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I. INTRODUCTION

The Illinois Environmental Protection Agency (“Agency”) is designated as the lead agency to administer funds allocated to Illinois from the Volkswagen Environmental Mitigation Trust Agreement for State Beneficiaries (“Trust Agreement”). As directed by the Trust Agreement, these funds are to be used for environmental mitigation projects that reduce emissions of nitrogen oxides (“NO\textsubscript{x}”) in Illinois. In compliance with Section 4.1 of the Trust Agreement, in August 2018, Illinois submitted its initial Beneficiary Mitigation Plan (“BMP”), which addressed Illinois’ plan for use of the funds, to the Volkswagen Trustee. This revised BMP would fund new, zero emission all-electric projects, as well as zero emission vehicle (“ZEV”) supply equipment. As with the initial BMP, this revised BMP may be further revised at any time.

II. VOLKSWAGEN CASE BACKGROUND AND SETTLEMENT SUMMARY

A. Case Background

On January 4, 2016, the United States, on behalf of the United States Environmental Protection Agency (“U.S. EPA”), filed a complaint against Volkswagen AG, et al. (“Volkswagen”) alleging the manufacture of vehicles with prohibited defeat devices that caused emission control systems to perform differently during normal vehicle operation than during emissions testing. As a result of the defeat devices, the vehicles emitted NO\textsubscript{x} in excess of federal vehicle emission standards. Approximately 500,000 (model year 2009 to 2015) vehicles containing 2.0-liter diesel engines and approximately 80,000 (model year 2009 to 2016) vehicles containing 3.0-liter diesel engines were affected in the country. Approximately 23,600 of the affected vehicles were registered in Illinois. The U.S. EPA has indicated that NO\textsubscript{x} emission levels from the 2.0-liter vehicles with defeat devices were 10 to 40 times higher than federal
emission standards, and NO\textsubscript{x} emission levels from the 3.0-liter vehicles were up to nine times higher than federal emissions standards. (U.S. Envir. Prot. Agency, Frequent Questions about Volkswagen Violations, available at https://www.epa.gov/vw/frequent-questions-about-volkswagen-violations)

B. Settlement Summary

Settlements were reached requiring Volkswagen to establish an Environmental Mitigation Trust (“Trust”) totaling $2.925 billion. Affected states and tribes that become beneficiaries of the Trust will receive funds to undertake Eligible Mitigation Actions (“EMAs”) that are intended to mitigate the excess NO\textsubscript{x} emissions from the Volkswagen vehicles. Illinois is a beneficiary of the Trust with an initial allocation of $108,679,676.98. The Agency has posted links to the settlements on its Volkswagen Settlement webpage (http://www.epa.illinois.gov/topics/air-quality/vw-settlement/index). Separate from the Trust, the Volkswagen Settlement includes a $10 billion vehicle recall and repair program and a $2 billion investment in ZEV infrastructure, public education and access to ZEVs.

III. ILLINOIS AIR QUALITY - OZONE

The Volkswagen vehicles equipped with defeat devices emitted excess NO\textsubscript{x}. NO\textsubscript{x} is a precursor to ground level ozone, an air pollutant formed when NO\textsubscript{x} and volatile organic compounds react in the presence of sunlight. Reducing NO\textsubscript{x} emissions from diesel engines is an important strategy in reducing overall NO\textsubscript{x} emissions, reaching attainment of the ozone standard in nonattainment areas, and improving air quality in Illinois. Two areas in Illinois are designated nonattainment for the ozone National Ambient Air Quality Standard (“NAAQS”)—the Chicago area and the Metro-East St. Louis area.
IV. ILLINOIS’ BENEFICIARY MITIGATION PLAN

A. Beneficiary Mitigation Plan Requirements

Pursuant to Section 4.1 of the Trust Agreement, the BMP must include the following:

- Illinois’ overall goals for use of the Trust funds;
- The categories of EMAs Illinois anticipates will be appropriate to achieve those goals, and a preliminary assessment of the percentages of funds anticipated to be used for each type of EMA;
- A description of how Illinois will consider the potential beneficial impact of the selected EMAs on air quality in areas that bear a disproportionate share of the air pollution burden;
- A general description of the expected ranges of emission benefits Illinois estimates will be realized by implementation of the EMAs; and
- The process for seeking and considering public input on Illinois’ BMP.

