Department of Community Services Land Use and Transportation Planning Program http://www.multco.us/landuse



1600 SE 190th Avenue, Portland Oregon 97233-5910 • PH. (503) 988-3043 • Fax (503) 988-3389

STAFF REPORT TO THE PLANNING COMMISSION FOR THE WORKSESSION ON DECEMBER 1, 2014

PROPOSED DARK SKY LIGHTING REQUIREMENTS

CASE FILE: PC-2013-3056

SECTION 1. INTRODUCTION

In October 2013, the 'Dark Sky' regulatory concept was first introduced to the Planning Commission who directed staff to research more aggressive measures to address light pollution. Outdoor lighting ordinances are commonly referred to as Dark Sky ordinances in reference to the primary goal of reducing glow in the night sky. A dark sky is one of the many qualities that set rural areas apart from urban and suburban communities. Existing County land use codes only require Dark Sky type lighting in specific geographical areas. The proposed code language offers a more holistic approach by applying the Dark Sky requirements to all general zoning districts in unincorporated Multnomah County where protection measures do not currently exist.

SECTION 2. DARK SKY ORDINANCE - WHY DO IT?

Preservation of the Night Sky

Light pollution was first raised as an issue in the 1970s by astronomers who began to notice a degradation of the night sky. Growth and light pollution from excessive outdoor lighting is diminishing the view of the stars in and around urban areas, as well as within smaller towns and rural areas and many jurisdictions have adopted anti-light pollution laws. Light pollution from a community can travel over 100 miles from the source and therefore the application of the Dark Sky concept can provide surprisingly widespread benefits. While excessive light may cause a nuisance to others, it also wastes electricity, results in unnecessary emissions of greenhouse gases, and can have negative effects on humans and wildlife.

The Dark Sky concept promotes the thoughtful approach to outdoor lighting design. Research has shown links between light pollution and negative impacts on human health, adverse behavioral changes in insect and animal populations, and a decrease of both quality of ambient lighting and safety in the nighttime environment.

Better Lighting Means Better Neighbors

Outdoor lighting, when appropriately directed can improve visibility and safety while minimizing energy use, operating costs, and glare. Improperly aimed lights can shine onto nearby properties creating conflict with neighbors, drivers, and pedestrians. A general rule of thumb is if the bulb is visible from a distance,

it's contributing to glare and sky glow. With Dark Sky friendly lighting, only the intended area is illuminated.



Staff Contact: Adam Barber

Impacts on Human Health

Excessive light at night negatively impacts many areas of human health. Bright points of light from poorly designed lighting produces a condition known as "disability glare". Disability glare is so intense it causes us to avert our eyes from the veil of light being scattered across our retinas.

The 24 –hour day/night cycle, known as the circadian clock, affects physiologic processes in almost all organisms. Studies show disruption of these rhythms can result in insomnia, depression and cardiovascular disease. In June 2009 the American Medical Association adopted resolutions that support reducing light pollution and glare and advocate for use of fully shielded outdoor lighting.

Impacts on Wildlife

Studies suggest that artificial night lighting has negative effects on a wide range of wildlife, including amphibians, birds, mammals, insects and even plants. Light pollution disorients migratory birds, disrupts mating behavior of frogs and interferes with predatory/prey relationships. Since the eyes of nocturnal animals have evolved for foraging in low-light conditions, small changes in illumination can alter their relationship with prey species. Light fixation is also a bird hazard that kills thousands of birds in urban areas every year.

Safety

Brighter light does not necessarily mean safety. Bright, glaring lights that illuminate nighttime events or locations can actually decrease the security of the sites. Excessively bright lighting can create a sharp contrast between light and darkness, making the area outside the light nearly impossible to see. Most property crime is still committed during the day, or inside lit buildings. A safe environment involves shielding lighting for roadways, parking lots, homes, businesses and landscapes, increasing visibility and decreasing distractions, such as glare.

Economic Case for a Lighting Ordinance

According to the International Dark Sky Association, inappropriate outdoor lighting results in wasted energy amounting to over one billion dollars a year. When lighting is used only where needed, money that would otherwise be spent on the electric bill can instead be spent on other things, which is good for property owners and good for the economy.

