DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Docket Number CDC-2018-0059; NIOSH-315]

Request for information about inorganic lead (CAS No. 7439-92-1)

AGENCY: National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Request for information.

SUMMARY: The National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC) intends to evaluate the scientific data on inorganic lead, to develop updated recommendations on the potential health risks, medical surveillance, recommended measures for safe handling, and to establish an updated Recommended Exposure Limit (REL).

DATES: Electronic or written comments must be received by [INSERT DATE THAT IS 60 DAYS AFTER PUBLICATION DATE IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by CDC-2018-0059 and Docket Number NIOSH-315, by any of the following methods:
• Federal eRulemaking Portal: https://regulations.gov
Follow the instructions for submitting comments.
• Mail: National Institute for Occupational Safety and
Health, NIOSH Docket Office, 1090 Tusculum Avenue, MS-C34
Cincinnati, Ohio 45226-1998.

Instructions: All information received in response to
this notice must include the agency name and docket number
[CDC-2018-0059; NIOSH-315]. All relevant comments received
will be posted without change to
https://www.regulations.gov, including any personal
information provided. For access to the docket to read
background documents or comments received, go to
https://www.regulations.gov. All information received in
response to this notice will also be available for public
examination and copying at the NIOSH Docket Office, 1150
Tusculum Avenue, Room 155, Cincinnati, OH 45226-1998.

FOR FURTHER INFORMATION CONTACT: R. Todd Niemeier, NIOSH,
Robert A Taft Laboratories, MS C32, 1090 Tusculum Avenue,
Cincinnati, Ohio 45226-1998, telephone (513) 533-8166 (not
a toll free number).

SUPPLEMENTARY INFORMATION: Inorganic lead is a naturally
occurring soft, gray metal used in various forms since
ancient times. Occupational exposures occur in a wide range
of industries including, but not limited to, the following:
construction, smelting and refining, firing ranges, automobile repair, electronic waste recycling, metal recycling, and many others. Significant occupational exposures to inorganic lead are through inhalation, ingestion, and through the skin, principally through damaged skin.

The current NIOSH REL for inorganic lead is 50 micrograms per cubic meter ($\mu$g/m$^3$) as a time-weighted average (TWA) concentration for an 8-hr work shift during a 40-hr workweek [NIOSH 2007].

NIOSH is requesting information on the following: (1) de-identified (without personally identifiable information such as name, social security number, date of birth, etc.) inorganic lead breathing zone airborne exposure measurements with corresponding blood lead level concentrations; (2) information on possible health effects observed in workers exposed to inorganic lead, including exposure data (airborne, blood, and/or surface) and the method(s) used for sampling and analyzing exposures; (3) description of work tasks and scenarios with a potential for exposure to inorganic lead; (4) information on control measures (e.g., engineering controls, work practices, personal protective equipment, exposure data before and after implementation of control measures) that are being
used in workplaces with potential exposure to inorganic lead; (5) surveillance findings including protocol, methods, and results; and (6) other relevant information related to occupational exposure to inorganic lead.

**Background:** The current Recommended Exposure Limit (REL) for inorganic lead is 50 µg/m³ as a Time-weighted Average (TWA) concentration for an 8-hour work shift during a 40-hour workweek [NIOSH 2007]. As part of an effort to identify RELs that may not be adequate to protect workers from adverse health effects due to exposure, NIOSH is reexamining the REL for inorganic lead. The Occupational Safety and Health Administration (OSHA) lead standard, 29 CFR 1910.1025, established a permissible exposure limit (PEL) for inorganic lead at 50 µg/m³ for an 8-hour period with an action level of 30 µg/m³ for an 8-hour period [CFR 2018]. The American Conference of Governmental Industrial Hygienists (ACGIH®) threshold limit value (TLV®)-TWA for lead and inorganic compounds is 50 µg/m³ with an A3 carcinogenicity classification (confirmed animal carcinogen with unknown relevance to humans) [ACGIH 2018].

**Information Needs:** NIOSH seeks to obtain materials, including published and unpublished reports and research findings, to evaluate the possible health risks of occupational exposure to inorganic lead. Examples of
requested information include, but are not limited to, the following:

(1) Identification of industries or occupations in which exposures to inorganic lead may occur.

(2) Trends in the production and use of inorganic lead.

(3) Description of work tasks and scenarios with a potential for exposure to inorganic lead.

(4) Workplace exposure measurement data of inorganic lead (airborne and surface) in various types of industries and jobs with an emphasis on de-identified, breathing zone airborne inorganic lead exposures with corresponding blood lead levels. De-identified data do not contain personally identifiable information that can be used to distinguish or trace an individual’s identity.

(5) Case reports or other health information demonstrating potential health effects in workers exposed to inorganic lead.

(6) Information on control measures (e.g., engineering controls, work practices, PPE) being taken to minimize worker exposure to inorganic lead.

(7) Educational materials for worker safety and training on the safe handling of inorganic lead.

(8) Data pertaining to the feasibility of establishing a more protective REL for inorganic lead.
References:

ACGIH [2018]. 2018 TLVs® and BEIs®: threshold limit values for chemical substances and physical agents and biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists.


Dated: August 16, 2018

Frank J Hearl,

Chief of Staff, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.

[FR Doc. 2018-18019 Filed: 8/20/2018 8:45 am; Publication Date: 8/21/2018]