

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection**

M416426971

<b>FACILITY:</b> DELTA AIR LINES, INC.		<b>SRN / ID:</b> M4164
<b>LOCATION:</b> DETROIT METRO AIRPORT, DETROIT		<b>DISTRICT:</b> Detroit
<b>CITY:</b> DETROIT		<b>COUNTY:</b> WAYNE
<b>CONTACT:</b> Scott James , Environmental Coordinator		<b>ACTIVITY DATE:</b> 09/18/2014
<b>STAFF:</b> Stephen Weis	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM 208A
<b>SUBJECT:</b> Compliance inspection the Delta Airlines facility/operations at Detroit Wayne County Metropolitan Airport. The Delta facility is scheduled for inspection in FY 2014.		
<b>RESOLVED COMPLAINTS:</b>		

**Location:**

Delta Air Lines, Inc.  
Detroit Metropolitan Wayne County Airport  
2602 World Gateway Place  
Romulus, MI

**Date of Activity:**

Thursday, September 18, 2014

**Personnel Present:**

Steve Weis, DEQ-AQD Detroit Office  
Scott James, Environmental Coordinator, Delta Air Lines - Detroit

**Purpose of Activity**

A self-initiated inspection of the Delta Air Lines, Inc. (hereinafter "Delta") operations at the Detroit Metropolitan Wayne County Airport was conducted on Thursday, September 18, 2014. The Delta facility was on my list of sources targeted for an inspection during FY 2014. The purpose of this inspection was to determine compliance of operations at the Delta facility with applicable rules, regulations and standards as promulgated by Michigan Public Act 451 of 1994 (NREPA, Part 55 Air Pollution Control) and Federal standards. In addition, the inspection allowed the opportunity to perform an on-site review of the correspondence submitted by Delta dated August 12, 2014 to demonstrate that facility-wide emissions are below major source thresholds.

**Facility Description**

The Delta facility consists of various operations situated within the boundary of the Detroit Metropolitan Wayne County Airport (hereinafter "Airport") property. The land that is currently designated as a part of the Airport complex is bounded by Interstate 94 to the north, Middlebelt Road to the east, Eureka Road to the south, and Vining Road to the west. Thus, the land that comprises the Airport complex covers several square miles.

Operations at the Airport complex are overseen by the Wayne County Airport Authority. The Airport property contains many buildings and operations serving a wide array of functions. These include buildings/operations owned and operated by the Airport Authority and/or Wayne County; buildings/operations owned and operated by the various airlines doing business at the Airport; buildings/operations that provide support services to the airport, the various airlines, or both. Many of these buildings/operations have been in existence for many years, and were built at various stages in the airport's existence.

The Delta operations are located throughout the Airport property. Detroit's Airport is a hub for Delta, and Delta and its partners operate from the McNamara (Midfield) Terminal. The main administrative offices of Delta are located in the McNamara Terminal. Another prominent Delta operation at the Airport are the large maintenance hangars in the northern portion of the Airport property, just west of the intersection of Merriman Road (aka William G. Rogell Drive) and the West Service Drive. Attached to this report is a map that I was provided with during my site visit that shows some of Delta's operations at the Airport; the Delta properties are shaded gray, and the designations of the properties are indicated by bold type.

### Facility Operations

The Delta operations at the Airport are scattered throughout the Airport property, as indicated by the map referenced in the last section of this report. The air emission sources associated with the Delta operations include natural gas-fired boilers, various emergency generators and fire pumps, and fuel storage tanks. Delta sent correspondence to DEQ-AQD dated August 12, 2014 in which they provided an inventory of the air emission sources at the facility; this inventory included the equipment that was just referenced, as well as a listing of equipment that is classified as an insignificant activity per the provisions of Michigan Administrative Rule 212. A copy of the August 12 correspondence, which will be referenced later in this report, can be found in the Delta facility file in the "Rule 208a" folder.

According to Delta's correspondence, the air emission sources consist of 10 natural gas-fired boilers, 20 emergency generators and fire pumps (13 classified as large, 7 as small), and 8 storage tanks.

