

## X03.2 Manage Lead Hazards

### Professional Narrative

WELL Building Standard™ version 2 (WELL v2™), Q1 2021 addenda



#### HOW TO USE THIS DOCUMENT:

This document is intended to serve as a guide on how to create a project **professional narrative to mitigate risks of human exposure to chromate copper arsenate (CCA) and lead.**

This document is meant to demonstrate an acceptable degree of detail for a documentation submission. The Feature cannot be demonstrated solely through a confirmation that the requirements have been or will be implemented. The level of detail is up to the discretion of the project team, but the documents must include specific details demonstrating that the actual requirements have been enacted in the project boundary.

This document and similar tools are intended to assist projects in their pursuit of WELL v2 but use of this document and/or similar tools are in no way a guarantee of achievement of any rating or designation, and no representation or warranty is made regarding the likelihood of achieving any rating or designation.

Note: The below document is based on the Q1 2021 addenda of the WELL Building Standard™ version 2 (WELL v2™). Project teams are required to implement the feature requirements from the addenda version assigned to their project or any more recent addenda version.

#### FEATURE PART REQUIREMENTS:

##### *For All Spaces*

*The project addresses lead hazards through the following:*

- a. *The top 0.6 in layer in all existing outdoor bare soil (outside the building envelope, post-construction, not covered by grass, vegetation or other landscaping including mulch covered soil) is tested for lead. Each continuous area of bare soil is sampled at least once. If the lead concentration of any sample surpasses 400 ppm by weight, then the following is performed:*
  1. *A second set of samples is taken at 6 in, 12 in, 18 in and 24 in deep.*
  2. *If these samples are above 400 ppm by weight, soil is replaced with soil from another source to the extent of the deepest sample found above this threshold.*
- b. *Lead in artificial turf fibers is assessed as follows:*
  1. *If lead concentration of synthetic turf fibers is unknown, test a sample of fibers to determine the lead concentration using an EPA, ISO or locally accepted protocol.*
  2. *If the total lead concentration of synthetic turf fibers is greater than 136 mg/lb, perform dust-wipe testing per EPA, ISO or locally accepted protocol for dust-wipe testing to determine the surface dust-lead loading.*
  3. *If the wipe-testing results show total lead loadings greater than 40 µg/ft<sup>2</sup>, replace with turf containing lead concentrations less than 136 mg/lb.*
- c. *If loose-fill rubber from recycled tires is present on playgrounds, sporting fields, or other surfaces, the surface is assessed and remediated per the following:*
  1. *Sample the loose-fill rubber using an EPA, ISO or locally accepted protocol for lead testing and perform lead content analysis.*
  2. *If the loose rubber results show total lead loadings greater than 136 mg/lb of rubber, replace the loose-fill rubber.*
- d. *Paint applied to existing playground equipment, installed and painted before the enactment of banning laws, is assessed for lead and removed, as necessary, per the guidance below:*
  1. *Assess the integrity and age of the paint. If the paint is cracked, peeled or chipped collect a sample for laboratory analysis for lead. Follow guidelines and methods described by the World Health Organization or local equivalents for sampling and laboratory analysis.*
  2. *Remove or encapsulate the paint from the playground equipment if the sample contains lead at a concentration over 90 ppm. Removal duties must be performed by a certified specialist or someone with demonstrable experience where no local regulations apply.*

#### WELL Core Guidance:

Meet these requirements for the extent of developer buildout.



The below sample documentation is intended to provide guidance in creating a professional narrative. It is not a template. You may note included components that are not required to demonstrate compliance with this Feature.

#### Example document for Feature X03.2 a - d

*The following example is for a new construction building project in a location where there is no external site.*

##### X03.2.a-d – Professional Narrative for [PROJECT NAME]

[PROJECT NAME] is a zero lot line building with no exterior site. There is no bare soil, artificial turf, loose-fill rubber or paint applied to playground equipment.

*The following example is for an interiors project with a terrace garden, but no other exterior site area.*

##### X03.2.a-d – Professional Narrative for [PROJECT NAME]

[PROJECT NAME] is an interiors project with a terrace garden that has some exposed soils, but no playground, artificial turf, loose-fill rubber or paint applied to playground equipment. The terrace garden was created from imported soils purchased at the local plant store [NAME OF STORE, LOCATION]. Per FAQ #198 (see below) it is not necessary to consider imported soils for this feature. Please see attached soil product sheet and purchase receipt confirming that it is imported.

