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Commissioner Jon Niermann  
Texas Commission on Environmental Quality  
Air Quality Division  
Implementation Grants Section, MC-204  
P.O. Box 13087  
Austin, TX 78711-3087

October 8, 2018

**RE: Comments on Texas's Volkswagen Settlement Beneficiary Mitigation Plan**

ChargePoint is pleased to provide written comments to the State of Texas regarding the Texas Commission on Environmental Quality's (TCEQ) Draft Beneficiary Mitigation Plan dated August 8, 2018, stemming from the VW settlement and the State's allocation from the Environmental Mitigation Trust. The Trust funds provide a significant opportunity for the State to mitigate the environmental harm VW diesel vehicles caused, as well as advance key transportation segments that produce long-term benefits to the State and its communities.

**In summary, ChargePoint strongly supports TCEQ's plan to include the maximum allowable 15% of its Trust allocation towards smart, light-duty electric vehicle (EV) charging infrastructure. We urge TCEQ to maintain this commitment in the final plan. Importantly, we recommend that DC fast charging (DCFC) deployments be covered at the maximum level listed in the consent decree: up to 80% for public deployments with a 20% private match. TCEQ's planned coverage at 50% for EV charging installations would not generate rapidly deployed and widespread DCFC projects.**

We believe that this investment in transportation electrification significantly contributes to the NO<sub>x</sub> mitigation goals of the Environmental Mitigation Trust, and NO<sub>x</sub> reductions from charging sessions are easily and empirically calculable. Moreover, funding for EV infrastructure is needed to meet the demands of today's 30,000 EV drivers in Texas, let alone support the exponential growth of EVs forecast for the years to come. In a state that currently has just 2,600 public charging spots, this small portion of the investment could lead to thousands of charging stations deployed in communities across Texas, potentially more than doubling the number of ports available in the State.

ChargePoint is the world's leading electric vehicle (EV) charging network, with charging solutions for every charging need and all the places EV drivers go: at home, work, around town and on the road. With more than 54,000 independently-owned charging spots and thousands of customers nationwide, ChargePoint drivers have completed more than 43 million charging sessions, all powered by the local grid, and more than 1 billion miles have been driven on charges from our network. In addition, there are currently more than 1,200 public ChargePoint charging spots in the State of Texas.

***Bottom-line reasons to commit to 15% for charging infrastructure in Texas***

1. 15% for charging infrastructure would deploy thousands of charging stations across Texas.
  - Charging infrastructure is the most cost-efficient category for investment under the Trust.

- EV charging stations can be deployed flexibly, with deployments easily tailored to State priorities and leveraging strong private sector demand.
  - Smart charging can give the State real-time insights into EV charging and transportation trends.
  - Within months hundreds of charging stations would be installed and fully operational, update constantly over air.
2. 15% for charging infrastructure would provide a measurable and significant annual NOx mitigation.
    - EV charging is the only category that offers real-time NOx mitigation measures.
    - Captures data on kilowatt-hours consumed, which can be easily converted to electric miles driven.
    - Charging infrastructure is the only eligible mitigation action that will increase NOx mitigation over time with greater EV adoption and a cleaner electric grid.
  3. 15% for charging infrastructure will make Texas a leader in advanced transportation technologies.
    - 40+ States have already determined EVSE as part of their draft or final beneficiary mitigation plans.
    - Current infrastructure is not adequate to meet the needs of today's EV drivers and prepare for future projected growth.
    - States are currently competing for preparedness in electrification, and Trust funds provide a unique opportunity Texas to lead and become a target for investment.
  4. 15% for charging infrastructure is part of a resilient transportation sector.
    - Charging is powered by the grid and keeps transportation fuel local.
    - Transportation fuel diversity mitigates risks for Texas and its drivers.
    - Infrastructure is currently needed along evacuation routes, in order to address range security at a time of emergency.

***More charging Infrastructure is needed, and VW Trust funds present a key opportunity***

To meet the needs of today's electric vehicle drivers more charging infrastructure is needed. There are currently 2,600 public charging stations in Texas.<sup>1</sup> Studies show that by 2030, the State will need more than 32,000 public, non-residential charging stations.<sup>2</sup>

There is currently not enough fast charging along the corridors to allow Texas drivers to travel to-and-from the Dallas-Fort Worth-San Antonio-Houston triangle cities, enabling refueling in a matter of minutes. Similarly, Level 2 chargers, which are best for destinations with longer dwell times, are not widely available at many workplaces, retail establishments, and multi-unit dwellings around the State. Most critically, not enough charging infrastructure is available along evacuation routes, leaving EV drivers vulnerable in times of emergency. A widespread deployment of charging stations across the State of Texas is required to meet and sustain EV growth long term and ensure the safety of drivers.

