

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
BUREAU OF AIR

November 1999

Responsiveness Summary  
on Proposed Issuance of a  
Clean Air Act Permit Program Permit to  
United Airlines for its operations at O'Hare Airport,  
Chicago, Illinois

Facility Identification No.: 031600FXH  
Application No.: 95120102  
Illinois EPA Hearing File No.: 106-99

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## **ILLINOIS EPA DECISION**

Following review of comments received during the public comment period and final review of the application, the Illinois EPA has determined the application meets the standards for issuance of a Clean Air Act Permit Program (CAAPP) permit. Accordingly, on November 15, 1999, the Illinois Environmental Protection Agency (Illinois EPA) issued a CAAPP permit to United Airlines for their operations at O'Hare International Airport.

### **OVERVIEW OF THE CLEAN AIR ACT PERMIT PROGRAM**

The Illinois EPA Bureau of Air processes applications for permits for stationary sources of emissions. One of the permit programs that the Bureau of Air administers is the Clean Air Act Permit Program (CAAPP). This operating permit program is mandated by Title V of the Clean Air Act. In Illinois, these permits are known as Clean Air Act Permit Program or CAAPP permits. Owners or operators of major stationary sources of emissions and certain other significant stationary sources in Illinois must obtain a Title V permit, the operation of their sources.

The CAAPP permit is intended to be a comprehensive permit for the stationary emission units at a source. The permit identifies the various units at a source and the applicable rules that apply to them. It also specifies testing, monitoring, recordkeeping and reporting provisions that must be followed to confirm compliance with applicable rules.

Prior to issuance of a CAAPP permit, the Illinois EPA must prepare a draft of the CAAPP permit and hold a public comment period. This allows the public to comment on the terms and conditions of the permit that is issued.

Following this public comment period, the Illinois EPA must then prepare a proposed permit for review by the United States Environmental Protection Agency (USEPA). The USEPA may also comment on the proposed permit, providing suggested or required changes to the terms or conditions of the CAAPP permit. The final CAAPP permit is issued after USEPA review is completed.

The Illinois EPA must issue a CAAPP permit for a source if the procedural requirements of the CAAPP program have been met. The obligation on the applicant for a CAAPP permit is to submit an application describing the emission units at the source and their emissions, the air pollution control requirements that apply to each unit, and the means by which the applicant will comply with such requirements.

### **CAAPP APPLICATION FROM UNITED AIRLINES, O'HARE**

United Airlines has applied for a CAAPP permit from the Illinois EPA for the following stationary emission units:

- Unit 1: Ground Support Equipment Coating Booths (2 units)
- Unit 2: Aircraft Components Coating Booth (1 unit)
- Unit 3: Maintenance and Touch-up Coating Activities
- Unit 4: Dry Cleaning Unit (1 unit)
- Unit 5: Gasoline Storage Tanks (9 units)
- Unit 6: Natural Gas Combustion Units (8 boilers and 10 heaters)
- Unit 7: Internal Combustion Engine (1 unit)

The public comment period for United Airlines' CAAPP application began on March 4, 1999, with the publication of a notice in the Park Ridge Herald, Bensenville Press, and the Des Plaines Times newspapers. Notices were also in the papers on March 11<sup>th</sup> and 18<sup>th</sup>, 1999. The public hearing was held on Monday, April 19, 1999, at 7:00 p.m. at Oakton Community College to receive oral comments and answer questions regarding the application and draft CAAPP permit. The comment period remained open until May 19, 1999.

Following the close of the comment period, the Illinois EPA reviewed the public comments. To assist in response to the comments, the Illinois EPA required United Airlines to supplement its application. The Illinois EPA then prepared a revised permit which was sent to USEPA for review on June 30, 1999. A number of further enhancements to the permit were made as a result of discussions with USEPA, and on November 15, 1999, the CAAPP permit was issued.

### **QUESTIONS AND COMMENTS**

**1. Issuance of the CAAPP permit would violate Section 9(a) of the Illinois Environmental Protection Act, which prohibits causing or allowing air pollution either alone or in combination with contaminants from other sources.**

The issuance of a CAAPP permit to United Airlines is not prohibited by Section 9 of the Environmental Protection Act. Moreover, for purposes of this provision, United Airlines is similar to hundreds of other companies and millions of individuals whose activities result in emissions that affect the quality of Illinois' air.

