STAFF REPORT

Asphalt Plant Special Use Permitting

Date: January 20, 2010

Public Hearing Date: February 17, 2010

Prepared by: Olivia Terwilleger, Assistant Planner

Proponent/Applicant: Thurston County

Action Requested: Amend Chapter 20.54 of the Thurston County Code to change the permit process and requirements for Asphalt Plants in rural Thurston County. Areas designated mineral resource lands of long term commercial significance.

☐ Map Changes ☒ Text Changes ☐ Both ☐ Affects Comprehensive Plans/documents ☐ Affected Jurisdictions

PURPOSE:
The intent of the preliminary staff report is to:

- Provide the Planning Commission (PC) with sufficient background information to objectively hear public testimony in the context of proposed amendments,
- Stimulate request by the PC for additional information from the staff as necessary,
- Facilitate focused deliberations by the PC, and
- Allow the PC to make informed recommendations to the Board of County (BoCC) Commissioners in either a final staff report or report from the PC directly to the BoCC.

ISSUE:
The existing regulatory process and regulations in Title 20 (Rural) Zoning for asphalt plants does not adequately address impacts related to dust, noise, potential odors, and other environmental issues.

BACKGROUND:
Concerns over the location of asphalt plants surfaced in 2003 after the Board of County Commissioners began review of existing designated Mineral Lands of Long Term Commercial Significance (MLTCS) as part of the seven year review of the Comprehensive Plan. In October 2003, the Board of County Commissioners (Board) passed Ordinance No. 13030. The interim ordinance prohibited the permitting of new mineral extraction activities, asphalt plants and
several related accessory uses, except for asphalt plants in the Rural Resource Industrial (RRI) zoning district. The interim ordinance has been renewed 11 times and is due to expire again on February 24, 2010. In addition, the Board established the Mineral Lands Task Force to review mineral lands, gravel mining, asphalt plants and related issues. In August 2007, the Board established the Asphalt Advisory Task Force to provide further advice specific to asphalt plants.

Asphalt plants are currently permitted as an accessory special use to a gravel mine. A separate Special Use Permit (SUP) is issued, but there is no separate “asphalt plant” section in the chapter. All permitted gravel mines are potentially eligible to apply for an asphalt plant as an accessory use. In addition to the county’s SUP review process, asphalt plant operations are subject to an Olympic Region Clean Air Agency (ORCAA) review and permitting, Department of Ecology review, and federal standards regarding any hazardous waste storage or discharges to water regulated by the National Pollutant Discharge Elimination System permit (NPDES).

**ASPHALT ADVISORY TASK FORCE RECOMMENDATIONS:**
The nine-member Asphalt Advisory Task Force met for ten facilitated work sessions and toured two asphalt plants. An expert panel was also convened to provide answers and professional perspectives on current state-of-the-art technology and knowledge regarding asphalt processing, operation, environmental permitting, and regulation. The objective of this group was the development of recommendations on the siting and permitting of asphalt plants and on the use of recycled asphalt in these plants. The following is a summary of their recommendations.

**Comprehensive Plan Policy Guidelines**
- Consistent with Comprehensive Plan and sub-area designations. -7 support
- Asphalt plants must meet all CAO requirements. -7 support
- Obtain NPDES permit. -7 support
- Locate asphalt plants to minimize adverse impacts to surrounding uses, human health and the environment. -6 support, 1 supports, but has some reservations
- Must obtain ORCAA permit. -6 support, 1 supports, but has some reservations
- Must comply with County storm water regulations. -6 support, 1 supports, but has some reservations
- Must undergo SEPA review. -6 support, 1 supports, but has some reservations
- When not in a gravel mine, asphalt plants can be sited in
  - Rural Resource Industrial
  - Industrial/Commercial Center
    - 6 support, 1 supports, but has some reservations

**Special Use Siting Criteria for Following Zones:**
- Long Term Forestry
- Military Reservations
- Rural 1/20
- Rural 1/10
- Rural Residential/Resource 1/5
- Rural Residential
• Permitting process for gravel mines and asphalt plants can run concurrently. -7 support
• Asphalt plants can be located on a parcel size of at least 40 acres. Will allow under 40 acres if the asphalt plant is located adjacent to an operating or permitted gravel mine or asphalt plant. -7 support
• Asphalt plants are 500 feet from residential district denser than 1 dwelling unit per 5 acres. - 6 support
• Asphalt plants need to be at least 300 feet from adjacent residential area, park, or public preserves. Hearing examiner may lessen this requirement if appropriate, i.e., adjacent to intensive use, such as other industry, airport, freeway, etc. - 6 support
• Plants may remain after depletion of mine. - 2 support with only this text
  o Plants may remain after depletion of mine if another source is “nearby” (nearby = ½ to 1 mi). - 2 support if this text is added
  o Plants may remain after depletion of mine if another source is “nearby” and can begin importing gravel when 90% of gravel is depleted. - 1 support if this text is added
• Asphalt plants must be in, or adjacent to, an active gravel mine that will at the time of permitting, have a life span of at least 10 years. - 2 support, 3 support but have some reservations, and 2 do not support.
• 50% of gravel used by asphalt plants comes from mine or “nearby”. - 2 support, and 4 do not support.