SECTION 3. PROPOSED DARK SKY CODE LANGUAGE

Staff desires the lighting review associated with a development proposal to utilize the basic non-discretionary (over the counter) process used for building plan review. For example, an applicant would mark on the site plan the location of all existing and proposed outdoor lighting. This would be required information just like property lines, building and driveway locations, etc. and would be listed on the County's building permit checklist. Photographs or lighting details may also be required for both existing and proposed light fixtures, depending on the proposal details. The three threshold options offered in Section 3.4 are all intended to qualify for over the counter review.

SECTION 3.1 – DEFINITIONS

Please note the following formatting styles used for the proposed code language:

Bold = Existing Code Language

<u>Double Underline</u> = Proposed new language

<u>Strikethrough</u> - Language proposed for removal

The following new definition(s) are proposed for county code chapters 33, 34, 35, 36 and 11.15:

MCC 33.0005 DEFINITIONS; 34.0005 DEFINITIONS; 35.0005 DEFINITIONS; 36.0005 DEFINITIONS; 11.15.0010 Definitions

Exterior Lighting — Exterior Lighting means outdoor artificial illuminating devices, outdoor fixtures, lamps or other similar devices, permanently installed or portable, used for flood lighting, general illumination or advertisement. Depending on the design, exterior lighting can include the components such as reflector (mirror) or refractor (lens), shielding, assembly housing and attachment parts. Such devices shall include, but are not limited to spot and flood lights for security and illumination purposes.

Horizontal Plane – A plane parallel to the horizon.

<u>Substantial Improvement - Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:</u>

- (1) Before the improvement or repair is started; or
- (2) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The costs to repair must be calculated for full repair to "before-damage" condition, even if the owner elects to do less. The total costs to repair include both structural and finish materials and labor including donated labor and materials.
- (3) The value of these alterations to an existing structure is measured cumulatively to avoid exempting a substantial improvement implemented in phases over time.
 - (4) Substantial Improvement does not, however, include either:
- (a) The portion of any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by local building officials and which are the minimum necessary to assure safe living conditions or
- (b) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

<u>SECTION 3.2 - REFERENCE WITHIN ZONING DISTRICTS TO NEW DARK SKY CODE</u> <u>SECTION</u>

The proposed Dark Sky concept begins by adding a regulatory trigger within each of the general zoning districts referencing the new Dark Sky lighting code section. Although County Code Chapter 33 (West Hills) is used as an example below to illustrate the location and structure of the proposed changes, the changes will also be applied to other plan areas regulated by County Code Chapters 34, 35, 36 and 11. Chapter 11 changes will be limited to unincorporated zoning districts still regulated by Multnomah County (RR, CFU, LR5, LR7, RC, CFU3).

1. General District Revisions

For the Exclusive Farm Use (EFU), Multiple Use Agriculture – 20 (MUA-20), Rural Residential (RR), Rural Center districts (BRC, OR, OCI, PH-RC, RC, SRC), and various urban zoning designations, the existing code sections dealing with the dimensional requirements (setbacks, minimum front lot line length, building height) will be renamed to **Dimensional Requirements** and <u>Development Standards</u>. This rename will make Chapters 11, 33, 34 and 35 consistent with Chapter 36 in style. The following shows an example of the change to Chapter 33's EFU district:

Change the section header MCC 33.2660 Dimensional Requirements to MCC 33.2660 Dimensional Requirements and Development Standards

The following code language would then be added at the end of the section as a trigger requiring compliance with the new Dark Sky standards in MCC 33.0560.

(G) All exterior lighting shall comply with MCC 33.0560.

For all Commercial Forest Use zones (CFU, CFU-1, CFU-2, CFU-3, CFU-4 and CFU-5) listed within Chapters 33, 35, 36 and 11.15; the above trigger language would be added to the end of the existing code section titled **Development Standards for Dwellings and Structures** as follows:

§ 33.2261 DEVELOPMENT STANDARDS FOR DWELLINGS AND STRUCTURES All dwellings and structures shall comply with the approval criteria in (B) through (E) below except as provided in (A):