### Title V Source Status

As mentioned earlier, operations at the Airport complex are overseen by the Wayne County Airport Authority. The Airport property contains buildings/operations owned and operated by the Airport Authority and/or Wayne County; buildings/operations owned and operated by the various airlines doing business at the Airport; buildings/operations that provide support services to the airport, the various airlines, or both. Many of these buildings/operations have been in existence for many years, and were built at various stages in the airport's existence.

From the perspective of the applicability of air regulations, the Airport has been considered as a grouping of separate stationary sources, which include those that are directly owned, operated and controlled by the Wayne County Airport Authority, and those that are owned, operated and controlled by other entities at the Airport, independent of the Airport Authority, such as Delta. All of the operations at the Airport are contiguous to one another, and most if not all are located where they are because of the Airport and the role that these operations play in terms of supporting the Airport operations, or receiving support themselves. This would seem to classify all of the operations on the Airport property as a single stationary source.

This issue was examined in an EPA memorandum several years back. This memorandum was drafted in response to a written request dated June 15, 1989 relating to the PSD applicability and permitting requirements associated with the new airport in Denver, CO, which was in the planning stages at that time. The memorandum states in part that:

"...if the SIC Manual grouping was the only criterion to consider, then the airport and all pollutant-emitting activities therein would be considered a single source. However, the definition requires that, for applicability purposes, emissions be aggregated not just on the basis of the SIC code but also based on a determination of "control" of the pollutant-emitting activities at a stationary source."

Based upon this logic, in the case of the Detroit Metropolitan Wayne County Airport, the issue of "control" lies with the owner/operator of each individual business/operation doing business at the Airport complex; the decision to locate there, as well as what type of business to operate, equipment to install, compliance with federal, state and local regulatory requirements, etc., lies entirely with the individual entities, themselves.

In accordance with being classified as a separate stationary source, Delta, and Northwest before them, tracks the applicability of air regulations at the operations that they maintain at the Airport complex. One of the primary regulatory issues pertaining to air quality is the overall classification of the Delta facility in terms of the major source definitions put forth by Title 5 of the Clean Air Act Amendments of 1990. Michigan DEQ-AQD developed and implemented regulatory mechanisms that facilities could use to "opt-out" of the major source requirements of Title 5 (the primary one being obtaining a Renewable Operating Permit, or ROP); these mechanisms serve to demonstrate that facility-wide potential emissions of Title 5-subject pollutants are below the major source thresholds. One of these mechanisms was Michigan Administrative Rule 208a. A facility using the Rule 208a option essentially certified that the actual emissions emitted from the facility on an annual basis are less than 50% of the major source threshold via the submittal of a Rule 208a registration form and an annual emissions report (the annual Michigan Air Emissions Reporting System, or MAERS). This certification allowed a facility to avoid being subject to Michigan's Title 5 ROP program.

Michigan DEQ is in the process of rescinding Rule 208a. As part of the rescission process, DEQ-AQD informed the facilities that were utilizing Rule 208a and submitting the annual certification that they would need to choose

a different option to address their Title 5 applicability. Delta was informed via a letter dated June 27, 2014. Delta responded with correspondence dated August 12, 2014. Per their correspondence, Delta demonstrated that potential facility-wide emissions are below major source thresholds. The correspondence included an inventory of potential emissions-producing equipment at the Delta facility, and calculations of the potential emissions from this equipment. Delta's submittal stated that the potential emissions of criteria pollutants and hazardous air pollutants (HAPs) are less than the associated major source thresholds.

### **Inspection Narrative**

Prior to the site visit, I spoke with Scott James, the Environmental Coordinator for Delta's facility at the Airport. I told him that Delta was on my list of sources to inspect this year, and that during my site visit, I would also like to visit a representative amount of the equipment listed in Delta's 208a-related correspondence.

I arrived at the Airport at about 8:05am, parking in the parking deck adjacent to the McNamara/Midfield Terminal. I called Scott to let him know that I had arrived, and he met me near the Delta passenger check-in desk between the parking deck and the terminal. We proceeded to Scott's vehicle to begin our tour of the Delta facility.