Special Use Siting Criteria for Following Zones:
Light Industrial
Rural Resource Industrial
• Asphalt plants have no special requirements in these 2 zones. - 7 support

Operational Criteria
• County road ordinance: space required for delivery trucks on property. -7 support
• Asphalt plants should have County approved haul routes. - 6 support
• AATF supports the use of “highway RAP” (i.e. highway, roadway, runway, parking lot, etc.) All other sources of RAP must be tested. - 5 support, 1 supports, but has some reservations
• The county should develop annual road wear mitigation fees based on tonnage used by asphalt plants. - 3 support, 2 support, but have some reservations, and 1 does not support.
• Asphalt plants should be fueled by natural gas or propane (or an alternative fuel with the same or less hazardous emissions).- 2 support, 2 support but have some reservations, and 2 do not support
• Support existing code: TCC §20.54.070(21.e) (5 year review) - 3 support, 1 supports but has some reservations, and 2 do not support
• RAP must be covered before use. - 1 supports, and 5 do not support

Other Comments and Considerations
The comments and considerations listed in the recommendation may be part of the overall evaluation of asphalt plant regulations. They do not, however, represent majority or minority opinions for which votes were taken. The ideas were expressed, but did not receive enough support by the group to discuss further.
PLANNING COMMISSION SUB-COMMITTEE ANALYSIS:

Land Environmental Issues with Asphalt Plants:
Hot mix asphalt plants can result in spills, leaks or emissions from chemicals used in the asphalt manufacturing process or absorbed through prior uses of recycled asphalt. Spills and leaks can occur either through some sort of natural disaster, improper storage of materials, or human error in the manufacturing, transporting and storage processes. Emissions occur if the equipment used to contain them does not function properly, which happens even in the best of plants. Recycled asphalt will contain unknown chemical contaminants through its prior uses.

Siting Issues:
Reduce risk of natural disasters through avoiding land-defined critical areas – particularly steep and hazardous, slide-prone slopes, seismic zones, areas of subsidence, and other areas of soil instability.

Possible Impacts on Air Quality:
During manufacturing, asphalt plants may emit significant levels of both particulate matter and gaseous volatile organic compounds (VOCs). These pollutants are considered detrimental to human health (some are suspected carcinogens). The most significant ducted source of emissions in an asphalt plant is the mixer. Storage piles and transport may also emit pollutants.

While these pollutants can be minimized by technology and proper emission control systems at the plant, and by requiring periodic inspection and reporting, such technology is by no means perfect. Where it fails or human operators make errors, plumes of gases that are not fully cleaned are released even from “state of the art” plants.

Siting Issues:
Distance to vulnerable residents who would be harmed. Distance to residential areas is also relevant because of the odor that the plants can create.

Possible Impacts of Asphalt Plants on Water Quality:
Asphalt plants can contaminate ground water through spills and leaks of chemicals. This contaminated ground water could then travel to other lakes and rivers. The common co-location between gravel mines and asphalt plants adds to the possible ground water contamination.

Siting Issues:
Do not site asphalt plants in flood plains. Locate away from areas that slide or that are subject to coastal flooding. Locate away from wetlands, and aquifer recharge areas. Site away from ground water intake for domestic purposes.

Possible Impacts of Asphalt Plants on Plant and Animal Habitat:
Asphalt plants can contaminate habitat through spills and leakage of chemicals.

Siting Issues to Consider:
Locate away from critical or endangered species habitats, state/federal natural area preserves, and state/federal wildlife refuges.
Possible Impacts:
Odor, air pollution, and added truck traffic if “recycled” asphalt is permitted.
Siting Issues to Consider: distance to residential areas, “buffers” from other land uses through setbacks.

Personal use:
The average Washington resident uses 12-14 tons of aggregate, 1.3 cubic yards of concrete, and 1.25 tons of asphalt per year. The average 2,000 square foot home in Western Washington uses almost 210 tons of aggregate in driveways, foundations, sidewalks, base materials, and streets. A mile of county road will contain about 4,600 tons of aggregate. (http://www.washingtonconcrete.org/14/fun-facts.html). Thus the residents of Thurston County have a clear need for the materials provided by gravel mines and asphalt plants for private and public uses, such as buildings, roads, trails, and others.