**2. The Illinois EPA has failed to include or consider the other sources of air contaminants from other operations at O'Hare International Airport in the application or in reviewing the application for the proposed permit. O'Hare International Airport is a "single" source of air contaminants, as defined by Section 39.5(1) of the Act, 415 ILCS 5/39.5(1). The Illinois EPA has no authority to issue a permit that considers United Airlines to be a source by itself.**

For permitting purposes, airports' tenant facilities are generally considered as separate sources for CAAPP applicability and general permitting requirements. This is because, under a landlord-tenant relationship, the landlord (property owner) does not have common control (i.e., partial ownership, voting interest, funding, etc.) over tenant (separately owned airlines) operations. This approach is also being used for permitting of

operations at other airports in the United States, as confirmed by conversation with USEPA Regional Offices across the country.

This approach is appropriate because each airline at an airport is responsible for its own actions. That is to say that United Airlines cannot be held accountable for the operations and activities of other airlines, and each airline must individually obtain permits for its own operations and operate them in compliance with applicable control requirements. In addition, while the O'Hare airport authority may provide certain services for the individual airlines, such as providing terminal space and handling of automobile parking for passengers, it does not have responsibility for the operation, care or maintenance of airplanes.

**3. The application fails to list and identify the hazardous air pollutants (HAP) which are released into the atmosphere from the facility.**

The application states that the facility is a non-major source of HAP emissions. United Airlines has supplemented its application to provide detailed information on its HAP emissions. This information is attached to the Responsiveness Summary. Emissions of HAP from all stationary units operated by United Airlines are small with actual emissions of 3.68 tons/year during 1998.

**4. The communities surrounding O'Hare suffer from unacceptable levels of hazardous air pollutants. The Illinois EPA has failed to address: 1) the total emissions of hazardous air pollutants from O'Hare International Airport; 2) the resultant concentrations of these hazardous air pollutants in the air breathed by our residents – especially sensitive populations; and 3) the restrictions and abatement measures necessary to reduce these concentrations to acceptable levels that are protective of health and property in our communities.**

Available information suggests that air quality in the vicinity of O'Hare is not significantly different than air quality generally in the more developed areas of the Chicago Metropolitan Area. In particular, the ambient monitoring stations in Bensenville and Schiller Park, in the vicinity of O'Hare, show levels of particulate matter, nitrogen oxides and carbon monoxide that are typical of Urban Chicago. Also, next year two more monitors are scheduled to be installed to enhance ambient monitoring in the vicinity of O'Hare.

In addition, due to public concern about major airports like O'Hare, national studies are underway to better define the effect of airports on both local and regional air quality. Airlines, the FAA, the USEPA, airports, and aircraft engine manufacturers are among the participants in the study. The studies entitled "Study of Aviation Related Emissions in Airport Environs" and "Analysis of Aviation Related Emissions Reduction Opportunities in Airport Environs" are scheduled for completion in April 2000. Once the studies are completed, stakeholders in the process will discuss how airlines, airports and manufacturers will implement the recommendations in the studies. The air quality in the vicinity of O'Hare should benefit from these efforts to generally improve regional air quality. Further information on these studies can be obtained from Brian Manning, 734/214-4832 at the USEPA.

**5. In its totality, O'Hare is probably one of the largest sources of air pollution in the state.**

O'Hare certainly is a large source of air pollution if all of the passenger vehicles, airplanes, support vehicles, and stationary sources operating at O'Hare are considered together. Equally important, the Illinois EPA does consider all emissions from O'Hare in its ongoing planning and evaluation of the measures needed to attain the ozone air quality standard in the greater Chicago region. (The region now complies with the current air quality standards for other pollutants.) Likewise, the USEPA is considering all emissions from O'Hare in its program to better understand the nature of urban air quality in the Chicago region.

The USEPA regulates mobile sources through emission standards on the engines not by permitting. Only stationary sources are directly regulated by permitting. The rules that apply to CAAPP sources and USEPA interpretations of the rules have indicated that individual sources at airports, such as the United Airlines maintenance facility, should be permitted as separate sources and not as one large source.

**6. The addition of further toxic and hazardous air pollutants due to the applicant's request will only exacerbate this pollution source.**

The proposed permit is for United Airlines' existing stationary operations at O'Hare. United Airlines has not requested an increase in emissions from these units.

**7. Prior to the issuance of any permits adding to this pollution source, we request a detailed study of O'Hare airport.**

The proposed permit will not be increasing emissions at the source. The Illinois EPA does not have the authority to deny or delay permits if the applications comply with the applicable state and federal regulations.

The USEPA is in the initial stages of a national study that will evaluate emissions from airports in more detail including emissions of hazardous air pollutants.

