



Oregon OSHA

Fiscal Impact Advisory Committee

OAR 437-004-1120

OAR 437-002-0142

**Employer-Provided Housing:**

**Agricultural Labor Housing and Related Facilities**

**Introduction**

Oregon OSHA is engaged in rulemaking activities related to its requirements for employer-provided housing under its Oregon Administrative Rule (OAR) Chapter 437-004-1120 – Agricultural Labor Housing and Related Facilities (OAR 437-004-1120). The following is a fiscal impact statement (FIS) based on the proposed rule amendments to OAR 437-004-1120. This FIS includes cost estimates and considerations that were received from Oregon stakeholders and members of the rule advisory committee (RAC) convened by Oregon OSHA during this rulemaking process. For ease of reference, the FIS refers to agricultural labor housing (ALH), which is intended to include all employer-provided housing subject to Oregon OSHA’s jurisdiction, not just housing provided by agricultural employers.

Generally, the FIS is organized by individual rule sections and includes standardized language to provide additional clarity. To the extent that a proposed rule amendment is not addressed in the FIS, it is intended to signify that Oregon OSHA does not anticipate a fiscal impact for that specific provision. Proposed rule amendments can be identified as either “substantive change” or “clarification of existing requirement,” which denote that a potential fiscal impact is anticipated, or no fiscal impact is anticipated respectively.

Throughout the FIS there will be estimated costs based on available data and information provided by ALH RAC members. However, because of data gaps and variability between operations, some cost estimates cannot be calculated or are indeterminate. Some of the factors that make this FIS assessment challenging include employer site configuration and size, differences in business activities and operations, volume and duration of ALH occupancy, diversity of housing types provided to occupants, local zoning restrictions, climate, proximity to municipal or potable water sources, and site-specific electrical, plumbing, sewage, and construction permitting costs. Each of these factors, among others, can vary widely based on each employer’s unique decisions or individual circumstances. Oregon OSHA expects that employers will make site-specific and operation-specific decisions on how best to minimize the

costs to come into compliance on a case-by-case basis. It is important to recognize, that in some instances the potential magnitude of additional costs cannot be quantified at this time.

In addition, improved productivity may occur due to increased employee morale from safer and healthier living conditions. This may result in a reduction in workers compensation claims and absenteeism, and improve employee retention and active participation in the safety and health management system.

The complex nature of these rules makes it difficult to predict and assess the potential financial impacts of housing projects. For example, Exclusive Farm Use (EFU) zoning could potentially limit the types of dwellings an employer may provide on their property. The economic impact of farmworker housing is intricately connected to the agricultural economy in Oregon, which is influenced by fluctuations in market demand, labor availability, and environmental factors. Estimating the financial impact of changes in regulations related to employer-provided housing involves complex considerations, particularly in relation to workforce capacity and the safety or health of workers and their families. Employer-provided housing also carries broader economic implications that can be challenging to quantify. There are many intangible benefits and potential costs that extend beyond the available financial information that can be included in this fiscal impact statement.

It is not Oregon OSHA's intention to create rules for agricultural labor housing that would conflict with the Oregon's Exclusive Farm Use zoning laws. However, to the extent any conflicts arise, making it not feasible for the ALH operator to comply, the ALH operator may seek a permanent variance through the free process at Oregon OSHA. Oregon OSHA cannot guarantee a variance.

### **Permit Fees for Building, Plumbing, Electrical, and Mechanical Modifications**

Table 1 of the FIS relies on the published building permit fee schedules for four Oregon counties: Multnomah, Washington, Linn, and Jefferson (July 2024). The potential costs of improving ALH housing (e.g., plumbing, electrical, etc.) can vary widely due to several factors. Local building permit fees can differ widely by jurisdiction. Additionally, depending on the specific scope, scale, and location of the project, additional fees and requirements may apply that introduce other potential costs. However, the purpose of the FIS is not to present an exhaustive list of all potential costs and compliance options in terms of labor, equipment, professional services, supplies, and administrative activities, but rather provide a reasonable estimate of the potential costs based on the average employer.

**Table 1**

<b>County</b>	<b>State Surcharge Fees</b>	<b>Plan Review Fees</b>	<b>Building Permit Fees per \$1,000 valuation (minimum)</b>	<b>Plumbing Fees</b>	<b>Electrical Fees</b>	<b>Mechanical Fees</b>
<a href="#"><u>Multnomah</u></a>	12%	65% of building permit fee	\$145 for the first \$2,000, then \$3.13 - \$12.15 per valuation differential	\$302 - \$1,258 per dwelling unit	\$83 - \$369 per dwelling unit	\$21 - \$81 per unit
<a href="#"><u>Jefferson</u></a>	12%	75% of building permit fee	\$72.41 - \$882.31, then \$3.05 - \$7.80 per valuation differential	\$321.26 - \$512.40 per dwelling unit	\$99.10 minimum, \$35.70 - \$195.30 per dwelling unit	\$99.10 minimum, \$11.55 - \$72.44 per unit
<a href="#"><u>Washington</u></a>	12%	65% of building permit fee	\$211.50 for the first \$2,000, then \$7 - \$16.25 per valuation differential	\$726.75 - \$1,135.75 per dwelling unit	\$211.50 - \$327.25 per dwelling unit	\$407 flat fee for new construction
<a href="#"><u>Linn</u></a>	12%	65% of building permit fee	\$139.75 - \$965.10 minimum, then \$3.05 - \$11.45 per valuation differential	\$363.75 - \$505.85 per dwelling unit	\$25 minimum - \$556, \$6 - \$12 per valuation differential	\$86 minimum, \$16.05 - \$36.40 per unit

Estimates are based on the permit fees for a single family dwelling unit. Additional permit fees and plan evaluation costs may apply based on state and local requirements.

## Wage Data

Where listed, wage information was collected from the Oregon Employment Department online database ([Oregon Employment Department Quality Information](#)). To complete the FIS, Oregon OSHA relied on the tenth (10<sup>th</sup>), fiftieth (50<sup>th</sup>), and ninetieth (90<sup>th</sup>) percentiles wage data for 2024:

1. *Farmers, Ranchers, and Other Agricultural Managers* (119013) Oregon (All Counties); Hourly Wage: \$24.16 (10<sup>th</sup>), \$38.52 (50<sup>th</sup>), \$72.84 (90<sup>th</sup>)
2. *Farmworkers and Laborers, Crop, Nursery, and Greenhouse* (452092) Oregon (All Counties); Hourly Wage: \$14.18 (10<sup>th</sup>), \$16.65 (50<sup>th</sup>), \$21.55 (90<sup>th</sup>)
3. *Construction Managers* (119021) Oregon (All Counties); Hourly Wage: \$35.56 (10<sup>th</sup>), \$59.09 (50<sup>th</sup>), \$97.85 (90<sup>th</sup>)
4. *Construction Laborers* (472061) Oregon (All Counties); Hourly Wage: \$18.42 (10<sup>th</sup>), \$23.74 (50<sup>th</sup>), \$35.72 (90<sup>th</sup>)
5. *Electricians* (472111) Oregon (All Counties); Hourly Wage: \$24.13 (10<sup>th</sup>), \$43.79 (50<sup>th</sup>), \$55.17 (90<sup>th</sup>)
6. *Plumbers, Pipefitters, and Steamfitters* (472152) Oregon (All Counties); Hourly Wage: \$24.25 (10<sup>th</sup>), \$40.87 (50<sup>th</sup>), \$63.55 (90<sup>th</sup>)
7. *Septic Tank Servicers and Sewer Pipe Cleaners* (474071) Oregon (All Counties); Hourly Wage: \$18.86 (10<sup>th</sup>), \$23.92 (50<sup>th</sup>), \$37.22 (90<sup>th</sup>)

An estimated range of thirty-five percent (35%) to one hundred percent (100%) was applied for purposes of wage loading. Briefly, wage loading refers to the additional payments or allowances that may be added to a worker's base pay to account for various factors such as benefits, taxes, and other employment related costs. When estimating labor costs, Oregon OSHA utilized the following formula:

Hourly Wage Data for the 10<sup>th</sup> Percentile x 135% Wage Loading x Time = Lower Bound

Hourly Wage Data for the 90<sup>th</sup> Percentile x 200% Wage Loading x Time = Upper Bound

RAC members provided a number of cost estimates related to labor and septic tanks.

- Estimated costs to hire an electrician:
  - For Marion County (mid-valley): Electricians: \$120 to \$165 an hour. Apprentice rate of \$65 to \$85.
  - A good median hourly rate to go with for an electrician is \$140. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Electrical - \$140.00 – 155.00/hr
  - IBEW (electricians)

- \$60.50 wage
  - \$29.59 benefits
  - \$87.34 total per hour
  
- Estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.
  - Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
  - UA (plumbers and pipefitters):
    - \$57.92 wage
    - \$38.00 benefits
    - \$95.92 total per hour
  
- Estimated costs to hire HVAC specialist:
  - For the Columbia Gorge Area: HVAC -\$145.00/hr
  
- Estimated septic tank and septic system costs:
  - One contractor shared that in Marion County it's nearly impossible to replace a septic tank with permitting and environmental requirements but for those with a perfect application the replacement costs alone are \$15-20k. He said in Detroit Lake the costs are \$75-120k just for septic tank replacement or new build because of ground requirements (too wet so they need sand filters and grease traps). It's going to depend on the ground the housing is built on.
  - Installation for an example drain field in Spring 2024 – total cost, including a pump system & permitting: \$22,170 - ~\$74/ft.
  - There could be permitting challenges with replacing a drain field in the Scenic area as it can trigger review. Local public health department may also require total system replacement, depending on where you are located. DEQ regulations indicate that replacing a portion of a septic system triggers the need for the entire system to be brought up to current code. They now look at maximum capacity rather than simply the number of bathrooms etc. to determine system size. Today, that would mean that upgrades could trigger a requirement to install a much larger and more expensive system encompassing a dosing tank, a much larger septic tank, and a much larger pumping system in addition to the new drain field in a location where there is no room to place these items. This is just

an additional regulatory challenge that exists in other agencies that would need to be assessed on a project-by-project basis.

## **Construction Supply and Equipment Estimates**

Construction costs, including those for lumber, electrical, and plumbing systems are expected to vary widely between employers due to several factors. The scale and scope of a project significantly impact cost estimates, wherein larger projects may benefit from economies of scale, reducing price per-unit costs, while smaller or more complex projects may incur higher expenses due to specialized labor, materials, or travel distances. Material quality is another crucial factor; premium materials are typically more expensive than standard options. Additionally, as referenced previously, regional labor rates, local building codes, and site-specific conditions, such as accessibility and existing infrastructure, can further impact the range of cost estimates. Taken together, these and other variables collectively contribute to the complexity of estimating the wide range of construction costs observed across different projects and employers.

As discussed previously, the purpose of the FIS is not to present an exhaustive list of all potential costs and compliance options in terms of labor, equipment, professional services, supplies, and administrative activities, but rather provide a reasonable estimate of the potential costs based on the average employer. Below are common construction materials that may be used by an employer to meet compliance requirements would be introduced if the proposed rule was adopted. To the extent an employer needs lumber, electrical cords and wiring, or plumbing supplies, those costs have been estimated below.

### **Lumber Supply Estimates**

- Estimate cost of \$24.30 per sheet (4'x8'x15/32") of plywood, ([Home Depot](#))
- Estimate cost of \$22.87 per sheet (4'x8'x15/32") of plywood, ([Lowes](#))
- Estimate cost of \$3.65 (2'x4'x8' framing lumber), ([Home Depot](#))
- Estimate cost of \$3.25 (2'x4'x8' framing lumber), ([Lowes](#))

### **Electrical Supply Estimates**

- Extension cords
  - 6 ft. 12/3 SJTW 15 Amp 125-Volt 1875-Watt Lighted End Indoor/Outdoor Black Heavy-Duty Extension Cord (2-Pack) is estimated to cost approximately \$10.96 per unit ([Home Depot](#))
  - 50 ft. 12/3 SJTW Hi-Visibility Outdoor Heavy-Duty Extension Cord with Power Light Plug is estimated to cost approximately \$46.05 per unit ([Home Depot](#))
  - Woods 8-ft 16/3 3-Prong Black Outdoor SJTW Heavy Duty General Extension Cord to cost approximately \$8.36 per unit ([Lowes](#))



- Utilitech Outdoor 25-ft 12/3 3-Prong Yellow Outdoor SJTW Heavy Duty Lighted Extension Cord is estimated to cost approximately \$49.97 per unit ([Lowe's](#))
- Electrical wiring varies widely (e.g., length, gauge, max amperage, stranded or solid, etc.); therefore, depending on the specifics of the project, it is estimated that if electrical wiring is required supply costs could range from \$23 per roll for 15 feet of 12/2 electrical wire up to \$1340 per roll for 500 feet of 6/2 wire ([Home Depot](#)); \$59 per roll for Southwire 25-ft 12/2 Solid UF-B Wire W/G ([Lowe's](#)) or \$167 per roll Southwire 50-ft 6/2 Romex SIMpull Solid Indoor CU NM-B W/G ([Lowe's](#))
- RAC members reported a range of cost estimates to upgrade their electrical panels, estimating it would be approximately \$1,928.85 up to \$5,000 per panel (Documents 7, 27, 34)

### Plumbing Supply Estimates

- PVC Piping
  - Charlotte Pipe 1 in. x 10 ft. PVC Schedule 40 Tubing DWV Pipe is estimated to cost approximately \$8.48 per unit ([Home Depot](#))
  - IPEX 1-in x 10-ft CPVC Pipe is estimated to cost approximately \$12.96 per unit ([Lowe's](#))
- Copper pipe
  - Streamline 1/2-in x 10-ft Copper Type M Pipe is estimated to cost approximately \$21.92 per unit ([Lowe's](#))
  - Streamline 3/4 in. x 10 ft. Copper Type M Pipe is estimated to cost approximately \$35.54 per unit ([Home Depot](#))
- Galvanized pipe
  - The Plumber's Choice 3/4 in. x 36 in. Galvanized Steel Pipe is estimated to cost approximately \$18.15 per unit ([Home Depot](#))
  - Southland 3/4-in x 24-in Galvanized Pipe is estimated to cost approximately \$19.56 per unit ([Lowe's](#))
- Miscellaneous supplies:
  - Plumbshop 3/8 in. Flare x 1/2 in. FIP x 16 in. Braided Stainless Steel Faucet Supply Line is estimated to cost approximately \$2.05 per unit ([Home Depot](#))
  - RELIABILIT 1/2-in FIP x 1/2-in Fip x 20-in Braided Stainless Steel Flexible Faucet Supply Line is estimated to cost approximately \$6.98 per unit ([Lowe's](#))
  - SIMPLE DRAIN 1.25 in. Rubber Threaded P-Trap Bathroom Single Sink Drain Kit is estimated to cost approximately \$12.88 per unit ([Home Depot](#))
  - Snappy Trap Universal Drain Kit for Bathroom Sinks - Black, Adapts to 1-1/4 in - 1-1/2 in sink drains and wall drain pipes is estimated to cost approximately \$15.78 per unit ([Lowe's](#))

- A RAC member provided the following cost estimate related to a shower installation: it cost approximately \$8,000 for 15 hours of work for a plumber to replace a tub with a handicap shower.

## **Proposed Amendments to OAR 437-004-1120**

### **Proposed Rule Section 1 – Application**

#### *Amendment (1)(a) – Clarification of Existing Requirement(s)*

- The words, “or employment” were added to the proposed rule to clarify that the ALH rules applied to individuals who employ workers on an agricultural establishment.
- No fiscal impact anticipated.

#### *Amendment (1)(c) – Clarification of Existing Requirement(s)*

- The reference to OAR 918-500-0020(2) was replaced by the correct corresponding OAR 918-500-0510, which is associated with ORS 446.155 to 446.185.
- No fiscal impact anticipated.

### **Proposed Rule Section 2 – Rule Exemptions**

#### *Amendment (2)(a) – Clarification of Existing Requirement(s)*

- The exemption for hotels or motels was clarified to apply when such establishments provide similar accommodations commercially on a regular basis.
- No fiscal impact anticipated.

### **Proposed Rule Section 3 – Charging Occupants for Required Services**

#### *Amendment (3) – Clarification of Existing Requirement(s)*

- Prohibitions against pay-per-use services were clarified to include toilets, toilet paper, soap for handwashing, bathing facilities, laundry facilities, or cool potable water.
- No fiscal impact anticipated, as this provision does not require anything, it is a prohibition.
- A RAC member asked if this amendment would prohibit the use of coin-operated laundry machines. This question is addressed in [Oregon OSHA’s ALH FAQ guide](#) on page 5. Summarized below:



- “If the operator provides the minimum, rule-required services for free, they are permitted to charge for services beyond those minimum requirements. For example, if a housing operator has the minimum requirement of one laundry tray for each 30 occupants and clothes lines or drying facilities that serve their needs available for free, that operator could also have a coin-operated washing machine and dryer available at the facility. [See OAR 437-004-1120(11).] If the operator only provided the pay-per-use equipment, they would be in violation of the rule that prohibits them from charging for the required services.” – Page 5 of ALH FAQ
- Readers should note that the draft rule includes an amendment that would change the ratio for laundry tubs and trays from 1:30 to 1:25. For more details see section 11 of this fiscal impact statement.

