lead results are at or above 20 $\mu\text{g}/\text{dl}$; or one year after the standard is effective, the average of the results of all of your blood lead tests in the last 6 months is at or above 20 $\mu\text{g}/\text{dl}$, unless the last blood test indicates a blood lead level below 15 $\mu\text{g}/\text{dl}$, in which case you need not be removed. If you are removed from your normal job because of a high BLL, your employer must return you to your former job status when your BLL declines to below 15 $\mu\text{g}/\text{dl}$, and two consecutive blood lead tests, taken at least 30 days apart, both indicate this level.

You may also be removed from exposure even if your blood lead levels are below 30 $\mu\text{g}/\text{dl}$ or the other criteria described above if a medical determination indicates that you temporarily need reduced lead exposure for medical reasons. If the PLHCP who is implementing your employer's medical program makes a written opinion

recommending your removal or other special protective measures, your employer must implement the PLHCP's recommendation. If you are removed in this manner, you must be returned when the doctor indicates that it is safe for you to do so.

The standard does not give specific instructions dealing with what an employer must do with a removed employee. Your job assignment upon removal is a matter for you, your employer and your union (if any) to work out consistent with procedures or agreements for job assignments which may exist in your place of employment. Each removal must be accomplished in a manner consistent with existing collective bargaining relationships. Your employer is given broad discretion to implement temporary removals so long as no attempt is made to override existing agreements. Similarly, a removed employee is provided no right to veto an employer's choice which satisfies the standard.

In most cases, employers will likely transfer removed employees to other jobs with sufficiently low lead exposure. Alternatively, an employee's hours may be reduced so that the time-weighted average exposure is reduced to below the action level, or they may be temporarily laid off if no other alternative is feasible.

In all of these situations, MRP benefits must be provided during the period of removal that is, you continue to receive the same earnings, seniority, and other rights and benefits you would have had if you had not been removed. Earnings include more than just your base wage; they include overtime, shift differentials, incentives, and other compensation you would have earned if you had not been removed. During the period of removal you must also be provided with appropriate follow-up medical surveillance. If you were removed because your blood lead level was too high, you must be provided with a monthly blood lead test. If a medical opinion caused your removal, you must be provided medical tests or examinations that the doctor believes to be appropriate. If you do not participate in this follow up medical surveillance, you may lose your eligibility for MRP benefits.

When you are medically eligible to return to your former job, your employer must return you to your "former job status." This means that you are entitled to the position, wages, benefits, etc., you would have if you had not been removed. If you would still be in your old job if no removal had occurred, you are to be returned to this job. If you would not be in your old job, the job assignment to which you return must be consistent with the decision which your employer would have been obliged to make had no removal occurred. MRP only seeks to maintain your rights, not expand them or diminish them.

If you are removed under MRP and you are also eligible for workers' compensation or other compensation for lost wages, your employer's MRP benefits obligation is reduced by the amount that you actually receive from these other sources. Similarly, if you obtain other employment during the time you are laid off, the benefits you receive under MRP are reduced by the amount you earn in such other employment.

The standard also covers situations where an employer voluntarily removes an employee from exposure to lead due to the effects of lead on the employee's health-related condition, even though the standard does not require removal. In these situations MRP benefits must also be provided as though the standard required removal. Finally, it is important to note that in all cases where removal is required, respirators cannot be used as a substitute. Respirators may be used before removal becomes necessary, but not as an alternative to a transfer to a low exposure job or to a lay-off with MRP benefits.

X. Employee Information and Training -- subsection (I)

All employees occupationally exposed to lead must be trained, prior to initial assignment and at least annually thereafter, on housekeeping and hygiene practices, including, where applicable, written safe hydration procedures. Your employer is also required to provide an information and training program for all employees exposed to lead at or above the action level on any day, or who may experience skin or eye irritation from lead compounds such as lead arsenate or lead azide, and as interim protection for employees who perform PSLW. This program must inform these employees of the specific hazards associated with their work environment, protective measures which can be taken, the danger of lead to their bodies (including their reproductive health), and their rights under the standard. In addition your employer must make readily available to all employees, including those exposed below the action level, a copy of the standard and these appendices.

Your employer is required to complete this training program for all employees described above prior to initial job assignment. This training program must also be provided at least annually thereafter.

XI. Communication of Hazards -- subsection (m)

Your employer must include lead in their hazard communication program and training.

The standard requires that the following warning sign must be posted in work areas where the exposure to lead is at or above the action level, and as interim protection in each work area where PSLW is performed:

DANGER
LEAD WORK AREA
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR SMOKE IN THIS AREA

These signs are to be posted and maintained in a manner which ensures that the legend is readily visible, and must be in a language understandable to employees.

Your employer is not required to post the specified warning sign in work areas where employees are exposed to lead at or below 50 µg/m³, without regard to the use of respirators, and the employer has implemented compliant written safe hydration procedures.

XII. Recordkeeping -- subsection (n)

Your employer is required to keep all records of exposure monitoring for airborne lead. These records must include the name and job classification of employees measured, details of the sampling and analytic techniques, the result of this sampling, and the type of respiratory protection being worn by the person sampled. Your employer is also required to keep all records of blood lead testing and medical examination results. These must include the name of the employee, the PLHCP's written opinion, and a copy of the results of the examination. All of the above kinds of records must be kept for 40 years or for at least 20 years after your termination of employment, whichever is longer.

Recordkeeping is also required if you are temporarily removed from your job under the medical removal protection program. This record must include your name and unique identifier, the date of your removal and return, how the removal was or is being accomplished, and whether or not the reason for the removal was an

elevated blood lead level. Your employer is required to keep each medical removal record only for the duration of an employee's employment.

In addition, the standard requires that your employer keep records of their annual review of their written compliance program, and written elevated blood lead level response plans, for three years. They are also required to keep records of any training required by this standard for three years.

The standard requires that if you request to see or copy environmental monitoring, blood lead level (BLL) testing, or medical removal records, they must be made available to you or to a representative that you authorize. Your union also has access to these records. Upon your request, your complete medical records must also be provided to you, to your PLHCP or to any other person whom you may specifically designate. Your union does not have access to your personal medical records unless you authorize such access.

XIII. Observation of Monitoring -- subsection (o)

When air monitoring for lead is performed at your workplace as required by the standard, your employer must allow you or someone you designate to observe the monitoring. The observer is entitled to an explanation of the measurement procedure and to observe all steps related to the lead monitoring performed and record the results obtained. Since results will not normally be available at the time of the monitoring, the observer is entitled to record or receive the results of the monitoring when returned by the laboratory. Your employer is required to provide the observer with any personal protective devices required to be worn by employees working in the area that is being monitored. The employer must require the observer to wear all such equipment and to comply with all other applicable safety and health procedures.