- (A) For the uses listed in this subsection, the applicable development standards are limited as follows:
 - (1) Expansion of existing dwelling.
 - (a) Expansion of 400 square feet or less additional ground coverage to an existing dwelling: Not subject to development standards of MCC 33.2261;
 - (b) Expansion of more than 400 square feet additional ground coverage to an existing dwelling: Shall meet the development standards of MCC 33.2261(C) & (E);
 - (2) Replacement or restoration of a dwelling.
 - (a) Replacement or restoration of a dwelling that is within the same foot-print of the original dwelling and includes less than 400 square feet of additional ground coverage: Not subject to development standards of MCC 33.2261;
 - (b) Replacement or restoration of a dwelling that is within the same foot-print of the original dwelling with more than 400 square feet of additional ground coverage: Shall meet the development standards of MCC 33.2261(C) & (E);
 - (c) Replacement or restoration of a dwelling that is not located within the footprint of the original dwelling but it is located where at least a portion of the replacement dwelling is within 100 feet of the original dwelling: Shall meet the development

standards of MCC 33.2261(C) & (E) and the applicable driveway/road requirements of 33.2261(E); [Staff note: this is a housekeeping correction]

- (3) Accessory buildings.
 - (a) Accessory buildings within 100 feet of the existing dwelling: Shall meet the development standards of MCC 33.2261(C) & (E);
 - (b) Accessory buildings located farther than 100 feet from the existing dwelling: Shall meet the development standards of MCC 33.2261(B), & (C) & (E);
- (4) Temporary dwellings.
 - (a) A temporary health hardship mobile home located within 100 feet of the existing dwelling: Not subject to development standards of MCC 33.2261 Shall meet the development standards of MCC 33.2261(E);
 - (b) A temporary health hardship mobile home located farther than 100 feet from the existing dwelling: Shall meet the development standards of MCC 33.2261(B). & (C) & (E);
 - (c) A temporary mobile home used during construction or reconstruction of a dwelling located within 100 feet of the dwelling under construction: Not subject to development standards of MCC 33.2261 Shall meet the development standards of MCC 33.2261(E);
 - (d) A temporary mobile home used during construction or reconstruction of a dwelling located farther than 100 feet of the dwelling under construction: Shall meet the development standards of MCC 33.2261(B), &(C) & (E);

* * *

(E) All exterior lighting shall comply with MCC 33.0560.

For Chapter 11.15, the following changes are proposed:

Commercial Forest Use Districts

* * *

11.15.2058 Dimensional Requirements and Development Standards

* * *

(I) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.

Rural Residential
* * *
11.15.2218 Dimensional Requirements and Development Standards
* * * (E) All systemics lighting shall comply with MCC 11 15 2000 Dowle Sleve Lighting Standards
(F) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.
Rural Center
* * *
11.15.2258 Dimensional Requirements and Development Standards
* * * * (F) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.
(1) All exterior righting shall compry with Mee 11.15.2000 Dark Sky Lighting Standards.
Urban Future UF-20
11.15.2932 Dimensional Requirements and Development Standards
* * *
(F) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.
Urban Low Density Residential District (LR-10)
* * *
11.15.2572 Dimensional Requirements and Development Standards
* * * (C) All extension lighting shall comply with MCC 11 15 2000 Dowle Sleve Lighting Standards
(G) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.
II-barr I am Dan dan Bardandal District (I D. 7)
Urban Low Density Residential District (LR-7)
* * *
11.15.2616 Dimensional Requirements and Development Standards
* * *

(I) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.

Urban Low Density Residential District (LR-5)

* * *

11.15.2634 Dimensional Requirements and Development Standards

* * *

(I) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.

Commercial Districts Retained

* * *

Retail Commercial C-3

11.15.2258 Restrictions

* * *

(I) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.

Urban Light Manufacturing

* * *

11.15.5135 Dimensional Requirements and Development Standards

* * *

(C) All exterior lighting shall comply with MCC 11.15.2000 Dark Sky Lighting Standards.

SECTION 3.3 - DARK SKY PURPOSE STATEMENT

The purpose statement provides the reasons for the ordinance and what the ordinance seeks to prevent or correct. Chapter 33 is used as an example below and the intent is to also add the proposed Dark Sky Lighting Standards to Chapter 34, 35 and 36. Additionally, staff is proposing adding these standards to Chapter 11, in newly created section 11.15.2000.

MCC 33.0560 Dark Sky Lighting Standards

(A) The purposes of the Dark Sky Lighting Standards are to protect and promote the public health, safety and welfare by permitting reasonable uses of exterior lighting for nighttime safety, utility, security, and enjoyment while preserving dark night sky, reducing light pollution and the adverse impacts of exterior lighting on wildlife habitat and human health.

