



State of Oregon
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Air Quality Rule Changes and Updates

Informational Meeting

July 16, 2014



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Rulemaking Goals

- Make rules clearer
- Update rules
- Address air quality problems



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Rulemaking Schedule

- Public Notice: June - August
- Public Hearing: July 16, 2014
- Proposed EQC Rule Adoption: Jan. 2015
- SIP Submittal to EPA for Approval: ~Feb. 2015



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Overview

- Rule clean-up
- Categorically Insignificant Activities
- Update particulate matter (PM) standards
- Splitting businesses
- New Source Review (NSR)
- Extensions for NSR permits
- Net air quality benefit for sensitive areas
- UARG v EPA (GHG PSD)



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Rule Clean-Up

Unclear rules, not organized well

- Reorganize by moving procedures out of definitions
- Provide clarification when needed, especially regarding compliance requirements
- Delete unused/redundant definitions
- Correct errors
- Maintain overall stringency

Rule Clean-Up

Outdated rules repealed:

- Consumer Spray Paint VOC limits replaced by EPA rules (19% vs. 15%)
- Western Backstop SO₂ Federal Trading Program – replaced by direct control of PGE Boardman



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Rule Clean-Up

Repeal rules for sources that no longer exist in Oregon:

- Neutral Sulfite Semi-Chemical Pulp Mills
- Sulfite Pulp Mills
- Primary Aluminum Standards
- Laterite Ore Production of Ferronickel
- Charcoal Producing Plants

New sources must comply with more stringent federal requirements for new sources



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Categorically Insignificant Activities

- Background
- Proposed changes
- Regulatory considerations

Categorically Insignificant Activities - Background

- Categorically insignificant activities identified in mid 90's for Title V program – examples:
 - Janitorial activities
 - Groundskeeping activities
 - Instrument calibration
 - Maintenance and repair shop activities
- Some activities at facilities previously considered insignificant are not insignificant when aggregated

Categorically Insignificant Activities - Background

- Some of these activities are subject to new standards issued by EPA
- Emissions from these activities were not considered when:
 - Determining what permits are necessary
 - Establishing Plant Site Emissions Limits



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Emergency generators and pumps

- Currently considered insignificant no matter how large or how many at site
- Change categorically insignificant to:
 - Any individual engine rated at less than 500 horsepower (375 kW); and
 - Emissions in aggregate less than de minimis levels of 1 ton/year (2,756 tons/yr for GHG) based on 100 hours readiness and maintenance testing.



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Small fuel burning equipment

- Currently considered categorically insignificant no matter how many at a source
- Change categorically insignificant to:
 - Retain current size threshold for individual units (0.4 MMBtu/hr oil; 2 MMBtu/hr gas); and add
 - Emissions in aggregate are less than de minimis levels of 1 ton/year (2756 tons/yr for GHG)



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Regulatory Considerations

- Notice of intent to construct (NC) may apply to small sources not otherwise required to have permits
- Air Contaminant Discharge Permits (ACDP) may be required for some sources – e.g., data centers with numerous emergency generators
- Plant Site Emission Limit changes for non-categorically insignificant activities



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Regulatory Considerations

- Adding emissions to PSELs for existing sources will not trigger other requirements solely as a result of this rule change
- PSELs will be revised at next permit renewal after rule adoption

Categorically Insignificant Activities





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Rule Clean-Up

Division 216 Table changes: New Categories:

- Deleted grain terminal elevators (use Grain elevators instead)
- Added recreational vehicle manufacturing to manufactured home, mobile home manufacturing
- Separated pathological waste incinerators from crematory incinerators
- Stationary internal combustion engines only if criteria are met



Rule Clean-Up

Division 216 Table changes: New Source Categories:

All other portable sources not listed for which DEQ determines that:

- An air quality concern exists;
- Source would emit significant malodorous emissions; or
- Source would have uncontrolled actual emissions of ≥ 5 tpy of direct PM_{2.5} or PM₁₀ if located in a PM_{2.5} or PM₁₀ nonattainment or maintenance area, or ≥ 10 tpy of any single criteria pollutant elsewhere.