Moving an Asphalt Plant:
One of the recommendations of the Asphalt Advisory Task Force is to allow asphalt plants to import gravel only from a “nearby” mine. (nearby is ½-1 mile) This would require major investments to be made to move mines. The cost of moving a plant would be about one million dollars; this would not include other costs such as permits fees, site prep, upgrades, and legal expenses.

Cost of hauling used product:
Many projects require the removal of old asphalt. If asphalt is to be hauled from the jobsite to the plant, those trucks can be used hauling material both ways. If a plant is not allowed to use the recycled asphalt, that material must be hauled to a different site (usually a landfill). This would most likely require trucks hauling old material away from the jobsite while other trucks haul the new material in. This adds overall truck traffic to our roads, and requires the trucks to run one way empty, reducing efficiency. (Note, however, that recycled asphalt leads to more truck traffic around the asphalt plant itself).

Cost of hauling excess product:
Asphalt plants that can’t recycle asphalt must move excess product off site.

Cost of covering RAP:
Covering a limited supply of RAP is economically feasible and sensible. Dry RAP requires less heat to mix, since less heat would be used to dry the product.
Covering all RAP on site in a roofed building would be costly, as the size of the structure would be cost prohibitive. Buildings with an eave of up to 16’ are the conventional size and cost is based mostly on total square footage. As the height of the eaves goes above 16’ the cost rises much faster. Also a 30’to 40’ building without walls would do little to protect the RAP from rain when the wind is blowing.

As the RAP is required to be in an area that will contain runoff, the industry has suggested using a tarp or small building to contain enough material for the short term, providing the same benefit as a larger more expensive building. However, such covering would not protect against the environmental impacts of recycled asphalt, which include the leaching of pollutants from the asphalt pile into the ground water and then into nearby streams.
OPTIONS:

Option 1: Forward the draft with a recommendation of approval.
With this option, amendments would be made to Title 20 (Rural) Zoning to address issues around asphalt plants. Staff drafted the regulations using the Asphalt Advisory Task Force recommendations as well as the Planning Commission subcommittee recommendations. The Special Use Permit process regarding asphalt plants will have been updated to reflect local environmental, economical, and social needs of Thurston County. This approach will also help resolve the mineral lands moratorium issue.

Option 2: No action
With this option, the Planning Commission would recommend that no changes be made to Title 20 (Rural) Zoning in regards to asphalt batch plants. The county may opt to either continue the moratorium, or the permitting of asphalt plants will revert to the original 2003 guidelines. It was determined that the current regulations fail to address many of the environmental and citizen concerns that led to the formation of the Mineral Lands Task Force and the Asphalt Advisory Task Force.

STAFF RECOMMENDATION:

Planning staff recommends the Planning Commission select Option 1 and forward with a recommendation, the draft regulations to the Board of County Commissioners for consideration.

ATTACHMENTS:

Attachment A Draft text change and ordinance
Attachment B Asphalt Advisory Task Force

Mineral Lands and Asphalt Plant Staff Report O:\Track\LONG RANGE PLANNING\Mineral Lands\Planning Commission\2009 PC briefings
ATTACHMENT A

PROPOSED TEXT CHANGE FOR CHAPTER 20.54 ASPHALT PLANT SUP
OF THE THURSTON COUNTY CODE

The Thurston County Code is hereby amended to read as follows:

Deleted Text: Strikethrough
Staff Comments: *Italics*
Proposed Changes: Underlined
Unaffected Omitted Text: (...)

Chapter 20.54 SPECIAL USE*

20.54.070
...

3.1 Asphalt production. Asphalt plants (hot mix or batch plants) are subject to
the following provisions in addition to the provisions of chapter 17.20. TCC, the
Thurston County Mineral Extraction Code:

a. An asphalt plant shall be located only on a parcel that is 40 acres or
larger unless the asphalt plant is located adjacent to an operating or
permitted gravel mine or another existing asphalt plant. Light Industrial
and Rural Resource Industrial zones are exempt from this requirement.

b. Air emissions. The Olympic Region Clean Air Agency regulates the
minimum required setback for asphalt plants based on air emissions only.
The County may require more stringent setback requirements based on
other factors. Light Industrial and Rural Resource Industrial zones are
exempt from this requirement.