SECTION 3.4 - DARK SKY LIGHTING STANDARDS

State law preempts the county from adopting retroactive ordinances which impose new standards upon uses that exist on the date that new regulations are adopted. For example, staff's understanding is that the county does not have the authority to require ALL existing exterior lighting in Multnomah County to come into compliance by a certain date. However, the county does have the authority to require Dark Sky compliance for all new and existing lighting associated with a proposed development application.

Additionally, staff believes the county has the authority to require the Dark Sky lighting standards to be met anytime an existing non-Dark Sky compliant lighting fixture is replaced regardless of whether the replacement fixture is associated with a development proposal or because an owner simply wishes to replace a lighting fixture for a different design. Thus, the county has options and staff offers the Planning Commission three options below for regulation of dark sky lighting, each offering unique opportunities and challenges. Staff is asking the Planning Commission which option as drafted below (or with modifications) to pursue for the public hearing.

(OPTION A)

The proposed Dark Sky standards in MCC 33.0560(C) below establish the rule that all new and replacement exterior lighting must be dark sky compliant. The concept for Option A was largely based on existing lighting regulations in select zones in the communities of Orient and Pleasant Home which require the following; "New and replacement exterior lighting fixtures shall be of the "cut off" or fully shielded type so that no light is emitted above the horizontal."

MCC 33.0560 Dark Sky Lighting Standards

* * *

(C) All new and replacement exterior lighting shall be shielded such that:

(1) The light source (bulbs, lamps, etc.) is fully shielded with opaque materials and directed downwards. Fully shielded shall mean no light is emitted above the horizontal plane located at the lowest point of the fixture's shielding. Shielding must be permanently attached;

(2) The area of direct illumination is contained on the property; and

(3) No light creates a hazard to the traveling public on any street, such as loss of visual ability or discomfort due to glare on the roadway. Glare shall mean light with intensity great enough to cause squinting of the eyes to see into the shadows.

At first glance, the "new and replacement" trigger language offered in Option A seems simple and clear but a number of questions, and different points of view, arose when staff explored how the "replacement" threshold was being interpreted internally. Staff's forecast is that Option A could result in inconsistent application and would prove difficult to track when an existing compliant fixture is voluntarily replaced. For example, we understand from discussions with the City of Gresham Building Department that a landowner has the ability to replace an external lighting fixture without an electrical permit. Therefore, staff would likely have no easy or consistent way of determining when a light fixture may have been replaced other than guessing at the age visually and asking the owner who may or may not have owned the structure when the light fixture was replaced. This is an example of the type of scenario staff might

face fairly frequently when reviewing plans showing existing lighting and also in response to lighting complaints. It is helpful to keep in mind that the end result of any enforcement action could procedurally involve a lien on a non-compliant property. Considering the severity of this outcome, it is important that code compliance staff have the ability to confirm when development subject to regulation occurred.

Staff offers this approach for the Planning Commission's consideration despite these implementation complications because staff heard a desire at the previous work session for an aggressive approach which the replacement component offers.

(OPTION B)

MCC 33.0560 Dark Sky Lighting Standards

* * *

- (C) All new and existing exterior lighting supporting a new use, replacement of an existing use, or any repair, alteration or expansion of a use resulting in a Substantial Improvement, shall be shielded such that:
 - (1) The light source (bulbs, lamps, etc.) is fully shielded with opaque materials and directed downwards. Fully shielded shall mean no light is emitted above the horizontal plane located at the lowest point of the fixture's shielding. Shielding must be permanently attached;
 - (2) The area of direct illumination is contained on the property; and
 - (3) No light creates a hazard to the traveling public on any street, such as loss of visual ability or discomfort due to glare on the roadway. Glare shall mean light with intensity great enough to cause squinting of the eyes to see into the shadows.

The term 'Substantial Improvement' is currently defined in the county's Chapter 29 Flood Hazard code and offers a common national threshold for the point an entire structure must be brought up to current floodplain standards. Option B involves using this term and associated definition in the context of a Dark Sky lighting threshold. As noted below in italics, real market value cost of the improvement as compared to the value of the structure is the metric used. Staff offers the use of the term 'Substantial Improvement' as one approach to determine when existing lighting on a property associated with a development request must be brought into compliance with dark sky requirements.

