

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

**IN THE MATTER OF:** )  
)  
**PETITION OF MIDWAY RACS, LLC** ) **AS 12-3**  
**FOR ADJUSTED STANDARD FROM** ) **(Adjusted Standard – Air)**  
**35 ILL. ADM. CODE 218.586** )  
)  
)

**PETITION FOR ADJUSTED STANDARD**

**NOW COMES the Midway RACs, LLC (“LLC”) by and through its attorney, Shell J. Bleiweiss, pursuant to Section 28.1 of the Environmental Protection Act (“Act”) (415 ILCS 5/28.1) and 35 Ill. Adm. Code Part 104, Subpart D, and petitions the Board to grant it an adjusted standard from the provisions for Stage II vapor recovery (“Stage II”), codified at 35 Ill. Adm. Code § 218.586, and to require, in place of Stage II vapor recovery, that the LLC comply with the standards of the federal onboard refueling vapor recovery regulations (“ORVR”). In support of its petition, the LLC states as follows:**

Avis Budget Car Rental, LLC (d/b/a Avis Rent-A-Car System, Inc. and Budget Rent A Car Systems, Inc.); DTG Operations, Inc., (d/b/a Dollar Rent A Car); Enterprise Leasing Company of Chicago, LLC (d/b/a Enterprise Rent-A-Car); The Hertz Corporation; Thrifty Rent-A-Car System, Inc.; and Vanguard Car Rental USA, LLC (d/b/a National and Alamo) are all rental car companies operating at the Chicago Midway International Airport (“Airport”). These car rental companies currently operate out of individual service facilities and rental locations near the Airport terminal.

The City of Chicago, Illinois (the “City”), through the Department of Aviation, determined that the development, acquisition, equipping and construction of a new Consolidated Rental Car Facility for the above car rental companies at the Airport was necessary in order to, among other things, better serve the car rental customers, relieve traffic congestion on the Airport roadways, and enhance aviation and commerce, shipping, and travel in, to, and around the Airport. The Consolidated Rental Car Facility includes rental offices, rental parking spaces, car washes, and a common fueling system to be used by all the car rental companies (collectively, the “Project” or “Facility”). For purposes of this petition, “common fueling system” shall be understood to be comprised of the underground fuel storage tanks (USTs), all underground piping, the fuel dispensers, the nozzles and related appurtenances.

Pursuant to a Request for Proposals (RFP) conducted by the City in 2002, the City determined that the seven (7) car rental companies referenced above were successful respondents, and awarded an On-Airport Rental Car Concession License Agreement (“Agreement”) to each. Pursuant to the RFP and Agreement, the City required each of the successful respondents to become a member of Midway RACs, LLC (“LLC”) and required the LLC to be responsible for certain aspects of the Project including, but not limited to, operation of the common fuel system. All of the above referenced car rental companies are members of the LLC.

In addition, the City entered into a Lease with the LLC effective June 1, 2011. Pursuant to the terms of the Lease, the LLC is obligated to operate, maintain, repair and replace all equipment contained in the Facility, which includes the common fueling system.

The business, purposes and powers of the LLC are listed in the Midway RACs, LLC Operating Agreement. Pursuant to this agreement the LLC is required to design, develop, construct or assist in the design, development and construction of, and to, lease, operate and maintain the Project, or any portion or component thereof; to engage such other professionals, including architects to take such other actions as necessary to assist the LLC in the design, cost estimation, development, construction and financing of the Project and, upon completion thereof, to assist in the operation and maintenance of the Project.

The Facility consists of a Garage and an adjoining Quick Turnaround Area (QTA). The Garage has a capacity of 1,864 vehicles, or approximately 26% of the total rental car fleet of 7,056 cars and includes a Customer Service Facility (CSF) where rental car customers transact business with the rental car agencies. The QTA is used by the agencies to prepare returned vehicles for the next customer and consists of an outdoor vehicle queuing area, a Fuel Canopy that shelters fueling islands and a QTA Building that houses car wash bays and offices for the rental agency crews. Once a rented vehicle is returned to the facility, employees of the various RAC agencies drive the vehicle to the QTA to prepare returned vehicles for the next customer. Upon arriving at the QTA, vehicles are driven to the fueling islands. A total of nine fuel islands are provided, with two dual-sided dispensers per island, for a total of 36 nozzles (or fueling stations). It is expected that approximately 750-850 fueling operations will occur each month with an average of 3.5 gallons of fuel dispensed per fueling operation for an average total throughput of approximately 85,000 gallons per month. All of the fueling stations are supplied by two 20,000 gallon underground fuel tanks. While refueling is underway, other services are performed on the vehicles, including vacuuming, topping off windshield washer fluid, and checking tire pressure. In addition to providing protection for the fueling islands, the canopy structure also supports the vacuum equipment, and hose reels for window washer fluid and compressed air. After servicing, the vehicles are driven through automated car washes