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Rule Clean-Up





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PM and Opacity Standards - Topics



- Background
- Proposed changes
- Implementation schedule
- Affected sources
- Compliance issues



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PM and Opacity Standards - Background

- Standards adopted in early 1970's as part of initial State Implementation Plan (SIP)
- Different standards for pre and post 1970 sources - grandfathering provision
 - Pre-1970: 40% opacity and 0.2 gr/dscf
 - Post 1970: 20% opacity and 0.1 gr/dscf
- PM standard inconsistent with current EPA policy for significant figures/compliance



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Opacity Standard – proposed changes

- Change all opacity standards (except recovery furnaces) to 6-minute block average
 - Replaces 3-minute aggregate in 60 minutes
 - Compliance based on EPA Method 9
 - Change is consistent with other states
 - No change in stringency



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Opacity Standard – proposed changes

- Repeal Portland 4-county standard
 - 20% opacity for 30 seconds for non-fuel burning equipment
 - No uniform procedures for determining compliance
 - Not a SIP provision
 - Still covered by statewide standards



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Opacity Standard – proposed changes

- Change opacity limit for pre-1970 equipment from 40% to 20%
- Retain 40% limit for grate cleaning operations if:
 - Following grate plan; and
 - Plan to minimize emissions approved by DEQ
- Defer compliance until January 1, 2020 for businesses not located in sensitive air quality areas

“sensitive area” = nonattainment and maintenance areas; and proposed sustainment and reattainment areas (to be covered later in presentation)



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Fugitive Emissions – proposed changes

Fugitive emissions: visible emissions that leave the property for more than 18 seconds in a 6-minute period determined by EPA Method 22

When fugitive emissions escape from a source, DEQ may order the owner/operator to:

- Abate the emissions
- Tightly close and ventilate a building or equipment
- Develop a fugitive emission control plan to prevent visible emissions from leaving the property



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Grain Loading Standard – proposed changes

- Add significant digit to standards consistent with EPA policy
 - 0.1 » 0.10
 - 0.2 » 0.20
- Phase out 0.2 standard for older sources to help address newer/tighter ambient air quality standards



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PM Grain loading standards – proposed changes

Source	Grain Loading Standards (gr/dscf)		
	Current Limit	Effective upon Rule Adoption	2020
Source test data < 0.080 gr/dscf	0.2 or 0.1	0.10	0.10
Built before 06/01/70	0.2	0.2	0.15*
Built after 06/01/70	0.1	0.1	0.14
equipment/mode of operation used <876 hours	0.2	0.2	0.20

*source specific limit of 0.17 grains per dry standard cubic foot with report by registered professional engineer



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PM Grain loading standards – proposed changes

- Changes are proactive measures for helping to prevent violations of current PM_{2.5} standards and potentially more stringent standards in the future
- Changes are similar to more stringent changes adopted for PM₁₀ nonattainment areas as reactive measures



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Affected Businesses

- Approximately 11 wood-fired boilers
- Many units comply but not all the time
- Test results range from 0.06 to 0.21 gr/dscf
- Individual outreach to these businesses after August 2013 stakeholder meetings



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What might be necessary to comply with proposed standards:

- Conduct more frequent tuning/maintenance
- Conduct more frequent inspection/maintenance of control equipment
- Maintain consistent/high quality fuel
- Improve combustion controls



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PM Standards





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Combining/Splitting Sources

- Address how Netting Basis is handled when sources combine or split
- DEQ proposes clarifications:
 - The original source or sources and the resulting source or sources must have common primary or secondary 2-digit SIC codes
 - In a split, NB assigned to resulting sources cannot exceed PTE of devices or emissions units involved



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Combining/Splitting Businesses





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New Source Review (NSR)

- Pre-construction permitting program mandated by Clean Air Act
 - Maintain and protect air quality
 - Requires pollution control devices where appropriate
- Three distinct programs
 - Prevention of Significant Deterioration (PSD) in attainment areas
 - Nonattainment NSR
 - Minor NSR

} *Major
NSR*



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Things unique to DEQ's program

- Major source definition in nonattainment and maintenance areas
 - Lower threshold than EPA definition
- Offsets and Net Air Quality Benefit
 - NAQB requires air dispersion modeling
 - EPA program only requires offsets



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Things unique to DEQ's program, cont.

