

IN THE COMMONWEALTH COURT OF PENNSYLVANIA

Ashley Funk; Otis Harrison, a minor, by his guardian)
Amy Lee; **Lilian McIntyre**, a minor, by her guardian)
Jennifer McIntyre; **Rekha Dhillon-Richardson**, a minor,)
by her guardian Jaskiran Dhillon; **Austin Fortino**, a minor,)
by his guardian Ruth Fortino; **Darius Abrams**, a minor,)
by his guardian Elaine Abrams; **Kaia Luna Elinich**, a minor,)
by her guardian Arianne Elinich,)

Petitioners,)

vs.)

467 M.D. 2015)

Tom Wolf, in his official capacity as Governor of)
Pennsylvania; **Pennsylvania Department of**)
Environmental Protection; John Quigley, in his official)
as Secretary of the Pennsylvania Department of)
Environmental Protection; **Pennsylvania Environmental**)
Quality Board; John Quigley, in his official capacity)
as Chairperson of the Environmental Quality Board;)
Pennsylvania Public Utility Commission; Gladys M.)
Brown, in her official capacity as Chairperson of the Public)
Utility Commission; **Pennsylvania Department of**)
Conservation and Natural Resources; Cindy Adams)
Dunn, in her official capacity as Secretary of the)
Pennsylvania Department of Conservation and Natural)
Resources; **Pennsylvania Department of**)
Transportation; Leslie S. Richards, in her official)
capacity as Secretary of the Pennsylvania Department of)
Transportation; **Pennsylvania Department of**)
Agriculture; Russell C. Redding, in his official capacity)
as Secretary of the Department of Agriculture;)

Respondents.)

AMENDED PETITION FOR REVIEW
SEEKING DECLARATORY AND MANDAMUS RELIEF

NOTICE TO PLEAD

TO RESPONDENTS: YOU ARE HEREBY NOTIFIED TO FILE A WRITTEN RESPONSE TO THIS AMENDED PETITION FOR REVIEW WITHIN 30 DAYS FROM SERVICE HEREOF PURSAUANT TO Pa.R.App.P 1516(B) OR A JUDGEMENT MAY BE ENTERED AGAINST YOU.

A handwritten signature in black ink, appearing to read "Kenneth T. Kristl". The signature is fluid and cursive, with the first name "Kenneth" and last name "Kristl" clearly distinguishable.

Kenneth T. Kristl (Pa. Bar # 207825)
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Petitioners **Ashley Funk**; **Otis Harrison**, a minor, by his guardian Amy Lee; **Lilian McIntyre**, a minor, by her guardian Jennifer McIntyre; **Rekha Dhillon-Richardson**, a minor, by her guardian Jaskiran Dhillon; **Austin Fortino**, a minor, by his guardian Ruth Dana Fortino; **Darius Abrams**, a minor, by his guardian, Elaine Abrams, and **Kaia Luna Elinich**, a minor, by her guardian Arianne Elinich (collectively, “Youth Petitioners”), by and through their attorney, hereby complain of Respondents **Tom Wolf**, in his official capacity as Governor of Pennsylvania; **Pennsylvania Department of Environmental Protection**; **John Quigley**, in his official capacity as Secretary of the Pennsylvania Department of Environmental Protection; **Pennsylvania Environmental Quality Board**; **John Quigley**, in his official capacity as Chairperson of the Environmental Quality Board; **Pennsylvania Public Utility Commission**; **Gladys M. Brown**, in her official capacity as Chairperson of the Public Utility Commission; **Pennsylvania Department of Conservation and Natural Resources**; **Cindy Adams Dunn** in her official capacity as Secretary of the Pennsylvania Department of Conservation and Natural Resources; **Pennsylvania Department of Transportation**; **Leslie S. Richards**, in her official capacity as Secretary of the Department of Transportation; **Pennsylvania Department of Agriculture**; **Russell C. Redding**, in his official capacity as Secretary of the Department of Agriculture (collectively, “Respondents”), and in support thereof state as follows:

NATURE OF THIS ACTION

1. This is an action within the original jurisdiction of this Court concerning Article I, Section 27 of the Pennsylvania Constitution. This Petition seeks declaratory and mandamus relief requiring Respondents to develop a comprehensive plan and regulate in a comprehensive manner Pennsylvania’s emissions of carbon dioxide (“CO₂”) and other greenhouse gases (“GHGs”) consistent with and in furtherance of the Commonwealth’s duties and obligations under Article I, Section 27. These duties include the obligation, as public trustee, to conserve and maintain public natural resources, including the atmosphere, for the benefit of present and future generations. Despite the present and projected impacts of climate change within Pennsylvania, Respondents have failed to fulfill their trustee obligations to meet the Commonwealth’s Article I, Section 27 requirements by failing to develop and then implement a comprehensive plan to regulate carbon dioxide and other greenhouse gas emissions in the Commonwealth so as to protect and benefit the beneficiaries of that trust, including the Youth Petitioners, thereby adversely impacting those beneficiaries and the Youth Petitioners. **To be clear, this Petition does not seek to have this Court require Respondents to implement any particular set of regulations**; rather, it asks this Court—via declaratory and mandamus relief—to require Respondents to determine what steps are necessary to conserve and maintain the public natural resources, including the atmosphere, in the face of climate change via regulation of CO₂ and GHGs, develop a comprehensive plan to achieve those necessary steps, and to implement the comprehensive plan via regulations of CO₂ and GHG emissions in order to satisfy the constitutional mandate in Article I, Section 27 and thereby protect Petitioners as Article I, Section 27 beneficiaries.

JURISDICTION

2. This Court has original jurisdiction over this action pursuant to 42 Pa. Cons. Stat. Ann. §§ 761 and 7532.

PETITIONERS AND STANDING

3. Petitioner **Ashley Funk** is from Mount Pleasant, in Southwestern Pennsylvania. She is 21 years old and is a senior at Wellesley College, where she majors in environmental studies and engineering (she maintains her permanent residency in Pennsylvania). She is excited to return to Pennsylvania when she is finished with college. Growing up, she inspired her community by promoting environmental responsibility and health. After implementing a recycling program and anti-litter campaign in her town, Ashley moved on to making Southwestern Pennsylvania and her state aware of the larger scale environmental injustices of today. Ashley tells her story in the mini-documentary film *Stories of TRUST: Calling for Climate Recovery (TRUST Pennsylvania)*.¹
4. Climate change is impacting Ashley personally and she is concerned about how it will continue to disrupt her life. Climate models for Southwestern Pennsylvania predict a significant increase in annual temperatures and precipitation. Ashley enjoys hiking and biking on trails near her home but her ability to engage in those activities has been and is being diminished due to increased rainfall and temperatures. Higher intensity storms have caused flooding and high flow events in the spring and increased snowfall in the winter. Ashley has already been adversely impacted by significant flooding in her town, which causes creeks to overflow into houses and entire roadways to be submerged under water. Her county is also susceptible to damaging weather conditions such as high intensity winds and tornadoes. On multiple occasions, Ashley has been forced to spend hours in her basement to be safe when there was a tornado warning. In her lifetime, Ashley has experienced an increase in the intensity of winter storm weather, which makes it more difficult to attend school or get other places. Climate change is expected to increase severe weather events, including tornados, posing great threat to Ashley.
5. Ashley fears that climate change will have significant impacts on the economy, health, and environment of her community with adverse impacts for her future. Warmer temperatures have led to an increase in concerns about ground-level ozone in Ashley's county, which are above the recommended levels. Operations such as natural gas drilling have been shown to increase ground level ozone levels. Increased temperatures due to climate change will lead to worse air quality that will harm Ashley. In the area surrounding her home, public health and water resources have been jeopardized by extracting fossil fuels. After attending college in the Boston area, Ashley has come to appreciate and value many places there but as a result of sea level rise, those places are threatened and could be lost or greatly diminished, thus harming Ashley ability to enjoy them in the future. Ashley is proud to call the state of Pennsylvania home, but she is worried about how current and future effects of climate change may impact the health of her community, her family, and future generations. She believes that Commonwealth has the obligation to take action on climate change in order to

¹ The film is available at: <http://ourchildrenstrust.org/state/pennsylvania>.

do its part and inspire others to secure the Commonwealth's public trust resources for present and future generations.