Under the Trust Agreement, states have the discretion to adjust their goals and specific spending plans. For that reason, the BMP is a living document. As with the initial BMP, the Agency will provide this first revised BMP and any future revisions to the Trustee and post the updated versions on its Volkswagen Settlement webpage. The BMP and revisions to the BMP are not a request for projects and do not include details regarding applications for funding or the project selection process. Further, the Agency will provide notice of funding opportunities and application materials, including the information regarding the project selection process, on its Driving a Cleaner Illinois webpage, https://www2.illinois.gov/epa/topics/air-quality/driving-a-cleaner-illinois/Pages/default.aspx.
The Trust Agreement provides that the following categories of EMAs are eligible to receive funding from the Trust:

1. Class 8 Local Freight Trucks and Port Drayage Trucks;
2. Class 4-8 School, Shuttle, or Transit Buses;
3. Freight Switchers;
4. Ferries/Tugs;
5. Ocean Going Vessels Shore power;
6. Class 4-7 Local Freight Trucks;
7. Airport Ground Support Equipment;
8. Forklifts and Port Cargo Handling Equipment;
9. Light Duty ZEV Supply Equipment; and

It further provides eligible vehicles and equipment may either be repowered with a newer, cleaner diesel, alternate fuel, or all-electric engine, or replaced entirely with a new, cleaner diesel, alternate fuel, or all-electric vehicle. Funding for government owned eligible vehicles and equipment may be up to 100 percent, while funding for non-government owned vehicles and equipment ranges from up to 25 percent to up to 75 percent, depending on whether it is repowered or replaced and whether the repower or replacement is newer, cleaner diesel, alternate fuel, or all-electric.

For Option 9 above, beneficiaries may use up to 15 percent of its allocation on the costs necessary for, and directly connected to, the acquisition, installation, operation, and maintenance of new light duty ZEV supply equipment. This 15 percent allotment is further subject to the
funding limitations set forth in the Trust Agreement. Separately, funding for all-electric charging infrastructure may be provided on a project-specific basis within individual EMAs.

The Trust Agreement also provides that beneficiaries may use up to 15 percent of Trust funds for actual administrative expenditures associated with implementing EMAs. Administrative expenditures may include costs for personnel, fringe benefits, travel, supplies, contractual services and goods, construction, and other costs.

B. Illinois’ Overall Goals for Use of the Funds

Illinois will use the Trust funds to support projects that:

- Will reduce NOx emissions in areas where the affected Volkswagen vehicles were registered while taking into consideration areas that are nonattainment for ozone or bear a disproportionate share of the air pollution burden, including environmental justice areas.
- Decarbonize Illinois’ transportation sector.
- Align funding with state priorities to establish a reliable network of charging infrastructure to promote transition to an electrified transportation sector to support business and consumer needs.
- Support public transportation needs of Illinois residents, including school children.

C. Volkswagen Vehicles in Illinois

There were approximately 23,600 affected Volkswagen vehicles registered throughout Illinois. Figure 1 identifies affected Volkswagen vehicle registrations in Illinois by zip code. Approximately 69.5 percent of the affected Volkswagen vehicles were registered in the Chicago ozone nonattainment area. Approximately 32 percent were registered in Cook County alone with
the highest concentration of affected Volkswagen vehicles per square mile located in and just north of the Chicago Loop. Approximately 4.91 percent of the affected Volkswagen vehicles were registered in the Metro-East St. Louis ozone nonattainment area. The remaining affected Volkswagen vehicles were spread throughout the State in the ozone attainment area. The Illinois ozone attainment counties with 1 percent or greater affected Volkswagen vehicle registrations are Champaign, DeKalb, LaSalle, McLean, Peoria, Sangamon, and Winnebago.
Figure 1 - Volkswagen Settlement Vehicle Registrations by Zip Code