SUBSTANTIAL IMPROVEMENT. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- (1) Before the improvement or repair is started; or
- (2) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The costs to repair must be calculated for full repair to "before-damage" condition, even if the owner elects to do less. The

total costs to repair include both structural and finish materials and labor including donated labor and materials.

- (3) The value of these alterations to an existing structure is measured cumulatively to avoid exempting a substantial improvement implemented in phases over time.
 - (4) Substantial Improvement does not, however, include either:
- (a) The portion of any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by local building officials and which are the minimum necessary to assure safe living conditions or
- (b) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

An example of how the Substantial Improvement threshold concept could be applied to Dark Sky lighting includes a proposal for a structural addition equaling or exceeding 50% of the market value of the structure being modified. In this case, Option B would require that all lighting come into compliance with current standards on the existing building, on the proposed addition and any lighting in the driveway, yard, etc. which is provided for the use being modified. One challenge with this approach would likely be how quickly and easily the necessary financial information could be prepared by the applicant and reviewed by staff over the counter. One fundamental goal is for Dark Sky rules to be simple enough to apply over the planning counter and staff has concerns that 'value' may be more difficult to work with than another threshold like square footage (see option C).

(OPTION C)

County code provides other approaches which could be considered for application to the dark sky threshold. Proposed Option C below was crafted after comparing thresholds in county code for other permits which are summarized in Table 1 below, and largely modeled using the 400 square foot development threshold used in the Commercial Forest Use and Significant Environmental Concern – Wildlife Habitat zones.

MCC 33.0560 Dark Sky Lighting Standards

* * *

- (C) All new and existing exterior lighting supporting a new use, replacement of an existing use, or any repair, alteration or expansion of a use exceeding 400 square feet of new ground coverage shall be shielded such that:
 - (1) The light source (bulbs, lamps, etc.) is fully shielded with opaque materials and directed downwards. Fully shielded shall mean no light is emitted above the horizontal plane located at the lowest point of the fixture's shielding. Shielding must be permanently attached;
 - (2) The area of direct illumination is contained on the property; and

(3) No light creates a hazard to the traveling public on any street, such as loss of visual ability or discomfort due to glare on the roadway. Glare shall mean light with intensity great enough to cause squinting of the eyes to see into the shadows.

Table 1. Summary of common thresholds related to structural improvements for other county permits.

Permit Name	Permit Threshold Summary
Significant Environmental Concern (SEC) Scenic View regulations	Any alteration or expansion of the exterior of a structure is subject to scenic view standards (example is MCC 33.4515(A)(8)(a)). Does not require the existing structure to come into compliance with current rules when an addition is proposed, for example.
Significant Environmental Concern (SEC) Wildlife Habitat and Streams regulations	Alteration or expansion of more than 400 square feet of additional ground coverage subjects the entire property to review (example is MCC 33.4515(A)(8)(b)).
Structural repair in the Columbia River Gorge National Scenic Area	Structural repair is allowed without land use review in the Columbia River Gorge National Scenic Area. Repair includes replacement or reconstruction of a structure but does not allow a change in the original size, scope, configuration or design of a structure. An exception exists for up to a 10 percent increase in building size if required to comply with building codes provided additional excavation is not required (MCC 38.0015).
Home Occupations	Somewhat tangentially related is the county's Home Occupation regulations which use a "20 percent of the gross floor area of the dwelling and attached garage or 500 square foot, whichever is less" space usage threshold between a Type A and Type B Home Occupation (example is MCC 33.0540). A Type A Home Occupation registration is issued over the counter whereas a Type B Home Occupation application is processed as a discretionary land use decision.
Grading and Erosion Control - Stormwater	New impervious surfaces exceeding 500 square feet are required to be reviewed by an engineer to assess storm water runoff impacts (example is MCC 29.333(C)).
Additions in the Columbia River Gorge National Scenic Area	New buildings and additions to existing buildings over 200 square feet requires discretionary Type 2 land use review (example MCC 38.1010(A)(2) & 38.2025(A)(9)).
Commercial Forest Use Zones – Replacement,	Primary fire safety zone requirements and fire wise

Restoration and Dwelling Expansions	construction standards (fire retardant roof, chimney spark arrester, etc.) apply when more than 400 square feet of additional ground coverage is proposed to a dwelling (examples are MCC
	33.2056 & 33.2061(A)).