- DEQ program requires air quality impact analysis for minor sources
- Maintenance areas
 - Former nonattainment areas
 - DEQ program has more stringent requirements than federal program



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Why make changes?

- Areas of the state are close to or are exceeding the PM_{2.5} National Ambient AQ Standards
 - New PM_{2.5} standards adopted in 2007 – much lower than PM₁₀ standards

AQ problems mainly due to area sources, not industrial sources
- Current rule structure
 - does not adequately address PM_{2.5} ambient air quality problems
 - prohibits development



How will the changes improve the program?

- New or modified sources can help address ambient air quality problems
- Allows for development while improving or maintaining air quality



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What are the changes?

- Align definition of major source with EPA's definition
 - Different requirements for small and large sources
- Create 2 new area designations
 - Help prevent nonattainment
 - Eliminate permitting roadblock
 - Get to maintenance faster
- *Primarily affect **Minor** New Source Review*



PERMITTING PROGRAM UPDATES RULEMAKING

Major / Minor NSR – current/proposed

With construction or change in method of operation
(Major Modification)

Current Area designation, major mod?	Emission Rate> SER or more	Less than SER
Nonattainment	<i>Major</i>	n/a
Maintenance	<i>Major</i>	n/a

Proposed Area designation, major mod?	Emission Rate> 100 tpy or more	SER to 99	Less than SER
Nonattainment	<i>Major</i>	Minor	n/a
Maintenance	<i>Major</i>	Minor	n/a

Overall stringency remains the same



PERMITTING PROGRAM UPDATES RULEMAKING

Major / Minor NSR – current/proposed

With construction or change in method of operation
(Major Modification)

Current Area designation, major mod?	Emission Rate> 100*/250 tpy or more	SER to 99*/249	Less than SER
Attainment	<i>Major</i>	Minor	n/a

No change for attainment areas

* Applies to 28 source categories listed in rule (e.g. pulp and paper mills, iron and steel mills, chemical process plants)



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Two New Area Designations

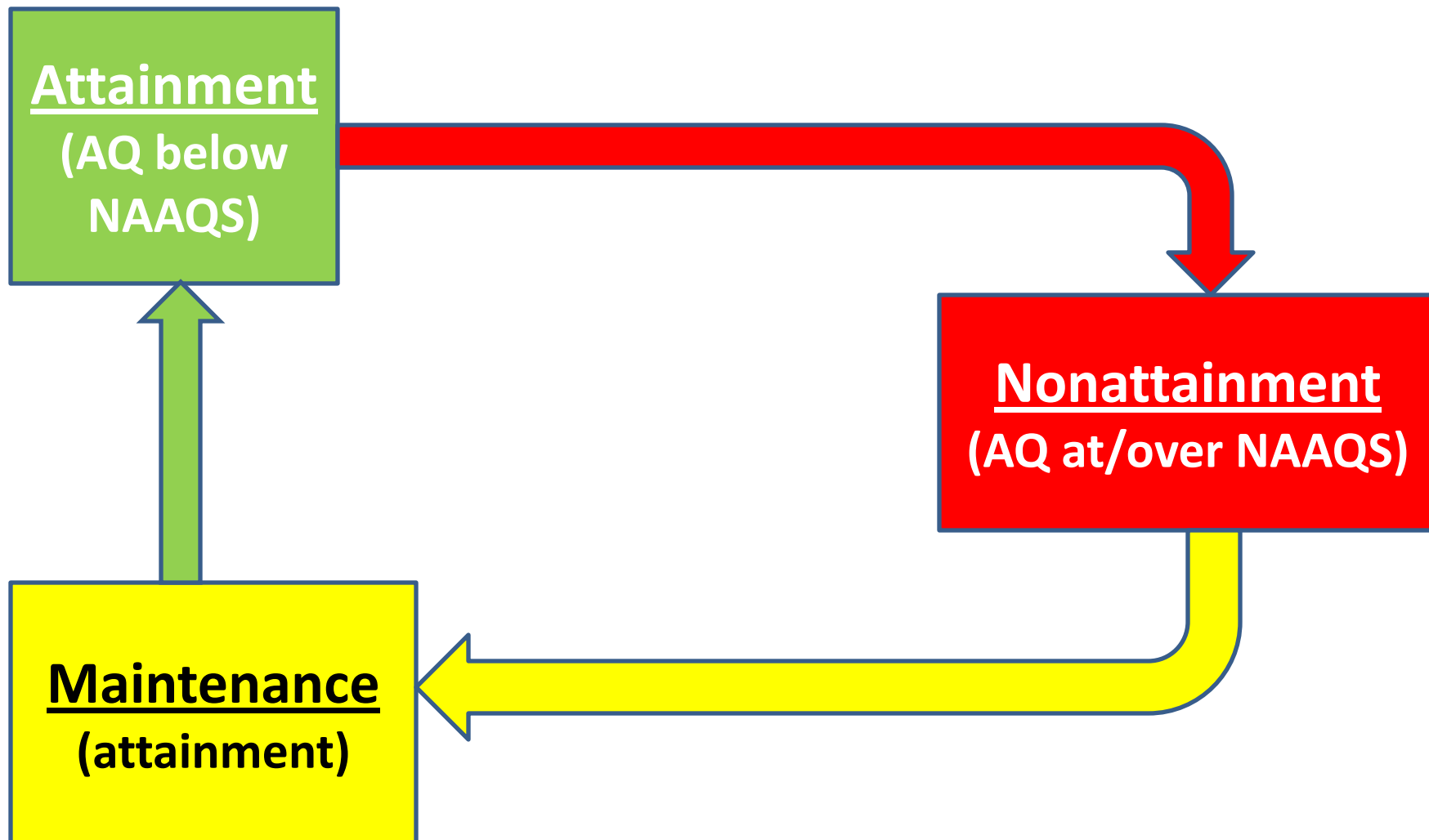
- Sustainment area
 - Proposed rules designed to help keep area from becoming nonattainment
- Reattainment area
 - Proposed rules designed to be more flexible for smaller sources to allow development, but still protect air quality