located within bays at the QTA Building. After being washed, prepared vehicles are returned to the garage by the jockeys where the rental process starts over. A significant advantage of the Facility is the reduced distance rental car agency employees must travel to service the cars. Existing service facilities are from ¼ mile to 2 miles from the current rental car parking area at the airport. Use of a QTA facility in close proximity to the Garage will result in improved air quality at the airport and on adjacent surface streets, due to a substantial reduction of aggregate travel distance, and therefore emissions, associated with the “shuttling” of vehicles.

Site construction of the Consolidated Rental Car Facility began in October, 2011. Construction of the common-use fueling system is scheduled to commence in May, 2012 and is expected to be substantially complete by September, 2012. Currently, the design of the fueling system includes a Stage II Vapor Recovery system as it was understood to be a requirement at the time the initial design of the facility occurred. However, with the implementation of Onboard Refueling Vapor Recovery systems (ORVR) by the automobile industry, and recognition by the US EPA that Rental Car Industry fleets achieved widespread use of ORVR as of 2006, construction of the fueling system without the Stage II Vapor Recovery included appears consistent with the original intent of the Clean Air Act.

**A. Description of Standard from Which Relief Is Sought (§ 104.406(a))**

Midway RACs, LLC (“LLC”) seeks an adjusted standard from the provisions of Section 218.586 of the Board’s air pollution control regulations. Section 218.586 provides for Stage II vapor control of gasoline fueling operations. The regulations require that affected dispensers of gasoline install, use, and maintain a vapor collection and control system certified by the California Air Resources Board (“CARB”) for the fueling of motor vehicles. Section 218.586(a) (2) Defines *certified* and establishes the minimum capture and control efficiency for motor vehicle fueling operations:

Certified means any vapor collection and control system which has been tested and approved by CARB as having a vapor recovery and removal efficiency of at least 95% (by weight) shall constitute a certified vapor collection and control system. CARB testing and approval is [*sic*] pursuant to the CARB manual, incorporated by reference as 218.112 of this Part.

35 Ill. Adm. Code § 218.586(a)(2). The Board adopted Stage II vapor recovery R91-30, 16 Ill. Reg. 13864, effective August 24, 1992. (*The Board also adopted clean-up amendments to the regulation as R93-9, 17 Ill. Reg. 16636, effective September 27, 1993.*) The U.S. Environmental Protection Agency (“USEPA”) approved Illinois’ Stage II vapor recovery rules as part of the state implementation plan (“SIP”) as 58 Fed. Reg. 3841 (January 12, 1993). (**Exhibit 1**)

**B. Regulation of General Applicability to Implement the Clean Air Act (§ 104.406(b))**

The Board promulgated Section 218.586 to implement the Stage II requirements of Section 182(b)(3)(A) of the Clean Air Act (42 U.S.C. § 7511a(b)(3)(A)). (**Exhibit 2a**)

**C. Level of Justification Necessary for Adjusted Standard (§ 104.406(c))**

Although 104.406(c) requires a level of justification and 104.406(h) requires an explanation thereof, no level of justification or other requirements for adjusted standards are specified in Section 218.586. According to 415 ILCS 5/27(c):

If a regulation of general applicability does not specify a level of justification required of a petitioner to qualify for an adjusted standard, the Board may grant individual adjusted standards whenever the Board determines, upon adequate proof by petitioner, that:

- (1) factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner;
- (2) the existence of those factors justifies an adjusted standard;
- (3) the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and
- (4) the adjusted standard is consistent with any applicable federal law.

Therefore, because 218.586 does not list a level of justification, 27(c) applies, and this amended Petition addresses the above listed four factors.

**(1) Factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner:**

Stage II and ORVR compete to capture any displaced gasoline vapor during the fueling process, rendering each less effective from a technical and practical engineering perspective. See Section E below, and Exhibit 3.

The Board adopted Stage II requirements before ORVR technology was widespread. Section 202(a)(6) of the Clean Air Act (**Exhibit 2**), requires that automobile manufacturers incorporate ORVR systems in new passenger vehicles (“cars”). Congress anticipated that as new cars equipped with Onboard Refueling Vapor Recovery (ORVR) replaced older vehicles, Stage II vapor recovery would no longer be needed. The Clean Air Act provides that Stage II would not apply in moderate nonattainment areas once US

EPA had adopted ORVR regulations and that the Administrator could waive Stage II requirements in serious, severe, and extreme nonattainment areas as appropriate. 42 U.S.C. § 7521(a)(6).