A slight modification to the Option C concept that the Planning Commission could consider is using a 20%, 25%, 50% or some other <u>percentage</u> footprint expansion threshold rather than using square footage. If the modified Option C approach is attractive to the Commission, staff recommends 50% as a starting point for that discussion to closely align with the 'Substantial Improvement' concept. The requirement for existing lighting to comply with Dark Sky regulations might not come as a surprise to the applicant proposing 50% or more change in the building footprint.

In conclusion, staff believes Option C is most consistent with other thresholds in county code and would be the easiest to implement either using the 400 square foot new ground coverage threshold (or some other square footage) or 50% new ground coverage threshold (or some other percentage).

SECTION 3.5 - EXEMPTIONS

Exemptions are often needed for certain circumstances, but should not be so broad as to preempt the ultimate purpose of the ordinance. The exemptions proposed are chiefly for existing lighting having no relationship to a proposal and for temporary lighting in various circumstances. The exemptions below would also be applied to Chapters 34, 35, 36 and 11.15.

MCC 33.0560 Dark Sky Lighting Standards.

* * *

(B) The following are exempt from the requirements of paragraph (C) of this section:

(1) Exterior lighting legally installed prior to the effective date of this ordinance is exempt from the requirements of paragraph (C) of this section, provided that no replacement or structural alteration of exterior lighting shall be made unless it thereafter conforms to the provisions of paragraph (C). Replacement shall mean a change of light fixture or changing the mounting location. Routine light fixture maintenance, such as changing lamps or bulbs, shall not constitute replacement or structural alteration. This exemption does not apply to existing or proposed exterior lighting that supports a proposed new use or alteration or expansion of an existing use.

Staff note: The first sentence in the (B)(1) exemption language above emphasizes existing lighting is "grandfathered" and not subject to Dark Sky regulations. However, the language continues to explain how the replacement of an existing lighting triggers the regulations. This exemption will be reworded prior to the public Planning Commission hearing to align with whichever trigger option is selected by the Planning Commission.

(2) The location and illumination area of lighting needed for security of utility facilities.

- (3) Decorative seasonal lighting and which shines for not more than 60 nights (or any portion thereof) in any one year.
- (4) Temporary lighting associated with discrete farming practices as defined in ORS 30.930 and agricultural use as defined in OAR 603-095-0010, *except* that permanent lighting on buildings, structures or poles associated with farm practices and agricultural practices is subject to the requirements of this Section.
- (5) Temporary lighting associated with discrete forest practices as defined by ORS 527 (The State Forest Practices Act), *except* that permanent lighting on buildings, structures or poles associated with forest practices is subject to the requirements of this Section.
- (6) Work necessary to protect, repair, maintain, or replace existing structures, utility facilities, service connections, roadways, driveways, accessory uses and exterior improvements in response to emergencies pursuant to the provisions of MCC 33.0535 Responses to an Emergency Disaster Event, provided that after the emergency has passed, all lighting to remain are subject to the requirements of this Section.

Staff note: The reference to MCC 33.0535 (West Hills code) will be updated with the appropriate chapter reference within the other chapters of county code. The reference above is an example of how this exemption will read within Chapter 33.

- (7) The placing or use by a public agency of temporary lighting to serve the public.
- (8) Temporary lighting for theatrical, television, performance areas and construction sites.
- (9) Lighting required by the Federal Aviation Administration or other applicable *aviation-related* federal or state agency.
- (10) Emergency warning systems. Examples include temporary lighting associated with emergency response alarm systems including but not limited to fire alarms.
- (11) Illuminated signs authorized through the provisions of Multnomah County Sign Code. Dark Sky compliant signs should be encouraged, but not required.
- (12) Search and rescue recovery operations.
- (13) Traffic control devices consistent with the Manual on Uniform Traffic Control Devices.
- (14) Lighting supporting a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.
- (15) Underwater lighting in swimming pools, fountains and other water features.
- (16) Exit signs, lighting for stairs and ramps and other illumination required by building codes.