c. Setbacks. Asphalt plants shall be set back a minimum of 500 feet from
any property line adjacent to or across a roadway from a residential district
with densities greater than .1 dwelling unit per 5 acres and a minimum of
300 feet from less dense adjacent residential property, any park, public
preserve, national wildlife refuge, state conservation areas, or wildlife
easement. The hearing examiner may increase or reduce the setback
requirement where appropriate. Any setback adjustment shall be granted
only after consideration of the public health, safety, welfare and
environment. Light Industrial and Rural Resource Industrial zones are
exempt from this requirement.

d. The location of asphalt plants shall be consistent with the
Comprehensive Plan and Sub-Area Plan designations.

e. Asphalt plants shall meet all the Critical Area Ordinance requirements
to minimize any adverse impacts to surrounding uses, human health, and
the environment.
f. The asphalt plant operator shall obtain a National Pollution Discharge Elimination Systems (NPDES) permit.

g. Asphalt plants shall comply with all County storm water regulations.

h. Asphalt plants must provide for noise control in conformance with Chapter 173-60 WAC and any other applicable local noise standards.

i. The permitting process for gravel mines and asphalt plants may run concurrently.

j. Asphalt plants may remain after depletion of the related mine if another gravel source is within 1 mile of the asphalt plant. Importing of gravel may commence when 90% of gravel from the related mine is depleted. Light Industrial and Rural Resource Industrial zones are exempt from this requirement.

k. Asphalt plants must be in, or adjacent to, an active gravel mine that will remain active for the foreseeable future. The parcel upon which the asphalt plant is located shall be a minimum of 40 acres individually or in combination with an existing gravel mine parcel or parcels. Light Industrial and Rural Resource Industrial zones are exempt from this requirement.

l. A minimum of 50% of gravel used by the asphalt plant must come from the related mine, or after depletion of the related mine, from a mine within 1 mile of the asphalt plant. Light Industrial and Rural Resource Industrial zones are exempt from this requirement.

m. Asphalt plants shall provide necessary space to accommodate delivery trucks on the site.

n. Asphalt plants shall have County approved haul routes.

o. Use of “highway RAP” (i.e. highway, roadway, runway, parking lot, etc.) in asphalt production is allowed. All other sources of RAP must be tested.

p. Asphalt plant operators shall pay road wear mitigation fees based on tonnage used by asphalt plants.

q. Asphalt plants shall be fueled by natural gas, propane, or an alternative fuel with the same or less hazardous emissions.

r. RAP must be covered by an un-walled structure before use if being stored on site for more than 30 days.

s. Where the language in this chapter conflicts with chapter 17.15, 17.20, or 20.54.070(21) TCC, the stricter language shall apply.
21. Mineral Extraction. Mineral extraction (including expansions of existing conforming and legal nonconforming mines) and their accessory uses are subject to the following provisions and the provisions of Chapter 17.20 of this code, the Thurston County Mineral Extraction Code, and chapter 17.15 of this code, Critical Areas:

a. Designation requirements. Mineral extraction may only be permitted on sites designated as mineral lands of long-term commercial significance under Chapter 20.30B.

b. Critical areas excluded. The SUP shall be conditioned to specifically exclude the following areas, as mapped by Thurston County and/or known to occur on the site based on best available information, from mining activity:

i. Streams, lakes, 100-year floodplains, documented channel migration zones, and the 500 year floodplain associated with the Nisqually River;

ii. The buffer area of 250 feet on Type 1 or 2 streams as defined in Chapter 17.15 TCC;

iii. The buffer area of 200 feet on Type 3 streams as defined in Chapter 17.15 TCC, and Type 4 or 5 streams that drain to Type 1 or 2 streams;

iv. The buffer area of 100 feet on Type 4 and 5 streams draining directly to Puget Sound;

v. The buffer area of 50 feet on any stream not draining to a Type 1, 2, or 3 stream or Puget Sound;

vi. Class I and II wetlands and the buffer area of 300 feet except those wetlands under 1,000 square feet in size and that are not located in a riparian area, are not part of a mosaic wetland (as described in the Washington State Wetland Rating System for Western Washington, DOE, August 2004, as amended), and do not provide essential habitat for priority wildlife species identified by the Washington Department of Fish and Wildlife;

vii. Marine bluff hazard areas with a vertical height of 15 feet or more;

viii. Wellhead protection areas and their 1-year, 5-year, and 10-year time of travel zones, or recharge areas that serve as the sole
potable water supply for residents of the area, except that coal and minerals mining are also not permitted in any aquifers or aquifers with extreme or high susceptibility to contamination due to porous soils and the absence of a till layer at least 25-feet thick;

c. In addition to the requirements of Chapter 17.15, the SUP shall require that no activity or use be allowed that results in a significant net loss of critical area functions, such as but not limited to sediment harmful to aquatic life in streams, lakes, or marine shorelines, and reduce groundwater flows to a stream that would adversely affect dependent fish.

