



U.S. Department
of Transportation

**Federal Aviation
Administration**

Northwest Mountain Region
Colorado, Idaho, Montana
Oregon, Utah, Washington
Wyoming

1601 Lind Avenue, S. W.
Renton, Washington 98055-4056

December 13, 1995

Mrs. Debi L. DesMarais
24322 22nd Ave. S.
Des Moines, WA 98198

Dear Mrs. DesMarais:

This is in response to your letter of November 13, 1995. I will address your questions in the order asked.

1. This is the type of question that should have been asked as part of your comments on the draft EIS. I believe it would be improper to answer this question since the draft EIS comment period has long since closed. Addressing this type of question, at this time, would be viewed by many as preferential treatment or selectively re-opening the comment period.

2. through 5: Are general technical questions about EDMS. The following answers have been provided by the Office of Environment and Energy in our Washington, D. C. Headquarters office:

Have the emission rates contained within the model been approved by EPA? If not, were previous rates approved? When? Is the EDMS model approved by EPA?

On July 20, 1993, the Environmental Protection Agency (EPA) formally accepted EDMS as a "Preferred Guideline" model for use at civil airports and military air bases. The emission rates contained within EDMS come from EPA's AP-42 Compilation of Air Pollutant Emission Factors and the FAA Engine Emission Database (FAEED).

If the emission rates come from manufacturers specifications, who exempted aircraft engine manufacturers from estimating particulate matter (smoke number)? If FAA exempted, do manufacturers estimates exist? Are they available for viewing?

The particulate matter (PM-10) come from EPA's AP-42 database. The aircraft engine manufacturers are required to estimate smoke number for certification purposes. For further information, please contact Richard Wilcox at EPA, Ann Arbor, Michigan.

Does FAA update emission data periodically with newer aircraft engine emission rates? If so, can those rates be substantiated with appropriate documentation?

The FAA updates aircraft emission data as information becomes available. The EDMS model is flexible in allowing users to add new aircraft emission data into the database and to override defaults for more detailed or site specific values.

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Since there is such disparity between the 1985 EPA AP-42 engine emission rates and today FAA EDMS rates, can the reduction in CO and HC by approximately 2/3 be substantiated?

The emission rate in EPA's AP-42 and EDMS are very close. We are in the process of updating the EDMS database to incorporate data from the recent update of the AP-42 database. If Ms DeMarais can specify how she used the EDMS model to calculate the emission rate, then we would be willing to look at the cause of any disparities.

A further contact for EDMS questions is Ms Diana Liang at 202-267-3494.

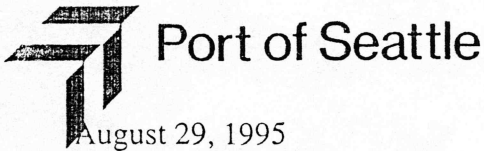
Sincerely,



Dennis Ossenkop
Environmental Protection Specialist

HHP

hour of conc. @ aa receptor
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Dispersion



August 29, 1995

Ms. Lori Wardian
609 SW 187th Street
Normandy Park, WA 98166

Dear Ms. Wardian:

Thank you for your call to the Noise Information Line on August 23, 1995, in which you commented about jet fuel odor from Sea-Tac International Airport jet aircraft activity. A high number of jet aircraft operations may increase the smell of jet fuel odor and depending on weather conditions, localities around the Airport may notice the odor more. The recently released draft Environmental Impact Statement (EIS) on the proposed master plan developments at Sea-Tac addresses several different environmental categories, including air quality impacts associated with existing and future development at the Airport.

Generally, the Puget Sound Air Pollution Control Agency (PSAPCA) is the regional agency that deals with air quality issues. PSAPCA staff can be reached at 343-8800. I have enclosed a copy of a recent issue of FORUM, which addresses the EIS and where it can be reviewed. If you have additional questions about the EIS, please feel free to call Rachel Garson, Sea-Tac Public Information. She can be reached at 248-6851.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Toni E. Turner'.

Toni E. Turner
Noise Abatement Assistant

cc: Rachel Garson - Aviation Communications

Enclosure

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JUL 15 1996

Mr. Chuck Clark, Regional Administrator
U. S. Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

JUL 18 1996

OFFICE OF AIR

Dear Mr. Clark:

Thank you for your June 6, 1996, letter concerning the draft air quality general conformity determination prepared by the Federal Aviation Administration (FAA) for the proposed Master Plan Update improvements at Seattle-Tacoma International Airport. The purpose of this letter is to request clarification of several of the issues identified in your letter.

The FAA has several options available to demonstrate general conformity for the proposed 25-year improvement program:

- a. an emissions inventory showing that the emissions from the project are below de minimis levels established by the conformity rule;
- b. a hot spot evaluation (using the dispersion models) showing that the proposed projects do not create new exceedances of the ambient air quality standards or do not worsen existing exceedances; and
- c. a hot spot evaluation with any associated mitigation to address any new exceedances or worsening of exceedances for all projects.

Subsequent to your letter, it is our understanding that the FAA and Environmental Protection Agency (EPA) have agreed that the spirit and intent of the conformity rules can be met through the FAA's exercise of its conditional approval process on an Airport Layout Plan. In rough translation, the FAA can unconditionally approve all projects that successfully meet the conformity requirements. Conditional approval could then be granted for those elements of the long range plan that do not meet the conformity test, subject to certain conditions. The primary condition being that the projects receiving approval do not trigger the need for or unfairly prejudice the outcome of the projects being conditionally approved. The FAA conditional approval is limited to approval of the layout plan (an illustration) which is prepared only for planning purposes. It would mean that the conditionally approved projects could not be funded or implemented until all requisite environmental approvals, including air quality conformity, have been completed. Your confirmation of this understanding is requested.