### **Proposed Rule Section 4 – Definitions**

#### *Amendment (4)(m) – Clarification of Existing Requirement(s)*

- The definition of potable water was clarified to reference the Oregon Health Authority requirements for drinking water under OAR Chapter 333 Division 61.
- No fiscal impact anticipated.

#### *Amendment (4)(n) – Clarification of Existing Requirement(s)*

- The definition of “prefabricated structure” was clarified to reference the Oregon Building Codes Division rules in OAR Chapter 918, Division 674.
- No fiscal impact anticipated.

#### *Amendment (4)(o) – Substantive Change (potential fiscal impact anticipated)*

- The definition of “privy” proposes to exclude outhouses, pit toilets, or privies as eligible options for meeting compliance requirements related to required toilet facility ratios under the ALH rules.
- To the extent that it impacts an employer, compliance with this proposed change could be achieved through multiple options, including the use of portable chemical toilets, expansion of existing plumbed toilet facilities, or the construction of new toilet facilities.
- A RAC member provided the following information related to this amendment.
  - Although not required by the rule:
    - If modification is needed, operators may build separate toilet facilities.
    - Estimated cost of \$24.30 per sheet plywood (4 – 6 sheets could be needed). Use other plywood sheet language used in other sections.
    - Estimated cost of \$3.65 (2’x4’x8’ framing lumber), it is estimated that 4 to 6 boards per toilet stall needed

- Estimated cost of any additional hardware and concrete/solid construction footing: \$54 - \$108 <https://homeguide.com/costs/concrete-slab-cost>
- Portable chemical toilets:
  - Estimated costs provided by [123 Portable Toilet Rental](#) (Redmond, Oregon), for standard portable toilet (60 gallon holding capacity)
    - Daily – 1 to 4 porta potties – \$99 per day
      - Weekly – 1 to 4 porta potties – \$538 per week
      - Monthly – 1 to 4 porta potties – \$1201 per month
  - Estimated costs provided by [Zters](#) (Eugene, Oregon), for a portable toilet costs between \$264 and \$347 depending on the number of times it is serviced in each 7 day rental period. Delivery costs average \$61.27 depending on the distance, type of toilet product, and current fuel prices. ([Zters](#))
  - One RAC member reported that based on 2023 rental rates, it would cost approximately \$47,200 annually for 59 portable toilets, including delivery, unit rental, and service four times per week
- Expand current stock or install additional plumbed toilet facilities:
  - Toilet fixture (Glacier Bay 12 in. Rough in 2-Piece 1.1 GPF/1.6 GPF Dual Flush Round Toilet in White Seat Included) is estimated to cost approximately \$94.00 per unit. ([Home Depot](#))
  - Toilet fixture (Project Source Pro White Round Chair Height 2-piece WaterSense Toilet 12-in Rough-In 1.28-GPF) is estimated to cost approximately \$89 per unit ([Lowe's](#)).
  - Estimate 2-8 hours of labor for a plumber or similarly qualified person for fixture installation per unit. There may be additional “show up” fees that apply that are estimated to range in cost from approximately \$250-\$350.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- \$24.25 (10<sup>th</sup>) x 135% loading x 2 hours = \$65.48
  - \$63.55 (90<sup>th</sup>) x 200% loading x 8 hours = \$1,016.80
- RAC members provided the following estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There’s usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.

- Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
  - UA (plumbers and pipefitters):
    - \$57.92 wage
    - \$38.00 benefits
    - \$95.92 total per hour
- RAC members reported a range of cost estimates to upgrade their septic system would be approximately \$8,000 to \$160,000. (Documents 2, 25, 29, 30, 34). The cost estimate of \$160,000 was for 4 septic systems. The estimate of \$8,000 was to replace two septic tanks with no additional work necessary to install the new systems. Drain field-related costs were estimated to be approximately \$5,000 - \$23,000. Another member provided an estimate that replacement costs for a septic tank could range from \$15,000 to \$20,000 for replacing only the tank, and range from \$75,000 to \$120,000 for a new septic tank system depending on the ground the housing is built on. Installation for a drain field in Spring 2024 is estimated to cost, including a pump system and permitting: \$22,170 or approximately \$74/foot.
- GreenbarExcavation.com, septic tank replacement range in Oregon \$3,000-\$10,000.
- ToddEWilderConstruction.com, septic tank replacement range in Oregon \$3,500-\$5,000 up to \$22,000-\$32,000 full ATT septic system.
- Estimate 1-8 hours of labor for a septic tank servicer to pump one septic tank system.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- $\$18.86 (10^{\text{th}}) \times 135\% \text{ loading} \times 1 \text{ hours} = \$25.46$
  - $\$37.22 (90^{\text{th}}) \times 200\% \text{ loading} \times 8 \text{ hours} = \$595.52$
- RAC members provided the following estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.

- Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
- UA (plumbers and pipefitters):
  - \$57.92 wage
  - \$38.00 benefits
  - \$95.92 total per hour

RAC members provided additional information related to this amendment:

- \$80/hour for septic tanking pumping costs
- \$450 for two hours of septic servicing in metro area
- \$0.54/gallon for septic pumping costs; approximately \$1080 for two hours to service a 2,000 gallon tank.

*Amendment (4)(r) – Clarification of Existing Requirement(s)*

- The definition of “sanitary” was clarified to include both health and hygiene.
- No fiscal impact anticipated.

*Amendment (4)(t) – Clarification of Existing Requirement(s)*

- The definition of “toilet room” was updated to “toilet facility” to align with the proposed rule language.
- No fiscal impact anticipated.

**Proposed Rule Section 5 – Housing Registration Requirements**

*Amendment (5)(a) – Substantive Change (potential fiscal impact anticipated)*

- The subsection (5)(a)(C) propose the exemption for ALH registration requirements for housing on sites that do not produce or harvest farm crops was removed.
- Estimated 2-6 hours of administrative time to complete a first-time pre-occupancy ALH site consultation.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 2 hours = \$65.23
- \$72.84 (90<sup>th</sup>) x 200% loading x 6 hours = \$874.08

- Estimate 0.5-1 hour of administrative time to complete re-registration, if no substantial changes to the housing or facilities occurred, each year.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31 annually
- \$72.84 (90<sup>th</sup>) x 200% loading x 1 hour = \$145.68 annually

*Amendment (5)(b) – Substantive Change (potential fiscal impact anticipated)*

- Subsection (5)(b) proposes to clarify that ALH occupied year-round must register by February first each year.
  - No fiscal impact anticipated.
- Subsections (5)(b)(A) and (5)(b)(C) proposes to clarify that operators must contact Oregon OSHA at least 45 calendar days before occupancy if it was previously unregistered, or if the housing or facilities were significantly changed since the previous registration.
  - No fiscal impact anticipated.
- Subsection (5)(b)(B) proposes to clarify that a pre-occupancy consultation must determine that the housing or facilities must be free from all hazardous conditions before being registered.
  - No fiscal impact anticipated.
- Subsection (5)(b)(E) would be added to require that certain housing would be required to include annual water testing results from an accredited lab each year as part of the ALH registration process.
  - See fiscal impact information for proposed rule section 7 (Water Supply) for additional fiscal information related to water testing cost estimates.
- Estimated 0.5-1 hour of administrative time annually to include proposed water quality testing results (see also proposed rule section 7) and to monitor the water system, as part of the ALH registration process.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31 annually
- \$72.84 (90<sup>th</sup>) x 200% loading x 1 hour = \$145.68 annually

#### *Amendment (5)(c) – Clarification of Existing Requirement(s)*

- Subsection (5)(c)(C) proposes to clarify that the Director of the Department of Consumer and Business Services or designees may revoke a site’s ALH registration if it is determined that is not free of hazardous conditions.
  - No fiscal impact anticipated.

#### *Amendment (5)(e) – Clarification of Existing Requirement(s)*

- Subsection (5)(e)(B) proposes to clarify that a designated representative of a group, would be allowed to protest an ALH registration before it is issued.
  - No fiscal impact anticipated.
- Subsection (5)(e)(C) proposes to clarify by adding “registration” before applicant.
  - No fiscal impact anticipated.
- Subsection (5)(e)(D) proposes to clarify by adding “ORS” before statute number.
  - No fiscal impact anticipated.

### **Proposed Rule Section 6 – Site Requirements**

#### *Amendment (6)(a) and (6)(c) – Substantive Change (potential fiscal impact anticipated)*

- Subsections (6)(a) and (6)(c) would require that ALH and related facilities must have adequate drainage and be free of depressions in which water may become a nuisance.
- A RAC member provided the following information related to this amendment.
  - Although not required by the rule:
    - If modification is needed, operators may fill any depression with gravel.
    - Estimated cost of gravel: \$12 – 36 (1 to 3 bags)  
<https://www.lowes.com/pd/Rain-Forest-Decorative-Landscape-Gravel-30-lb-Red-Gravel/1002075998>
- Estimated cost of any additional hardware and concrete/solid construction footing: \$54 - \$108 <https://homeguide.com/costs/concrete-slab-cost> Estimated costs provided by [Portland Sand and Gravel](#) (Portland, Oregon), for fill dirt:
  - \$20 per yard
  - \$80 minimum delivery fee per trip
- Estimated costs provided by [Landscape Shoppe](#) (Salem, Oregon), for fill dirt:
  - \$38.00 per yard
  - \$40-\$185 minimum delivery fee per trip
- Estimated 0.5-3 hours of labor time to spread one yard of fill dirt.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16 (10^{\text{th}}) \times 135\% \text{ loading} \times 0.5 \text{ hours} = \$16.31$
- $\$72.84 (90^{\text{th}}) \times 200\% \text{ loading} \times 3 \text{ hours} = \$437.04$

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- $\$14.18 (10^{\text{th}}) \times 135\% \text{ loading} \times 0.5 \text{ hours} = \$9.57$
- $\$21.55 (90^{\text{th}}) \times 200\% \text{ loading} \times 3 \text{ hours} = \$129.30$

- Estimated 0.5-1 hour of administrative time annually to monitor site and identify areas with depressions that may become a nuisance.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16 (10^{\text{th}}) \times 135\% \text{ loading} \times 0.5 \text{ hour} = \$16.31 \text{ annually}$
- $\$72.84 (90^{\text{th}}) \times 200\% \text{ loading} \times 1 \text{ hour} = \$145.68 \text{ annually}$

*Amendment (6)(e) – Substantive Change (potential fiscal impact anticipated)*

- Subsection (6)(e) would require that toxic materials used in work activities are locked in a secure location that is at least 30 feet from ALH or related facilities. While the proposed requirement for lockable storage would be a new requirement, Oregon OSHA’s current ALH rule requires that all toxic materials are stored in a safe place.
- 5 ft. x 3 ft. Outdoor Tool Storage Shed, Galvanized Metal Garden Shed, 15 sq. ft. with Lockable Door, is estimated to cost approximately \$220.80 per unit ([Home Depot](#))
- Arrow 10-ft x 8-ft High Point Galvanized Steel Storage Shed, is estimated to cost approximately \$469.00 per unit ([Lowe's](#))
- Mounted lock, hasp, and latch (4 in. L Steel Heavy-Duty Hasp Latch) is estimated to cost approximately \$7.98 per unit ([Home Depot](#)); Padlock (Outdoor Padlock with Key, 1-9/16 in. Wide) is estimated to cost approximately \$8.78 per unit ([Home Depot](#))
- Mounted hinged hasp (RELIABILIT 3-1/2-in Stainless Steel Keyed Hinge Hasps) is estimated to cost approximately \$11.98 per unit ([Lowe's](#))
- Master Lock Keyed Padlock 5/8-in Shackle is estimated to cost approximately \$8.88 per unit ([Lowe's](#))
- Estimated 0.5-1 hours of labor time to install one lock on a toxic material storage area.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16 (10^{\text{th}}) \times 135\% \text{ loading} \times 0.5 \text{ hour} = \$16.31$
- $\$72.84 (90^{\text{th}}) \times 200\% \text{ loading} \times 1 \text{ hour} = \$77.04$



Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- $\$14.18$  (10<sup>th</sup>) x 135% loading x 0.5 hour = \$9.57
- $\$21.55$  (90<sup>th</sup>) x 200% loading x 1 hour = \$43.10

- Estimated 1-4 hours of labor to move materials for ALH sites that would be required to move their existing storage the required distance.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16$  (10<sup>th</sup>) x 135% loading x 1 hour = \$32.62
- $\$72.84$  (90<sup>th</sup>) x 200% loading x 4 hour = \$582.72

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- $\$14.18$  (10<sup>th</sup>) x 135% loading x 1 hour = \$19.14
- $\$21.55$  (90<sup>th</sup>) x 200% loading x 4 hour = \$172.40

- Estimated 0.5-2 hours of labor time per area to maintain required perimeter around toxic storage material area (if applicable). The number of times an employer would need to clear the perimeter of brush would depend on the length of occupancy; estimate 2 instances for occupancy of 2 weeks or less, and up to 18 times annually if occupied year-round.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16$  (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31 per activity
- $\$72.84$  (90<sup>th</sup>) x 200% loading x 2 hour = \$291.36 per activity

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- $\$14.18$  (10<sup>th</sup>) x 135% loading x 0.5 hour = \$9.57 per activity
- $\$21.55$  (90<sup>th</sup>) x 200% loading x 2 hour = \$86.20 per activity

- Estimated 0.5-1 hour of administrative time monthly to monitor site and identify areas with storage areas might need maintenance attention.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16$  (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31 monthly
- $\$72.84$  (90<sup>th</sup>) x 200% loading x 1 hour = \$145.68 monthly

### *Amendment (6)(f) – Clarification of Existing Requirement(s)*

- Subsection (6)(f) would clarify that related facilities are included in the requirements for empty pesticide containers.
  - No fiscal impact anticipated.

### *Amendment (6)(h) – Substantive Change (potential fiscal impact anticipated)*

- Subsection (6)(h) would remove the exemption for relocating ALH 500 feet away from livestock operations for employees that are employed to tend or otherwise work with animals.
- RAC member proposal to add: There are barriers that may incur costs up to potentially \$100k for a luba challenge, and 100k for court of appeals for 1 challenge to estimate of (6)(h).

To the extent that covered employers are impacted by this proposed change, ALH operators have multiple options to achieve compliance with this proposed provision. The employer could relocate livestock operations to be more than 500 feet away from the housing or relocate the housing itself. How a particular employer might choose to achieve compliance with this proposed provision is likely to be site-specific, but could range from moving the housing (for example, if a travel trailer is being used), the purchase of travel trailer or tiny home, the construction of new ALH facilities, or moving the livestock to a different area. To the extent that an employer chooses to build new housing, Oregon OSHA anticipates that doing so will have an indeterminant fiscal impact based on the broad range of housing which may be chosen to be constructed. In some instances the potential magnitude of additional costs cannot be quantified at this time. Despite this challenge, Oregon OSHA has considered the information received by RAC member feedback specific to the anticipated fiscal impact tied to new housing construction ([Documents 1-35](#)).

- Additional dwellings on property can add additional fees that may range between \$10,000 to \$100,000.
- The estimated cost to move a mobile dwelling (e.g. trailer or RV) ranges approximately from \$3,000 to \$5,000.
- One RAC member reported that the cost to build a new ALH facility for 150 occupants in 2017 cost approximately \$1.5 million to build, which included all construction costs, permitting, site prep, septic system, laundry machines, in-unit toilets and showers, and indoor cooking units (Document 34).
- One RAC member reported that it cost approximately \$98,1112 in 2022, to construct a single-family unit mobile home, including site prep and plumbing (Document 26).
- One RAC member reported that it cost approximately \$12,069 in 2023 for permit fees and electrical for new housing construction (Document 27).