d. The SUP shall not be permitted if the proposed mineral extraction activity would result in a significant change of: water temperature, quality, physical or chemical characteristics (e.g., pH), and quantity; timing or duration of the water entering a wetland; or a wetland’s water level. (Chapter 173-201A WAC) A hydrogeologic report shall be required as specified in the Mineral Extraction Code.

e. Weed review. Applicants must submit a plan for controlling invasive and noxious weeds. The plan must include annual updates for weeds on the County’s noxious weed list and a report to the County Noxious Weed Division with results.

f. Where the language in this chapter conflicts with chapter 17.15 TCC, the stricter standard shall apply.

aj. Accessory Uses.
 i. The following accessory uses are allowed only when expressly permitted in a special use permit issued by the approval authority: washing, sorting or crushing of rock or gravel, asphalt production (batching or drum mixing) pursuant to subsection 3.1 above, concrete batching, storage or use of fuel, oil or other hazardous materials, and equipment maintenance. Limited manufacturing of concrete products from sand and gravel excavated on-site may be allowed by the development services department as an accessory use to a permitted concrete batching facility; provided, that retail sales of such products are prohibited. All other accessory uses are allowed only when approved after administrative review by the department, development services and the roads and transportation services departments.

ii. Accessory units uses are permitted only in conjunction with an existing mineral extraction operation. The permit for the accessory use expires when the SUP for the mineral extraction expires, is revoked, or when significant mineral extraction activity as defined in Section 17.20.150 ceases. Recycling of asphalt or concrete is permitted as an accessory use only in conjunction with a permitted crusher and in accordance with any
health department requirements. Temporary asphalt and concrete production may be permitted only to fulfill a contract for one specific public project and for a period not to exceed twelve months or the length of the contract, whichever is shorter. There must be at least twelve months between the end of one temporary use period and the beginning of another on the same site.

bj. Reports. Copies of any reports or records, except financial reports, required to be submitted to federal, state, regional or county officials or agencies pursuant to any laws or regulations shall be made available to the county upon request. Information required shall be limited to that pertaining to operations within Thurston County. The public disclosure of such information shall be governed by applicable law. The operator shall keep a record of the source of any asphalt, concrete or soils imported from off-site and stored on-site.

ek. Application and Review Procedures. In addition to the information required in Chapter 20.60, the application to the county for a special use permit for mineral extraction shall include:

i. A contour map, drawn to the scale of one hundred feet to the inch and contour intervals of two feet, or at a scale and topographic interval determined to be adequate by the department, showing current field topography, including the location of water courses of the tract intended for the proposed operation and estimated thickness of overburden and mineral-bearing strata in the tract intended for the proposed operation, all critical areas including their type or class;

ii. The rehabilitation and conservation plans described in Section 17.20.140 of this code;

iii. A list of all proposed activities anticipated or planned to occur on the site, including but not limited to the method of mineral extraction, washing, sorting, crushing, asphalt or concrete batching, equipment maintenance, or any activity that could result in a potential, significant, adverse environmental impact;

iv. A preliminary drainage plan in accordance with Chapter 15.05 of this code;

v. A copy of the applicant's DNR reclamation permit application, as required by RCW 78.44.080.

dl. Bonds. In cases where rehabilitation requirements of the county exceed those of the Department of Natural Resources, a performance bond may be required in an amount to be sufficient to insure rehabilitation in accordance with the plan submitted pursuant to Section 17.20.140 of this code, subject to applicable law. With the approval of the county and for such period or periods as may be
specified, the owner may be permitted to post its own bond without corporate surety.

em. Permit Review. Any permit issued pursuant to this chapter shall be reviewed by the approval authority at least no less frequently than every five years from the date of the decision to approve the permit. The approval authority shall determine the frequency of permit review. The director may authorize a reasonable fee for this review. At the time of such review, the approval authority may impose additional conditions upon the operation if the approval authority determines it is necessary to do so to meet the standards of this chapter, as amended.

fn. Designated Mineral Lands Status. In accordance with Chapter 20.30B, an application for designation as mineral resource lands of long-term commercial significance shall accompany an application for a special use permit for mineral extraction unless the site has already received designation status. Refer to Chapter 20.30B for requirements.
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Final Report to the Board of County Commissioners from the Asphalt Advisory Task Force: Recommendations on the Permitting of Asphalt Plants

Prepared by: Olivia Terwilleger, Assistant Planner

Background

RCW 36.70A.170 requires that governments planning under the Growth Management Act (GMA) designate Mineral Lands of Long Term Commercial Significance (LTCS). Seeking compliance with the GMA, the Board of County Commissioners (Board) adopted a policy in November 2003, which designated lands that were already active mining sites as LTCS. Shortly after this policy was implemented, concerns over the location of gravel mines and asphalt plants prompted the Board to reconsider its earlier policy.