6. In an attempt to get the Commonwealth to recognize its Article I, Section 27 obligations with respect to climate change from atmospheric concentrations of CO₂ and GHG through implementing regulations on emissions of these pollutants, on September 5, 2013 Petitioner Funk filed a Petition for Rulemaking with the Respondent Pennsylvania Environmental Quality Board ("EQB") under 25 Pa. Code § 23.1 ("Funk Petition for Rulemaking"). The Petition for Rulemaking requested that the EQB promulgate regulations to reduce fossil fuel CO₂ emissions to a safe atmospheric level consistent with the Commonwealth's obligations under Article I, Section 27. DEP opposed the Petition, ultimately recommending to the EQB that the Petition be denied. On August 24, 2014, the EQB—after rejecting a motion to allow Petitioner Funk to resubmit the Petition with changes so as to avoid the 2 year prohibition on new petitions—endorsed DEP's recommendation and denied the Funk Petition for Rulemaking.
7. Petitioner **Otis Harrison** is a resident of Philadelphia, Pennsylvania. He is eleven years old and is in fifth grade at Germantown Friends School. Otis works hard to reduce his environmental impact by conserving water and electricity and growing food in the family's garden to reduce their carbon footprint related to food. Otis has already experienced harm from the impacts of climate disruption and will suffer greater injuries if Pennsylvania does not address the climate crisis. Extreme temperatures make it harder for Otis to participate in outdoor activities, like hiking, biking, and gym class, and make it difficult for him to concentrate when outside on very hot days. As a result, his participation in such activities has declined. At the same time, the increase in extreme weather events, such as heavy rainfalls and hurricanes, are negatively impacting Otis. He experienced the damage caused by Hurricane Sandy firsthand; his school was cancelled and there were downed trees and other widespread damage and lasting impacts throughout the area where he lives. Otis has asthma and is allergic to pollen, and it is frightening to him that his asthma and allergies have gotten worse and could continue to get worse with further climate change. Otis and his family enjoy visiting and recreating in the Catskills in New York but their ability to continue to enjoy these places will be impacted by climate change, which will adversely impact the forests, streams, and wildlife that Otis cherishes. His family used to visit a beach house in Delaware but they had to stop going because sea level rise was leading to frequent flooding of the house. Sea level rise is a threat to Otis's future and could inundate parts of Philadelphia and other places that Otis enjoys visiting and recreating within his lifetime if greenhouse gases are not reduced immediately. Otis enjoys eating clams, shrimp, and other seafood, but these important food sources are being adversely impacted by ocean acidification associated with climate change. Otis thinks that Pennsylvania has an obligation to protect the environment for him but does not think the Commonwealth is acting aggressively enough to make the necessary changes to address climate change.
8. Amy Lee is the mother and legal guardian of Otis Harrison. Her address is 6601 Emlen St., Philadelphia, PA 19119.

9. Petitioner **Lilian (“Lily”) McIntyre** is a resident of Philadelphia, Pennsylvania. She is ten years old and in fourth grade at Germantown Friends School. Lily has already noticed the impacts of climate change on her day-to-day life and is concerned about how it will continue to disrupt her life as she grows up. Lily has asthma and is it troubling for her to think about how further climate change could make it worse. Additionally, she is allergic to pollen and fears that her allergies may get worse due to climate change. Climate disruption is impacting Lily in other ways too. The increasingly hot summer temperatures have make it hard for Lily to enjoy outdoor activities, such as riding bikes, hiking, and playing soccer. She has even had soccer cancelled because of extreme heat. Lily enjoys skiing in the Poconos and in Vermont but declining snow over the years and rising temperatures leading to reduced snowpack could undermine future skiing. Lily enjoys hiking in the forests and but the changing climate has led to an increase in dangerous ticks. While hiking Lily enjoys seeing wildlife but climate change will harm and disrupt the wildlife she enjoys seeing, thus reducing her enjoyment of nature. Lily and her family vacation on Martha’s Vineyard and have seen first hand the loss of beaches and erosion caused by rising tides when one of the lighthouses they visit, Gay Head, had to be relocated further inland. They also visit beaches in Florida that are particularly vulnerable to sea level rise from climate change. Sea level rise also threatens to inundate her home city and could lead to the loss of use and enjoyment of places important to her.
10. The increasing the frequency and destructiveness of storms like Hurricane Sandy, during which she and her mother got stuck in floodwaters when a stream by her house overflowed its banks, poses immediate threats to Lily’s safety and well-being. Lily has also experienced tornadoes where she lives, which are not normal and have been linked to climate change. These extreme weather events are harming her ability to use and enjoy her property. Lily does not think that Pennsylvania is doing enough to address the climate crisis and thinks the government should work harder to transition off fossil fuels, like natural gas, and should promote renewable energy sources.
11. Jennifer McIntyre is the mother and legal guardian of Lilian McIntyre. Her address is 129 West Mount Pleasant Ave., Philadelphia, PA 19119.
12. Petitioner **Rekha Dhillon-Richardson** is a resident of Philadelphia, Pennsylvania. She is 16 years old and a junior at Springside Chestnut Hill Academy. Rekha has had close relationship with nature since she was a young girl and is passionate about addressing the climate crisis in order to protect the Earth that she loves and minimize the impacts on human health and children. In April 2015, she organized and hosted her school’s inaugural Girls Climate Change Summit, for which she received the Henry H. Meigs Leadership Award. In May 2015, she gave a TEDx talk on her climate change work.²
13. Rekha enjoys numerous outdoor activities, including hiking, biking, rock climbing, and skiing, but is climate change is impacting her ability to participate in these activities. Extremely hot summers and poor air quality have already reduced her ability to enjoy outdoor activities and the hottest days have made her lightheaded and forced her to spend more time indoors, thereby reducing her participation in and enjoyment of outside activities.