Our first stop was building 514, where we arrived at 8:35am. Here we met up with Matt DeLand, Delta Facilities Maintenance and Operations. Delta's facilities maintenance operations at the Airport are based out of Building 514. Matt explained that the Facilities staff work to maintain Delta's hangars, de-icing pads, and other operations around the Airport.

From Building 514, we got into a Delta truck and began the rest of the tour. The bullet points that follow detail the stops that we made, with a summary of the information that was provided to me by Delta staff at each stop:

- **Fire pump house** – This building is designated as Building 528, and contains 3 small natural gas-fired boilers and 6 diesel-fired generators. The pump house serves to ensure constant water pressure in Buildings 516 and 518 for fire suppression material. One pump will start if the "jockey pump" can't meet the required load of 150 psi. There is a 30 inch main that runs to Buildings 516 and 518 that can provide a flow of 5,000 gpm. Matt told me that the generators are run 1-2 times each month for maintenance checks. There is also a yearly maintenance check performed on the generators that is performed by an outside contractor. In addition, the fuel is checked for percent sulfur and fuel degradation. Records are kept of all of the maintenance activities. Each generator is equipped with an hours meter and log. I looked at the meter on the generator designated as Fire Pump #1, which showed 102 hours of operation.

At this time, we discussed the SHEA numbers that are associated with much of the equipment at the facility, and that are included in the list of equipment in the August 12 correspondence from Delta. The SHEA number (Safety, Health, Environmental) is an internal environmental permit tracking number assigned by Delta to keep track of equipment. A SHEA number is assigned to combustion equipment and tanks with a capacity of greater than 55 gallons.

- **Building 518** – This building is a maintenance hangar. We visited the snow melt boiler (SHEA # 7765). Maintenance and combustion gas checks are performed on this unit every year by a mechanical contractor.
- **Building 514** – The building houses the Facilities group and aircraft parts. ServisAir also leases a portion of the building for maintenance operations and office space. This building contains 2 natural gas-fired boilers rated at 230,000 BTU/hour. Maintenance and combustion gas checks are performed on these boilers every year.
- **Delta Cargo** – Also known as Building 536 according to the August 12 correspondence. This building contains a fire pump (SHEA #7727) that was installed in 2007. This pump serves to boost the city water pressure for the Cargo Building's fire suppression. The pump has a non-resettable hours meter, and monthly operation logs are kept. There is a permit exempt fuel tank adjacent to the pump. According to Matt, this tank, and others at the facility like it, employ 80% capacity overfill protection devices and utilize dry fittings to ensure that there is no spillage.

According to the August 12 correspondence, the Cargo Building fire pump is the only such unit at the facility that is subject to 40 CFR Part 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines). A footnote on page A-4 of the August 12 correspondence states that the pump "...meets the applicable emission standards of the rule." The

name plate on the unit indicated that the unit was manufactured in 2006, so the pre-2007 model year emission standards put forth in Subpart IIII.

ServisAir – We visited the ServisAir facility, which is one of the separately designated and regulated stationary sources operating within the Airport complex (SRN N6544). The ServisAir property and tanks are subleased to them by Delta. Delta has assigned SHEA numbers to all of the fuel storage tanks at the ServisAir facility, as well as the engine generator. Delta has included the generator in their MAERS report.

Maintenance Hangars – Minor touch-up painting of maintenance vehicles and minor cosmetic repairs to airplanes (such as chips) are performed here. The touch-up paint is hand-applied. Any major body repairs to Delta maintenance vehicles are performed at an off-site facility. Similarly, and major airplane paint jobs, such as re-paintings, are performed at the Delta operations in Atlanta and Minneapolis. There is a parts washer at this location that uses water and soap, no solvents.

De-ice Pad 22L – This site is close to the North Terminal. There is a group of glycol storage tanks and an associated blending station through which the glycol-water ratio of the de-icing fluid is adjusted in accordance with ambient temperature requirements. The tanks are listed in Attachment C of the August 12 correspondence. There is a Cummins generator at the site (SHEA #8293). It is operated and inspected once each month, and usage and operation records are kept by Delta's Facilities staff.

On the way to our next stop, we drove along the service road next to Merriman Rd./Dingell Drive, under one of the runway bridges. It was pointed out that there is a de-icing pad at this location with 4 small, permit exempt glycol tanks.