Legend
Vehicles per Zip Code
- 1 - 10
- 11 - 25
- 26 - 45
- 46 - 65
- 66 - 95
- 96 - 150
- 151 - 513
D. Categories of Eligible Mitigation Actions and Projected Allocations of Trust Funds

For this revised BMP, the types of EMAs that Illinois will consider funding are: 1) Class 4-8 new, all-electric school bus replacement projects; 2) all-electric public transportation projects, including Class 4-8 new, all-electric transit bus replacements and passenger/commuter line haul locomotive projects; and 3) light duty ZEV supply equipment projects. Illinois will also fund administrative expenditures of the Agency associated with implementing the EMAs as allowed under the Trust Agreement.

Illinois expects to request up to 38 percent of the Volkswagen Trust funds for new, all-electric school bus replacement projects, up to 45 percent for all-electric public transportation projects and up to 15 percent for light duty ZEV supply equipment projects. To promote electric vehicle infrastructure, meet the purpose of the Trust Agreement and Illinois’ goal to reduce NOx emissions, and ensure against stranded electric vehicles or infrastructure, Illinois proposes to fund charging infrastructure within all-electric vehicle projects where charging infrastructure is needed. Illinois will require project applicants to identify whether adequate charging infrastructure will be available for any all-electric vehicle projects.

While beneficiaries may request up to 15 percent of their Volkswagen Trust allocation for administrative expenditures, as authorized in Appendix D-2 of the Trust Agreement, Illinois expects to request up to 2 percent of its allocation. Administrative expenditures may include personnel costs, fringe benefit costs, supply costs, contractual costs, and other eligible costs.

Illinois anticipates funding both government and non-government projects. Illinois will require the following cost shares. For non-government applicant all-electric vehicle projects, Illinois will require a cost share of at least 50 percent (or a higher cost share where specified by DERA where the DERA option is utilized). For government applicant all-electric vehicle
projects, Illinois will require a cost share of up to 25 percent (or a higher cost share where specified by DERA where the DERA option is utilized). A privately-owned school bus under contract with a public school district will be treated as a government owned bus for purposes of the required cost share as allowed by the Trust Agreement. Therefore, funding for a privately-owned school bus under contract with a public-school district will require a cost share up to 25 percent. For light duty ZEV supply equipment projects, Illinois will require cost shares consistent with the Trust Agreement.

E. Potential Beneficial Impact

Illinois has prioritized areas of the State for EMA funding and anticipates funding EMAs in each of the priority areas. Priority areas were based on the following considerations:

- Counties having the greatest number of subject Volkswagen vehicle registrations.
- Counties designated nonattainment for ozone; and
- Areas that bear a disproportionate share of the air pollution burden, including environmental justice areas.