The LLC has 100% ORVR utilization within the fleet. See Exhibit 7.

**(2): The existence of these factors justifies an adjusted standard:**

The following factors justify an adjusted standard: (1) Stage II and ORVR render each other less effective when used together; (2) Stage II preceded the widespread use of ORVR; and (3) RACs utilizes ORVR in 100% of its fleet.

Congress intended for Stage II to be effective in capturing vapor and reducing waste, and the use of Stage II in cars with ORVR contradicts this intent because it reduces the effectiveness of each technology. See section D below, and Exhibit 7.

The existence of the new technology in 100% of RACs' fleet justifies an adjusted standard because none of its cars would benefit from Stage II requirements, and with Stage II Vapor Recovery, emissions would increase.

**(3) The requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability:**

If the Board grants RACs' Petition for an Adjusted standard, the environmental effects will be less adverse than if the Board requires RACs to comply with Stage II requirements. As stated above, ORVR actually reduces Stage II's efficiency. Using the two in conjunction causes them to compete with each other, thus rendering each one less effective. The reported "in-use" efficiency of ORVR alone is approximately 98%, which exceeds the current requirements as established by 218.586 § 104.406(e). Furthermore, ORVR technology is more efficient than Stage II, which only captures 84%. (See Exhibit 3) The rule of general applicability would have a more adverse effect on the environment. An adjusted standard which would allow ORVR to replace Stage II in RACs' case would be cleaner than compelling it to comply with the standard. See section E below, and Exhibit 3.

**(4) The adjusted standard is consistent with any applicable federal law:**

The granting of this Petition will be consistent with federal law. As discussed above, the Clean Air Act requires that vehicle manufacturers equip new vehicles with ORVR systems. Moreover, as provided in Section 202(a)(6) of the Clean Air Act, the Administrator may waive the Stage II requirement in serious, severe, and extreme nonattainment areas as appropriate. As previously noted, in 2006, the USEPA provided

guidance to the States regarding the removal of Stage II gasoline vapor recovery systems for rental car facilities where the fueling is limited to ORVR-equipped vehicles. **See Exhibit 4.** On February 20, 2008 the California Air Resource Board (CARB) supported the position taken by the Federal EPA and encouraged the California Air Districts to revise their Stage II standards. **See Exhibit 5.** As a result, several states in the Northeastern US have begun using certain EPA criteria to classify that ORVR is in “widespread use” throughout their states and have initiated actions to phase-out or discontinue the requirement for Stage II vapor recovery systems at gasoline dispensing facilities (GDFs). **See Exhibit 6.** Please also refer to **Exhibit 7** - reference spreadsheets from participating rental car operators as listed above that comprise the Midway RACs, LLC -for the percentage of vehicles within the fleet that are equipped with ORVR systems. It should be noted that Exhibit 7 illustrates 100% ORVR utilization within the fleet.

Granting this Petition for Adjusted Standard to the LLC would not affect Stage II requirements elsewhere in the Chicago nonattainment area but would be consistent not only with the Clean Air Act but also with actions that USEPA has taken in other “captive” fueling situations. The Board may grant the Petition for Adjusted Standard consistent with federal law.

**D. Nature of, Location of, and Area Affected by Petitioner’s Activity That Is the Subject of This Petition (§ 104.406(d))**

Currently, the Midway RACs operate separate Quick-Turn-Around (QTA) facilities at Chicago’s Midway International Airport. Upon completion of the City of Chicago’s Midway International Airport Consolidated Rental Car Facility, all of the RACs will relocate to the Facility and QTA operations will be transferred from the separate facilities to the common QTA which is being constructed as part of the Project. The common QTA facility will be located at 5040 W. 55<sup>th</sup> Street, Chicago, Cook County, Illinois 60638. The Facility is located in the Chicago ozone nonattainment area. In the immediate vicinity for the Facility is an industrial area; although a residential area is also nearby.

The common QTA facility is anticipated to open in the first half of 2013 and will service four rental car “brand families”. Employees for each of the four brands will be on site. In total, it is anticipated that the rental car brands will employ 300 employees (based on full-time equivalence (FTE) which assumes 8 hour shifts).

The cars that will be rented at the Facility are produced by multiple manufacturers and cover a wide range of models. Despite the range in manufacturers and models, the Midway RACs maintain fleets comprised of models which are generally less than three

years old. Through sampling of the Midway RACs existing fleets in and around the airport, less than 0.5% of the fleets were 2009 models, the remaining 99.5% of the vehicles were model years 2010, 2011, or 2012.

Given that this request for relief is for a future Facility currently under construction, it is not possible to estimate the emissions, discharges or releases that will be generated by the Midway RACs fleets at this location. However, 100% of the Midway RAC's fleets are composed of new models which contain ORVR systems. Therefore, emissions from the facility will be less if this petition is granted than they would be if it is not.

**E. Efforts Necessary for RAC to Comply with Section 218.586 (§ 104.406(e))**

The MDW Consolidated Rental Car Facility was initiated at the beginning of the century; however, the Project was put on hold by the City of Chicago a number of times. Recently, the City of Chicago resurrected the nearly ten-year old design and proceeded with implementation of the Project. As a result of utilizing a design which was completed prior to the U.S. EPA allowing removal of Stage II where widespread use of ORVR is demonstrated, the design currently calls for a fuel system which is equipped with a "vacuum assist" Stage II vapor recovery system. The vapor recovery system which is currently in the construction documents calls for a specialized gasoline-dispensing nozzle designed to capture displaced gasoline vapors from the motor vehicle fuel tank during fleet fueling operations and to route the captured vapors through a pipeline back to the underground fuel storage tanks. As previously noted, Section 218.586 requires the installed vapor collection and control system to have a vapor recovery and removal efficiency of at least 95% by weight. Theoretically, the specified Stage II vapor recovery system planned for the facility captures the required 95% of vapors coming from the vehicle's fill pipe. However, the in-use efficiency rating of such Stage II systems ("in use" having to do with the frequency of inspection and proper maintenance) has been determined to be 84 percent. In a memorandum by Mr. Glenn W. Passavant, Office of Transportation, United States Environmental Protection Agency, National Vehicle and Fuel Emissions laboratory, dated June 9, 2011, Mr. Passavant notes that ORVR "in-use" efficiency has been validated "by over 1100 laboratory tests of in-use ORVR-equipped vehicles", the results of which are documented in the memorandum. (*See Exhibit 3*) The reported "in-use" efficiency of approximately 98% exceeds the requirements as established by 218.586 (§ 104.406(e)).

As quoted in Federal Register /Vol. 76, No. 136 / Friday, July 15, 2011 / Proposed Rules, "when an ORVR vehicle is fueled at a service station equipped with a vacuum assist Stage II vapor recovery system, a lack of compatibility between the two controls may actually cause the emission reduction of the two systems together to be less than the

emission reduction achieved by either system alone. The problem arises when the ORVR canister captures the gasoline emissions from the motor vehicle fuel tank. Instead of drawing vapor-laden air from the vehicle fuel tank into the underground storage tank, the vacuum pump of the Stage II system draws fresh air into the underground storage tank. The fresh air causes gasoline in the underground tank to evaporate inside the underground tank and thus creates an increase in pressure in the underground storage tank. As a result, gasoline vapors may be forced out of the underground storage tank vent pipe into the ambient air. This incompatibility can result in a 1 to 10 percent decrease in control efficiency over what would be achieved by either Stage II or ORVR alone. The decrease in efficiency varies depending on the vacuum assist technology design (including the ratio of volume of air drawn into the underground tank compared to the volume of gasoline dispensed), the gasoline Reid vapor pressure, the air and gasoline temperatures, and the fraction of throughput dispensed to ORVR vehicles. There are various technologies that address this incompatibility, such as nozzles that sense when fresh air is being drawn into the underground storage tank and stop the air flow. Another solution is the addition of processors on the underground storage tank vent pipe that capture or destroy the gasoline vapor emissions from the vent pipe. Installing these technologies adds to the expense of the control systems and is in some cases a reason to remove Stage II systems.”

Based on these independent studies, along with the intent of Section 202(a)(6) of the Clean Air Act, and based on the memorandum from the Federal Environment Protection Agency dated December 12, 2006 which provided guidance to the states concerning the removal of Stage II gasoline vapor recovery systems where States demonstrate to the EPA that widespread use of onboard refueling vapor recovery (ORVR) has occurred in specific portions of the motor vehicle fleet, including refueling of rental cars at rental car facilities (*See Exhibit 4*), the LLC respectfully requests an Adjusted Standard acknowledging that the ORVR systems installed on all fleet vehicles to be fueled at the facility would provide a significantly higher level of vapor recovery over time as compared to the originally-specified Stage II VPS.