- RAC members reported a range of cost estimates to upgrade their septic system would be approximately \$8,000 to \$160,000. (Documents 2, 25, 29, 30, 34). The cost estimate of \$160,000 was for 4 septic systems. The estimate of \$8,000 was to replace two septic tanks with no additional work necessary to install the new systems. Drain field-related costs were estimated to be approximately \$5,000 - \$23,000. Another member provided an estimate that replacement costs for a septic tank could range from \$15,000 to \$20,000 for replacing only the tank, and range from \$75,000 to \$120,000 for a new septic tank system depending on the ground the housing is built on. Installation for a drain field in Spring 2024 is estimated to cost, including a pump system and permitting: \$22,170 or approximately \$74/foot.
- Estimated 1-10 hours of labor to move or relocate the livestock or animals.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.62
- \$72.84 (90<sup>th</sup>) x 200% loading x 10 hour = \$1,456.80

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 1 hour = \$19.14
- \$21.55 (90<sup>th</sup>) x 200% loading x 10 hour = \$431.00

- Build new livestock area from lumber:
  - Estimate cost of \$24.30 per sheet (4'x8'x15/32") of plywood, it is estimated that 4-30 sheets could be needed. ([Home Depot](#))
  - Estimate cost of \$22.87 per sheet (4'x8'x15/32") of plywood, it is estimated that 8-30 sheets could be needed depending on the size of animal pen required. ([Lowes](#))
  - Estimate cost of \$3.65 (2'x4'x8' framing lumber), it is estimated that 4 boards depending on the size of animal pen required. ([Home Depot](#))
  - Estimate cost of \$3.25 (2'x4'x8' framing lumber), it is estimated that 4 boards depending on the size of animal pen required. ([Lowes](#))
- Estimated 8-24 hours of labor to construct livestock area from lumber:

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 8 hours = \$384.05
- \$97.85 (90<sup>th</sup>) x 200% loading x 24 hours = \$4,696.80

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 8 hours = \$198.94
- \$35.72 (90<sup>th</sup>) x 200% loading x 24 hours = \$1,714.56
- Cost estimates related to building or installing new housing if moving the livestock is not an option
  - RV or travel trailer
    - Camping World, 2024 Coleman Lantern LT 17B 21'5" (sleeps 5), is estimated to cost approximately \$13,999 per unit.
    - Camping World, 2025 Forest River Wolf Pup 16bhsw-or 21'9" (sleeps 5) is estimated to cost approximately \$23,999 per unit.
    - Blue Compass RV, 2024 Forest River RV Aurora Light 16BHX 19'6" (sleeps 5) is estimated to cost approximately \$15,998 per unit.
    - Blue Compass RV, 2025 Grand Design Transcend One 151BH 20' (sleeps 5) is estimated to cost approximately \$24,248 per unit.
  - Prefabricated homes
    - Amfor tiny home (464.5"D x 245.5"W x 97.5"H, 40ftx20ft Foldable House, Prefabricated House with Bathroom and Kitchen) is estimated to cost approximately \$27,700 per unit with free delivery. ([Amazon](#))
    - Hugh Hearts tiny home (240"D x 248"W x 99"H, Portable Prefabricated Tiny Home 20x20ft, Mobile Expandable Plastic Prefab House with Restroom) is estimated to cost approximately \$14,499 per unit with free delivery. ([Amazon](#))
    - Generic tiny home (232.28"D x 248"W x 99"H, Generic Portable Prefabricated Tiny Home 20ft, Mobile Expandable Plastic Prefab House, White, PNS-002) is estimated to cost approximately \$21,998 per unit with free delivery. ([Amazon](#))
    - Generic tiny home (240"D x 190"W x 98"H, Prefabricated 15ft x 20ft Expandable Tiny Houses, Modern Designed, Spacious, Waterproof) is estimated to cost approximately \$17,500 per unit with free delivery. ([Amazon](#))
  - Building or expanding existing sleeping areas such as mobile homes, bunk houses, single and multi-family dwellings. To the extent that an employer chooses to build new housing, Oregon OSHA anticipates that doing so will have an indeterminant fiscal impact based on the broad range of housing which may be chosen to be constructed. In some instances the potential magnitude of additional costs can't be quantified at this time. Despite this challenge, Oregon OSHA has considered the information received by RAC member feedback specific to the anticipated fiscal impact tied to new housing construction ([Documents 1-35](#))
    - One RAC member reported that the cost to build a new ALH facility for 150 occupants in 2017 cost approximately \$1.5 million to build, which included all construction costs, permitting, site prep, septic system, laundry machines, in-unit toilets and showers, and indoor cooking units (Document 34).

- One RAC member reported that it cost approximately \$98,112 in 2022, to construct a single-family unit mobile home, including site prep and plumbing (Document 26).
  - One RAC member reported that it cost approximately \$12,069 in 2023 for permit fees and electrical for new housing construction (Document 27).
  - RAC members reported a range of cost estimates to upgrade their septic system would be approximately \$8,000 to \$160,000. (Documents 2, 25, 29, 30, 34). The cost estimate of \$160,000 was for 4 septic systems. The estimate of \$8,000 was to replace two septic tanks with no additional work necessary to install the new systems. Drain field-related costs were estimated to be approximately \$5,000 -\$23,000. Another member provided an estimate that replacement costs for a septic tank could range from \$15,000 to \$20,000 for replacing only the tank, and range from \$75,000 to \$120,000 for a new septic tank system depending on the ground the housing is built on. Installation for a drain field in Spring 2024 is estimated to cost, including a pump system and permitting: \$22,170 or approximately \$74/foot.
- Construction costs, including those for lumber, electrical, and plumbing systems are expected to vary widely between employers due to several factors. The scale and scope of a project significantly impact cost estimates, wherein larger projects may benefit from economies of scale, reducing price per-unit costs, while smaller or more complex projects may incur higher expenses due to specialized labor and materials. Material quality is another crucial factor; premium materials are typically more expensive than standard options. Additionally, as referenced previously, regional labor rates, local building codes, and site-specific conditions, such as accessibility and existing infrastructure, can further impact the range of cost estimates. Taken together, these and other variables collectively contribute to the complexity of estimating the wide range of construction costs observed across different projects and employers.

### Lumber Supply Estimates

- Estimate cost of \$24.30 per sheet (4'x8'x15/32") of plywood, ([Home Depot](#))
- Estimate cost of \$22.87 per sheet (4'x8'x15/32") of plywood, ([Lowes](#))
- Estimate cost of \$3.65 (2'x4'x8' framing lumber), ([Home Depot](#))
- Estimate cost of \$3.25 (2'x4'x8' framing lumber), ([Lowes](#))

### Electrical Supply Estimates

- Extension cords
  - 6 ft. 12/3 SJTW 15 Amp 125-Volt 1875-Watt Lighted End Indoor/Outdoor Black Heavy-Duty Extension Cord (2-Pack) is estimated to cost approximately \$10.96 per unit ([Home Depot](#))

- 50 ft. 12/3 SJTW Hi-Visibility Outdoor Heavy-Duty Extension Cord with Power Light Plug is estimated to cost approximately \$46.05 per unit ([Home Depot](#))
- Woods 8-ft 16/3 3-Prong Black Outdoor SJTW Heavy Duty General Extension Cord to cost approximately \$8.36 per unit ([Lowe's](#))
- Utilitech Outdoor 25-ft 12/3 3-Prong Yellow Outdoor SJTW Heavy Duty Lighted Extension Cord is estimated to cost approximately \$49.97 per unit ([Lowe's](#))
- Electrical wiring varies widely (e.g., length, gauge, max amperage, stranded or solid, etc.); therefore, depending on the specifics of the project, it is estimated that if electrical wiring is required supply costs could range from \$23 per roll for 15 feet of 12/2 electrical wire up to \$1340 per roll for 500 feet of 6/2 wire ([Home Depot](#)); \$59 per roll for Southwire 25-ft 12/2 Solid UF-B Wire W/G ([Lowe's](#)) or \$167 per roll Southwire 50-ft 6/2 Romex SIMpull Solid Indoor CU NM-B W/G ([Lowe's](#))

### Plumbing Supply Estimates

- PVC Piping
  - Charlotte Pipe 1 in. x 10 ft. PVC Schedule 40 Tubing DWV Pipe is estimated to cost approximately \$8.48 per unit ([Home Depot](#))
  - IPEX 1-in x 10-ft CPVC Pipe is estimated to cost approximately \$12.96 per unit ([Lowe's](#))
- Copper pipe
  - Streamline 1/2-in x 10-ft Copper Type M Pipe is estimated to cost approximately \$21.92 per unit ([Lowe's](#))
  - Streamline 3/4 in. x 10 ft. Copper Type M Pipe is estimated to cost approximately \$35.54 per unit ([Home Depot](#))
- Galvanized pipe
  - The Plumber's Choice 3/4 in. x 36 in. Galvanized Steel Pipe is estimated to cost approximately \$18.15 per unit ([Home Depot](#))
  - Southland 3/4-in x 24-in Galvanized Pipe is estimated to cost approximately \$19.56 per unit ([Lowe's](#))
- Miscellaneous supplies:
  - Plumbshop 3/8 in. Flare x 1/2 in. FIP x 16 in. Braided Stainless Steel Faucet Supply Line is estimated to cost approximately \$2.05 per unit ([Home Depot](#))
  - RELIABILT 1/2-in FIP x 1/2-in Fip x 20-in Braided Stainless Steel Flexible Faucet Supply Line is estimated to cost approximately \$6.98 per unit ([Lowe's](#))
  - SIMPLE DRAIN 1.25 in. Rubber Threaded P-Trap Bathroom Single Sink Drain Kit is estimated to cost approximately \$12.88 per unit ([Home Depot](#))



- Snappy Trap Universal Drain Kit for Bathroom Sinks - Black, Adapts to 1-1/4 in - 1-1/2 in sink drains and wall drain pipes is estimated to cost approximately \$15.78 per unit ([Lowes](#))

*Amendment (6)(i) – Clarification of Existing Requirement(s)*

- Subsection (6)(i) proposes to spell out “agricultural labor housing” instead of using the acronym.
  - No fiscal impact anticipated.

*Amendment (6)(j) – Substantive Change (potential fiscal impact anticipated)*

- Subsection (6)(j) would require that all sleeping rooms in ALH have at least one wall-type electrical receptacle for every two occupants. The proper use of power strips and similar devices would be permissible to meet this requirement as long as they are used in accordance with their listing and labeling. To the extent that an employer must expand or install a new electrical panel, Oregon OSHA anticipates that doing so will have an indeterminant fiscal impact based local permitting costs, labor, and scope of the specific project.
- 15-amp duplex wall outlet prices range from \$0.77 (15 Amp Residential Grade Grounding Duplex Outlet, Ivory) to \$1.50 (15 Amp Tamper Resistant Duplex Outlet, Ivory) per unit, not including installation costs. ([Home Depot](#))
- Electrical power strip prices range from \$5.99 (One Power 2-ft 4-Outlet Indoor White Power Strip) to \$17.54 (GE 12-ft 6-Outlet Indoor White Power Strip) per unit ([Lowes](#))
- For ALH that requires the installation of new electrical receptacles, estimate 1-4 hours of labor time to install one wall-type electrical receptacle:

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Electricians at the top of this document:

- \$24.13 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.58
- \$55.17 (90<sup>th</sup>) x 200% loading x 4 hour = \$441.36
- RAC members provided to the following estimated costs to hire an electrician:
  - For Marion County (mid-valley): Electricians: \$120 to \$165 an hour. Apprentice rate of \$65 to \$85.
  - A good median hourly rate to go with for an electrician is \$140. There’s usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Electrical - \$140.00 – 155.00/hr
  - IBEW (electricians)
    - \$60.50 wage
    - \$29.59 benefits



- \$87.34 total per hour

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 1 hour = \$24.87
- \$35.72 (90<sup>th</sup>) x 200% loading x 4 hour = \$285.76

A RAC member provided the following information about this amendment:

- Add: If modification is needed, an upgrade to the electrical system may be needed. Use estimate indicated in other sections.

### Electrical Supply Estimates

- Extension cords
  - 6 ft. 12/3 SJTW 15 Amp 125-Volt 1875-Watt Lighted End Indoor/Outdoor Black Heavy-Duty Extension Cord (2-Pack) is estimated to cost approximately \$10.96 per unit ([Home Depot](#))
  - 50 ft. 12/3 SJTW Hi-Visibility Outdoor Heavy-Duty Extension Cord with Power Light Plug is estimated to cost approximately \$46.05 per unit ([Home Depot](#))
  - Woods 8-ft 16/3 3-Prong Black Outdoor SJTW Heavy Duty General Extension Cord to cost approximately \$8.36 per unit ([Lowe's](#))
  - Utilitech Outdoor 25-ft 12/3 3-Prong Yellow Outdoor SJTW Heavy Duty Lighted Extension Cord is estimated to cost approximately \$49.97 per unit ([Lowe's](#))
- Electrical wiring varies widely (e.g., length, gauge, max amperage, stranded or solid, etc.); therefore, depending on the specifics of the project, it is estimated that if electrical wiring is required supply costs could range from \$23 per roll for 15 feet of 12/2 electrical wire up to \$1340 per roll for 500 feet of 6/2 wire ([Home Depot](#)); \$59 per roll for Southwire 25-ft 12/2 Solid UF-B Wire W/G ([Lowe's](#)) or \$167 per roll Southwire 50-ft 6/2 Romex SIMpull Solid Indoor CU NM-B W/G ([Lowe's](#))

Note: Amendments to subsections (6)(l), (6)(m), and (6)(o) of the proposed rule include non-substantive amendments to existing rule requirements related to ALH remodeling and illumination requirements in facilities, walkways, and corridors.

### *Amendment (6)(p) – Substantive Change (potential fiscal impact anticipated)*

- Subsection (6)(p) of the proposed rule would require that road forks and driveways between ALH housing and public access roads are properly marked, and that each building and unit used to house workers is properly marked.
- A RAC member provided the following information related to this amendment.
  - If modification is needed, operators may need to purchase hardware to mount signs in visible locations.

- Estimated cost of \$3.65 (2'x4'x8' framing lumber), it is estimated that ½ to 1 board per sign needed.
- Estimated cost of \$1 - \$8 for hardware to mount each sign.  
<https://www.lowes.com/pd/Grip-Rite-170-Piece-Steel-Assorted-Colors-Screws-Fastener-Kit-Case-Included/1000365245>
- Unit wall numbering with fasteners (4 in. Black Nail-On Aluminum House Number) is estimated to cost approximately \$2.83 per unit (Home Depot)
- Vinyl letter and number sticker pack (Hillman 2-in Black Letter And Number Pack) is estimated to cost approximately \$4.98 per unit (Lowes)
- Estimated 0.5-2 hours of labor time to establish proper marking system per building or housing unit.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31 per activity
- \$72.84 (90<sup>th</sup>) x 200% loading x 2 hour = \$291.36 per activity

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$9.57 per activity
- \$21.55 (90<sup>th</sup>) x 200% loading x 2 hour = \$86.20 per activity

### Lumber Supply Estimates

- Estimate cost of \$24.30 per sheet (4'x8'x15/32") of plywood, ([Home Depot](#))
- Estimate cost of \$22.87 per sheet (4'x8'x15/32") of plywood, ([Lowes](#))
- Estimate cost of \$3.65 (2'x4'x8' framing lumber), ([Home Depot](#))
- Estimate cost of \$3.25 (2'x4'x8' framing lumber), ([Lowes](#))

### **Proposed Rule Section 7 – Water Supply**

*Amendment (7)(a) – Substantive Change (potential fiscal impact anticipated)*

- A reference to Oregon Health Authority OAR for Drinking Water was added. The amount of pressure that must be delivered at each outlet of the water system was increased from 15 to 20 pounds per square inch (PSI), with documentation requirements for systems that can reach at least 15 PSI but less than 20 PSI.
- Depending on the water system involved, an employer may choose to install a pressurized water tank to increase PSI in the system. Pressure tanks vary in size and capacity.
  - 32-gallon pressurized tank (Water Worker 32 Gal. Pressurized Well Tank) is estimated to cost approximately \$289.00 per unit ([Home Depot](#))

- 86-gallon pressurized tank (A.O. Smith 86-Gallon Vertical Well Pressure Tank) is estimated to cost approximately \$534.00 per unit ([Lowes](#))
- Estimated 1-4 hours of labor time to install the pressurized tank:

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- \$24.25 (10<sup>th</sup>) x 135% loading x 1 hours = \$32.74
- \$63.55 (90<sup>th</sup>) x 200% loading x 4 hours = \$508.40
- RAC members provided the following estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.
  - Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
  - UA (plumbers and pipefitters):
    - \$57.92 wage
    - \$38.00 benefits
    - \$95.92 total per hour
- Estimate 0.5-8 hours of labor to test the PSI of the site water system and document its limitations.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- \$24.25 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$27.59
- \$63.55 (90<sup>th</sup>) x 200% loading x 8 hours = \$1,016.80
- RAC members provided the following estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.

- Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
- UA (plumbers and pipefitters):
  - \$57.92 wage
  - \$38.00 benefits
  - \$95.92 total per hour

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31
- \$72.84 (90<sup>th</sup>) x 200% loading x 8 hour = \$1,165.44

*Amendment (7)(b) – Substantive Change (potential fiscal impact anticipated)*

- Potable water testing requirements were added to require that water from non-public systems be tested by an accredited lab for arsenic at least once, and *E. coli*, total coliform, and nitrates at least every 12 months. The results of each water test must be posted in the housing in the language of the workers, or in lieu of translation the results, post a pictogram that conveys the same information. Oregon OSHA has committed to developing the pictogram poster for employers to use.
- One RAC member provided the following information related to this amendment.
  - Although not required by the rule, operators may choose to test during mid-operation to measure levels at time water is consumer. This may involve additional testing costs (costs already indicated). This is the practice recommended by the OHA.
- Estimate 1-2 hours of labor to schedule water testing services and post testing results for each facility.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.62
- \$72.84 (90<sup>th</sup>) x 200% loading x 2 hours = \$291.36

- Water testing service providers vary in cost and location.
- Estimate one-time arsenic test as approximately \$20 to \$40, and testing for nitrates and total coliform at \$40 to \$80 annually ([Water Laboratories, Inc](#))
- Estimate one-time comprehensive test that includes arsenic, total coliform, and nitrates as approximately \$105 annually ([Alexin Analytical Laboratories, Inc](#))
- Estimate 1-2 hours of labor to translate that can be used in subsequent years.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.62
- \$72.84 (90<sup>th</sup>) x 200% loading x 2 hours = \$291.36

*Amendment (7)(c) – Clarification of Existing Requirement(s)*

- “Ample supply” of water was clarified to ensure that the 35 gallons of potable water per occupant per day was in addition to any water requirements required by other Oregon OSHA rules.
  - No fiscal impact anticipated.

**Proposed Rule Section 8 – Bathing, Hand Washing, Laundry, and Toilet Facilities (General)**

The proposed rule does not include substantive amendments to section 8.

**Proposed Rule Section 9 – Bathing facilities**

*Amendment (9)(d) – Substantive Change (potential fiscal impact anticipated)*

- A private dressing area in or adjacent to the bathing facilities must be provided for occupants. To the extent that it impacts an employer, compliance with this proposal could be achieved through the construction of a private dressing area within or adjacent to an existing bathing facility. Floor standing dressing rooms prices range from \$109.98 (Clothing Store Fitting Room with Shading Curtain, Portable Temporary Mobile Privacy Protection Dressing Room, Foldable Mall Simple Changing Room and Display Rack, 200x100x95cm) to \$135.99 (Lvrnben Dressing Room for Boutique, Clothing Store Fitting Room with Privacy Shading Curtain, Changing Room with Garment Hook, C-type Wall Corner Iron Stand Easy-to-install). ([Amazon](#))
- Panel room dividers prices range from \$50.51 (Room Divider 6.1 ft. Freestanding and Folding Privacy Screens 3 Panel) to \$135.99 (Black 8 Panel 6 ft. Tall Double Hinged Foldable Panel Room Divider). ([Home Depot](#))
- Build dressing area from lumber:
  - Estimate cost of \$24.30 per sheet (4’x8’x15/32”) of plywood, it is estimated that 1-3 sheets could be needed. ([Home Depot](#))
  - Estimate cost of \$22.87 per sheet (4’x8’x15/32”) of plywood, it is estimated that 1-3 sheets could be needed. ([Lowes](#))
  - Estimate cost of \$3.65 (2’x4’x8’ framing lumber), it is estimated that 4 boards per stall. ([Home Depot](#))

- Estimate cost of \$3.25 (2'x4'x8' framing lumber), it is estimated that 4 boards per stall. ([Lowe's](#))
- A RAC member provided the following information on this amendment:
  - Operators may choose to build additional structures or add on to existing structures.
  - Estimated cost of any additional hardware and concrete/solid construction footing: \$54 - \$108 <https://homeguide.com/costs/concrete-slab-cost>
  - Other construction costs
- Estimated 8-24 hours of labor to construct dressing area from lumber:

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 8 hours = \$384.05
- \$97.85 (90<sup>th</sup>) x 200% loading x 24 hours = \$4,696.80

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 8 hours = \$198.94
- \$35.72 (90<sup>th</sup>) X 200% loading x 24 hours = \$1,714.56

- Estimated 2-5 hours of labor to install curtain or similar partition.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 2 hours = \$65.23
- \$72.84 (90<sup>th</sup>) x 200% loading x 5 hours = \$728.40

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 2 hours = \$38.29
- \$35.72 (90<sup>th</sup>) X 200% loading x 5 hours = \$215.50

### Lumber Supply Estimates

- Estimate cost of \$24.30 per sheet (4'x8'x15/32") of plywood, ([Home Depot](#))
- Estimate cost of \$22.87 per sheet (4'x8'x15/32") of plywood, ([Lowe's](#))
- Estimate cost of \$3.65 (2'x4'x8' framing lumber), ([Home Depot](#))
- Estimate cost of \$3.25 (2'x4'x8' framing lumber), ([Lowe's](#))

### *Amendment (9)(e)(B) – Substantive Change (potential fiscal impact anticipated)*

- Each shower stall must have a working lock and provide privacy. To the extent that it impacts an employer, compliance with this proposed change could be achieved through



adding a locking mechanism to existing doors or installing doors and locking mechanism where curtains are in place.

- Estimates for installing shower stall
  - HCS plastic laminate toilet compartment door (1" thick honeycomb panels, odor, mildew, and corrosion resistant) is estimated to cost approximately \$175.50 per unit ([Harbor City Supply](#))
  - Toilet partition with door (powder coated) is estimated to cost approximately \$225.00 per unit ([Sustainable Supply](#))
- Estimated labor time of 0.5-2 hours per unit to install solid door on toilet compartment

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$24.00
- \$97.85 (90<sup>th</sup>) x 200% loading x 2 hours = \$391.40

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$12.43
- \$35.72 (90<sup>th</sup>) x 200% loading x 2 hours = \$142.88

- Where doors are in place – estimate the cost of adding a locking mechanism
- Hook and eyebolt locking mechanisms prices range from \$1.48 for a 2-pack ((2" Zinc-Plated hook and eyebolt) to \$4.99 for a 4-pack (2" Zinc-Plated hook and eyebolt) ([Lowes](#), [Amazon](#))
- Barrel bolt locking mechanism prices range from \$4.18 (3" Zinc-Plated Barrel Bolt) to \$4.74 (3" Zinc-Plated Barrel Bolt). ([Amazon](#), [Home Depot](#))
- Where curtains are in place – estimate the cost to install partition and lock
- Estimate cost for three-wall supported shower compartment with door between existing wall with hinges and lock (overhead braced, powder coated/baked enamel) at \$873.15 per stall. ([Harbor City Supply](#))
- Estimate cost for one-wall supported freestanding shower compartment with door hinges and lock (three walls, overhead braced, powder coated/baked enamel,) at \$1,106.96 per stall. [Harbor City Supply](#))
- Estimate 4-10 hours of labor per stall to install.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 4 hour = \$130.46



- \$72.84 (90<sup>th</sup>) x 200% loading x 10 hour = \$1,456.80
- Estimated 0.25-0.5 hours of labor time to install suitable lock in shower stall.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.25 hour = \$8.15
- \$72.84 (90<sup>th</sup>) x 200% loading x 0.5 hour = \$72.84

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 0.25 hour = \$4.79
- \$21.55 (90<sup>th</sup>) x 200% loading x 0.5 hour = \$21.55

## **Proposed Rule Section 10 – Hand Washing Facilities**

*Amendments (10)(a) and (10)(b) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule language maintains the current rule ratio of 1:6 but clarifies that food preparation sinks do not count towards the required ratio. It requires that handwashing be located close to toilets and strikes “or close to the sleeping places.” It requires that paper towels and a disposal bin must be provided near the handwashing facility.
- Estimates related to portable handwashing stations
  - Portable hot/cold handwashing stations with tank prices range from \$1729.90 (Ozark River Portable Sinks Premier Black - Portable Handwashing Station - Portable Sink For Washing Hands - Portable Sink With Hot And Cold Water With Water Tank) to \$2493.11 (Single-Basin Portable Sink Hand - Portable Handwashing Station-Steel Hand Sink with Hot and Cold Water with Sink Tank & Outdoor Hand Washing Station). ([Amazon](#))
  - Portable Sinks with Hot Water & Cold Water prices range from \$2017.95 (Premier Brite White Portable Hot Water Hand Washing Sink with Laminate Cabinet and Single Basin) to \$3009.95 (Elite LS1). ([Ozark River Manufacturing Co.](#))
  - One RAC member reported that portable handwashing stations can be purchased for \$1,399 per unit, and that they would need an additional 24 handwashing stations, which would cost approximately \$33,576.00.
- Estimates for paper towel rolls
  - HDX paper towel rolls (82 sheets) is estimated to cost approximately \$0.98 per unit ([Home Depot](#))

- MOXIE ultra 6-count paper towel pack is estimated to cost approximately \$13.48 per unit ([Lowe's](#))
- Estimates for garbage bins or disposal receptacles
  - Bins in sizes ranging from 5-gallon to 32-gallon prices range from \$5.00 to \$72.00 per unit. ([GRAINGER](#), [Home Depot](#), [Walmart](#))
- A RAC member provided the following information related to this amendment:
  - Although not required by the rule, operators may choose to move port-a-potties closer to existing handwashing facilities.
    - Estimate to move port-a-potties: labor/service - .5 hour (use other labor costs)
  - Although not required by the rule, operators may choose to install plumbed handwashing sinks rather than use portable handwashing stations.
    - Estimated costs from kitchen sink section.
- Estimated 2-6 hours one time cost to set up portable sink.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 2 hours = \$65.23
- \$72.84 (90<sup>th</sup>) x 200% loading x 6 hours = \$874.08

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 2 hours = \$38.29
- \$35.72 (90<sup>th</sup>) X 200% loading x 6 hours = \$258.60

- Estimated 0.5-1 hours to replenish the paper towels and empty the garbage bin daily.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$16.31 per day
- \$72.84 (90<sup>th</sup>) x 200% loading x 1 hours = \$145.68 per day

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$9.57 per day
- \$35.72 (90<sup>th</sup>) X 200% loading x 1 hours = \$43.10 per day

## **Proposed Rule Section 11 – Laundry Facilities**

### *Amendments (11)(a) and (11)(e) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule language changes the ratio of laundry provisions if tubs or trays are provided to 1:25 occupants, and requires a separate method for cleaning clothing that has been contaminated by chemicals. Options could include additional tubs, running clothes in a separate wash cycle, or sending clothing out for commercial laundering.
- A RAC member provided the following information related to these amendments:
  - Although not required by the rule, employers have multiple options to meet compliance including the use of laundry trays and tubs. Operators may consider adding laundry machines to comply with the proposed regulations.
    - Purchase laundry machine: \$578 – \$796  
<https://www.lowes.com/search?searchTerm=commercial+laundry+machines>
    - if needed, operator may need septic upgrade to allow workers to wash work clothing separately from family clothing. See other sections for estimate.
    - Aside from purchase of laundry machine there will be costs associated with electrical outlet appropriate for installing a laundry machine and enclosure of the machine in a protected area from the elements and drainage. \$5,000 if there is no covered area and \$800 dollars for electrical associated with installing a new machine and the appropriate electrical outlets for the machine.
- MUSTEE brand utility sink (Utilatub Combo 24 in. x 18 in. Polypropylene Floor Mounted Laundry Tub in White) is estimated to cost approximately \$134 per unit ([Home Depot](#))
- RuggedTub utility sink (24.25-in x 22-in 1-Basin Graphite Freestanding Utility Tub with Drain and Faucet) is estimated to cost approximately \$149 per unit ([Lowes](#))
- Residential laundromat service costs an estimated \$2.05 per pound with a \$45 minimum order (including pickup and delivery). Commercial service is available for an additional fee. ([Advantage Laundry Solutions](#))
- Estimate 0.25-3 hours of administrative labor time monthly to maintain laundry facilities and clean additional tubs or trays (if applicable).

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.25 hours = \$8.15 monthly
- \$72.84 (90<sup>th</sup>) x 200% loading x 3 hours = \$437.04 monthly

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

32

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.25 hours = \$4.79 monthly
- \$35.72 (90<sup>th</sup>) X 200% loading x 3 hours = \$129.30 monthly

## **Proposed Rule Section 12 – Toilet Facilities**

### *Amendment (12)(c) – Clarification of Existing Requirement(s)*

- The proposed rule language would clarify that walkways to common use facilities must have adequate lighting. This is already covered under the illumination requirements in section 6 of this rule.
- No fiscal impact anticipated

### *Amendment (12)(e)(B) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule language in subsection (12)(c) requires that walkways to common use facilities have adequate lighting, which is already required in section 6 of the rule; it increases the number of required toilets to 1 per 10 occupants of each gender with a minimum of two toilets for common use facilities when there are 2 or more occupants. It requires privacy, removing the option of curtains as toilet doors, requiring solid doors.
- Increased number of toilets – to the extent that it impacts an employer, compliance with this proposed change could be achieved through multiple options, including the use of portable chemical toilets, expansion of existing plumbed toilet facilities, or the construction of new toilet facilities.
- Portable chemical toilets:
  - Estimated costs provided by [123 Portable Toilet Rental](#) (Redmond, Oregon), for standard portable toilet (60 gallon holding capacity):
    - Daily – 1 to 4 porta potties – \$99 per day
    - Weekly – 1 to 4 porta potties – \$538 per week
    - Monthly – 1 to 4 porta potties – \$1201 per month
- One RAC member reported that based on 2023 rental rates, it would cost approximately \$47,200 annually for 59 portable toilets, including delivery, unit rental, and service four times per week
- Expand current stock or install additional plumbed toilet facilities:
  - Toilet fixture (Glacier Bay 12 in. Rough in 2-Piece 1.1 GPF/1.6 GPF Dual Flush Round Toilet in White Seat Included) is estimated to cost approximately \$94.00 per unit. ([Home Depot](#))
  - Toilet fixture (Project Source Pro White Round Chair Height 2-piece WaterSense Toilet 12-in Rough-In 1.28-GPF) is estimated to cost approximately \$89 per unit ([Lowe's](#)).

- Estimate 2-8 hours of labor for a plumber or similarly qualified person for fixture installation per unit. There may be additional “show up” fees that apply that are estimated to range in cost from approximately \$250-\$350.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- $\$24.25 (10^{\text{th}}) \times 135\% \times 2 \text{ hours} = \$65.48$
  - $\$63.55 (90^{\text{th}}) \times 200\% \times 8 \text{ hours} = \$1,016.80$
- RAC members provided the following estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There’s usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.
  - Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
  - UA (plumbers and pipefitters):
    - \$57.92 wage
    - \$38.00 benefits
    - \$95.92 total per hour
- Estimate 0.25-.5 hours of administrative labor time weekly to clean each additional toilets.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16 (10^{\text{th}}) \times 135\% \text{ loading} \times 0.25 \text{ hours} = \$8.15 \text{ each toilet weekly}$
- $\$72.84 (90^{\text{th}}) \times 200\% \text{ loading} \times 0.5 \text{ hours} = \$72.84 \text{ each toilet weekly}$

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- $\$18.42 (10^{\text{th}}) \times 135\% \text{ loading} \times 0.25 \text{ hours} = \$4.79 \text{ each toilet weekly}$
- $\$35.72 (90^{\text{th}}) \times 200\% \text{ loading} \times 0.5 \text{ hours} = \$21.55 \text{ each toilet weekly}$
- RAC members reported a range of cost estimates to upgrade their septic system would be approximately \$8,000 to \$160,000. (Documents 2, 25, 29, 30, 34). The

cost estimate of \$160,000 was for 4 septic systems. The estimate of \$8,000 was to replace two septic tanks with no additional work necessary to install the new systems. Drain field-related costs were estimated to be approximately \$5,000 - \$23,000. Another member provided an estimate that replacement costs for a septic tank could range from \$15,000 to \$20,000 for replacing only the tank, and range from \$75,000 to \$120,000 for a new septic tank system depending on the ground the housing is built on. Installation for a drain field in Spring 2024 is estimated to cost, including a pump system and permitting: \$22,170 or approximately \$74/foot.