Midfield Energy Center – As we drove past the Midfield Energy Center, we stopped to look at some Ground Support Equipment, or GSE. It was explained that this equipment is used for exempt machining and repair painting operations around the facility. This equipment was included in the MAERS report with other maintenance activities. We also looked at the lavatory house, and underground gasoline and diesel storage tanks.

De-ice Pad 4R – We stopped at looked at the 475 hp diesel-fired generator (SHEA #8292) and its associated, permit exempt diesel storage tank.

South Fuel Island USTs – Here, we looked at some gasoline and diesel underground storage tanks.

De-ice Pad 3L – We stopped at this de-icing operation, near the McNamara/Midfield Terminal, which included a building identified as Building 430. There are some glycol tanks, and a Caterpillar diesel-fired generator (SHEA #7536).

Midfield Terminal Generator – Before proceeding to Scott's office in the Terminal, we at the diesel-fired generator located in Room A2-796 (SHEA #7739).

At approximately 11:10am, we concluded the tour and met in Scott's office. We discussed the various environmental records that are kept in relation to operations at the Delta facility.

Scott showed me the engine inspection report that is used to ensure that the engines on site are regularly and properly inspected and maintained. The report is titled "EPM Form 7.05.04-E. Scott provided me with a blank copy of the report to demonstrate the tasks that are performed on the engines as part of Delta's Operation and Maintenance Plan for this equipment. A copy of this form is included with this report for reference. In addition, we reviewed the section from Delta's environmental handbook, EPM 7.05.04, that specifically addresses the requirements for generators and fire service equipment with internal combustion engines. This document presents all of the compliance requirements associated with the operation of such engines that the facility is expected to comply with. A copy of this document is included with this report.

Scott and I also reviewed the various types of forms that are used to track the operation of the various fire pumps and generators that are in use around the Delta facility. Scott provided me with copies of these forms, which are included with this report for reference.

Scott discussed how the records are used to generate reports. Scott gets a monthly material usage and emissions report from the corporate office for his review. These reports are based upon all of the information tracked and provided at the Airport facility. As an example, Scott provided me with the year-to-date Total Waste

Generation Report for the facility. Per my request, Scott also provided me with a map of the facility, which is attached to this report. Scott pointed out that Delta is no longer using Building 715.

Prior to leaving, I told Scott that I did not see any issues during the tour, and that the information presented in the August 12, 2014 correspondence looked valid. I told him that I would contact him with any questions, or if I discovered any issues. I left the facility at about 12:00pm.

#### Permits/Orders/Regulations/Other

At this time, there are no active permits associated with the Delta operations at the Detroit Airport.

Delta has been completing and submitting annual emission reports via the Michigan Air Emissions Reporting System.

As stated earlier in the report, the fire pump at the Cargo Building (Building 536) is subject to the Federal requirements put forth in 40 CFR Part 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines). Delta states that this pump is in compliance with the applicable emission standards in Subpart IIII.

The Delta facility was utilizing the provisions of Michigan Administrative Rule 208a to opt out of the requirements of Michigan DEQ-AQD's Title 5 program. With the upcoming rescinding of this Rule, Delta has chosen to demonstrate that the facility is a minor source of emissions, having potential emissions of Title 5-subject pollutants emitted below defined major-source thresholds.

#### Compliance Determination

Based upon the results of the September 18, 2014 site visit and subsequent records review, the Delta Air Lines, Inc. facility at the Detroit Metropolitan Wayne County Airport appears to be in compliance with all of the applicable state and federal regulations. In addition, a review of the previous-referenced August 12, 2014 indicates that the information presented is accurate and complete. Therefore, as of the date of this report, the Delta facility is classified as a minor source of air emissions for the purposes of Title 5 applicability.

Attachments to this report: a copy of the forms used to track engine operation in accordance with Delta's General Operation and Maintenance Plan; a copy of EPM 7.05.04; a copy of forms used to track the operation of fire pumps and generators; a copy of the Total Waste Generation Report for 2014 (through the date of the inspection); and a map showing much of the Delta facility.

NAME A. Teel Wilson

DATE 12/3/14

SUPERVISOR W.M.