Costs are discussed in Section F, following.

#### **F. Proposed Adjusted Standard, Level of Effort Required, Costs (§ 104.406(f))**

The LLC proposes that the Board grant an adjusted standard that waives the requirements of Section 218.586 and requires that the Midway RACs fuel only ORVR-equipped vehicles at the Facility. Specifically, the adjusted standard would state as follows:

The Chicago Midway Airport Consolidated Facility is not subject to the requirements of Section 218.586, effective immediately, so long as the vehicles fueled at the

Chicago Midway Airport Consolidated Facility are equipped with onboard refueling vapor recovery systems (ORVR) certified by the U.S. Environmental Protection Agency to capture a minimum of 95% of the gasoline vapor displaced during fueling.

The RACs already fuel only vehicles equipped with ORVR systems at their individual facilities nationwide. Therefore, the level of effort for the LLC to comply with the adjusted standard is minimal, merely to continue fueling only ORVR-equipped vehicles and to delete the initially designed Stage II system from the final construction documents for the Project.

Anticipated costs for a Stage II system would include increased upfront costs associated with installing the Stage II vapor recovery system – this initial installation cost is estimated to be approximately \$72,000.00 for the Stage II equipment and associated piping - as well as increased annual maintenance costs for the system over the 25-year life expectancy of the Project. The EPA estimates maintenance costs of about \$3,277 per year for a “typical gasoline dispensing facility”; based on the size of the proposed Facility, such costs at the Midway Consolidated Rental Car Facility could range from \$10 – 12,000 annually.

**G. Quantitative and Qualitative Impact of Petitioner’s Activity on the Environment Under Conditions of Compliance with Section 218.586 v. Adjusted Standard (§ 104.406(g))**

Since ORVR equipped vehicles that meet the federal ORVR standards have been produced, the Midway RACs have utilized them as part of their fleet. The ORVR systems capture at least 95% of the evaporative emissions that otherwise could be lost during refueling. The ORVR systems capture displaced gasoline vapors and absorb them in the vehicle’s onboard carbon canister. Over time, as the engine runs, the vapors are desorbed by engine heat and used as fuel for the engine.

**H. Justification of the Proposed Adjusted Standard (§ 104.406(h))**

Section 218.586 does not include a level of justification for adjusted standards. Therefore, this provision is not applicable to this Petition.

**I. Consistency With Federal Law (§ 104.406(i))**

The granting of this Petition will be consistent with federal law. See above, Section C(4).

**J. Citations to Supporting Documents and Authorities (§ 104.406(k))**

The LLC has cited various documents and authorities in support of this Petition. Such citations are embedded in the Petition.

**K. Additional Information Required in the Regulation of General Applicability (§104.406(l))**

No additional requirements are included in Section 218.586.

WHEREFORE, for the reasons set forth above, the Midway RACs, LLC respectfully requests that the Board grant its Petition for Adjusted Standard from the requirements of 35, Ill. Adm. Code § 218.586, Stage II vapor recovery as applicable to The Chicago Midway Airport Consolidated Rental Car Facility.

Respectfully submitted, Midway RACs LLC, Petitioner by Shell J. Bleiweiss attorney for Midway RACs, LLC.

/s/ Shell J. Bleiweiss

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**CERTIFICATE OF SERVICE**

I have served the AMENDED PETITION FOR AN ADJUSTED STANDARD, by sending a digital copy to:

Kent Mohr  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Springfield, IL 62794-9276  
At kent.mohr@illinois.gov

This 9th day of July, 2012.

/s/ Shell J. Bleiweiss  
Shell J. Bleiweiss, Attorney  
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**EXHIBITS**

Please note that Exhibits 1, 2, 2a, and 6 are below; Exhibits 3, 4, 5 and 7 are attached as PDFs.

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**Exhibit 3:** Onboard Refueling Vapor Recovery: Evaluation of the ORVR Program in the United States (November 2011).....(attached as PDF)

**Exhibit 4:** Removal of Stage II Vapor Recovery in Situations Where Widespread Use of Onboard Refueling Vapor Recovery is Demonstrated (December 12, 2006).....(attached as PDF)

**Exhibit 5:** Air Resources Board -State of California (CARB) letter to All Local Air District Air Pollution Control Officers (APCO) (February 20, 2008)... (attached as PDF)

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**Exhibit 7:** Vehicle Data from Rental Car Agencies Currently Operating at MDW (September 2011)..... (attached as PDF)