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PERMITTING PROGRAM UPDATES RULEMAKING

Current Area Designations

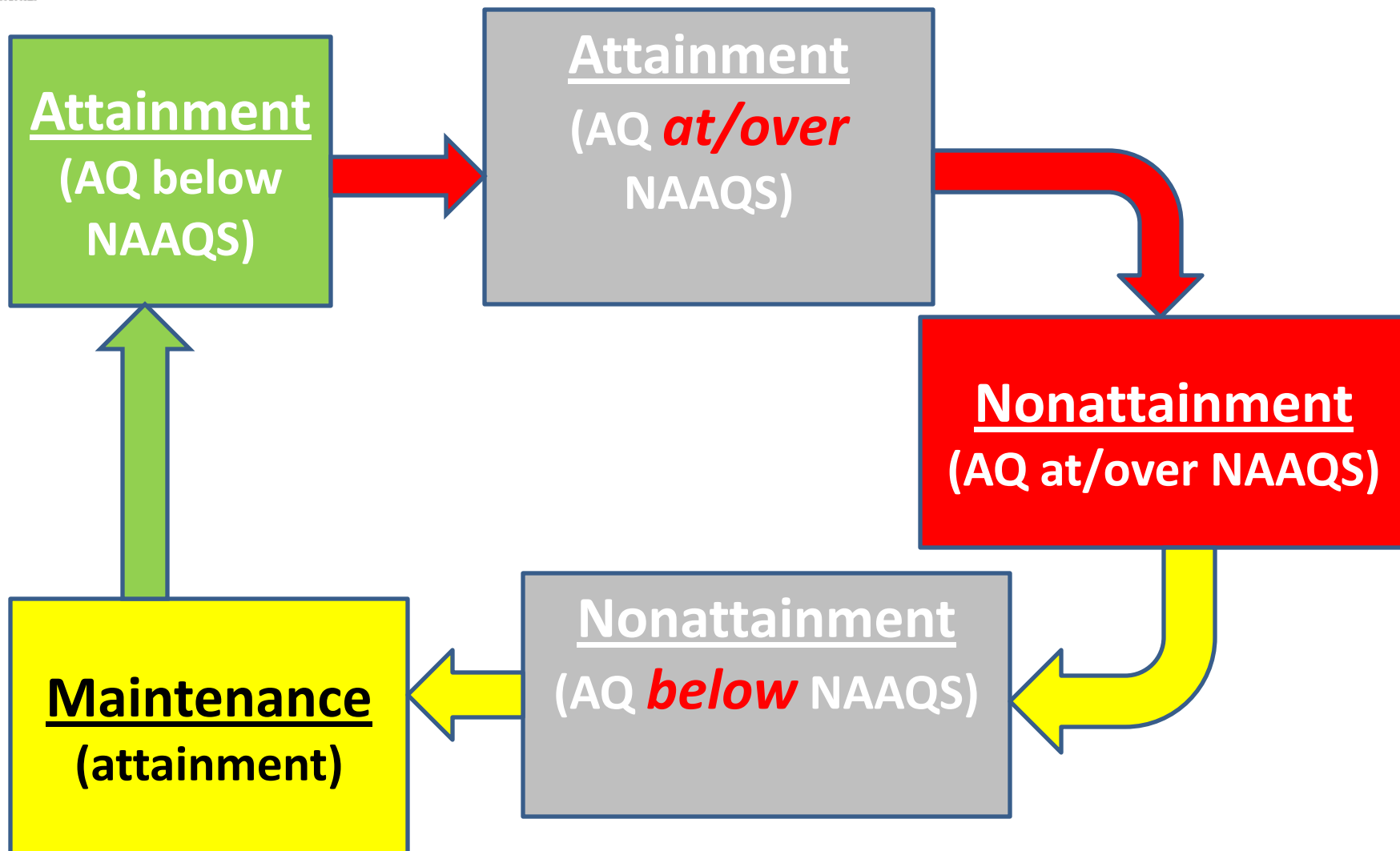




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Areas in transition

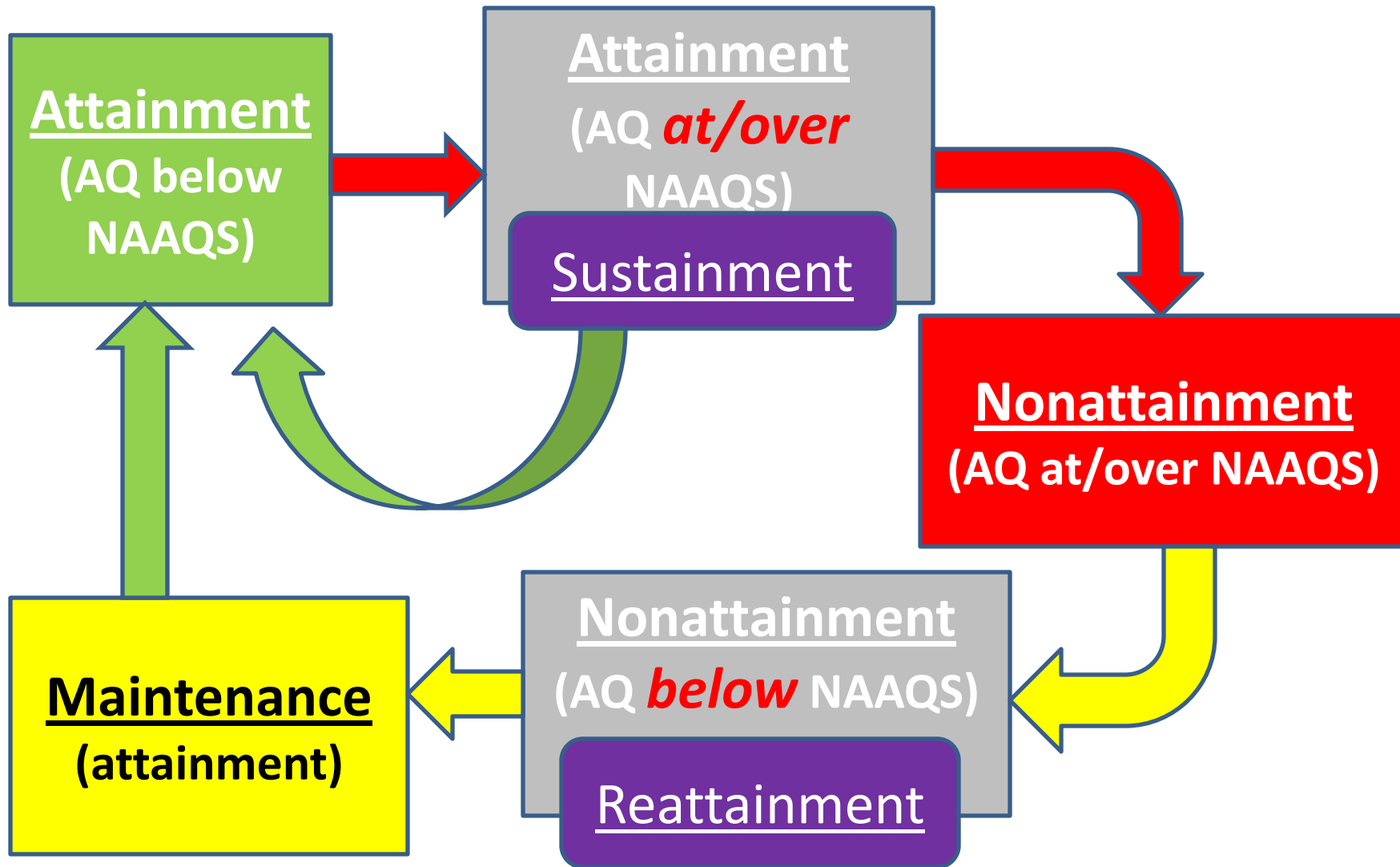




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New Area Designations





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Changes to Improve Air Quality

- “Priority sources” are primarily responsible for poor air quality (e.g., woodstoves in some communities)
- Provide incentives for reducing priority source emissions
 - More credit for emission reductions from priority sources
- EQC can specify Priority Sources



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Offset Changes

- Major NSR, some ratios higher than current **(1.2:1)**
- Minor NSR, ratios lower than major NSR
- Ratios area-specific
- Ratios reducible for priority source offsets
 - e.g. 1.2:1 → 1:1
- *No changes to ozone offset requirements*

Net Air Quality Benefit Changes

- Current NAQB criteria nearly impossible
- Revise NAQB criteria
 - Protect air quality:
 - Focus on areas with worst air quality, and
 - Prevent further degradation
 - Reduce emphasis on industrial emission offsets where area sources are the main contributors
 - Eliminate impossible criteria



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Summary of Proposed Changes

- Raise Major NSR threshold to 100 tpy in nonattainment and maintenance areas
- Create two new area designations: sustainment and reattainment
- Identify Priority Sources
- Revise offset requirements
- Revise Net Air Quality Benefit requirements
- Add State NSR to Division 224



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PERMITTING PROGRAM UPDATES RULEMAKING

New Source Review (NSR)





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Extensions for NSR/PSD permits – Proposed Rule Changes

- Add provisions for two 18-month extensions – no additional extensions
- Add criteria for approving extensions
- Add procedures for requesting extensions
- Add procedures for approving extensions

Extensions for NSR/PSD permits





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UARG v EPA (GHG PSD)

- In June, Supreme Court invalidated portions of EPA's so-called Tailoring Rule.
- Sources cannot trigger PSD for greenhouse gases alone, but
 - Sources subject to PSD for other pollutants could be required to perform a BACT analysis for greenhouse gases.
- Sources could not be subject to Title V for greenhouse gases alone.



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UARG v EPA (GHG PSD)

- EQC adopted rules in 2011 that implemented the Tailoring Rule in Oregon.
- The court's action does not invalidate any part of Oregon's rules; those rules remain in effect.
- DEQ is proposing revisions to air quality permitting rules at this time; the rules are on public notice until August 14 .



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UARG v EPA (GHG PSD)

- DEQ invites comments
- Should Oregon's rules regarding greenhouse gases and PSD and Title V applicability be:
 - Retained as they are?
 - Revised to agree with the court's ruling?
 - Changed in other ways?

UARG v EPA (GHG PSD)





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For further questions:

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