- GreenbarExcavation.com, septic tank replacement range in Oregon \$3,000-\$10,000.
- ToddEWilderConstruction.com, septic tank replacement range in Oregon \$3,500-\$5,000 up to \$22,000-\$32,000 full ATT septic system.
  - RAC members reported a range of cost estimates to upgrade their septic system would be approximately \$8,000 to \$160,000. (Documents 2, 25, 29, 30, 34). The cost estimate of \$160,000 was for 4 septic systems. The estimate of \$8,000 was to replace two septic tanks with no additional work necessary to install the new systems. Drain field-related costs were estimated to be approximately \$5,000 - \$23,000. Another member provided an estimate that replacement costs for a septic tank could range from \$15,000 to \$20,000 for replacing only the tank, and range from \$75,000 to \$120,000 for a new septic tank system depending on the ground the housing is built on. Installation for a drain field in Spring 2024 is estimated to cost, including a pump system and permitting: \$22,170 or approximately \$74/foot.
  - Estimate 1-8 hours of labor for a septic tank servicer to pump one septic tank system.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- \$18.86 (10<sup>th</sup>) x 135% loading x 1 hours = \$25.46
- \$37.22 (90<sup>th</sup>) x 200% loading x 8 hours = \$595.52
- RAC members provided the following estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.



- Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
- UA (plumbers and pipefitters):
  - \$57.92 wage
  - \$38.00 benefits
  - \$95.92 total per hour

RAC members provided additional information related to this amendment:

- \$80/hour for septic tanking pumping costs
- \$450 for two hours of septic servicing in metro area
- \$0.54/gallon for septic pumping costs; approximately \$1080 for two hours to service a 2,000 gallon tank.

*Amendment (12)(f) – Clarification of Existing Requirement(s)*

- Subsection (12)(f) proposes to add “ensure” and “cleaned” to the language to the existing requirement for sanitation.
  - No fiscal impact anticipated.

*Amendment (12)(h) – Clarification of Existing Requirement(s)*

- Subsection (12)(h) proposes to clarify that toilet rooms are a facility.
  - No fiscal impact anticipated.

*Amendment (12)(j)(B) – Substantive Change (potential fiscal impact anticipated)*

- Removing curtains and installing solid door on toilet compartments
  - HCS plastic laminate toilet compartment door (1" thick honeycomb panels, odor, mildew, and corrosion resistant) is estimated to cost approximately \$175.50 per unit ([Harbor City Supply](#))
  - Toilet partition with door (powder coated) is estimated to cost approximately \$225.00 per unit ([Sustainable Supply](#))
- Estimated labor time of 0.5-2 hours per unit to install solid door on toilet compartment

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$24.00
- \$97.85 (90<sup>th</sup>) x 200% loading x 2 hours = \$391.40

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$12.43
- \$35.72 (90<sup>th</sup>) x 200% loading x 2 hours = \$142.88

*Amendment (12)(k) – Clarification of Existing Requirement(s)*

- Subsection (12)(k) proposes to clarify that toilet rooms are a facility.
  - No fiscal impact anticipated.

**Proposed Rule Section 13 – Portable Toilets, Chemical Toilets, and Privies**

*Amendments (13)(b) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule language requires privies to be moved from 100 feet to 200 feet from living areas or facilities where food is prepped or served.
- Estimated 0.5-3 hours of labor time to spread one yard of fill dirt to fill in existing privy hole.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$16.31
- \$72.84 (90<sup>th</sup>) x 200% loading x 3 hours = \$437.04

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$9.57
- \$21.55 (90<sup>th</sup>) x 200% loading x 3 hours = \$129.30

- Estimated costs provided by [Portland Sand and Gravel](#) (Portland, Oregon), for fill dirt:
  - \$20 per yard
  - \$80 minimum delivery fee per trip
- Estimated costs provided by [Landscape Shoppe](#) (Salem, Oregon), for fill dirt:
  - \$38.00 per yard
  - \$40-\$185 minimum delivery fee per trip
- Estimated 1-4 hours of labor to move one existing privy to an adequate location.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.62
- \$72.84 (90<sup>th</sup>) x 200% loading x 4 hour = \$582.72

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 1 hour = \$19.14
- \$21.55 (90<sup>th</sup>) x 200% loading x 4 hour = \$172.40

*Amendments (13)(e) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule requires that handwashing facilities equipped with water, soap, and disposable paper towels are adjacent to portable toilet facilities are explicitly required in the portable toilets, chemical toilets, and privies.
- Estimates related to hand soap supplies
  - DIAL 7.5 oz. Foaming Hand Soap is estimated to cost approximately \$2.98 per unit ([Home Depot](#))
  - Softsoap 11.25-fl oz Fresh Citrus Antibacterial Hand Soap is estimated to cost approximately \$2.88 per unit ([Lowes](#))
- Estimates related to portable handwashing stations
  - Portable hot/cold handwashing stations with tank prices range from \$1729.90 (Ozark River Portable Sinks Premier Black - Portable Handwashing Station - Portable Sink For Washing Hands - Portable Sink With Hot And Cold Water With Water Tank) to \$2493.11 (Single-Basin Portable Sink Hand - Portable Handwashing Station-Steel Hand Sink with Hot and Cold Water with Sink Tank & Outdoor Hand Washing Station). ([Amazon](#))
  - Portable Sinks with Hot Water & Cold Water prices range from \$2017.95 (Premier Brite White Portable Hot Water Hand Washing Sink with Laminate Cabinet and Single Basin) to \$3009.95 (Elite LS1). ([Ozark River Manufacturing Co.](#))
  - One RAC member reported that portable handwashing stations can be purchased for \$1,399 per unit, and that they would need an additional 24 handwashing stations, which would cost approximately \$33,576.00.
- Estimates for paper towel rolls
  - HDX paper towel rolls (82 sheets) is estimated to cost approximately \$0.98 per unit ([Home Depot](#))
  - MOXIE ultra 6-count paper towel pack is estimated to cost approximately \$13.48 per unit ([Lowes](#))
- Estimates for garbage bins or disposal receptacles
  - Bins in sizes ranging from 5-gallon to 32-gallon prices range from \$5.00 to \$72.00 per unit. ([GRAINGER](#), [Home Depot](#), [Walmart](#))
- A RAC member provided the following information related to this amendment.
  - Although not required by the rule, operators may choose to install plumbed handwashing facilities.

- Add those estimated expenses indicated in other sections.
- Estimate 2-8 hours of labor for a plumber or similarly qualified person for fixture installation per unit. There may be additional “show up” fees that apply that are estimated to range in cost from approximately \$250-\$350.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- \$24.25 (10<sup>th</sup>) x 135% loading x 2 hours = \$65.48
- \$63.55 (90<sup>th</sup>) x 200% loading x 8 hours = \$1,016.80
- RAC members provided the following estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There’s usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.
  - Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
  - UA (plumbers and pipefitters):
    - \$57.92 wage
    - \$38.00 benefits
    - \$95.92 total per hour
- Plumbed sink fixtures
  - 22 in. D x 19 in. W Freestanding Stainless Steel Laundry/Utility Sink with Hot and Cold Faucet is estimated to cost approximately \$189.99 per unit ([Home Depot](#))
  - Free Standing Stainless-Steel Single Bowl, Commercial Restaurant Kitchen Sink Set w/Faucet & Drainboard, Prep & Utility Washing Hand Basin w/Workbench & Storage Shelves Indoor Outdoor (47 inch) is estimated to cost approximately \$279.99 per unit with free delivery. ([Amazon](#))
- RAC members reported a range of cost estimates to upgrade their septic system would be approximately \$8,000 to \$160,000. (Documents 2, 25, 29, 30, 34). The cost estimate of \$160,000 was for 4 septic systems. The estimate of \$8,000 was to replace two septic tanks with no additional work necessary to install the new systems. Drain field-related costs were estimated to be approximately \$5,000 -\$23,000. Another member provided an estimate that replacement costs for a septic tank could range from \$15,000 to \$20,000 for replacing only the tank, and range from \$75,000 to \$120,000 for a new

septic tank system depending on the ground the housing is built on. Installation for a drain field in Spring 2024 is estimated to cost, including a pump system and permitting: \$22,170 or approximately \$74/foot.

- Estimated 0.5-10 hour of administrative time annually to monitor site and identify when supplies or facilities need to be attended to or replaced.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31
- \$72.84 (90<sup>th</sup>) x 200% loading x 10 hour = \$1,456.80

### Plumbing Supply Estimates

- PVC Piping
  - Charlotte Pipe 1 in. x 10 ft. PVC Schedule 40 Tubing DWV Pipe is estimated to cost approximately \$8.48 per unit ([Home Depot](#))
  - IPEX 1-in x 10-ft CPVC Pipe is estimated to cost approximately \$12.96 per unit ([Lowe's](#))
- Copper pipe
  - Streamline 1/2-in x 10-ft Copper Type M Pipe is estimated to cost approximately \$21.92 per unit ([Lowe's](#))
  - Streamline 3/4 in. x 10 ft. Copper Type M Pipe is estimated to cost approximately \$35.54 per unit ([Home Depot](#))
- Galvanized pipe
  - The Plumber's Choice 3/4 in. x 36 in. Galvanized Steel Pipe is estimated to cost approximately \$18.15 per unit ([Home Depot](#))
  - Southland 3/4-in x 24-in Galvanized Pipe is estimated to cost approximately \$19.56 per unit ([Lowe's](#))
- Miscellaneous supplies:
  - Plumbshop 3/8 in. Flare x 1/2 in. FIP x 16 in. Braided Stainless Steel Faucet Supply Line is estimated to cost approximately \$2.05 per unit ([Home Depot](#))
  - RELIABILT 1/2-in FIP x 1/2-in Fip x 20-in Braided Stainless Steel Flexible Faucet Supply Line is estimated to cost approximately \$6.98 per unit ([Lowe's](#))
  - SIMPLE DRAIN 1.25 in. Rubber Threaded P-Trap Bathroom Single Sink Drain Kit is estimated to cost approximately \$12.88 per unit ([Home Depot](#))
  - Snappy Trap Universal Drain Kit for Bathroom Sinks - Black, Adapts to 1-1/4 in - 1-1/2 in sink drains and wall drain pipes is estimated to cost approximately \$15.78 per unit ([Lowe's](#))

A RAC member provided the following information related to this amendment:

- Add: As noted above, operators may choose to install plumbed handwashing facilities.
- Add those estimated expenses indicated in other sections.

### **Proposed Rule Section 14 – Sewage Disposal and Plumbing**

*The proposed rule does not include amendments to section 14.*

### **Proposed Rule Section 15 – Garbage and Refuse Disposal Outside of Buildings**

*The proposed rule does not include amendments to section 15.*

### **Proposed Rule Section 16 – Living Areas**

*Amendment (16)(a) – Clarification of Existing Requirement(s)*

- The phrase “structurally sound” was added to clarify the quality of all living areas. Such locations are already required under the current rule to be safe and in good repair structurally and stable on their foundations.
- No fiscal impact anticipated.
- A RAC member provided the following information related to this amendment.
  - Although not required by the rule, operators may choose to hire an engineer or similar professional. Estimated cost of civil engineer: \$2000 - \$15,000. Indeterminate cost to fulfill recommendations.

*Amendments (16)(c) – Substantive Change (potential fiscal impact anticipated)*

- A notification requirement was added to the heating requirements for living areas. Operators must notify occupants of the availability of portable heaters under certain conditions. The provision of the portable heater units is already a requirement under the current rule.
- Estimated 0.25-0.5 hours of administrative time to provide occupants with proper notification.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.25 hour = \$8.15 per activity
- \$72.84 (90<sup>th</sup>) x 200% loading x 0.5 hour = \$72.84 per activity



Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 0.25 hour = \$4.79
- \$21.55 (90<sup>th</sup>) x 200% loading x 0.5 hour = \$21.55

*Amendment (16)(d)(D) – Substantive Change (potential fiscal impact anticipated)*

- A requirement that gas burners not be used in living areas without adequate ventilation or range hoods was added to this provision. The current rule already requires all gas appliance and gas piping to comply with the manufacturer’s instructions and the Oregon building codes in effect when the appliances or piping were installed.
- Ventilation and range hoods for gas burners and gas piping:
  - Broan-NuTone ducted range hood (RL6300 Series 30-inch Ducted Under Cabinet Range Hood with Light in White) is estimated to cost approximately \$89 per unit ([Home Depot](#)).
  - Midea ducted range hood (30-inch 100-CFM Ducted Stainless Steel Under Cabinet Range Hoods Undercabinet Mount) is estimated to cost approximately \$99 per unit ([Lowes](#)).
  - Rigid duct materials vary in cost depending on the scale of the project. Masterflow round metal duct (3 inch x 2 feet Round Metal Duct Pipe) is estimated to cost approximately \$5.48 per unit. ([Home Depot](#))
  - Imperial duct pipe (4-in x 24-in 30-Gauge Galvanized Steel Round) is estimated to cost approximately \$6.58 per unit. ([Lowes](#))
- A RAC member provided the following estimated costs to hire HVAC specialist:
  - For the Columbia Gorge Area: HVAC -\$145.00/hour
- Estimate 1-4 hours of labor for an electrician or similarly qualified person for fixture installation per unit.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Electricians at the top of this document:

- \$24.13 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.58
- \$55.17 (90<sup>th</sup>) x 200% loading x 4 hour = \$441.36
- RAC members provided to the following estimated costs to hire an electrician:
  - For Marion County (mid-valley): Electricians: \$120 to \$165 an hour. Apprentice rate of \$65 to \$85.
  - A good median hourly rate to go with for an electrician is \$140. There’s usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Electrical - \$140.00 – 155.00/hr
  - IBEW (electricians)

- \$60.50 wage
- \$29.59 benefits
- \$87.34 total per hour

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 1 hour = \$24.87
- \$35.72 (90<sup>th</sup>) x 200% loading x 4 hour = \$285.76

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 1 hours = \$48.01
- \$97.85 (90<sup>th</sup>) x 200% loading x 4 hours = \$782.80

*Amendment (16)(f) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule removes the option for using cots or foam pads. The proposed rule would require mattresses be at least 4 inches thick and occupants be provided with clean mattress covers. When provided, bunk beds must provide a method for safe access to the upper bunk. The proposed rule would clarify that occupants cannot be forced to share a bed. For an adult couple in a relationship, the operator can provide one mattress given that it is at least full size.
- To the extent that they are impacted by cots being removed, an operator may be required to purchase and install bed frames.
  - Signature Home bed frame (Black Metal Frame for Twin/Full/Queen Mattresses with Center Support Rail System with Adjustable Platform Bed Frame) is estimated to cost approximately \$38.11 per unit. ([Home Depot](#))
  - Ruesleag twin bed frame (Twin Size Bed Frame Metal Platform Bed Frame Classic 14-Inch Mattress Foundation Storage Space Under The Bed, Heavy Duty Frame Bed) is estimated to cost approximately \$19.78 per unit. ([Amazon](#))
- Estimated 0.5-1 hour of labor to build or install each adequate bedframe and remove cots.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31
- \$72.84 (90<sup>th</sup>) x 200% loading x 1 hour = \$145.68

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$.57

- $\$21.55$  (90<sup>th</sup>) x 200% loading x 1 hours =  $\$43.10$
- Twin and full size mattress options that are at least 4 inches thick:
  - Furinno 5-inch full size mattress (Furinno Tidur Full Medium Firm Cooling Gel 5 In. Bed-in-a-Box Memory Foam Mattress) is estimated to cost approximately  $\$121.11$  per unit ([Home Depot](#))
  - DHP 6-inch twin size mattress (Dana 6 in. Plush Polyester Fill Tight Top Quilted Pink Twin Mattress) is estimated to cost approximately  $\$77.52$  per unit ([Home Depot](#))
  - Linenspa 5-inch full size mattress (Linenspa Essentials ActiveRelief 5-in Firm Full Memory Foam Mattress in a Box) is estimated to cost approximately  $\$175.21$  per unit ([Lowe's](#))
  - Linenspa 5-inch twin size mattress (Linenspa Essentials ActiveRelief 5-in Firm Full Memory Foam Mattress in a Box) is estimated to cost approximately  $\$134.00$  per unit ([Lowe's](#))
- Mattress covers
  - RayStar Twin Size Comfort Waterproof Mattress Protector Cover is estimated to cost approximately  $\$11.00$  per unit ([Home Depot](#))
  - RayStar Full Size Comfort Waterproof Mattress Protector Cover is estimated to cost approximately  $\$14.92$  per unit ([Home Depot](#))
  - Subrtex Microfiber 15-in D Polyester Encasement Mattress Cover with Bed Bug Protection is estimated to cost approximately  $\$16.45$  per unit ([Lowe's](#))
- Estimated 0.25-0.5 hour of labor time to clean one mattress cover (if not using disposable covers) before each new occupant use and before each season.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16$  (10<sup>th</sup>) x 135% loading x 0.25 hour =  $\$8.15$
- $\$72.84$  (90<sup>th</sup>) x 200% loading x 0.5 hour =  $\$72.84$

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- $\$14.18$  (10<sup>th</sup>) x 135% loading x 0.25 hours =  $\$4.79$
- $\$21.55$  (90<sup>th</sup>) x 200% loading x 0.5 hours =  $\$21.55$