<u>SECTION 3.6 – REMOVING DUPLICATIVE EXISTING LIGHTING REQUIREMENTS IN</u> WEST OF SANDY PH-RC, OR, OCI, SEC-H ZONES

The following language is proposed to be removed from the PH-RC, OR, OCI base zones and SEC-h overlay zone because exterior lighting requirements for these areas are proposed to be captured in the new Dark Sky lighting standards.

PLEASANT HOME RURAL CENTER, PH-RC

* * *

§ 36.3355 DIMENSIONAL STANDARDS AND DEVELOPMENT REQUIREMENTS.

All development proposed in this district shall comply with the applicable provisions of this section.

* * *

(G) New and replacement exterior lighting fixtures shall be of the "cut off" or fully shielded type so that no light is emitted above the horizontal.

(H) (G) New, replacement, or expansion of existing dwellings shall minimize impacts to existing farm uses on adjacent land (contiguous or across the street) by:

* * *

ORIENT RURAL CENTER RESIDENTIAL, OR

* * *

§ 36.3455 DIMENSIONAL STANDARDS AND DEVELOPMENT REQUIREMENTS.

All development proposed in this district shall comply with the applicable provisions of this section.

* * *

(G) New and replacement exterior lighting fixtures shall be of the "cut off" or fully shielded type so that no light is emitted above the horizontal.

(H) (G) New, replacement, or expansion of existing dwellings shall minimize impacts to existing farm uses on adjacent land (contiguous or across the street) by:

* * *

ORIENT COMMERCIAL-INDUSTRIAL, OCI

* * *

§ 36.3550 DIMENSIONAL STANDARDS AND DEVELOPMENT REQUIREMENTS.

All development proposed in this district shall comply with the applicable provisions of this section.

* * *

- (G) New and replacement exterior lighting fixtures shall be of the "cut off" or fully shielded type so that no light is emitted above the horizontal.
- (H) (G) New, replacement, or expansion of existing dwellings shall minimize impacts to existing farm uses on adjacent land (contiguous or across the street) by:

* * *

§ 36.4567 SEC-H CLEAR AND OBJECTIVE STANDARDS.

At the time of submittal, the applicant shall provide the application materials listed in MCC 36.4540(A) and (D). The application shall be reviewed through the Type I procedure and may not be authorized unless the following are met:

- (A) The proposed development meets the standards listed in 36.4560(A)(1) through (5);
- (B) The proposed development shall meet the applicable storm water and grading and erosion control requirements of MCC Chapter 29. Ground disturbance within 100 feet of a watercourse as defined by MCC 29.351 shall be limited to the period between May 1st and September 15th. Revegetation and soil stabilization must be accomplished no later than October 15th.
- (C) New and replacement exterior lighting fixtures shall be of the "cut off" or fully shielded type so that no light is emitted above the horizontal plane. The location and illumination area of lighting needed for security of utility facilities shall not be limited by this provision.
- (D) (C) The nuisance plants in 36.4550, Table 1, in addition to the nuisance plants defined in 36.4510, shall not be used as landscape plantings within the SEC-h Overlay Zone.

For development that fails to meet all of the standards listed above, a separate land use application pursuant to MCC 36.4560 may be submitted.

Staff note: At this point, staff is not proposing to delete or amend the exterior lighting standard applicable within the Significant Environmental Concern-Significant Scenic Views (SEC-v). The reasons are that it is working well and there is value in evaluating lighting impacts as seen from identified viewing areas as currently required in the SEC-v overlay. For example, it could be possible for a development high on a hill to have downward directed lighting which could expose views of the bulb as seen from an identified viewing area at a lower elevation.

Additionally, the visibility analysis standards are the core of the SEC-v regulatory program and significant modifications to this section of code was not envisioned as part of the Dark Sky project scope. Staff's intent is to adopt Dark Sky regulations which complement but do not conflict with existing SEC-v

lighting standards and staff will re-evaluate this relationship after receiving threshold direction from the Commission during the Worksession.

SECTION IV. CONCLUSION

In conclusion, Staff believes Option C is most consistent with other thresholds in county code and would be the easiest to implement either using the 400 square foot new ground coverage threshold (or some other square footage) or 50% new ground coverage threshold (or some other percentage). Staff would like to move this project to public hearing as a next step after receiving direction from the Planning Commission.