The greatest percentage of affected Volkswagen vehicles in Illinois were registered in the Chicago area. Approximately 69.5 percent of the affected Volkswagen vehicles were registered in the Chicago ozone nonattainment area. Approximately 32 percent were registered in Cook County alone with the highest concentration of affected Volkswagen vehicles per square mile located in and just north of the Chicago Loop. In addition, based on the Agency’s environmental justice public participation policy and mapping tool, approximately 69.8 percent, the highest percentage, of environmental justice block groups in the State are in Cook County. This means that approximately 69.8 percent of the Illinois population living in areas designated as areas of environmental concern in the State live in Cook County. Approximately 79.3 percent of
environmental justice block groups in the State are in the Chicago ozone nonattainment area. This means that approximately 79.3 percent of the Illinois population living in areas designated as areas of environmental concern in the State live in the Chicago ozone nonattainment area. Figure 2 contains a map of Volkswagen vehicle registrations by zip code versus environmental justice areas in Illinois. Figure 3 contains a map of Volkswagen vehicle registrations by zip code versus environmental justice areas in Chicago. This confluence of factors provides evidence that the Chicago nonattainment area bears a disproportionate share of the air pollution burden in Illinois. As a result of these factors and Illinois’ goals for use of the Volkswagen Trust funds, Illinois has established the Chicago nonattainment area as Priority Area 1 for funding.
Figure 2 - Volkswagen Vehicle Registrations by Zip Code versus Environmental Justice Areas - Illinois
Figure 3 - Volkswagen Vehicle Registrations by Zip Code versus Environmental Justice Areas – Chicago Area
Approximately 4.91 percent of affected Volkswagen vehicles were registered in the Metro-East St. Louis ozone nonattainment area. Approximately 2.9 percent, the second highest percentage outside the Chicago ozone nonattainment area, of environmental justice block groups in the State are in St. Clair County, part of the Metro-East St. Louis ozone nonattainment area. This means that approximately 2.9 percent of the Illinois population living in areas designated as areas of environmental concern in the State live in St. Clair County. Approximately 4.1 percent of environmental justice block groups in the State are in the Metro-East St. Louis ozone nonattainment area. This means that approximately 4.1 percent of the Illinois population living in areas designated as areas of environmental concern in the State live in the Metro-East St. Louis ozone nonattainment area. Figure 4 contains a map of Volkswagen vehicle registrations by zip code versus environmental justice areas in the Metro-East St. Louis nonattainment area. These facts provide evidence that the Metro-East St. Louis nonattainment area bears a disproportionate share of the air pollution burden as compared to the attainment area of Illinois. Based on these facts and Illinois’ goals for use of the Volkswagen Trust funds, Illinois has established the Metro-East St. Louis nonattainment area as Priority Area 2 for funding.
Figure 4 - Volkswagen Vehicle Registrations by Zip Code versus Environmental Justice Areas – Metro-East St. Louis Ozone Nonattainment Area
The remaining affected Volkswagen vehicles registered in Illinois were spread throughout the State in the ozone attainment area. The vast majority of ozone attainment counties each had less than 1 percent of affected Volkswagen vehicles. The Illinois ozone attainment counties with 1 percent or greater affected Volkswagen vehicles registered were Champaign, DeKalb, LaSalle, McLean, Peoria, Sangamon, and Winnebago. Combined, these attainment counties had 10.1 percent of affected Volkswagen vehicles. Therefore, Illinois has established these counties as Priority Area 3 for funding.

F. Expected Ranges of Emissions Benefits

1. All-Electric School Bus Projects. The Agency analyzed a sample of all-electric school bus projects that included replacing older diesel school buses with new all-electric school buses. The NOx emissions reduced per bus could range from .05 to .10 tons.

2. All-Electric Public Transportation Projects. The Agency analyzed a sample of all-electric public transportation projects. For Class 4-8 public transit buses, the NOx emissions reduced per bus could range from 0.5 to 1 ton. For passenger/commuter locomotive projects, the NOx emissions reduced per train could range from 30-40 tons.

3. Light Duty ZEV Supply Equipment Projects. Given the assumptions necessary and complexity of linking NOx emission reductions to light duty ZEV supply equipment usage, this BMP will not quantify such emission reductions.

G. Public Input

The Trust Agreement requires the BMP to include an explanation of the process by which Illinois will seek and consider public input on its BMP. To provide for informed comment on Illinois’ revised approach for use of its Settlement allocation, the Agency has prepared a revised draft BMP which lays out goals, allocations, and benefits for public review and comment. To
reach and inform a broad range of the public and potential applicants, and to make public participation easy and convenient, the Agency will utilize its established Volkswagen Settlement webpage https://www2.illinois.gov/epa/topics/air-quality/driving-a-cleaner-illinois/vw-settlement/Pages/default.aspx and solicit written public comment through its established VW e-mail mailbox, EPA.VWSettlement@illinois.gov, and promote the availability of the revised draft BMP and comment period through social media, press release, and direct e-mail notification.

Any comments or questions relating to the BMP should be directed to the Agency’s Office of Community Relations through EPA.VWSettlement@illinois.gov.

V. CONCLUSION

This revised BMP has been developed in accordance with the terms of the Trust Agreement. This is not a solicitation for projects. As such, it does not include detail on the application or project selection process. Such information will be available on the Agency’s Driving a Cleaner Illinois webpage.