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We have discussed the possibility of demonstrating de minimis levels for the proposed project. As our analysis has shown, the operational emissions from the proposed project are well below the de minimis threshold established by the rules. Depending upon how the proposed runway embankment is constructed, the construction emissions could exceed the de minimis levels. However, as we have indicated, until wetland permitting and a contractor is selected for the proposed project (which can not occur until after the project has been approved), construction emissions are not reasonably foreseeable, as defined by the conformity rules. While it might be possible to tailor the construction process to meet the de minimis levels, at this time we believe that the uncertainty of total construction emissions makes this approach undesirable.

In demonstrating conformity using the hot spot evaluation, several questions arise from your June letter. You indicate that the analysis must reflect the pollution concentrations associated with construction. As we indicated above, the Environmental Impact Statement (EIS) does not include an emissions inventory for construction, because of the uncertainty associated with the amount of on-site versus off-site fill but did include an evaluation of pollutant concentrations that could occur along the airport area haul routes. Chapter IV, Section 23 "Construction Impacts" (beginning on page IV.23-8) presented the dispersion evaluation at intersections likely to be affected by hauling associated with the maximum use of off-site material. Although the emissions inventory would exceed the conformity de minimis levels, the concentrations at intersections where hauling would occur are well below the NAAQS (all 8-hour CO levels are under 3 ppm with or without the proposed Master Plan Update). We request confirmation of our presumption that the EPA comments concerning construction apply only if we are seeking to use the de minimis approach to conformity.

You also request that the analysis present mobile emissions resulting from the use of "regular gasoline". The analysis presented in the Final EIS reflects the use of reformulated gas. As you know there are basically three types of fuel 1) the cleanest burning gas currently in use in the Puget Sound Region between November and February - Oxygenated Fuel; 2) Reformulated fuel - a form of oxy fuel, but insignificantly less clean burning; and 3) regular gas - does not contain the higher oxygen content. While the EIS analysis incorrectly used the reformulated fuel assumption, we have shown that the difference between oxy fuel and reform fuel have no effect on the concentrations produced. We understand that Oxy fuel was assumed in the 1995 inventory presented in the approved Statewide Implementation Plan (SIP), but that the region is not assuming oxy fuel in the maintenance plan which is currently under development/review. The conformity rules mandate that conformance be demonstrated against the current approved SIP, which presume the use of Oxy fuel. However, conformity also requires the use of reasonably foreseeable emissions, which assuming the approval of the maintenance plan, will result in a return to regular gas related emissions. We request your guidance in interpreting the conformity rules relative to the applicable SIP versus a pending maintenance plan and the issue of the reasonably foreseeable emissions.

In light of possibly higher pollutant levels due to regional use of regular gas, we have evaluated all of the intersections modeled with reformulated fuel with both Oxy fuel and with regular gas. No changes over the data presented in the EIS would occur with Oxy fuel. With Regular gas, all intersections (with or without the proposed Master Plan Update improvements) would

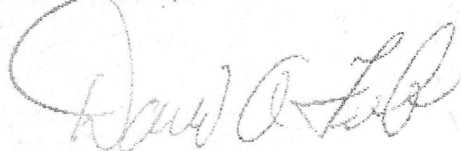
produce 2-3 ppm more CO during an 8-hour period. Thus, the same relationship presented in the Final EIS would exist at all intersections, but with higher pollutant levels.

You have also questioned if other intersections, not evaluated using CAL3QHC would result in any new exceedances or worsening of the exceedances with the regular gas assumption. We have reviewed all of the surface transportation data presented in Appendix O-B and the EPA's modeling guidelines for Carbon Monoxide and determined that the proposed Master Plan Update improvements would not create new exceedances of the NAAQS and that these improvements would not increase the severity of any existing exceedances. We request that you confirm the validity that this approach will meet the issues raised in your letter.

Your letter indicates that the EIS was not clear concerning the inclusion of a cumulative impact analysis reflecting all of the other surface transportation and major planned projects in the airport area. As we discussed in recent meetings, the Final EIS contains a detailed analysis reflecting the cumulative impact of an extensive number of known projects. Chapter II and applicable locations in Chapter IV, as well as Appendix O-B of the Final EIS detail these projects. Projects that were included in the cumulative analysis are: the Regional Justice Facility, the Des Moines Creek Technology Campus, the On- Airport Hotel, the City of SeaTac Airport Business Center, the SR 509 Extension/South Access and all other improvements included in the PSRC's Metropolitan Transportation Plan and Transportation Improvement Plan. Our Record of Decision will include a summary of the projects included in the cumulative impact analysis. We would appreciate being advised if there are other projects which you are concerned be included in the cumulative impact analysis.

Pending your response, we will proceed with the final conformity determination for the proposed improvements at Seattle-Tacoma International Airport.

Sincerely,



Lowell H. Johnson
Manager, Airports Division
Northwest Mountain Region

Condor Computer Co.

1988

Diana Liang

Database
Center

out of business

Developer

5:30

8:30

CSS 2 202 488-0003

4:30

Steven Augustine

DC
Time

944

Dispersion

Disperse. out = listing hour by
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Geburtswünsche

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