In January 2004, the Board took two steps to facilitate a comprehensive review of mineral lands policy. First, the Board established an interim ordinance that prohibited the designation of new mineral lands, permitting of new gravel mining operations, and the permitting of new asphalt plants outside the Rural Resource Industrial zone. The second step was to form the Mineral Lands Task Force (MLTF).

The Mineral Lands Task Force was tasked with:

- Addressing concerns about the location of mines and asphalt plants;
- Reviewing existing County policies and regulations;
- Familiarizing themselves with case law;
- Comparing scientific studies;
- Evaluating maps and related technical information;
- Listening to experts on mining and asphalt plant regulation; and
- Developing recommendations for the Board.

The MLTF made their final recommendations in July 2004. Action on the recommendations was deferred due to the County’s commitment to the Critical Areas Ordinance review process, and then yet again due to the appeal of the Comprehensive Plan to the Growth Management Hearings Board.
**The Asphalt Advisory Task Force**

The Board appointed a second task force in September 2007. The Asphalt Advisory Task Force (AATF) was established to build upon the work of the MLTF. The nine-member AATF met for ten facilitated work sessions, toured two asphalt plants and invited an expert panel for a question and answer session so they could gain perspective on the current technology and state-of-the-knowledge regarding asphalt processing, operation, environmental permitting, and regulation. The guests included Mike Kain, County Planning Manager, to speak about County permitting process, John Libby from the County Health Department, Jason Shira from DOE, Mark Goodin from ORCAA, and Gary Fore from NAPA. The objective of this group was the development of recommendations report regarding the siting and permitting of asphalt plants and use of recycled asphalt in these plants.

A balanced membership of the AATF was sought, first from those who participated previously in the MLTF and then from referrals from those members and solicitation from the public. These members donated their time and effort in participating in meetings, preparing assignments between meetings, and even agreed to meet several times beyond the original scheduled meetings in order to complete the work.

**Current Regulations**

20.54.070 Use--Specific standards.

21. Mineral Extraction. Mineral extraction (including expansions of existing conforming and legal nonconforming mines) and accessory uses are subject to the following provisions and the provisions of Chapter 17.20 of this code, the Thurston County Mineral Extraction Code:

a. Accessory Uses.

i. The following accessory uses are allowed only when expressly permitted in a special use permit issued by the approval authority: washing, sorting or crushing of rock or gravel, asphalt production (batching or drum mixing), concrete batching, storage or use of fuel, oil or other hazardous materials, and equipment maintenance. Limited manufacturing of concrete products from sand and gravel excavated on-site may be allowed by the department as an accessory use to a permitted concrete batching facility; provided, that retail sales of such products are prohibited. All other accessory uses are allowed only when approved after administrative review by the development services and the roads and transportation services departments.

ii. Accessory units are permitted only in conjunction with an existing mineral extraction operation. Recycling of asphalt or concrete is permitted as an accessory use only in conjunction with a permitted crusher and in accordance with any health department requirements. Temporary asphalt and concrete production may be permitted only to fulfill a contract for one specific public project and for a period not to exceed twelve months or the length of the contract, whichever is shorter. There must be at least twelve months between the end of one temporary use period and the beginning of another on the same site.
**Recommendations**

The focus of the majority of discussions among the members was whether asphalt plants should be an accessory use in gravel pits or if they should require a special use permit siting. Issues including property values, air quality, noise, odor, truck traffic, groundwater impacts, and oil storage, as well as potential contaminants in recycled asphalt were also discussed. The recommendations below represent the varying levels of agreements reached by the AATF. Additional issues discussed, but not voted on, are listed in the “Other Comments and Considerations” section.

The AATF agreed overall on some significant issues:

- Asphalt plants should not be outright prohibited;
- There has been a reduction in potential environmental impacts from asphalt plants with improvements in technology and best management practices;
- There is concern not only about the impacts generated by asphalt plants themselves but from increased truck traffic through transporting resource (gravel/sand) to the plant and transporting processed product (asphalt) from the plant to end use sites;
- There should be an attempt in the siting of asphalt plants to reduce conflicts with rural residential uses.

In order to distinguish where there was agreement on certain issues, and where there was opposing views, the issues and recommendations were made available to the AATF. The AATF approached the major concerns and replied with: yes, I support the recommendation, yes, I support the recommendation but have reservations or, no, I do not support the recommendation. This allowed them to focus on the areas of discussion where there were deferring views.