##### #198 - Do soil assessment requirements of Part 2 apply to raised garden beds?

Yes, soil assessment of Part 2 applies to raised garden beds, unless they are filled with imported topsoil (i.e., bought from a commercial source outside the project).

*The following example is for an existing school with a playground with loose fill from rubber tires and a turf athletic field. There are exposed soils around the playground. Inspections show that there was lead exceeding WELL requirements. The project team decided to remediate and select lead-free replacements. (Note: it is not required for a project to implement lead-free replacements. Lead content in products falling under the scope of this feature must not exceed WELL requirements).*

##### X03.2.a-d – Professional Narrative for [PROJECT NAME]

[PROJECT NAME] is an existing school project with a playground with loose fill from rubber tires and a turf athletic field. Please see attached full lead inspection and remediation report [ATTACH REPORT]. Below is a detailed summary of testing and remediation efforts conducted at the project, specific to X03.2 a-d:

- a. A lead testing specialist [NAME AND COMPANY] was hired to test soils from each of the following areas within the WELL project boundary containing exposed soils: [LIST OF AREAS]. The top 0.6 inches of soil was tested in each area. In two areas, the tests came back positive for lead (greater than 400 ppm by weight). The lead testing specialist returned to the site and tested soils in those two areas at depths of 6 in, 12 in, 18 in and 24 in depth. In the first area [NAME OF AREA], the lead contamination went down to 6 in, and in the second area [NAME OF AREA] the contamination went down to 18 in. Each of the areas has had the soil replaced with non-contaminated soil (imported soil sourced from the local gardening supply store) to a depth to where the contamination was found. The contaminated soils were disposed of in compliance with local requirements, see attached [ATTACH COPY OF LOCAL CONTAMINATED SOIL DISPOSAL REQUIREMENTS].

- b. The lead content of the turf is unknown, so the lead testing specialist *[NAME AND COMPANY]* was also asked to take a sample of the turf fibers for lead testing (using an ISO certified testing protocol). The lead content was found to be 420 mg/lb, exceeding the WELL threshold of 136 mg/lb. A follow-up dust test was conducted in line with ISO guidelines. The results were 45 µg/ft<sup>2</sup>, above the WELL threshold. The turf field has therefore been disposed of in compliance with local lead disposal requirements (see attached) and replaced with a lead-free mixed grass / turf field *[ATTACH LOCAL LEAD DISPOSAL REQUIREMENTS AND PRODUCT DETAILS SHEET OR INSERT LINK TO PRODUCT DETAILS WEBSITE, HIGHLIGHT WHERE IT CLARIFIES THAT IT IS LEAD-FREE]*.
- c. The playground area had loose-fill rubber from tires and the lead content was unknown. The lead testing specialist *[NAME AND COMPANY]* was also asked to take a sample of the turf fibers for testing (using an ISO certified testing protocol). The lead content was found to be 274 mg/lb, exceeding the WELL threshold of 136 mg/lb. The loose-fill rubber has been disposed of in compliance with local lead disposal regulations and replaced with a new lead-free playground play surface, see attached new product *[ATTACH PRODUCT DETAILS SHEET OR INSERT LINK TO PRODUCT DETAILS WEBSITE, HIGHLIGHT WHERE IT CLARIFIES THAT IT IS LEAD-FREE]*.
- d. Paint on the playground equipment was old and it was unknown what brand it was. The lead testing specialist *[NAME AND COMPANY]* was also asked to take a paint chip and test it for lead. The lab used World Health Organization (WHO) guidelines to measure the lead content in the paint chip. The lead content was greater than the WELL threshold of 90ppm. The project team decided to remove all of the playground equipment and replace it with lead-free state of the art equipment. The old playground equipment was disposed of in compliance with local laws *[ATTACH A COPY OF LOCAL REGULATIONS.]* A product data sheet confirming that the new equipment is lead-free is attached *[ATTACH PRODUCT DETAILS SHEET OR INSERT LINK TO PRODUCT DETAILS WEBSITE, HIGHLIGHT WHERE IT CLARIFIES THAT IT IS LEAD-FREE.]*

Here is a picture of the new lead-free playground with lead-free play surface:

