Dear Mr. Waggoner and Ms. Morgan:

Draft NEPA Environmental Assessment
for Proposed Passenger Service
at Snohomish County Airport/Paine Field

We appreciate the opportunity to comment on the Draft Environmental Assessment (EA) of the proposal to allow Horizon Air and Allegiant Air to provide commercial airline service at Snohomish County Airport/Paine Field. We strongly support FAA’s efforts to evaluate the potential environmental impacts associated with this project and recommend that the final EA evaluate air impacts associated with three key issues in our region: air toxics, ozone, and greenhouse gas emissions (GHGs).

Consistent with FAA’s environmental guidance policies, the EA should evaluate hazardous air pollutants (HAPs) including diesel particulate matter. We recognize that FAA is not required to assess the potential human health risks associated with HAPs in environmental assessments. However FAA guidance for NEPA evaluations clearly states that HAPs should be included in environmental assessments. Therefore, we encourage FAA to include HAPs and diesel particulate matter in the Environmental Assessment for the Paine Field expansion.

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In addition to air toxics, we are concerned that the proposal did not evaluate the regional change in greenhouse gas emissions (GHGs) due to the project. Again, we recognize that FAA is not currently required to evaluate GHGs, however, we are concerned that the draft EA does not reflect the Administration’s intent to require federal actions under NEPA to include GHGs in environmental analyses. Although we realize official guidance is still forthcoming, GHGs from airport operations have been evaluated in our region, and those reports could be used to provide methods and guidance. In particular, we encourage FAA to examine the regional change in motor vehicle traffic-related GHG emissions resulting from this proposal.

Also, the analysis needs to include ozone as well as carbon monoxide, as required under general conformity regulations. Snohomish County is included in our region’s maintenance areas for both ozone and carbon monoxide and is routinely evaluated in environmental assessments under NEPA.

Finally, we recommend that FAA extend the evaluation timeline to be consistent with the Paine Field Airport Master Plan and the region’s transportation plan, Transportation 2040. Both these plans evaluate potential environmental impacts associated with population and regional growth, and the impacts from the Paine Field project should be viewed in context with expected changes at both the airport and across the region.

More detailed comments on the Draft EA are provided in the attachment. If you have questions, please contact Paul Carr of my staff at (206) 689-4085 or paulc@pscleanair.org.

Sincerely,

James L. Nolan
Interim Executive Director

JLN/lh

Attachment

cc: Paul Roberts, PSCAA Board Chair
    Doug Brown, Dept. of Ecology
    Stu Clark, Dept. of Ecology

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Detailed Comments on
Draft Environmental Assessment
Snohomish County Airport/Paine Field

Alternatives
p. B.7: Describe existing transit service and facilities at and adjacent to the airport and whether transit service is affected by the alternatives considered in the initial range of alternatives.

Affected Environment
p. C.5 Air Quality: Provide additional information on air pollution from the proposal including criteria pollutants, air toxics, and greenhouse gases. Describe the health effects and major sources of the pollutants. Describe which agencies regulate the different sources of emissions, such as aircraft emissions, emissions from ground support equipment, and emissions from the traffic generated by the proposal.

The Puget Sound region is in the top five percent of the nation for potential cancer risk from air toxics. Provide general information on air toxic emissions associated with airport operations and the health effects. Identify existing sources of air toxics, especially diesel emissions, at the airport.

Transportation activities emit about half of the regional greenhouse gases. Describe the greenhouse gases emissions from aircraft, ground support equipment, and surface travel vehicle miles traveled (VMT) at the airport.

p. C.20 Surface Transportation: Add a description of transit service and facilities on or adjacent to the airport, including existing and planned service routes, stops, and frequency. Describe the distance; e.g., ¼ mile, and condition; e.g., paved sidewalk, of the route from the closest existing or planned transit stop to the existing pedestrian walkway that connects the terminal to Airport Road. Compare the existing and planned service and facilities to accepted performance measures for ground access. Add a description of existing transportation demand management programs, such as commute trip reduction programs, in the area.

Environmental Consequences
p. D.2 Air Quality: Provide additional information on air pollution from the proposal including criteria pollutants, air toxics, and greenhouse gases. Estimate the no action and project-related operational emissions for 2021 and 2040 in addition to 2016, which is the final year of the Carbon Monoxide Maintenance Plan. 2021 is the last year of the Paine Field Airport Master Plan Update. 2040 is the last year of the Puget Sound Regional Council’s proposed regional transportation plan – Transportation 2040. Describe how the emissions relate to the Airport Master Plan Update and Transportation 2040. For
example, have the emissions from the proposal been specifically accounted for or included in the general growth forecasts in the airport master plan update and the proposed Transportation 2040?

Identify operation-related greenhouse gas and toxic emissions, from diesel vehicles, aircraft, ground support equipment, and surface travel VMT. Where feasible provide descriptions of the sources, such as the types of ground support equipment that will be used.

p. D. 31 Surface Transportation: Does the proposal include transit service and adequate pedestrian access to the terminal building? Please describe the proposed service levels and facilities and compare them to accepted performance standards for ground access to airports.

Mitigation Measures

There are a number of available mitigation measures that could reduce the proposal’s impact on air quality and greenhouse gas emissions. For example, rather than rely upon fleet turnover and associated improvements in engine technology to reduce emissions from ground support equipment, the proposal proponents could use electric ground support equipment and achieve additional reductions in greenhouse gas emissions earlier than projected. The SeaTac Airport environmental strategy and current programs identify a number of mitigation measures that could be used at Paine Field, such as:

- Installing a terminal building that meets LEED\textsuperscript{\textregistered} or other "green" building performance measures
- Promoting transit use and ridesharing by employees.\textsuperscript{iii}

Additionally, the proposal proponents could reduce emissions by:

- Installing emission reduction retrofit equipment for their diesel powered off-road equipment
- Using biodiesel fuel for vehicles and equipment
- Using electric ground support equipment.


\textsuperscript{iii}A Vision for 2014 and Beyond, Environmental Strategy Plan 2009, Seattle-Tacoma International Airport; Greenhouse Gas Emissions Inventory Fact Sheet, Port of Seattle.
August 9, 2011

Andrew Green
Director -- Air Quality Programs
Puget Sound Clear Air Agency
1904 Third Avenue, Suite 105
Seattle, Washington 98101-3317

RE: Response to Comments on Draft Environmental Assessment for Proposed Passenger Service at Paine Field

Dear Mr. Green,

Thank you for your comments on the Draft Environmental Assessment (EA) for Amendment to the Operations Specifications for Air Carrier Operations, Amendment to the FAR Part 139 Operating Certificate, and Modification of the terminal building at Paine Field. We appreciate your input on the National Environmental Policy Act (NEPA) analysis and documentation for these proposed Federal actions. We have read and considered your comments during the preparation of the Final EA and in our meeting held April 21, 2011.

As we discussed, we thought it would be better to discuss our proposed approach to responding before finalizing the Final EA. Where applicable, we have noted where in the Final EA your comment will be addressed.

In response to comments regarding who regulates emission sources:

In order to keep the EA concise, this information was not available in the Draft EA. Our response to comments section will include this information.

In general the following sources of emission occur at an airport:

- Aircraft operations, including auxiliary power units (APUs)
- Ground support equipment – the ground vehicles that service aircraft
- Stationary source emissions
  - Facility/building power (electricity, natural gas, oil)
  - Emergency generator fuel use
  - Refrigerants
- Surface vehicle travel
  - Airport service equipment/fleet vehicles (i.e., snow removal, Aircraft Rescue and Fire Fighting (ARFF), etc).
- Airport employee commute and administrative travel
- Tenant support ground travel and employee commute
- Public ground travel
- Construction and maintenance project activities
- Other commercial activity associated with tenants

A wide range of agencies control the emissions associated with the various sources.

**Aircraft:** Aircraft activity, the largest source of emissions at an airport, is controlled by the federal government. Responsibility for ensuring the use of safe flight procedures rests with the Federal Aviation Administration. Clean Air Act (CAA) Section 231 directs the Environmental Protection Agency (EPA) to propose aircraft engine emission standards for any air pollutant that may reasonably be anticipated to endanger public health and welfare. These and other regulatory provisions prevent state and local government from regulating aircraft activity and their emissions. EPA is required to make certain such standards’ effective dates permit the development of necessary technology, giving appropriate consideration to compliance cost. It is important to note that the International Civil Aviation Organization (ICAO) sets such standards on an international level. Nothing in the CAA, or any other regulation, prevents the EPA from adopting standards different from the ICAO standards, but to date, EPA standards have closely mirrored those of ICAO.

**Stationary Source emissions.** Title I of the Clean Air Act specifies a set of requirements to emissions of stationary sources, and a variety of regulations have been developed in response to these requirements. Under the CAA, stationary sources at airport facilities are treated the same as stationary sources off the airport; therefore, they must meet the same regulations as similar off-airport sources. The control of stationary sources is contingent on the facility type and the applicable rules for such a source.

**Non-road vehicles: GSE, construction, etc.** The CAA classifies engines and vehicles that are not used on the road as nonroad vehicles. In this regard, most Ground Service Equipment (GSE) is classified as nonroad vehicles. The control of emissions from nonroad engines is outlined in CAA Section 209. Section 209 gives EPA the authority to establish emissions standards for new nonroad engines and vehicles. Section 209(e)(1) outlines federal preemption for certain types of nonroad equipment, particularly construction and agricultural vehicles, and locomotives. Other provisions of Section 209 enable the EPA administrator to authorize California (and other states after notice to the Administrator) to adopt and enforce standards to control certain other non-road engine emissions.

**On-Road Vehicles:** On-road vehicles using the airport (e.g., ground access vehicles, shuttle, rental cars, etc.) are subject to the same set of regulations and requirements as similar vehicles serving non-airport facilities. Under CAA Section 209, states are prohibited from adopting or attempting to enforce emissions standards for new motor vehicles or new motor vehicle engines. However, CAA Section 209 authorizes California to adopt “standards (other than crankcase emission standards) for the control of emissions from new motor vehicles” under a waiver from the EPA. Upon the adoption of such a standard by California, Section 177 permits other states to follow suit and adopt the identical policy. In addition, the CAA gives states the authority to
establish Transportation Control Measures (TCMs) in ozone non-attainment areas in order to reduce emissions from on-road vehicles.

**In response to comments regarding air quality conformity:**

The General Conformity Regulation requirements of the Clean Air Act (40 Code of Federal Regulations (CFR) Part 93) require the demonstration of conformity for pollutants in which the area is designated by USEPA as nonattainment or maintenance. For those pollutants, any actions of the federal government must be shown to conform with the State Implementation Plan (SIP) for the area. Based on the EPA's current designations, the area around Paine Field is currently designated as maintenance for carbon monoxide. In undertaking a conformity analysis, the conformity regulations identify the steps of the process, which first starts with a determination of whether or not the regulation applies, through the preparation of an applicability analysis. If the total project-related emissions are less than the de-minimis threshold for the pollution, a conformity determination is not required. The Draft and Final Environmental Assessment (EA) contain that applicability analysis.

Because the Puget Sound Region is in attainment for all pollutants, but is subject to a maintenance plan for carbon monoxide, the conformity analysis is only required for that pollutant. The de-minimis threshold for a carbon monoxide maintenance area is 100 tons of project-related emissions per year. (40 CFR Part 93.153(b)(2). The air quality modeling indicated that the proposed project would not trigger the de-minimis threshold (i.e. the project would produce less than 100 tons of project-related emissions per year).

In response to questions and comments about the emissions being low because the evaluation only focused on the proposal by two carriers, it is important to understand the basis by which National Environmental Policy Act (NEPA) documents are prepared. Council on Environmental Quality (CEQ) regulations implementing NEPA requires that NEPA documents address impacts that are "reasonably foreseeable".

Federal Aviation Administration (FAA) Order 5050.4B Paragraph 9q defines reasonably foreseeable as:

> An action on or off-airport that a proponent would likely complete and that has been developed with enough specificity to provide meaningful information to a decisionmaker and the interested public. Use the following table to help determine if an action is reasonably foreseeable.4

(footnote 4: Paragraph 905.c(1) and (2) provide definitions of "connected actions" and "similar actions," respectively)

Similar to the requirements of NEPA, the General Conformity Regulations also contain a related definition. 40 CFR 93.153 defines "reasonably foreseeable emissions" as:

> ... are projected future indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known and the emissions are quantifiable, as described and documented by the Federal agency based on its own information and after reviewing any information presented to the Federal agency.
While the action of constructing a new modular terminal is reasonably foreseeable, and thus is ripe for consideration in the EA, how and when activity levels may change beyond that predicted by the two proposing airlines is not foreseeable. Such information is required to evaluate the environmental effect. To disclose the effects of activity at the maximum capacity of the proposed terminal, the Final EA includes Appendix P. It is important to note that many commenters indicated that the proposing carriers may increase their activity to that capacity level, or that additional carriers may choose to operate at Snohomish County Airport. The results of the impact evaluation would differ based on the fleet mix assumptions and activity assumptions of the carriers operating. Appendix P describes one such scenario. Without a clear understanding of the carriers that would be operating in a specific timeframe, the impacts on air quality could not be identified, as emissions vary based on aircraft type and the associated engines. For these reasons, the FAA determined that such conditions are not reasonably foreseeable and therefore will not be modeled or assessed in this EA.

**In response to comments regarding the inclusion of an evaluation of hazardous air pollutants:**

Federal Aviation Administration guidance on Hazardous Air Pollutants states:

*e. Airport-related hazardous air pollutants (HAPs).* The Environmental Protection Agency (EPA) has identified roughly 25 individual HAPs that are associated with emissions from aircraft and airport ground service equipment (GSE). However, EPA does not specify aircraft and airports in the definitions and categories of HAP sources in Section 112 of the Clean Air Act (CAA) (“Hazardous Air Pollutants”). Nor has EPA established standards for HAPs. When compared with existing urban backgrounds, air quality monitoring studies near several large airports have not shown that increased HAP levels occur near those facilities. In fact, only a small percentage of an urban area’s overall air pollution is attributable to airport emissions. Nevertheless, due to the emission levels of unburned hydrocarbons and particulates near airports, EPA’s National Air Toxic Program notes that airports are complex facilities that emit HAPs. Therefore, to comply with NEPA’s disclosure requirements, FAA reports HAPs emissions in its environmental documents for information purposes only. FAA does not use that information to assess human health risks. The responsible FAA official should consider whether 40 CFR Section 1502.22, which addresses incomplete and unavailable information, applies to HAPS emissions for major airport development projects.

(1) For major projects normally requiring an EIS (e.g., new airport, new runway, major runway extension), the responsible FAA official should decide, in consultation with Federal, State, and local air quality agencies whether it is appropriate to conduct a HAPs emission inventory. This is, especially so when the action would occur in areas that are classified as nonattainment or maintenance for O3 or particulate matter (PM).

(2) As needed, consult APP-400 to determine the HAPs FAA will analyze and the methodology FAA will use to conduct that analysis. (FAA's Desk Reference for Airport Actions, October 2007, Page 15)

In 2003, the Puget Sound Clean Air Agency (PSCAA) completed a toxics evaluation for the Puget Sound region. Relative to airports, the following was concluded:
Emissions from the two airports (Sea-Tac and Boeing Field) could impact the SeaTac and Georgetown monitors. However, the results do not reflect significantly higher pollutant levels at these locations when compared with other sites. In fact, SeaTac potential risks appear slightly lower than Beacon Hill. It is possible that the airport emissions do not significantly impact the monitors because the emissions are diluted over the area. It is also possible that the pollutants of concern at the airport are not those included in the monitoring study.

Because of this information, the FAA does not feel that the evaluation of HAPs would be warranted for this project.

In response to comments regarding the inclusion of evaluation of air quality impacts including greenhouse gas emissions:

In response to your comments and those of the public, the FAA proposes to include the following text which FAA is using in NEPA documents.

Affected Environment: Climate Change/Green House Gases: Of growing concern is the impact of proposed projects on climate change. Greenhouse gases are those that trap heat in the earth’s atmosphere. Both naturally occurring and anthropogenic (man-made) greenhouse gases include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃).

Research has shown that there is a direct link between fuel combustion and greenhouse gas emissions. Therefore, sources that require fuel or power at an airport are the primary sources that would generate greenhouse gases. Aircraft are probably the most often cited air pollutant source, but they produce the same types of emissions as cars. Aircraft jet engines, like many other vehicle engines, produce CO₂, water vapor, nitrogen oxides, carbon monoxide, oxides of sulfur, unburned or partially combusted hydrocarbons [also known as volatile organic compounds (VOCs)], particulates, and other trace compounds.

According to most international reviews, aviation emissions comprise a small but potentially important percentage of human-made greenhouse gases and other emissions that contribute to global warming. The Intergovernmental Panel on Climate Change (IPCC) estimates that global aircraft emissions account for about 3.5% of the total quantity of greenhouse gas from human activities. In terms of relative U.S. contribution, the U.S. General Accounting Office (GAO) reports that aviation accounts “for about 3% of total

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1 All greenhouse gas inventories measure carbon dioxide emissions, but beyond carbon dioxide different inventories include different greenhouse gases (GHGs).

2 Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. For example, chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) are halocarbons that contain chlorine, while halocarbons that contain bromine are referred to as bromofluorocarbons (i.e., halons) or sulfur (sulfur hexafluoride: SF₆).

U.S. greenhouse gas emissions from human sources" compared with other industrial
sources, including the remainder of the transportation sector (23%) and industry (41%).4

The scientific community is developing areas of further study to enable them to more
precisely estimate aviation's effects on the global atmosphere. The FAA is currently
leading and participating in several efforts intended to clarify the role that commercial
aviation plays in greenhouse gas emissions and climate change. The most comprehensive
and multi-year program geared towards quantifying climate change effects of aviation is
the Aviation Climate Change Research Initiative (ACCRI) funded by FAA and NASA.
ACCRI will reduce key scientific uncertainties in quantifying aviation-related climate
impacts and provide timely scientific input to inform policy-making decisions. FAA also
funds Project 12 of the Partnership for Air Transportation Noise & Emissions Reduction
(PARTNER) Center of Excellence research initiative to quantify the effects of aircraft
exhaust and contrails on global and U.S. climate and atmospheric composition.

Environmental Consequences: Projects have the potential to both affect climate change and
be affected by climate change. As discussed in the affected environment section, changes to
resource categories such as air quality and natural resources and energy supply can
potentially affect climate change (e.g., by increasing the amount of greenhouse gases
emitted), but projects can also be impacted by climate change (e.g., rising sea levels). At
this point, there is no consistent scientific indication of when and how the climate will
change.

Research has shown that there is a direct link between fuel combustion and greenhouse gas
emissions. Therefore, sources that require power/fuel at an airport are the primary sources
that would generate greenhouse gases. Aircraft are probably the most often cited air
pollutant source, but they produce the same types of emissions as cars. Based on FAA data,
operations activity at Snohomish County Airport, relative to aviation throughout the United
States, represents less than 1% of U.S. aviation activity. Therefore, assuming that
greenhouse gases occur in proportion to the level of activity, greenhouse gas emissions
associated with existing and future aviation activity at the Airport would be expected to
represent less than 0.03% of U.S.-based greenhouse gases. Therefore, we would not expect
the emissions of greenhouse gases from this project to be significant.

As discussed above, changes to resource categories such as air quality and natural
resources and energy supply can potentially affect climate change (e.g., by increasing the
amount of greenhouse gases emitted), but projects can also be impacted by climate change
(e.g., rising sea levels). At this point, there is no consistent scientific indication of when
and how the climate will change.

At this time a full inventory has not been prepared. However, parts of the information are
available, and others will be generated when the County prepares its Washington State
Environmental Policy Act (SEPA) documentation. The following data is available:

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<table>
<thead>
<tr>
<th>Pollutant</th>
<th>No Action</th>
<th>Preferred Alternative</th>
<th>Project-Related Emissions</th>
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<tr>
<td>Aircraft</td>
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</tr>
<tr>
<td>Total</td>
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<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Year 2011</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Ground Access Vehicles</td>
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<td>1,712</td>
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<tr>
<td>Total</td>
<td>14,954</td>
<td>18,291</td>
<td>3,337</td>
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<tr>
<td><strong>Year 2016</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft</td>
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</tr>
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<tr>
<td>Total</td>
<td>18,684</td>
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Source: BridgeNet Consulting Services, February 2011 Using EDMS 5.1.3; Surface emissions: Synergy Consultants, December 2010. Note that EDMS is not able to quantify CO2 emissions from GSE and CO2 emissions for ground access vehicles assume no diverted trips.

In response to comments regarding the inclusion of ozone into the air quality analysis to meet conformity regulations:

Snohomish County Airport is located in a maintenance area for carbon monoxide, in accordance with the Clean Air Act General Conformity regulations, conformity must only be demonstrated for that pollutant. The Puget Sound Clean Air Agency (PSCAA) expressed a desire to see conformity prepared for ozone, although the region is in attainment for the current 8-hour standard, it was in maintenance for the previously rescinded the 1-hour standard and it is anticipated that over time, the region may become designated as a nonattainment area under the 8-hour rule, or a more stringent ozone standard. The Federal Aviation Administration (FAA) believes it would not be appropriate to conduct a General Conformity applicability analysis relative to ozone, as the regulation requires only consideration of nonattainment or maintenance pollutants. However, understanding that the local air agency anticipates a slide-back into nonattainment, the cumulative impact section of the Final Environmental Assessment (EA) includes the following:

During meetings with the Puget Sound Clean Air Agency, it was noted that the Central Puget Sound Region may become designated as a nonattainment area under the 8-hour ozone standard. At that time, the region will be required by the Environmental Protection Agency (EPA) to prepare a State Implementation Plan (SIP) for the 8-hour condition. Because the area is currently in attainment for the ozone standard, a conformity analysis is not warranted. The results of this EA could be used to assist with that future SIP, reflecting one or more of the alternatives. As noted in the Final EA, the following ozone precursors would be expected in 2016 with or without the proposed action:
<table>
<thead>
<tr>
<th>Pollutant</th>
<th>No Action</th>
<th>Preferred Alternative</th>
<th>Project-Related Emissions</th>
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<td><strong>Construction</strong></td>
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<td>NA</td>
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<td>0.2</td>
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<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>NA</td>
<td>2.4</td>
<td>2.4</td>
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<td><strong>Year 2011</strong></td>
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<td></td>
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</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>34.36</td>
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<td>Nitrogen Oxides (NOx)</td>
<td>56.61</td>
<td>66.87</td>
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<tr>
<td><strong>Year 2016</strong></td>
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</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>38.56</td>
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</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>70.41</td>
<td>84.74</td>
<td>14.33</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding. EDMS 5.1.3 outputs include emissions to the nearest ten-thousandth and these numbers are rounded to the nearest hundredth.

Source: BridgeNet Consulting Services, February 2011 Using EDMS 5.1.3; Surface emissions: Synergy Consultants, December 2010.

Even if the region was non-attainment for ozone, the emissions would be below the de minimis threshold for either of the ozone precursor pollutants.

**In response to comments regarding the health effect of pollution:**

The following provides a brief summary of the potential health and welfare effects of each of the criteria air pollutants.

**Ozone** — When volatile organic compounds and nitrogen oxides accumulate in the atmosphere and are exposed to the ultraviolet component of sunlight, the pollutant ozone is formed. Ozone is a pulmonary irritant that affects the respiratory mucous membranes, other lung tissues, and respiratory functions. Exposure to ozone at certain concentrations can result in symptoms such as tightness in the chest, coughing, and wheezing, and can trigger an attack or exacerbate the symptoms of asthma, bronchitis, and emphysema. Elevated concentrations of ozone also interfere with the ability of a plant to produce and store food, damage the leaves of trees, and reduce crop and forest yields.

**Nitrogen Dioxide** — When combustion temperatures are extremely high, as in aircraft engines, boilers, furnaces, or automobile engines, nitrogen gas from the atmosphere and from fuel combines with oxygen gas to form various oxides of nitrogen. Of these oxides of nitrogen, nitrogen dioxide is the most significant air pollutant. Nitrogen dioxide is a lung irritant capable of producing pulmonary edema at high concentrations, and exposure to elevated concentrations can lead to respiratory illnesses such as bronchitis and pneumonia. Nitrate particles and nitrogen dioxide can also block the transmission of light, reducing visibility in urban areas.

**Carbon Monoxide** — Carbon monoxide is a colorless and odorless gas that is a product of incomplete combustion. At elevated concentrations, this pollutant can have cardiovascular and central nervous system effects. Carbon monoxide is absorbed by the lungs and reacts with hemoglobin to reduce the oxygen-carrying capacity of the blood. At moderate concentrations,
carbon monoxide has been shown to aggravate the symptoms of cardiovascular disease. It can also cause headaches and nausea, and in extremely high concentrations, can lead to coma and death.

**Particulate Matter** – Typical sources of particulate matter are combustion of fossil fuels, industrial processes involving metals and fibers, fugitive dust from wind and mechanical erosion of soil, and photo-chemically produced particles (complex chain reactions between sunlight and gaseous pollutants). Particulate matter is made up of small solid particles and liquid droplets. Suspended particulates refer to particles of approximately 100 micrometers or less in diameter. Particulates larger than 10 micrometers remain in the nose and throat and are readily expelled. Particles 10 micrometers or smaller can reach the air ducts (bronchi) and the air sacs (alveoli) of the lung. Particles 2.5 micrometers or smaller have the best chance of reaching the lower respiratory tract. These particulates have been associated with increased respiratory diseases such as asthma, bronchitis, and emphysema; cardiopulmonary disease (heart attack); and cancer. Particulate matter is also a major cause of reduced visibility in parts of the United States.

**Sulfur Dioxide** – Sulfur dioxide is a colorless gas that is formed when fuels containing sulfur compounds are combusted. Sulfur dioxide can cause irritation and inflammation of tissues with which it comes in contact. Inhalation of elevated concentrations can cause irritation of the mucous membranes, bronchial damage, and can exacerbate pre-existing respiratory diseases such as asthma, bronchitis, and emphysema. Sulfate particles are the major cause of reduced visibility in many areas of the United States. When combined with other substances in the air, this pollutant can fall to the earth as rain, fog, snow, or dry particles (commonly referred to as “acid rain”). Sulfur dioxide can also accelerate the decay of building materials and certain types of paint.

**Lead** – People and animals can be exposed to lead by breathing or ingesting it in food, water, soil, or dust. Historically, the majority of lead came from the combustion of leaded fuels. However, the use of unleaded fuels since 1975 has reduced mobile source lead emissions by over 90 percent. Unlike unleaded automobile gasoline, aviation gasoline (commonly known as “AvGas” or 100 octane low-lead “100LL”) still contains lead as an antiknock agent. AvGas is generally only used by general aviation aircraft with piston engines. Currently, stationary sources such as lead smelters, battery manufacturers, and iron and steel producers emit the majority of ground-based lead emissions. Lead is a stable compound that accumulates in the environment and in living organisms where it can interfere with the maturation and development of red blood cells, affects liver and kidney functions, and disturbs enzyme activity. Lead exposure can also cause liver disease, affect the normal functions of the reproductive and cardiovascular systems, and cause mental retardation and brain damage in children. Near industrial facilities, concentrations of lead have been shown to slow down the rate of vegetative growth.

In addition to criteria pollutants noted above, aviation sources also may emit hazardous air pollutants. However, studies conducted at large airports (Chicago, Boston, Philadelphia, Los Angeles, Sea-Tac), indicate that pollutant levels near airports are considered similar to typical ambient air quality.
In response to comments asking for 2021 and 2040 air emissions to be included and in response to recommendations that the FAA extend the evaluation timeline to be consistent with the Paine Field Airport Master Plan and the region’s transportation plan:

To understand the timeframe picked for analysis in the Environmental Assessment, it is important to understand the basis by which National Environmental Policy Act (NEPA) documents are prepared. Council on Environmental Quality (CEQ) regulations implementing NEPA requires that NEPA documents address impacts that are "reasonably foreseeable" as discussed previously.

The Draft Environmental Assessment (EA) examined emissions through 2016. This year was chosen to enable consistency with the emissions inventory prepared for the carbon monoxide maintenance plan/State Implementation Plan (SIP). Predicting emissions associated with conditions beyond 2016 was determined by the Federal Aviation Administration (FAA) as not being reasonably foreseeable.

Neither the National Environmental Policy Act (NEPA) nor Council on Environmental Quality (CEQ) regulations contain requirements about specific years to be evaluated. Rather, these regulations indicate that NEPA documents should address the reasonably foreseeable future. The only reference to analysis of project impacts beyond five years in FAA orders is in Section 14. Noise, of Appendix A in FAA Order 1050.1E. Paragraph 14.4g. states that “DNL (Day-Night Noise Level) contours, grid point, and/or change-of-exposure analysis will be prepared for the following: (1) Current conditions; and (2) Future conditions both with and without (no action) the proposal and each reasonable alternative. Comparisons should be done for appropriate timeframes. Timeframes usually selected are the year of anticipated project implementation and 5 to 10 years after implementation. Additional timeframes may be desirable for particular projects.”

The year 2016 was also selected because it is the concurrency timeframe required under the Snohomish County Unified Development Code (SCC30.66B.155) as well as the timeframe required in accordance with the Clean Air Act General Conformity analysis years. The Environmental Assessment (EA) considered impacts, in accordance with FAA guidance, for the first year of implementation, 2010, and for one outlier year, 2016, both with and without the proposed activity levels. There were a number of reasons that this timeframe was considered reasonable and appropriate. First, the information from both Allegiant Air and Horizon Air (Appendix A of the EA) was given to the City in two year increments, starting with year 1, and continuing with years 3 and 5. The forecasts of aviation activity (Appendix G) were based on these projections supplied by the airlines.

Increases in commercial aviation operations associated with this project beyond 2016 are possible. However, the growth rates beyond 2016 (if any) cannot be accurately predicted at this time. It is unclear whether or not the air service would be successful, or if successful, how quickly the air service would increase. Such increases would be dependent on area residents choosing to fly using commercial service at Paine Field. In response to comments received on the Draft EA, an additional analysis was prepared that will be included in the Final EA. That analysis examines the environmental effects likely to occur if the terminal operated at its full
capacity. To efficiently serve activity above that level would require an expanded terminal which would be subject to its own federal approval process, which would then look at conditions at that time.

It is not possible to prepare a reasonable prediction of emissions in 2040, as to do so would require the identification of which airlines, if any, would be operating, the frequency of their operation, and the aircraft fleet mix that would be used by those airlines. For those reasons, the Federal Aviation Administration (FAA) determined that evaluating to 2040 would not be reasonably foreseeable.