Generally, there were areas of consensus with the majority of the Task Force supporting the recommendation. Below, each of the recommendations is identified, and a color dot indicates the feelings of an individual task force member.

- ☑️ = Yes, I support
- ☒️ = Yes, I support, but...
- ☐️ = No, I do not support

**COMPREHENSIVE PLAN POLICY GUIDELINES**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Yes</th>
<th>Support, but</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent with Comprehensive Plan and sub-area designations.</td>
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<tr>
<td>Asphalt plants must meet all CAO requirements.</td>
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<tr>
<td>Obtain NPDES permit.</td>
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<tr>
<td>Locate asphalt plants to minimize adverse impacts to surrounding uses, human health and the environment.</td>
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<tr>
<td>Must obtain ORCAA permit.</td>
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<tr>
<td>Must comply with County storm water regulations.</td>
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</table>
Must undergo SEPA review.

When not in a gravel mine, asphalt plants can be sited in:
- Rural Resource Industrial
- Industrial/Commercial Center

**SPECIAL USE SITING CRITERIA FOR FOLLOWING ZONES:**
- Long Term Forestry
- Military Reservations
- Rural 1/20
- Rural 1/10
- Rural Residential/Resource 1/5
- Rural Residential

Permitting process for gravel mines and asphalt plants can run concurrently.

Asphalt plants can be located on a parcel size of at least 40 acres. Will allow under 40 acres if the asphalt plant is located adjacent to an operating or permitted gravel mine or asphalt plant.

Asphalt plants are 500 feet from residential district denser than 1 dwelling unit per 5 acres.

Asphalt plants are at least 300 feet from adjacent residential area, park, or public preserves. Hearing examiner may lessen this requirement if appropriate, i.e., adjacent to intensive use, such as other industry, airport, freeway, etc.

Plants may remain after depletion of mine.

Plants may remain after depletion of mine if another source is "nearby" (nearby = ½ to 1 mi).

Plants may remain after depletion of mine if another source is "nearby" and can begin importing gravel when 90% of gravel is depleted.

Asphalt plants must be in, or adjacent to, an active gravel mine that will at the time of permitting, have a life-span of at least 10 years.

50% of gravel used by asphalt plants comes from mine or "nearby".

**SITING CRITERIA FOR THE FOLLOWING ZONES:**
- Light Industrial
- Rural Resource Industrial

Asphalt plants have no special requirements in these 2 zones.
OPERATIONAL CRITERIA (Special Conditions for Asphalt Plants)

<table>
<thead>
<tr>
<th>Criteria</th>
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<tr>
<td>County road ordinance: space required for delivery trucks on property</td>
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<tr>
<td>Asphalt plants should have County approved haul routes.</td>
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<tr>
<td>AATF supports the use of &quot;highway RAP&quot; (i.e. highway, roadway, runway, parking lot, etc.) All other sources of RAP must be tested.</td>
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<tr>
<td>The County should develop annual road wear mitigation fees based on tonnage used by asphalt plants.</td>
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<tr>
<td>Asphalt plants should be fueled by natural gas or propane (or an alternative fuel with the same or less hazardous emissions).</td>
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<tr>
<td>Support existing code: TCC §20.54.070(21.e) (5 year review)</td>
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<tr>
<td>RAP must be covered before use.</td>
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</tbody>
</table>

Other Comments and Considerations
The comments and considerations listed below may be part of the overall evaluation of asphalt plant regulations. They do not, however, represent majority or minority opinions for which votes were taken. The following ideas were expressed, but did not receive enough support by the group to discuss further. Generally, they focus on the need to:

1. Avoid particular sensitive/hazardous areas-suggested to reduce potential conflicts with surrounding uses.

2. Allow plants to remain active at depleted mines- suggested to minimize the number of locations/neighborhoods that would be subjected to impacts caused by asphalt plants and transport of resources and product to and from the plant.

3. Establish volume or time limit restrictions to plant activity-suggested to reduce the truck traffic required for importing gravel.

Community Vision:
The citizens of Thurston County recognize mining as an important part of the rural economy. Asphalt plants supply materials for road maintenance and construction projects throughout the region. The community seeks a balance between the need for asphalt plants and the need to protect the environment and the community from adverse impacts. Good stewardship of operations requires a partnership among asphalt operators, county citizens, and regulatory agencies.