**8. Can the citizens that are interested in the CAAPP permit process get technical assistance or workshops to help in reviewing CAAPP documents?**

The Illinois EPA can provide assistance, including sample applications and sample permits to explain the CAAPP process to the public. The Illinois EPA also has engineers assigned to answer questions on the CAAPP program, please call 217/782-2113 and ask for the engineer on phone duty.

**9. How will the permit improve the air or make it worse?**

This permit will not make air quality worse. The CAAPP permit is only for equipment that is already in use at the facility. The permit lists the regulations that apply to the facility and the practices that it must follow to demonstrate compliance.

**10. Was there any effort to speciate the various hazardous air pollutant (HAP) or Illinois Toxic Air Contaminates (ITAC) compounds that make up the 51.41 tons per year of volatile organic material that United Airlines would be permitted to emit?**

HAP and ITAC compounds make up just a small portion of the total volatile organic material (VOM) emissions from the stationary emission units operated by United Airlines. A breakdown of HAP emissions is attached to this Responsiveness Summary.

**11. When was the last time that airplane emissions were measured?**

The USEPA recently completed a study of emissions from commercial airports at ten selected cities, "Evaluation of Air Pollutant Emissions from Subsonic Commercial Jet Aircraft" (USEPA, April 1999, EPA 420-R-99-013).

**12. How can airplane emissions be decreased?**

Generally, emissions are reduced by improvements to airplanes and their engines that improve efficiency and reduce emissions. Because aircraft are national and international in nature, these aspects of aircraft operation are regulated at the federal level. (Refer to the Code of Federal Regulation, 40 CFR Part 87 and 14 CFR Part 34, respectively.) These questions need to be addressed to the USEPA, and the Federal Aviation Administration. More specifically, measures have been suggested to reduce emissions from airplanes, which include having parked airplanes rely on airport provided power rather than on their auxiliary power units and other steps to operate more efficiently.

**13. There is contamination of the land at the United Airlines' facility. Will any kind of inspection be done at the site to test for contamination?**

A CAAPP permit addresses air emissions, not contamination of the ground. Ground contamination is handled by the Illinois EPA's Bureau of Land. The Bureau of Land is aware of three Leaking Underground Storage Tank sites that United Airlines is responsible for at O'Hare Airport. Remediation plans for the sites will be reviewed by the Bureau of Land and the sites will be inspected to assure that the work was done according to the plans. The Illinois EPA is not aware of other contamination at the United Airlines maintenance facility. If you have information about other contamination by United Airlines or would like further information about the status of the identified sites, please contact the Illinois EPA Bureau of Land at 217/782-3397.

**14. Streams and wells around O'Hare are being contaminated with glycol.**

Run-off glycol from airplane deicing operations at O'Hare airport is addressed by a National Pollutant Discharge Elimination System (NPDES) permit from the Illinois EPA's Bureau of Water for surface run-off from the airport. Most of the water containing glycol from the tarmac and runways gets captured in retention basins and sent to the Metropolitan Water Reclamation District for treatment. O'Hare is in the process of implementing a compliance plan to better address stormwater runoff that when completed should capture all glycol runoff from the airport. The Illinois EPA, Bureau of Water is overseeing the implementation of the compliance plan.

**15. I believe that O'Hare puts out much more HAP than all the manufacturing facilities in Cook County.**

This is not correct, nor is it appropriate to compare O'Hare to manufacturing facilities. The principle source of HAP emissions at O'Hare is airplane, car and truck engines, and O'Hare is more appropriately considered as one component of vehicular traffic in the greater Chicago area. In this respect, jet airplane engines are much cleaner than the gasoline and diesel engines used by land vehicles, in terms of the emissions per gallon of fuel used or work performed.

**16. This facility should be an ERMS participant.**

United Airlines is not subject to the Emissions Reduction Market System (ERMS) because its actual VOM seasonal emissions are well below the 10-ton applicability threshold for the ERMS, as specified in 35 IAC 205.200.

**17. We would like specific information about the types, quantities and concentrations (both stationary and mobile) of hazardous air pollutants being discharged at O'Hare and in the surrounding communities and the health impacts from these emissions.**

Attached is a list of HAP emissions from the units at United Airlines. As stated above, studies are currently underway to define the types and kinds of emissions from airports. The studies will include emissions from mobile sources and include suggestions to reduce emissions from airports. Further information on these studies can be obtained from Brian Manning, 734/214-4832 at the USEPA.

**FOR ADDITIONAL INFORMATION**

Questions about the comment period, public hearing and permit decision should be directed as follows:

Public Hearing Procedures and Exhibits

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Responsiveness Summary (question on or extra copies)

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SIGNED \_\_\_\_\_ DATE \_\_\_\_\_  
John Williams, Hearing Officer