- Upper bunk bed access
  - Quick Products (RV Bunk Ladder - 66 in., Silver) is estimated to cost approximately  $\$76.79$  per unit ([Home Depot](#))
  - If choosing to build access ladder with lumber, estimate cost of  $\$3.65$  (2'x4'x8' framing lumber), it is estimated that 6 boards per ladder. ([Home Depot](#))
  - If choosing to build access ladder with lumber, estimate cost of  $\$3.25$  (2'x4'x8' framing lumber), it is estimated that 6 boards per ladder. ([Lowe's](#))
- Estimated 0.5-1 hour of labor time to build or install each adequate access to upper bunk.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31
- \$72.84 (90<sup>th</sup>) x 200% loading x 1 hour = \$145.68

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$.57
- \$21.55 (90<sup>th</sup>) x 200% loading x 1 hours = \$43.10

*Amendment (16)(g) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule removes the option for fumigating mattresses, and otherwise specify that mattresses must be stored in fully enclosed cleanable covers. The current rule already requires that mattresses be stored in clean location.
- Handheld UV Mattress Cleaner with LED light & High Heating Tech, 500W Powerful Deep Mattress Vacuum, HEPA Filter for Bed, Mattress, is estimated to cost approximately \$129.99 per unit ([Amazon](#))
- HOOVER CleanSlate Pro Portable Corded Spot Cleaner, Black, is estimated to cost approximately \$124.00 per unit ([Home Depot](#))
- HOOVER 116 oz. Oxy Carpet Cleaner Solution for Everyday Use, Carpet, Upholstery, Car Interiors, Colored Stain Remover, is estimated to cost approximately \$31.98 per unit (Home Depot)
- BISSELL PRO MAX Clean + Protect Formula 48-fl oz Concentrated Steam Cleaner Chemical Solution, is estimated to cost approximately \$22.99 per unit ([Lowe's](#))
- Pratt Retail Specialties twin/full sized mattress bag (91 in. x 54 in. x 14 in. Twin and Full Mattress Bag) is estimated to cost approximately \$10.98 per unit. ([Home Depot](#))
- Project Source (Full Sized Mattress Bag) is estimated to cost approximately \$10.98 per unit. ([Lowe's](#))
- Estimated 0.25-0.5 hour of labor time to place one mattress in an adequate bag and location.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.25 hour = \$8.15
- \$72.84 (90<sup>th</sup>) x 200% loading x 0.5 hour = \$72.84

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 0.25 hours = \$4.79
- \$21.55 (90<sup>th</sup>) x 200% loading x 0.5 hours = \$21.55

*Amendment (16)(i) – Substantive Change (potential fiscal impact anticipated)*

- “Suitable storage facilities,” including wall cabinets and shelves for each occupant or family unit, is already a requirement under subsection (16)(f) of the current rule. This amendment specifies that such storage must be at least 21 cubic feet per occupant or family unit and require that a portion of this storage would need to be lockable and capable of securing small personal effects. Employers have multiple options including the use of closets, shelves, cabinets, bins, lockers, or other amenities.
- A RAC member provided the following information related to this amendment.
  - Although not required by the rule:
    - If modification is needed, operators may choose to implement these proposed regulations by building wood cabinets in the sleeping rooms or other living areas if applicable for the housing sites for each occupant.
    - Estimated cost of \$24.30 per sheet plywood, it is estimated that 1 -3 sheets could be needed. (use other plywood sheet language used in other sections.
- Estimated cost of \$3.65 (2’x4’x8’ framing lumber), it is estimated that 1 – 3 boards per stall needed. A RAC member provided the following information related to this amendment.
  - Operators may elect to reduce housing capacity if storage needs cannot be met under subsection (16)(i); estimate \$160-\$180 per square feet if the grower does not have capacity to give up space.
- 4-level plastic shelves (12 in. W x 48 in. H x 24 in. D 4 Shelves Resin Freestanding Cabinet Storage Unit System for Home or Garage in White) is estimated to cost approximately \$42.22 per unit ([Home Depot](#))
- HDX plastic storage tote (30 gallon with lid) is estimated to cost approximately \$12.98 per unit. ([Home Depot](#))
- Project Source small storage (5-gallon) is estimated to cost approximately \$7.98 per unit. ([Lowe's](#))
- Kyodoloed medium cast box (Small Safe with Key, 7.87"x 6.30"x 3.54" Black) is estimated to cost approximately \$13.99 per unit. ([Amazon](#))
- A 12-inch wide metal locker (approximately 5-6 feet tall) costs approximately \$141 to \$417 per unit. ([Lockers](#))
- A heavy-duty padlock with key costs approximately \$5 to \$47 per unit. ([Home Depot](#))
- Lockable storage cabinet prices range from \$279.30 (~ 28 ft<sup>3</sup> Ready-to-Assemble 24-Gauge Steel Freestanding Garage Cabinet in Black (36.6 in. W x 72 in. H x 18.3 in. D)) to \$ 365.38 (~ 26 ft<sup>3</sup> Combination storage cabinet 17.7"D x 35.4"W x 72"H Black Metal Locker Storage Home Office Garage). ([Home Depot](#))
- One RAC member reported the cost for a 21 cubic feet lockable storage closet to be approximately \$566.82 ([Grainger](#)). If one unit is needed per family unit, then the cost for this grower’s 316 family units would be approximately \$158,000.00. If one unit is needed per bed, then the cost for this grower’s 1,720 occupants would be approximately \$860,000.00. (Document 34)
- Estimated 0.5-8 hour of labor time to assemble, install, or build or install each adequate storage per occupant or family unit.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31
- \$72.84 (90<sup>th</sup>) x 200% loading x 8 hour = \$1,165.44

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$24.00
- \$97.85 (90<sup>th</sup>) x 200% loading x 8 hours = \$1,565.60

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$12.43
- \$35.72 (90<sup>th</sup>) x 200% loading x 8 hours = \$571.52

*Amendment (16)(j) – Clarification of Existing Requirement(s)*

- Subsection (16)(j) proposes to clarify that strikes the building of housing date.
  - No fiscal impact anticipated.

*Amendment (16)(k) – Clarification of Existing Requirement(s)*

- Subsection (16)(k) proposes to clarify that strikes “employee” and add “occupant”.
  - No fiscal impact anticipated.

*Amendment (16)(l) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule would require 50 square feet of floor space per occupant when double bunk beds are used. The current rule already requires 40 square feet of floor space per occupant when double bunk beds are used. To the extent that an employer is impacted by the increase in 10 square feet, they would have multiple options to consider to meet the new requirements including reducing the number of occupants in a given sleeping area, including among other things, purchasing additional mobile space such as RV or travel trailers, decreasing the volume of housing offered in impacted areas, and building new or expanding existing housing.
  - RV or travel trailer
    - Camping World, 2024 Coleman Lantern LT 17B 21’5” (sleeps 5), is estimated to cost approximately \$13,999 per unit.



- Camping World, 2025 Forest River Wolf Pup 16bhs-or 21'9" (sleeps 5) is estimated to cost approximately \$23,999 per unit.
  - Blue Compass RV, 2024 Forest River RV Aurora Light 16BHX 19'6" (sleeps 5) is estimated to cost approximately \$15,998 per unit.
  - Blue Compass RV, 2025 Grand Design Transcend One 151BH 20' (sleeps 5) is estimated to cost approximately \$24,248 per unit.
- Prefabricated homes
  - Amfor tiny home (464.5"D x 245.5"W x 97.5"H, 40ftx20ft Foldable House, Prefabricated House with Bathroom and Kitchen) is estimated to cost approximately \$27,700 per unit with free delivery. ([Amazon](#))
  - Hugh Hearts tiny home (240"D x 248"W x 99"H, Portable Prefabricated Tiny Home 20x20ft, Mobile Expandable Plastic Prefab House with Restroom) is estimated to cost approximately \$14,499 per unit with free delivery. ([Amazon](#))
  - Generic tiny home (232.28"D x 248"W x 99"H, Generic Portable Prefabricated Tiny Home 20ft, Mobile Expandable Plastic Prefab House, White, PNS-002) is estimated to cost approximately \$21,998 per unit with free delivery. ([Amazon](#))
  - Generic tiny home (240"D x 190"W x 98"H, Prefabricated 15ft x 20ft Expandable Tiny Houses, Modern Designed, Spacious, Waterproof) is estimated to cost approximately \$17,500 per unit with free delivery. ([Amazon](#))
- Building or expanding existing sleeping areas: mobile homes, bunk houses, single and multi-family dwellings. To the extent that an employer chooses to build new housing, Oregon OSHA anticipates that doing so will have an indeterminant fiscal impact based on the broad range of housing which may be chosen to be constructed. Therefore, Oregon OSHA is relying partly on RAC member feedback specific to the anticipated fiscal impact tied to new housing construction ([Documents 1-35](#))
  - One RAC member reported that the cost to build a new ALH facility for 150 occupants in 2017 cost approximately \$1.5 million to build, which included all construction costs, permitting, site prep, septic system, laundry machines, in-unit toilets and showers, and indoor cooking units (Document 34).
  - One RAC member reported that it cost approximately \$98,1112 in 2022, to construct a single-family unit mobile home, including site prep and plumbing (Document 26).
  - One RAC member reported that it cost approximately \$12,069 in 2023 for permit fees and electrical for new housing construction (Document 27).
  - RAC members reported a range of cost estimates to upgrade their septic system would be approximately \$8,000 to \$160,000. (Documents 2, 25, 29, 30, 34). The cost estimate of \$160,000 was for 4 septic systems. The estimate of \$8,000 was to replace two septic tanks with no additional work necessary to install the new systems. Drain field-related costs were estimated to be approximately \$5,000 - \$23,000. Another member provided an estimate that replacement costs for a septic tank could range from \$15,000 to \$20,000 for replacing only the tank, and range from \$75,000 to \$120,000 for a new septic tank system depending on the ground the housing is built on. Installation for a drain field in Spring 2024 is

estimated to cost, including a pump system and permitting: \$22,170 or approximately \$74/foot.

- A RAC member provided information specific to their impact related to this amendment:
  - Regarding basic construction costs construction materials, including framing, foundation, roofing, siding, interior and exterior doors, windows, insulation, drywall, siding, paint, flooring, electrical, plumbing fixtures, and light fixtures from two contractors in The Dalles:
    - Estimate \$160-180/ ft<sup>2</sup> for the most basic low-end construction
    - Estimate \$165-175/ ft<sup>2</sup> but it all depends on what's in it, bathrooms, kitchens etc.
    - Estimate \$170/ ft<sup>2</sup> as the average for low end construction, not including septic or drain field.
  - Using a 4-year gross income average (years 2020-2023), looking at this year's filled to capacity camp roster and that almost all of the cabins are 4 bed units, we learned the following:
    - \*85% of the seasonal harvesters are families (mostly of 4 people) and 15% groups of single men (mostly of 4).
    - For a small farm, to comply with subsection (16)(l) will remove 50 of 110 beds, a 45% drop in total capacity. % Drop in pickers = % drop in Gross Revenue.
    - Without the ability to build back those 50 workers, the "average cost to comply" with subsection (16)(l) is \$1,013,203.80/year.
  - If new construction can occur for those 50 workers lost to harvest all the crop, the new housing will come at an estimated cost of \$1,700,000 not including septic/drain field, a permanent loss of income on 1-2 producing acres, and a permanent property tax increase (partial loss of farm deferral). Calculation per year: 50 beds x 200 ft<sup>2</sup> per bed x \$170 ft<sup>2</sup> = \$1.7M. To account for sleeping, cooking, bathing and laundry total square footage per person is estimated at 200 ft<sup>2</sup>.
- Construction costs, including those for lumber, electrical, and plumbing systems are expected to vary widely between employers due to several factors. The scale and scope of a project significantly impact cost estimates, wherein larger projects may benefit from economies of scale, reducing price per-unit costs, while smaller or more complex projects may incur higher expenses due to specialized labor and materials. Material quality is another crucial factor; premium materials are typically more expensive than standard options. Additionally, as referenced previously, regional labor rates, local building codes, and site-specific conditions, such as accessibility and existing infrastructure, can further impact the range of cost estimates. Taken together, these and

other variables collectively contribute to the complexity of estimating the wide range of construction costs observed across different projects and employers.

### Lumber Supply Estimates

- Estimate cost of \$24.30 per sheet (4'x8'x15/32") of plywood, ([Home Depot](#))
- Estimate cost of \$22.87 per sheet (4'x8'x15/32") of plywood, ([Lowe's](#))
- Estimate cost of \$3.65 (2'x4'x8' framing lumber), ([Home Depot](#))
- Estimate cost of \$3.25 (2'x4'x8' framing lumber), ([Lowe's](#))

### Electrical Supply Estimates

- Extension cords
  - 6 ft. 12/3 SJTW 15 Amp 125-Volt 1875-Watt Lighted End Indoor/Outdoor Black Heavy-Duty Extension Cord (2-Pack) is estimated to cost approximately \$10.96 per unit ([Home Depot](#))
  - 50 ft. 12/3 SJTW Hi-Visibility Outdoor Heavy-Duty Extension Cord with Power Light Plug is estimated to cost approximately \$46.05 per unit ([Home Depot](#))
  - Woods 8-ft 16/3 3-Prong Black Outdoor SJTW Heavy Duty General Extension Cord to cost approximately \$8.36 per unit ([Lowe's](#))
  - Utilitech Outdoor 25-ft 12/3 3-Prong Yellow Outdoor SJTW Heavy Duty Lighted Extension Cord is estimated to cost approximately \$49.97 per unit ([Lowe's](#))
- Electrical wiring varies widely (e.g., length, gauge, max amperage, stranded or solid, etc.); therefore, depending on the specifics of the project, it is estimated that if electrical wiring is required supply costs could range from \$23 per roll for 15 feet of 12/2 electrical wire up to \$1340 per roll for 500 feet of 6/2 wire ([Home Depot](#)); \$59 per roll for Southwire 25-ft 12/2 Solid UF-B Wire W/G ([Lowe's](#)) or \$167 per roll Southwire 50-ft 6/2 Romex SIMpull Solid Indoor CU NM-B W/G ([Lowe's](#))
- RAC members reported a range of cost estimates to upgrade their electrical panels, estimating it would be approximately \$1,928.85 up to \$5,000 per panel (Documents 7, 27, 34)

### Plumbing Supply Estimates

- PVC Piping
  - Charlotte Pipe 1 in. x 10 ft. PVC Schedule 40 Tubing DWV Pipe is estimated to cost approximately \$8.48 per unit ([Home Depot](#))
  - IPEX 1-in x 10-ft CPVC Pipe is estimated to cost approximately \$12.96 per unit ([Lowe's](#))
- Copper pipe
  - Streamline 1/2-in x 10-ft Copper Type M Pipe is estimated to cost approximately \$21.92 per unit ([Lowe's](#))

- Streamline 3/4 in. x 10 ft. Copper Type M Pipe is estimated to cost approximately \$35.54 per unit ([Home Depot](#))
- Galvanized pipe
  - The Plumber's Choice 3/4 in. x 36 in. Galvanized Steel Pipe is estimated to cost approximately \$18.15 per unit ([Home Depot](#))
  - Southland 3/4-in x 24-in Galvanized Pipe is estimated to cost approximately \$19.56 per unit ([Lowe's](#))
- Miscellaneous supplies:
  - Plumbshop 3/8 in. Flare x 1/2 in. FIP x 16 in. Braided Stainless Steel Faucet Supply Line is estimated to cost approximately \$2.05 per unit ([Home Depot](#))
  - RELIABILIT 1/2-in FIP x 1/2-in Fip x 20-in Braided Stainless Steel Flexible Faucet Supply Line is estimated to cost approximately \$6.98 per unit ([Lowe's](#))
  - SIMPLE DRAIN 1.25 in. Rubber Threaded P-Trap Bathroom Single Sink Drain Kit is estimated to cost approximately \$12.88 per unit ([Home Depot](#))
  - Snappy Trap Universal Drain Kit for Bathroom Sinks - Black, Adapts to 1-1/4 in - 1-1/2 in sink drains and wall drain pipes is estimated to cost approximately \$15.78 per unit ([Lowe's](#))

*Amendments (16)(m), (16)(o) and (16)(p) – Clarification of Existing Requirement(s)*

- The proposed rule would clarify existing requirements for ceiling heights in living and sleeping areas, allow air conditioning systems to be used to substitute for openable window space so long as emergency egress is maintained, and pesticide products must be used according to the requirements of the label.
- No fiscal impact anticipated.

*Amendment (16)(n) – Clarification of Existing Requirement(s)*

- Subsection (16)(n) proposes to strike the effective date of the 7-foot ceiling date as it past the effective date and moved the existing ceiling height to a (m).
  - No fiscal impact anticipated.