**In response to comments regarding the inclusion of transit services in the alternatives:**

Other modes of transportation were not considered in the alternatives analysis as they do not meet the purpose and need for the proposed Federal actions; the decision to take different forms or modes of transportation rests with the passenger, and under the current Federal regulatory process, neither the Federal Aviation Administration (FAA) or the County can require passengers to drive or take other surface modes (train or bus).

The Final EA Transportation Discipline Report (Appendix X) was modified for the Final EA to note the availability of transit services in the airport area. Further, Snohomish County will continue to meet with transit agencies in the area to identify ways to enhance transit and encourage ridership, where possible.

**In response to comments regarding a description of existing transit facilities and the proposed project impact on the transit service in the area:**

The project is not anticipated to have an impact on transit services in the area, in part because there is only limited transit service (Everett Transit route 12) along Airport Road at the access, 100th Street SW. The nearest substantial transit service is along Airport Road at 94th Street SW. This stop serves four routes from Community Transit (routes 227, 247, 277 and 280) and two routes from Everett Transit (routes 3 and 70). Community Transit and Everett Transit constantly evaluate routes and could decide to add transit along Airport Road if there is sufficient ridership.

However the existing bus pull-out on the west side of Airport Road south of 100th Street SW is used by Everett Transit route 12. There is sidewalk connectivity between this pull-out and the terminal, which is approximately 0.33 mile walking distance. There are also adequate facilities along the frontage of the terminal to provide a turn-around route for bus service if a future route serving the terminal is warranted as part of continuing review of the service provided by Community Transit and Everett Transit.

**In response to comments regarding the description of the Transportation Demand Management requirements:**

There are adequate on-site measures, including sidewalks between the terminal and Airport Road, to satisfy the Transportation Demand Management requirements of Snohomish County. In
addition, there are standard Commute Trip Reduction requirements of any similar size employment center that need to be met. Although there is not currently substantial transit service at the 100th Street SW terminal entrance at Airport Road, Community Transit and Everett Transit are currently evaluating and will continue to evaluate routes and could decide to add transit along Airport Road if there is sufficient ridership.

In response to comments regarding the description of specific Ground Service Equipment sources:

The fleet of vehicles that are expected to service the Horizon and Allegiant Air aircraft are expected to consist of: aircraft tugs, baggage tugs, air starts, baggage belt loaders, and general delivery vehicles. Airlines are currently replacing fuel-burning vehicles with electric equipment where it makes economic, safety, and compliance sense. As noted in the report Improving Our Environmental Footprint: Alaska Air Group 2009 Environmental Report: “Horizon Air’s strategy has been to methodically convert our vehicle fleet, wherever practical, from fuel-powered to electric. A large proportion of Horizon Air’s vehicle fleet is located at airports where the infrastructure is available to support its growing fleet of electric ground service equipment. As of January 1, 2010, over 65% of Horizon Air’s station-based ground support vehicle fleet consists of electric vehicles.” It is not clear at this time how Allegiant would service their aircraft. The County will continue to work with its tenants to reduce emissions.

In response to comments regarding the potential mitigation measures for air quality:

As the proposed project would generate emissions less than de-minimis, federally mandated mitigation based on the federal significance thresholds contained within the FAA environmental orders would not be required. However, Snohomish County notes that it continues to work with its existing and future tenants to reduce emissions through best management practices and other measures. The County will investigate participation in the Federal Aviation Administration’s (FAA’s) Voluntary Airport Low Emission (VALE) grant program to reduce pollutant emissions from its fleet vehicles and those of its tenants. These programs (such as participation in the VALE program) are voluntary and not related to the proposed project; no mitigation is required from the proposed project.

Thank you again for your assistance on this project. On behalf of FAA’s entire Northwest Mountain Region, I look forward to working with you on other airports and other airport related projects throughout the region.

Sincerely,

Cayla Morgan
Environmental Protection Specialist
Paine Field – Air Quality Analysis
Commercial Air Service and
Passenger Terminal

Discussion with
Puget Sound Clean Air Agency
About Study Approach

July 31, 2009 1:00 pm
Agenda

• The Proposed Project
• The Proposed Air Quality Methodology
• The EA Timeline
• Discussion
The Proposed Project

• Requests from Horizon Air and Allegiant Air to allow scheduled commercial air service at Paine Field (PAE).

• Snohomish County will require a new terminal to accommodate this service.

• Federal actions will be triggered, including:
  – Part 139 Operating Certificate;
  – Approval of the airline operating specifications;
  – Funding assistance for the addition of a modular terminal building to accommodate the proposed commercial air service at PAE.

• FAA is required to comply with NEPA and has asked Snohomish County to prepare an Environmental Assessment.
The Proposed Project

• Horizon Proposal by 2016:
  – 20 operations (10 flights) per day serving Portland and Spokane
  – Service with Q400 turboprop (75 seat aircraft)
  – Peak hour: 2 operations

• Allegiant Proposal by 2016:
  – 3 operations per day serving Las Vegas
  – MD82/83 aircraft (150 seats)
  – Peak Hour: 2 operations

• Surface traffic analysis shows that no roadway improvements will be required for the proposed project.

• Project timeline:
  – Construction of terminal: early 2010
  – Initiation of air service: early 2010
Proposed Project Site
Proposed Modular Terminal Site

Proposed Terminal
18,000 square feet, including 2 gates for Allegiant; Horizon Aircraft to be ground loaded. No expansion of auto parking, as space is currently available.
The Proposed Project

• The EA will address:
  – Purpose and Need
  – Alternatives
  – Affected Environment
  – Environmental Consequences
    • Air Quality
    • Coastal Resources
    • Compatible Land Use
    • Construction impacts
    • DOT 4(f) Lands
    • Farmlands
    • Fish, Wildlife, and Plants
    • Floodplains
    • Hazardous Materials, Solid Waste
    • Historical/Cultural sites
    • Light Emissions and Visual Impacts
    • Natural Resources and Energy Supply
    • Noise
    • Secondary Impacts
    • Socio-economic, EJ, and Children’s Health
    • Water Quality
    • Wetlands
    • Wild and Scenic Rivers
  – Mitigation and Best Management Practices
The Proposed AQ Methodology