Balancing conflicts:
Asphalt plants do pose potential conflicts with surrounding uses, particularly rural residential uses and critical areas. During the process of locating asphalt plants, the County evaluates the location and proximity to existing residential areas (see below). For permitting asphalt plants, the County considers groundwater protection, air quality impacts, hazards posed by gravel truck travel, and residential densities surrounding the plant, among other concerns. In response to these concerns, the County implements conditions and Best Management Practices (BMP) through
Special Use Permit process to ensure that asphalt plants are in keeping with public health and safety and environmental protection. The policies provide that generally, asphalt plants "should minimize adverse impacts on the environment and wildlife, and should minimize its effect on surface water, groundwater, and air quality."

Asphalt Plants . . .
- are not located near certain areas of County (sub-area plan);
- are not located near rivers of statewide significance;
- are not located near wildlife refuge;
- are not located within the Black River corridor;
- are not located near the McAllister Springs;
- are located to reduce neighborhood impacts, i.e., roads, utilities, noise, odor, light, etc;
- are buffered to protect people, animals, and the environment; buffer distances should be defined.

Additional Buffering Considerations:
Geologic criteria
- Plants located at least 1000 ft from a seismic fault, not within an area of subsidence, and not within an area of slope or soil instability.

Water
- Boundary is located at least 500 ft from any perennial surface water body.
- Plant is located outside of the 100-year-floodplain (FEMA) and outside areas subject to slides or coastal flooding.
- Boundary is at least 500 ft from class 1 & 2 wetlands.
- Plant is located outside of areas where there is less than 20 ft separation between plant and seasonal high groundwater level.
- Plant is located at least 1000 ft from any surface water intake (domestic use) and 500 ft from any ground water intake for domestic use.

Air
- Plant is not located in Class 1 airspace nor in a non-attainment area (unless compensating emission offset can be met).

Wildlife Habitat
- Boundary is at least 1000 ft from wilderness area as defined by Wilderness Act of 1964 (Federal).
- Boundary is at least 500 ft from natural areas acquired or voluntarily dedicated under RCW 79.70.
- Boundary is at least 500 ft from habitat designated by WDFW as essential to maintenance or recovery of listed endangered, threatened or sensitive wildlife species.
- Boundary at least 500 ft from designated habitat for endangered or threatened species (Federal ESA).

Public Open Space
- Boundary is at least 1000 ft from public preserves, including parks, wildlife refuges, state conservation areas and wildlife areas.

Developed Community
- Plant is located outside any archeological site or historic site.
- Boundary is at least 1000 ft from Agricultural Lands of Long Term Commercial Significance.
o Plant is at least 200 ft from the facility property line.
o Boundary is located at least ½ mile from residences or public gathering places.

**Infrastructure**
o Plant is sited where natural gas or propane is available, or an alternative fuel that produces the same or less hazardous emissions.
o Space is provided for delivery truck queue parking on-site to minimize haul road & neighborhood impacts.
o Plant will be located within 1-mile of a city /county arterial road or a state highway.
o Traffic impact study will be required in order to obtain permit. Fees or improvements to improve roads used for access will be required as necessary. [Permitting requirement, not siting requirement]
o An asphalt plant may not be sited where a subarea plan prohibits it.
o The use of best available technology for asphalt processing will be required.

**Monitoring**
o The permit authority may require additional monitoring … [per discussion on 11/27]

**Recycled Asphalt (RAP) Conditions (Permitting requirements)**
o RAP will be stored under a roofed structure.
o The source of RAP will be identified.
o RAP composition will be tested when it is not from a highway source.
o The County, or cities within the County, should provide urban industrial zoned locations for asphalt plants.

**Conclusion**
The AATF met at work sessions, toured asphalt plants, and had experts speak with them. The objective of this group was to formulate a recommendations report regarding the siting and permitting of asphalt plants and use of recycled asphalt in these plants. These members gave their time and effort in the meetings, assignments, and met several times beyond the original scheduled meetings, including one final meeting one year after the close of the Task Force, in order to complete their work.

Both the recommendations and the additional consideration criteria opinions are the result of lengthy discussions and consultation with experts and technical information. The Task Force hopes that the outcome of their work will result in better planning for asphalt plant permitting with a balanced approach for the protection of rural character and the environment.
Asphalt Advisory Task Force Membership:

Citizen/Environmental
Susan Markey, Black Hills Audubon
Howard Glastetter
Don Leaf
Ron Nelson

Agency/Municipal
Lester Olson, Thurston County Roads & Transportation
Matt Brookshier, WA DNR

Building/Development (end user)
Dave Lewis, Miles Sand and Gravel

Mining/Asphalt Industry
Tom Zamzow, Wilder Construction
Mark Segale, MAS Resources

Facilitator
John Kliem and Debbie Holden, Creative Community Solutions

Thurston County Planning Staff
Cinde Donoghue