**Proposed Rule Section 17 – Fire Protection**

*Amendment (17)(c) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule language would require a working carbon monoxide detector where workers sleep when the housing is occupied.
- Battery operated carbon monoxide detectors cost from \$21 to \$100 per unit. ([Lowe's](#))
- Plug in carbon monoxide detectors from \$30 to \$55 per unit. ([Lowe's](#))
- Hardwired carbon monoxide detectors cost from \$52 to \$133 per unit. ([Grainger](#))

- Sealed battery powered carbon monoxide detectors cost from \$88 to \$103 per unit. ([Grainger](#))
- Estimated 1-2 hours of time labor per unit to install a carbo monoxide alarm.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Electricians at the top of this document:

- \$24.13 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.58
- \$55.17 (90<sup>th</sup>) x 200% loading x 2 hour = \$220.68
- RAC members provided to the following estimated costs to hire an electrician:
  - For Marion County (mid-valley): Electricians: \$120 to \$165 an hour. Apprentice rate of \$65 to \$85.
  - A good median hourly rate to go with for an electrician is \$140. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Electrical - \$140.00 – 155.00/hr
  - IBEW (electricians)
    - \$60.50 wage
    - \$29.59 benefits
    - \$87.34 total per hour

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 1 hour = \$24.87
- \$35.72 (90<sup>th</sup>) x 200% loading x 2 hour = \$142.88
- Estimated 0.25-0.5 hour of administrative time annually per unit to monitor site and identify carbon monoxide detection units that may need to be replaced or batteries replaced.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.25 hour = \$8.15 annually
- \$72.84 (90<sup>th</sup>) x 200% loading x 0.5 hour = \$72.84 annually

## Proposed Rule Section 18 – Cooking and Eating Facilities and Equipment

Note: Section 18 of the proposed rule would introduce a number of substantive changes to cooking and facilities, dining halls, and common-use facilities, some of which may have different effective dates. Specifically, subsection (18)(a) of the proposed rule would introduce changes related to refrigerator temperature under (18)(a)(A), changes to cooking burner ratios under (18)(a)(B), and protected food storage under (18)(a)(D), that would be effective upon the first effective date if the rule is adopted, but only if cooking and eating facilities and equipment are already provided to occupants. To the extent that an ALH operator does not currently provide such facilities, there would be no fiscal impact anticipated until the provisions of subsection (18)(b) became effective. The operative clause of subsection (18)(a) of the proposed rule is “when provided.”

Subsection (18)(b) of the proposed rule would similarly introduce a number of substantive changes to cooking and facilities, dining halls, and common-use facilities, but remove the operative clause of “when provided” and replaced with a new operative clause, “must be provided.” The operative clause of subsection (18)(b) would therefore require the provision of cooking or food preparation facilities or equipment by the specified effective date. Therefore, to the extent that ALH operators are not currently providing such facilities and equipment, they would be required to do so beginning on the effective date specified by subsection (18)(b). The FIS information for amendments (18)(a) and (18)(b) takes into account this potential fiscal impact on ALH operators and employers.

### *Amendment (18)(a) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule would strike “common use” from the title of section 18, require cooking facilities or equipment, ensure that there are adequate number of refrigerators and that temperatures are at or below 40 degrees Fahrenheit, require that burners be provided in a ratio of two burners for every 8 persons (2:8) or part thereof (currently 2:10), and clarify that food storage shelves must be protected and cleanable, when such equipment is provided.
- Subsection (18)(a)(A) – Refrigerator temperature change to 40 degrees (when provided)
  - Refrigerators (20.0 cu ft) may be purchased with prices ranging from \$649 (LG 20.2-cu ft Top-Freezer Refrigerator (White) ENERGY STAR) to \$739.00 (Whirlpool 20.5-cu ft Top-Freezer Refrigerator (Black) ([Lowes](#)))
  - Refrigerators (20.0 cu ft) may be purchased with prices ranging from \$649 (30 in. W 20 cu. ft. Top Freezer Refrigerator w/ Multi-Air Flow and Reversible Door in White, ENERGY STAR) to \$758.00 (Frigidaire 30 in. 20.4 cu. ft. Top Freezer Refrigerator in Stainless Steel). ([Home Depot](#))



- Subsection (18)(a)(B) – Cooking equipment and burners ratio must be 2:8 (when provided)
  - Electric or gas cooktops prices range from \$33.14 (2-Burner 1,500-Watt 6.5 in. Hot Plate) to \$172.33 (12 in. Gas Cooktop in Stainless Steel 2 Sealed Burners Gas Stove 4000 BTUs Simmer Burner). ([Home Depot](#))
  - Electric or gas cooktops prices range from \$95.99 (Courant 24-in Stainless Steel Smooth Surface 2 Burners Infrared Hot Plate) to \$98.10 (XKITCHEN 24-in 2 Burners Coil Black Electric Cooktop with Downdraft Exhaust). ([Lowe's](#))
  - Electric or gas cooktops prices range from \$33.07 (MegaChef Indoor and Outdoor Portable Electric Stove Portable Dual Vitro-Ceramic Infrared Cooktop) to \$89.98 (Hot Plate, Cusimax Dual Infrared Burner, Electric Ceramic Glass Stove, Adjustable Temperature Control, Stainless Steel, Compatible of all Cookware, Easy Clean for Home, Dorm, Office). ([Amazon](#))
- Subsection (18)(a)(D) – Protected food storage must be included if such storage is currently provided – Subsection (18)(a)(D)
  - Kitchen pantries may be purchased prices range from \$132.28 (10 cubic feet - Kitchen Pantry Cabinet 60 in. Tall Food Pantry Storage Cabinet with 3 Shelves(2 Adjustable) Freestanding Storage Cabinet) to \$266.13 (15.37 cubic feet - Monti White Food Pantry with Drawer Kitchen Storage Cabinet). ([Home Depot](#))
  - Kitchen pantries may be purchased from Lowe's and prices range from \$199.00 (25.03 cubic feet - VEIKOUS Traditional White Pantry with 6 Doors, 2 Drawers, and Microwave Stand) to \$249.99 (25.28 cubic feet - VEIKOUS Contemporary/Modern Gray Pantry). ([Lowe's](#))
  - A variety of plastic totes may be purchased and prices range from \$6.99 (STERILITE 18 GALLON TOTE, MARINE BLUE) to \$9.99 (STERILITE 16 QUART/15 LITER STACKING DRAWER) per unit. ([BiMart](#))
  - A variety of plastic totes may be purchased and prices range from \$51.99 (\$8.67 per unit - IRIS USA 32 Qt Stackable Plastic Storage Bins with Lids, 6 Pack - BPA-Free, Made in USA - See-Through Organizing Solution, Latches, Durable Nestable Containers, Secure Pull Handle – Clear) to \$84.97 (\$21.24 per unit - RIS USA 91 Quart Stackable Plastic Storage Bins with Lids and Latching Buckles, 4 Pack, Containers with Lids, Durable Nestable Closet, Garage, Totes, Tubs Boxes Organizing, Pearl) ([Amazon](#))
  - A RAC member provided the following information about this amendment:
    - Operators may choose to build storage structures.
    - Estimated cost of \$24.30 per sheet of plywood, it is estimated that 4 – 6 sheets could be needed. (use other plywood sheet language used in other sections)
    - Estimated cost of \$3.65 (2'x4'x8' framing lumber), it is estimated that 4 to 6 boards per stall needed.
    - Estimated cost of hardware: \$5 per unit – see above.

- Estimate 0.5-24 hours of labor time to move or install new refrigerator, burner or cooking equipment, and protected food storage.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$12.43
- \$35.72 (90<sup>th</sup>) x 200% loading x 24 hour = \$1,714.56

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hours = \$16.31
- \$72.84 (90<sup>th</sup>) x 200% loading x 8 hours = \$3,496

*Amendment (18)(b) – Substantive Change (potential fiscal impact anticipated)*

- The proposed rule would strike “common use” from subsection (18)(b) and require the provision of certain cooking or food preparation facilities or equipment be provided to occupants. Each provision of the proposed changes to subsection (18)(b) are discussed below.
- Subsection (18)(b)(A) – Refrigerator must be able to maintain 40 degrees or lower
  - Refrigerators (20.0 cu ft) may be purchased with prices ranging from \$649 (LG 20.2-cu ft Top-Freezer Refrigerator (White) ENERGY STAR) to \$739.00 (Whirlpool 20.5-cu ft Top-Freezer Refrigerator (Black) ([Lowes](#)))
  - Refrigerators (20.0 cu ft) may be purchased with prices ranging from \$649 (30 in. W 20 cu. ft. Top Freezer Refrigerator w/ Multi-Air Flow and Reversible Door in White, ENERGY STAR) to \$758.00 (Frigidaire 30 in. 20.4 cu. ft. Top Freezer Refrigerator in Stainless Steel). ([Home Depot](#))
- Subsection (18)(b)(B) – Burner ratios must be 2:8
  - Electric or gas cooktops prices range from \$33.14 (2-Burner 1,500-Watt 6.5 in. Hot Plate) to \$172.33 (12 in. Gas Cooktop in Stainless Steel 2 Sealed Burners Gas Stove 4000 BTUs Simmer Burner). ([Home Depot](#))
  - Electric or gas cooktops prices range from \$95.99 (Courant 24-in Stainless Steel Smooth Surface 2 Burners Infrared Hot Plate) to \$98.10 (XKITCHEN 24-in 2 Burners Coil Black Electric Cooktop with Downdraft Exhaust). ([Lowes](#))
  - Electric or gas cooktops prices range from \$33.07 (MegaChef Indoor and Outdoor Portable Electric Stove Portable Dual Vitro-Ceramic Infrared Cooktop) to \$89.98 (Hot Plate, Cusimax Dual Infrared Burner, Electric Ceramic Glass Stove, Adjustable Temperature Control, Stainless Steel, Compatible of all Cookware, Easy Clean for Home, Dorm, Office). ([Amazon](#))
- Subsection (18)(b)(C) – Liquid petroleum gas (LPG) tanks cannot be used inside.
  - Estimated 1-4 hours of labor to move LPG tanks outside or there appropriate location.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.62
- \$72.84 (90<sup>th</sup>) x 200% loading x 4 hour = \$582.72

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 1 hour = \$19.14
- \$21.55 (90<sup>th</sup>) x 200% loading x 4 hour = \$172.40

- Subsection (18)(b)(D) – Food preparation areas and storage, including protected food storage
  - Kitchen pantries may be purchased prices range from \$132.28 (10 cubic feet - Kitchen Pantry Cabinet 60 in. Tall Food Pantry Storage Cabinet with 3 Shelves(2 Adjustable) Freestanding Storage Cabinet) to \$266.13 (15.37 cubic feet - Monti White Food Pantry with Drawer Kitchen Storage Cabinet). ([Home Depot](#))
  - Kitchen pantries may be purchased from Lowes and prices range from \$199.00 (25.03 cubic feet - VEIKOUS Traditional White Pantry with 6 Doors, 2 Drawers, and Microwave Stand) to \$249.99 (25.28 cubic feet - VEIKOUS Contemporary/Modern Gray Pantry). ([Lowes](#))
  - A variety of plastic totes may be purchased and prices range from \$6.99 (STERILITE 18 GALLON TOTE, MARINE BLUE) to \$9.99 (STERILITE 16 QUART/15 LITER STACKING DRAWER) per unit. ([BiMart](#))
  - A variety of plastic totes may be purchased and prices range from \$51.99 (\$8.67 per unit - IRIS USA 32 Qt Stackable Plastic Storage Bins with Lids, 6 Pack - BPA-Free, Made in USA - See-Through Organizing Solution, Latches, Durable Nestable Containers, Secure Pull Handle – Clear) to \$84.97 (\$21.24 per unit - RIS USA 91 Quart Stackable Plastic Storage Bins with Lids and Latching Buckles, 4 Pack, Containers with Lids, Durable Nestable Closet, Garage, Totes, Tubs Boxes Organizing, Pearl) ([Amazon](#))
  - A RAC member provided the following information on this amendment.
    - Operators may choose to build food preparation areas adjacent to water source or the sinks
    - Estimated cost of \$24.30 per sheet plywood, it is estimated that 4 – 6 sheets could be needed. (use other plywood sheet language used in other sections)
    - Estimated cost of \$3.65 (2'x4'x8' framing lumber), it is estimated that 4 to 6 boards per toilet stall needed.
    - Estimated cost of hardware: \$5 per unit. See above.
  - Estimate 1-8 hours of labor time to install new storage amenities or modify existing storage to be protected per unit.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- \$24.25 (10<sup>th</sup>) x 135% loading x 1 hours = \$32.73
- \$63.55 (90<sup>th</sup>) x 200% loading x 8 hours = \$1,016.80

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 1 hours = \$48.01
- \$97.85 (90<sup>th</sup>) x 200% loading x 8 hours = \$1,565.60

- Subsection (18)(b)(E) – Fiscal for labor and materials, tables and chairs

- Dinette sets with four chairs may purchased with prices ranging from \$154.00 (Winado Silver Contemporary/Modern Dining Room Set with Rectangular Table) to \$214.00 (Sumyeg Rustic Brown Contemporary/Modern Dining Room Set with Rectangular Table). ([Lowes](#))
- VECELO 3-Piece Dining Room set (63 in. Extendable Dining Table with Benches, Dinette/Dining Table and Chairs Set for 4/6/2 Brown) is estimated to cost approximately \$167.92 per unit. ([Home Depot](#))
- Estimated 1-4 hours of labor to set up appropriate tables and chairs at facility.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 1 hour = \$32.62
- \$72.84 (90<sup>th</sup>) x 200% loading x 4 hour = \$582.72

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$14.18 (10<sup>th</sup>) x 135% loading x 1 hour = \$19.14
- \$21.55 (90<sup>th</sup>) x 200% loading x 4 hour = \$172.40

- Subsection (18)(b)(F) – Plumbed sinks must be installed in food preparation areas or within a reasonable distance adjacent to such areas.

- Plumbed sink
  - 22 in. D x 19 in. W Freestanding Stainless Steel Laundry/Utility Sink with Hot and Cold Faucet is estimated to cost approximately \$189.99 per unit ([Home Depot](#))
  - Free Standing Stainless-Steel Single Bowl, Commercial Restaurant Kitchen Sink Set w/Faucet & Drainboard, Prep & Utility Washing Hand Basin w/Workbench & Storage Shelves Indoor Outdoor (47 inch) is estimated to cost approximately \$279.99 per unit with free delivery. ([Amazon](#))

- Plumbing materials – to the extent that the employer must have new plumbing installed, the costs will vary depending on local permitting requirements and the scale of the installation. To that end, Oregon OSHA estimated the cost of basic materials and plumber labor time.
  - 3/4 in. x 10 ft. PVC Schedule 40 Pressure Plain-End Pipe is estimated to cost approximately \$6.29 per unit ([Home Depot](#))
  - Charlotte Pipe 1-in x 10-ft 200 Psi SDR 21 PVC Pipe is estimated to cost approximately \$4.98 per unit ([Lowe's](#))
- One RAC member provided the following information related to this amendment.
  - Although not required by the rule, operators may need to install concrete or other flooring when installing plumbed sinks. Use costs indicated in other sections
- RAC members reported a range of cost estimates to upgrade their septic system would be approximately \$8,000 to \$160,000. (Documents 2, 25, 29, 30, 34). The cost estimate of \$160,000 was for 4 septic systems. The estimate of \$8,000 was to replace two septic tanks with no additional work necessary to install the new systems. Drain field-related costs were estimated to be approximately \$5,000 - \$23,000. Another member provided an estimate that replacement costs for a septic tank could range from \$15,000 to \$20,000 for replacing only the tank, and range from \$75,000 to \$120,000 for a new septic tank system depending on the ground the housing is built on. Installation for a drain field in Spring 2024 is estimated to cost, including a pump system and permitting: \$22,170 or approximately \$74/foot.
- Estimate 1-8 hours of labor time to install new plumbed sink in or near food preparation areas per unit.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- \$24.25 (10<sup>th</sup>) x 135% loading x 1 hours = \$32.73
- \$63.55 (90<sup>th</sup>) x 200% loading x 8 hours = \$1,016.80

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 1 hours = \$48.01
- \$97.85 (90<sup>th</sup>) x 200% loading x 8 hours = \$1,565.60

- Estimate 1-8 hours of labor for a septic tank servicer to pump one septic tank system.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Plumbers, Pipefitters, and Steamfitters found at the top of this document:

- $\$18.86 (10^{\text{th}}) \times 135\% \text{ loading} \times 1 \text{ hours} = \$25.46$
- $\$37.22 (90^{\text{th}}) \times 200\% \text{ loading} \times 8 \text{ hours} = \$595.52$
- RAC members provided the following estimated costs to hire a plumber:
  - For Marion County (mid-valley): Plumbers: \$130 to \$200 an hour. Apprentice rate \$75 to \$95.
  - A good median hourly rate to go with for a plumber \$150. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Plumbing -\$145.00/hour.
  - A member estimated the cost to higher a plumber at \$75/hour.
  - Other members provided that cost estimates may range from \$65/hour (apprentice), \$102/hour (journeyman), up to approximately \$145/hour for a plumber.
  - UA (plumbers and pipefitters):
    - \$57.92 wage
    - \$38.00 benefits
    - \$95.92 total per hour

RAC members provided additional information related to this amendment:

- \$80/hour for septic tanking pumping costs
- \$450 for two hours of septic servicing in metro area
- \$0.54/gallon for septic pumping costs; approximately \$1080 for two hours to service a 2,000 gallon tank.
- Subsection (18)(b)(G) – Refrigerators and cooking equipment must be in working condition.
  - Estimate 0.25-3 hours of administrative labor time to assess and maintain refrigerators and cooking equipment unit(s) each year.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- $\$24.16 (10^{\text{th}}) \times 135\% \text{ loading} \times 0.25 \text{ hours} = \$8.15$
- $\$72.84 (90^{\text{th}}) \times 200\% \text{ loading} \times 3 \text{ hours} = \$437.04$

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- $\$18.42 (10^{\text{th}}) \times 135\% \text{ loading} \times 0.25 \text{ hours} = \$4.79$
- $\$35.72 (90^{\text{th}}) \times 200\% \text{ loading} \times 3 \text{ hours} = \$129.30$



- Subsection (18)(b)(H) - Fiscal for labor and cleaning materials, clean facilities before each occupancy
  - Cleaning supplies
    - ZEP 1 Gallon Antibacterial Disinfectant Cleaner is estimated to cost approximately \$10.98 per unit. ([Home Depot](#))
    - Lysol 32 oz. Citrus Hydrogen Peroxide Power and Free Multi-Cleaner Spray is estimated to cost approximately \$6.38 per unit. ([Home Depot](#))
    - Clorox 75-Count Fresh Disinfectant Wipes All-Purpose Cleaner is estimated to cost approximately \$7.28 per unit. ([Lowe's](#))
    - Clorox 32-fl oz Crisp Lemon Disinfectant Liquid All-Purpose Cleaner Spray is estimated to cost approximately \$5.58 per unit. ([Lowe's](#))
  - Estimate 0.25-3 hours of administrative labor time to maintain food preparation areas, perform maintenance tasks, and clean unit(s) each year.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.25 hours = \$8.15
- \$72.84 (90<sup>th</sup>) x 200% loading x 3 hours = \$437.04

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.25 hours = \$4.79
- \$35.72 (90<sup>th</sup>) X 200% loading x 3 hours = \$129.30

- Subsection (18)(b)(I) – No fiscal impact anticipated – this clarifies an existing requirement
- Subsection (18)(b)(J) – No fiscal impact anticipated – this clarifies an existing requirement for disease reporting which is already accounted for below in section 20 of the proposed rule FIS.
- Subsection (18)(b)(K) – Fiscal for labor and heating units, electrical costs
  - Electric heaters may be purchased from Lowe's and prices range from \$73.40 (Optimus Up to 1500-Watt Fan Compact Personal Indoor Electric Space Heater with Thermostat) to \$124.01 (Dr. Infrared Heater Up to 1500-Watt Infrared Quartz Cabinet Indoor Electric Space Heater with Thermostat and Remote Included). ([Lowe's](#))
  - Electric heaters may be purchased from Home Depot and prices range from \$54.17 (10 in 1500-Watt Retro TV Look Ceramic PTC Heater) to \$126.84 (LifeSmart LifePro 6 Element 1500W Portable Infrared Quartz Mica Space Heater). ([Home Depot](#))
  - Estimate 0.5-8 hours of labor for an electrician or similarly qualified person to hook up and install one heating unit or similar equipment.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Electricians at the top of this document:

- \$24.13 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.29
- \$55.17 (90<sup>th</sup>) x 200% loading x 8 hour = \$882.72
- RAC members provided to the following estimated costs to hire an electrician:
  - For Marion County (mid-valley): Electricians: \$120 to \$165 an hour. Apprentices rate of \$65 to \$85.
  - A good median hourly rate to go with for an electrician is \$140. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Electrical - \$140.00 – 155.00/hr
  - IBEW (electricians)
    - \$60.50 wage
    - \$29.59 benefits
    - \$87.34 total per hour

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$12.43
- \$35.72 (90<sup>th</sup>) x 200% loading x 8 hour = \$571.52
- Subsection (18)(b)(L) – Fiscal for labor and construction materials to build kitchen enclosures or move equipment indoors
  - Building enclosed cooking area and screen mesh
    - Estimate cost of \$24.30 per sheet (4'x8'x15/32") of plywood, it is estimated that 10-20 sheets could be needed. ([Home Depot](#))
    - Estimate cost of \$22.87 per sheet (4'x8'x15/32") of plywood, it is estimated that 10-20 sheets could be needed. ([Lowe's](#))
    - Estimate cost of \$3.65 (2'x4'x8' framing lumber), it is estimated that 10-50 boards per enclosure. ([Home Depot](#))
    - Estimate cost of \$3.25 (2'x4'x8' framing lumber), it is estimated that 10-50 boards per enclosure. ([Lowe's](#))
  - Screened gazebo kits
    - 8 ft. x 16 ft. Gray Florence Add-A-Room Solarium is estimated to cost approximately \$3,956.63 per unit with free delivery. ([Home Depot](#))
    - Gazebo Penguin 10.16-ft x 15.83-ft Florence add-A-room Rectangle Sand Metal Polycarbonate Roof Gazebo with Screen Included is estimated to cost approximately \$4,124.05 per unit with free delivery. ([Lowe's](#))
  - Kits to screen in existing outdoor structures can be purchased for approximately \$1,538. ([Screen Porch Living](#))
  - Screened mesh materials

- Phifer 3-ft x 7-ft Charcoal Fiberglass Screen Mesh is estimated to cost approximately \$8.48 per unit ([Lowes](#))
- 36 in. x 84 in. Charcoal Fiberglass Extra Strength Screen Roll for Windows and Door is estimated to cost approximately \$12.48 per unit ([Home Depot](#))
- A RAC member provided the following estimated costs to hire HVAC specialist:
  - For the Columbia Gorge Area: HVAC -\$145.00/hour
- Estimate 4-24 hours of labor time to move cooking materials indoors or install or construct each adequate enclosure and screens where necessary per unit.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Managers at the top of this document:

- \$35.56 (10<sup>th</sup>) x 135% loading x 4 hours = \$192.02
- \$97.85 (90<sup>th</sup>) x 200% loading x 24 hours = \$4,696.80

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 4 hours = \$99.47
- \$35.72 (90<sup>th</sup>) x 200% loading x 24 hours = \$1,714.56

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 4 hour = \$130.46
- \$72.84 (90<sup>th</sup>) x 200% loading x 24 hour = \$3,496.32 Subsection (18)(b)(M) – Fiscal for labor to review FDA code requirements, and install appropriate facilities or systems.
  - Estimated 0.5-3 hours of administrative time to review the FDA and implement requirements.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31 annually
- \$72.84 (90<sup>th</sup>) x 200% loading x 3 hour = \$437.04 annually

**Note:** The proposed rule would remove section 19 of the current rule, except for the requirement for dining halls to comply with FDA Food Code Requirements (incorporated into section 18 of the proposed rule). The proposed rule would remove section 20 of the current rule. The removal of sections 19 and 20 from the current rule would change the rule numbering for provisions that come after section 18 of the proposed rule. Please review the proposed rule closely.

## **Proposed Rule Section 19 – First Aid**

The proposed rule does not include amendments to section 19.

## **Proposed Rule Section 20 – Disease Reporting**

*Amendment (20) – Substantive Change (potential fiscal impact anticipated)*

The proposed rule would update the language related to Oregon Health Authority (OHA) disease reporting requirements to reflect OHA's current administrative rules: OAR 333-018-0000 and OAR 333-018-0015. For ease of communication, the provisions of these two OHA OARs would be repackaged into a mandatory appendix at the end of the rule – Appendix A.

- Estimated 0.5-1 hours of administrative time to review the updated OHA OAR disease reporting requirements in Appendix A of the proposed rule.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.31 annually
- \$72.84 (90<sup>th</sup>) x 200% loading x 1 hour = \$145.68 annually

## **Proposed Rule Section 21 – Access to ORS and OAR**

The proposed rule does not include amendments to section 21.

## **Proposed Rule Section 22 – Closure and Alternative Housing**

The proposed rule does not include amendments to section 22.

## **Proposed Rule Section 23 – Heat Illness Prevention in Labor Housing**

*Amendments (23)(c) and (23)(d) – Substantive Change (potential fiscal impact anticipated)*

The proposed rule language would require that all sleeping rooms be able to be maintained at 78 degrees Fahrenheit or less whenever the heat index outside is between 80 and 94 degrees Fahrenheit; and that sleeping rooms be able to be maintained at least 15 degrees Fahrenheit less than the outside temperature whenever the outdoor heat index is 95 degrees Fahrenheit or above.

Indoor cooling units (window or in-wall AC units, and portable evaporative coolers) can be obtained through a variety of sources including Amazon, Lowes, Home Depot, Grainger, and Sylvane. The cost varies based on style (window, portable, through the wall), capacity, and features (for example, WIFI capability). To the extent that an employer relies upon equipment that uses electricity, Oregon OSHA anticipates that the use of cooling devices will have an indeterminant annual increase to an employer's electrical costs. In some instances the potential magnitude of additional costs can't be quantified at this time.

One RAC member provided information related to these amendments.

- Although not required by the rule:
  - In addition to insulation, operators may choose to add dry wall. Operators may need to upgrade the electrical system to keep units adequately cool.
  - In addition to interior insulation where not possible, some operators may choose to do clad wrapping of the exterior of the building or siding for added insulation to control the temperatures inside.
  - Estimated Cost: Clad wrapping will most likely require an outside contractor per hour and the materials in addition to what is interior insulation. The outside clad wrapping in some instances may prove more economical because there would not be a need to open the interior walls.
  - Additionally, insulation could be achieved in some instances with foam blown into the interior walls as they are. Add: Blow Foam Insulation cost.
  - Estimated cost: \$17.88/dry wall sheet, indeterminate amount needed based on the project. <https://www.lowes.com/pd/ToughRock-Common-1-2-in-x-4-ft-x-8-ft-Actual-0-49-in-x-3-99-ft-x-7-99-ft-Drywall-Panel/1000363095>.

### Electrical Supply Estimates

- Extension cords
  - 6 ft. 12/3 SJTW 15 Amp 125-Volt 1875-Watt Lighted End Indoor/Outdoor Black Heavy-Duty Extension Cord (2-Pack) is estimated to cost approximately \$10.96 per unit ([Home Depot](#))
  - 50 ft. 12/3 SJTW Hi-Visibility Outdoor Heavy-Duty Extension Cord with Power Light Plug is estimated to cost approximately \$46.05 per unit ([Home Depot](#))
  - Woods 8-ft 16/3 3-Prong Black Outdoor SJTW Heavy Duty General Extension Cord to cost approximately \$8.36 per unit ([Lowes](#))
  - Utilitech Outdoor 25-ft 12/3 3-Prong Yellow Outdoor SJTW Heavy Duty Lighted Extension Cord is estimated to cost approximately \$49.97 per unit ([Lowes](#))
- Electrical wiring varies widely (e.g., length, gauge, max amperage, stranded or solid, etc.); therefore, depending on the specifics of the project, it is estimated that if electrical wiring is required supply costs could range from \$23 per roll for 15 feet of 12/2 electrical wire up to \$1340 per roll for 500 feet of 6/2 wire ([Home Depot](#)); \$59 per roll for

Southwire 25-ft 12/2 Solid UF-B Wire W/G ([Lowes](#)) or \$167 per roll Southwire 50-ft 6/2 Romex SIMpull Solid Indoor CU NM-B W/G ([Lowes](#))

- Window A/C units
  - LG Window Air Conditioner (10,000 BtuH/450 sq ft coverage), 115V AC, 5-15P is estimated to cost approximately \$547.50 per unit ([GRAINGER](#))
  - Residential window AC units may be purchased ranging from \$119 (5,000 BTUs/150 sq ft) to \$449 (12,000BTUs/550 sq feet). ([Amazon](#))
  - Residential window AC units may be purchased ranging from \$169 (5,000 BTUs/150 sq ft) to \$1,070 (18,000 BTUs/1050 sq ft). ([Lowes](#))
  - Residential window AC units may be purchased ranging from \$160 (5,000 BTUs/150 sq ft) to \$680 (24,500 BTUs/1550 sq ft). ([Home Depot](#))
- Through the wall A/C units
  - Residential Grade through the wall AC units capable of cooling between 300 and 700 sq. ft cost an estimated \$600 - \$2,700 per unit. ([GRAINGER](#))
  - 8,000 BTU 115-Volt Through-the-Wall Air Conditioner Cools 350 Sq. Ft is estimated to cost approximately \$459.00 per unit ([Home Depot](#))
  - 14,000/13,600 BTU 230/208 Volts Electronic Controlled Through The Wall Air Conditioner Cools 700 Sq. Ft. is estimated to cost approximately \$548.67 per unit ([Home Depot](#))
  - Keystone 350-sq ft Window Air Conditioner with Heater with Remote (115-Volt, 8000-BTU) is estimated to cost approximately \$389.99 per unit ([Lowes](#))
  - Bevoi 12000-BTU-BTU 550-sq ft 115-Volt White Through-the-wall Air Conditioner is estimated to cost approximately \$567.63 per unit ([Lowes](#))
- Evaporative coolers
  - Portable evaporative coolers capable of cooling between 350 and 6,500 sq. ft. cost between \$143.00 and \$6,254 per unit. ([GRAINGER](#))
  - Portable evaporative coolers may be purchased from [Lowes](#) and range from \$149 (sq ft unknown) to \$448 (1200 sq ft).
  - 500 CFM 4-Speed Portable Evaporative Cooler for 350 sq. ft. is estimated to cost approximately \$459.00 per unit ([Home Depot](#))
- Insulation is not required by the rule, but some employers may choose to add insulation to improve temperature control in certain buildings and areas.
  - R-Tech 1 in. x 48 in. x 8 ft. r-3.85 insulating sheathing is estimated to cost approximately \$15.78 per unit ([Home Depot](#))
  - 1-in x 4-ft x 8-ft Expanded Polystyrene Board Insulation is estimated to cost approximately \$15.78 per unit ([Lowes](#))
- A RAC member provided the following estimated costs to hire HVAC specialist:
  - For the Columbia Gorge Area: HVAC -\$145.00/hour

65



- Estimate 0.25-3 hours of administrative labor time to maintain conditioning unit(s) each year.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmers, Ranchers, and Other Agricultural managers at the top of this document:

- \$24.16 (10<sup>th</sup>) x 135% loading x 0.25 hours = \$8.15
- \$72.84 (90<sup>th</sup>) x 200% loading x 3 hours = \$437.04

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Farmworkers and Laborers, Crop, Nursery, and Greenhouse workers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.25 hours = \$4.79
- \$35.72 (90<sup>th</sup>) X 200% loading x 3 hours = \$129.30

- RAC members reported a range of cost estimates to upgrade their electrical panels, estimating it would be approximately \$1,928.85 up to \$5,000 per panel (Documents 7, 27, 34)

Estimate 0.5-8 hours of labor for an electrician or similarly qualified person to hook up and install one air conditioning unit or other cooling equipment.

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Electricians at the top of this document:

- \$24.13 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$16.29
- \$55.17 (90<sup>th</sup>) x 200% loading x 8 hour = \$882.72

- RAC members provided to the following estimated costs to hire an electrician:
  - For Marion County (mid-valley): Electricians: \$120 to \$165 an hour. Apprentice rate of \$65 to \$85.
  - A good median hourly rate to go with for an electrician is \$140. There's usually a show-up fee of \$250. Some charge a show up fee (\$200-\$250) and others require an up-front payment of a two-hour minimum.
  - For the Columbia Gorge Area: Electrical - \$140.00 – 155.00/hr
  - IBEW (electricians)
    - \$60.50 wage
    - \$29.59 benefits
    - \$87.34 total per hour

Using the 10<sup>th</sup> and 90<sup>th</sup> percentile hourly wage information for Construction Laborers at the top of this document:

- \$18.42 (10<sup>th</sup>) x 135% loading x 0.5 hour = \$12.43
- \$35.72 (90<sup>th</sup>) x 200% loading x 8 hour = \$571.52