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<sup>1</sup> Alternative Fuels Data Center. U.S. Department of Energy. [www.afdc.energy.gov](http://www.afdc.energy.gov). January 2018.

<sup>2</sup> National Renewable Energy Laboratory. "National Plug-In Electric Vehicle Infrastructure Analysis." September 2017. <https://www.nrel.gov/docs/fy17osti/69031.pdf>

***Key Recommendation: Coverage levels for DC Fast Charging Projects should be increased to 80%***

The economic considerations of Level 2 and DC fast charging segments are dramatically different. First, DC fast charging has several cost factors that are variable with each site, which are generally not present in Level 2 deployments. Second, while Level 2 is primarily installed as an amenity to complement other site host activities that attract drivers, DCFC is primarily installed for scenarios where a driver's main reason for visiting a site is refueling. This difference in business models, use cases, and costs between Level 2 and DCFC results in a difference in the way each segment would respond to incentive programs, such as TCEQ's proposed grant programs.

The suggested 50% cost coverage for DCFC would not effectively accelerate private investment and would lack broad distribution across the State. Industry models show that 80% coverage for DCFC projects would significantly improve the economics and enable scalable and sustainable buildouts of DC fast charging spots in a variety of locations statewide. Codifying this change in the final Beneficiary Mitigation Plan would give industry greater certainty and increase private investment interest in the program prior to its launch.

***Designing the right EV charging program for Texas under the Trust***

As stated in our initial comments to TCEQ, ChargePoint supports flexible incentive programs, designed to accommodate a range of project sizes and types of EVSE. We believe that TCEQ's proposal for first-come, first-served grant programs, with certain criteria for projects and technology used, can achieve widespread, sustained buildout of charging infrastructure. We would propose the following criteria for eligibility:

*Program Eligible Applicants*

- Public agencies
- Private entities
  - Business owners, EVSE manufacturers, electric vehicle service providers, contractors, not-for-profits, etc.

DC Fast Charging Program Site Requirements

*Eligibility DCFC Site Locations*

- Retail shopping centers
- Gas stations
- Restaurants
- Hospitals
- Airports
- Colleges and universities
- Hotels
- State, city, county owned surface lots and parking garages, including park-and-rides
- Chargers must be available to the public 24 hours a day, 365 days a year
- Be well-lit, safe and in compliance with all federal, state and municipal laws, ordinances, rules, codes, standards and regulations

### *Equipment Requirements – DCFC*

- Must have standard connectors, both CHAdeMO and SAE CCS Combo connectors
- $\geq 50$  kW
- Must report real-time availability and pricing to web-based charging station locator
- Equipment and network must have remote diagnostics and be capable of remote start
- Capable of usage data collection
- If payment is required, must accept some form of credit cards and multiple forms of payment
- Must be certified under the Nationally Recognized Testing Laboratory Program

### Level 2 Program Site Requirements

#### *Eligibility Level 2 Site Locations*

- Commercial
  - Public
- Workplace
  - Public or private
  - Must be shared use
- Multifamily
  - Public or private
  - Must be shared use

#### *Equipment Requirements – Level 2*

- Must have J1772 connector
- $\geq 6.2$  kW capable
- If public, must report real-time availability and pricing to web-based charging station locator
- Must have remote diagnostics and be capable of remote start
- Capable of usage data collection
- If payment is required, must accept some form of credit cards and multiple forms of payment
- Must be certified under the Nationally Recognized Testing Laboratory Program

Given the speed of deployments of charging stations, ChargePoint also recommends that applications for EVSE grants be simple and accommodating of a wide variety of project types.

### **Conclusion**

Thank you for your consideration of ChargePoint's comments. ChargePoint looks forward to being a resource to TCEQ as it charts a course for Environmental Mitigation Trust funds to meet the needs of Texas's communities.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Schatz', with a stylized flourish at the end.

David Schatz  
Director, Public Policy  
ChargePoint

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