• The proposed project will affect the following sources:
  – Aircraft operations levels and taxiing
  – Ground support equipment servicing the aircraft
  – Vehicle miles travelled of passengers/employees
  – Construction activity
• The inventory will assume no project-related aircraft and auto VMT for the No Action.
• With Project aircraft will reflect construction, and the proposed air service and a change in auto VMT. Project effects = No Action - Project
• EDMS Version 5.1 will be used to evaluate aircraft emissions, GSE, and surface travel by passengers/employees.
• NONROAD2008 will be used to evaluate construction emissions.
• No dispersion modeling is proposed to be conducted.
The Proposed Methodology

• A CO General Conformity Applicability Analysis will be prepared:
  – Identifying construction emissions (2009 emissions)
  – Identify operational emissions (2010 and 2016)
    • Aircraft /APU operations and GSE activity.
    • Vehicle miles travelled (VMT) of passengers/employees
      – Quantify total emissions reductions from passengers driving to Portland and Spokane, as well as those who would have travelled out of Sea-Tac/Bellingham.
      – Conformity analysis will only reflect that travel in the maintenance area.
    • Net the aircraft /GSE emissions and VMT
  • FAA would like agency concurrence on the proposed method.
The EA Timeline

- Draft EA is being prepared
- Public release – Late October 2009
- Public meeting on EA – November 2009
- Final EA – late January 2010
1. Introduction and Background

- Proposed air service by Horizon and Allegiant Air at Paine Field
- Requires:
  - amendments to the airline's individual operations specifications
  - amendment to the Airport’s existing FAR Part 139 operating certificate
  - Development of a modular terminal
- Draft EA released in December 2009 and Public Hearing held January 2010 (4th, 5th, 21st)
- Substantial number of comments received

2. Public Comments Received

- Forecast issues
  - Evaluation of two carriers activity
  - Projection into the future beyond 2016
- Scope of the EA
- Study area
- Project effects
- SEPA compliance

3. PSCAA 2-3-2010 Comments

4. Next Steps
I. INTRODUCTION

II. BACKGROUND

- Proposed air service by Horizon and Allegiant Air at Paine Field
- Requires:
  - amendments to the airline's individual operations specifications
  - amendment to the Airport’s existing FAR Part 139 operating certificate
  - Development of a modular terminal
- Draft EA released in December 2009 and Public Hearing held January 2010 (4th, 5th, 21st)
- Substantial number of comments received:
  - Forecast issues
  - Evaluation of two carriers activity
  - Projection into the future beyond 2016
  - Scope of the EA
  - Study area
  - Project effects
  - SEPA compliance
- Based on comments received, the EA has been revise to address comments:
  - Confirmation of the project and its need/purpose and timeframe
  - Update to the models (EDMS and noise models)
  - Correction for passenger/operations relationship
  - Appendix to respond to maximum activity with terminal

III. PSCAA COMMENTS

- Requested that final EA address:
  a. air toxics/hazardous air pollutants and diesel particulates,
  b. conformity for ozone, and
  c. greenhouse gases
- Extend the timeline to be consistent with Master Plan and PSRC Transportation 2040
- Other comments
  a. Describe transit services and facilities
  b. Provide additional air quality background information
  c. Include mitigation measures

IV. NEXT STEPS
### DRAFT Table D2
**SUMMARY OF PROJECT-RELATED OPERATIONAL EMISSIONS**  
*Snohomish County Airport Environmental Assessment*

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>No Action</th>
<th>Preferred Alternative</th>
<th>Project-Related Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 2011</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
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<td>1,039.62</td>
<td>69.62</td>
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<td>37.89</td>
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<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>56.61</td>
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</tr>
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<td>Sulfur Oxides (SOx)</td>
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<td>Particulate Matter (PM₁₀)</td>
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<td>Particulate Matter (PM₂.₅)</td>
<td>1.15</td>
<td>1.40</td>
<td>0.25</td>
</tr>
<tr>
<td><strong>Year 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
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<td>1,112.15</td>
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<td>1.66</td>
<td>0.31</td>
</tr>
</tbody>
</table>

*Note:* Totals may not add due to rounding. EDMS 5.1.3 outputs include emissions to the nearest ten-thousandth and these numbers are rounded to the nearest hundredth.


### DRAFT Table D3
**CONSTRUCTION EMISSIONS – PREFERRED ALTERNATIVE (90 DAYS IN 2010)**  
*Snohomish County Airport Environmental Assessment*

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Construction Emissions (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
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</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>0.2</td>
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<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>2.4</td>
</tr>
<tr>
<td>Sulfur Oxides (SOx)</td>
<td>0.1</td>
</tr>
<tr>
<td>Particulate Matter (PM₁₀)</td>
<td>2.6</td>
</tr>
<tr>
<td>Particulate Matter (PM₂.₅)</td>
<td>2.6</td>
</tr>
</tbody>
</table>

*Note:* Totals may not add due to rounding to the nearest tenth.

*Note:* PM10 and PM2.5 assume that all fugitive dust is PM10 and PM2.5.

Memo

To: File

From: Mary Vigilante

Cc: Andrew Green (PSCAA), Cayla Morgan (FAA), Bill Dolan (Snohomish County)

Date: August 27, 2012

Re: Meeting with Puget Sound Clean Air Agency re: Paine Field Air Service EA

At FAA’s request, I scheduled a meeting with the Puget Sound Clean Air Agency to review the status of the preparation of the Final EA and the Conformity analysis.

Date: Friday August 24, 2012 1:30
Attendees: Andrew Green (PSCAA), Cayla Morgan (FAA), Janell Barrilleaux (FAA), Bill Dolan (Snohomish County).

See discussion outline for meeting guide.

Region has not slid back into ozone non-attainment. Cold summer last year so that ozone levels were below standards. PSCAA has prioritized program areas in response to evolving air quality challenges and budgetary constraints. As a result, PSCAA has changed the role that they will play in NEPA/SEPA processes. They plan to actively participate in only select large NEPA/SEPA processes of regional strategic importance to air quality.

I reviewed the revisions to the EA based on the new forecast and the resulting emissions inventory for the proposed action. I explained that we are finalizing the documentation which should be released in September. We would like to characterize the PSCAA reaction to the revised analysis. Generally, PSCAA concurs with the approach that has been taken.

PSCAA has not replied to the September 2011 letter. That letter noted then draft results, which have since been updated with the material shown in the discussion outline. Cayla asked if a response that reflects material in the 2011 letter and today’s discussion outline could be prepared for inclusion in the Final EA. Andrew indicated that he would try to have a letter prepared.
Paine Field – Air Quality Analysis
Commercial Air Service and Passenger Terminal

Discussion with
Puget Sound Clean Air Agency

August 24, 2012
Agenda

• Introduction
• The Proposed Project
• The Updated Air Quality Analysis
• Discussion
Introduction

• The County and FAA have been working to respond to the comments received on the Draft EA.
• Based on changes in activity at the Airport and passage of time, an updated forecast was prepared:
  – GA activity has declined, and Boeing operations increased.
  – Reflects that the project, if approved, could start in 2013.
  – Projects activity through 2018 (reasonably foreseeable horizon).
  – Those impacts of the project that are activity related (noise, air quality, etc) were evaluated with the newest models.
  – Addresses public interest in the maximum capacity of the terminal in an Appendix. Such activity is not reasonably foreseeable, as defined in NEPA.
The Proposed Project

• Requests from Horizon Air and Allegiant Air to allow scheduled commercial air service at Paine Field.

• Snohomish County will require a new terminal to accommodate this service

• Federal actions would be triggered, including:
  – Part 139 Operating Certificate;
  – Approval of the airline operating specifications;
  – Funding assistance for the addition of a modular terminal building to accommodate the proposed commercial air service at PAE.
Proposed Modular Terminal Site

Proposed Terminal
18,000 square feet, including 2 gates for Allegiant; Horizon Aircraft to be ground loaded. No expansion of auto parking, as space is currently available.
The Proposed Project

• Horizon Proposal:
  – Flights to Portland and Spokane with Q400 turboprop (75 seat aircraft)
  – Peak hour: 2 operations

• Allegiant Proposal by:
  – Serving Las Vegas with MD82/83 aircraft (150 seats)
  – Peak Hour: 2 operations

• Forecast of Activity:

<table>
<thead>
<tr>
<th>Year</th>
<th>Final EA</th>
<th>Draft EA</th>
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<tr>
<td></td>
<td>Annual Aircraft Operations</td>
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<tr>
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<td>2013</td>
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<td>2018</td>
<td>122,127</td>
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## Air Quality Analysis

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<th>Year 2016</th>
<th>Year 2018</th>
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<td>Preferred</td>
<td>Project-Related</td>
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<td>996.86</td>
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<td>Particulate Matter (PM$_{2.5}$)</td>
<td>1.75</td>
<td>1.96</td>
<td>0.21</td>
</tr>
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**Note:** Totals may not add due to rounding. EDMS 5.1.3 outputs include emissions to the nearest ten-thousandth and these numbers are rounded to the nearest hundredth.

**Source:** BridgeNet Consulting Services, July 2012 Using EDMS 5.1.3; Surface emissions: Synergy Consultants, August 2012.
Air Quality Analysis

CONSTRUCTION EMISSIONS (90 DAYS - 2013)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Construction Emissions (Tons)</th>
</tr>
</thead>
<tbody>
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</tr>
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<tr>
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</table>

**Note:** Totals may not add due to rounding to the nearest tenth. PM10 and PM2.5 assume that all fugitive dust is PM10 and PM2.5
# Conformity Summary

## DRAFT

<table>
<thead>
<tr>
<th>Year</th>
<th>CO (tons/year)</th>
<th>Are Project-Related Emissions Below De-Minimis?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
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<tr>
<td>Operational Emissions (project-related)</td>
<td>1.5</td>
<td>Yes</td>
</tr>
<tr>
<td>Total</td>
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</tr>
<tr>
<td></td>
<td>51.5</td>
<td></td>
</tr>
<tr>
<td>Year 2016 (operational emissions)</td>
<td>67.1</td>
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</tr>
<tr>
<td><strong>De-minimis (maintenance area)</strong></td>
<td>100</td>
<td></td>
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**Notes:** Year 2016 was evaluated as it is the current end of the horizon considered in the Maintenance Plan. Sources reflect direct and indirect emissions.

**Source:** Synergy Consultants, August, 2012.
## Appendix Analysis

Maximum Terminal Capacity – Not reasonably foreseeable

### Project Related Emissions (tons/year)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Aircraft &amp; APU</th>
<th>GSE</th>
<th>GAV</th>
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APU = Auxiliary Power Unit, GSE = Ground Support Equipment, GAV = Ground Access Vehicles

Source: EDMS 5.1.3 August 2012
## Appendix Analysis

### DRAFT

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<th>Ground Service Vehicles</th>
<th>Ground Access Vehicles</th>
<th>Construction</th>
<th>Total</th>
<th>CO2 Emissions (Tons)</th>
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**Source:** BridgeNet Consulting Services, July 2012 Using EDMS 5.1.3; Surface emissions: Synergy Consultants, July 2012.

**Note** that EDMS is not able to quantify CO2 emissions from GSE and CO2 emissions for ground access vehicles assumes no diverted trips. GAV calculated assuming average MPG of 22.5 and 19.56 lbs of CO2 per gallon fuel.

* Project-related emissions for 2013 are conservative and assume a full year of operations in addition to construction of the proposed terminal.
Discussion
September 10, 2012

Ms. Cayla Morgan
Environmental Protection Specialist
Seattle Airports District Office
Northwest Mountain Region
Federal Aviation Administration
1601 Lind Avenue SW, Suite 250
Renton, WA 98057-3356

Dear Ms. Morgan:

Thank you for meeting with me on August 24, 2012, and providing an update on the approach FAA has taken in the air quality analysis to be included in the final Environmental Assessment (EA) for proposed passenger service at Paine Field. Thank you also to Janell Barrilleaux (FAA), Bill Dolan (Paine Field) and Mary Vigilante (Synergy Consultants) for participating in the same update.

Puget Sound Clean Air Agency generally concurs with the approach you outlined for the air quality analysis. We particularly appreciate the additional analyses proposed for inclusion in the appendix (e.g. regarding carbon dioxide emissions, and maximum terminal capacity).

I should note for the record that our concurrence with the air quality analysis approach constitutes neither support for, nor opposition to, passenger service at Paine Field.

Sincerely,

Andrew Green
Director, Air Quality Programs