² The TEDx talk is available at: <https://www.youtube.com/watch?v=IpWAjWasj0Y>.

With warmer winters and declining snowfall Rekha will not be able to continue to enjoy winter activities like skiing. Rekha has also been impacted by extreme weather events. When Hurricane Sandy struck in 2012, her school was cancelled and her great grandmother's home in Ocean City, New Jersey, where she likes to visit, suffered flood damage. It is distressing for her to think that such storms will only become more frequent and destructive with further climate change and may undermine the value of her home or may harm her ability to use and enjoy her property. Climate change poses a serious threat to Rekha's future and the places that are important to her. She is acutely aware that the very world she loves and relies on for her health, safety, enjoyment, and well-being is at stake. She thinks that Pennsylvania's government leaders are more concerned about their short-term personal achievements and are not paying enough attention to the serious long-term implications of climate change. She knows that we have the power and means to address climate change and believes that the youth will be an important part of that process.

14. Jaskiran Dhillon is the mother and legal guardian of Rekha Dhillon-Richardson. Her address is 2 University Mews, Philadelphia, PA 19104.
15. Petitioner **Austin Fortino** is a resident of Philadelphia, Pennsylvania. He is 17 years old and attends George Washington Carver High School of Engineering and Science. Austin is passionate about sciences and cares deeply about climate change. He is determined to be part of the solution to the threats that it poses to his future. In order to get to school, Austin walks and uses public transportation. At school, Austin is on the Green Team. Through the Green Team, Austin helped his high school establish a recycling program, co-authored a grant to raise the money to install a water bottle filling station at school, and takes care of a greenhouse where he helps grow food.
16. Austin is already being harmed by Respondents' actions resulting in climate change and is concerned about how future climate impacts will harm him even more in the future unless Respondents take immediate action to reduce greenhouse gas emissions. Abnormally hot temperatures make it difficult for Austin to walk to and from school and can leave him feeling exhausted. Austin enjoys riding bikes with his father but the oppressive heat means that he spends less time biking than he would like to. Each summer, Austin and his family spend time at the beach in Delaware but Austin rising sea levels threaten to inundate the beaches and other coastal areas that Austin likes to visit and plans to return to. Austin fears that rising temperatures, droughts, and the inundation of fresh water supplies from rising sea levels could lead to future conflicts over fresh water supplies that would disrupt his life and harm him. Austin does not eat meat but he does eat fish. However, ocean acidification is degrading the marine ecosystem and harming the seafood that makes up an important part of his diet. Seasonal allergies afflict Austin and climate change is making his allergies worse and more disruptive to his life. Austin does not think that Pennsylvania is doing enough to address the climate crisis and is hoping that they will respond to the climate crisis with a sense of urgency in order to protect him from the worst impacts of climate change.
17. Ruth Fortino is the mother and legal guardian of Austin Fortino. Her address is 505 Denise Dr., Philadelphia, PA 19116.

18. Plaintiff **Darius Abrams** is a resident of Philadelphia, Pennsylvania. He is 16 years old and attends George Washington Carver High School of Engineering and Science. Darius enjoys studying environmental studies and science and is passionate about helping others and volunteering to support community projects. As a member of his school's Green Team, Darius helps educate students about their recycling program and works in the school's community garden.
19. Darius is experiencing disruptions from climate change in his life and he fears that the impacts will get worse in the near future unless Pennsylvania reduces its greenhouse gas emissions. Rising temperatures reduce Darius' ability to play sports and spend time outside in the summer. During the winter, Darius enjoys skiing, but rising temperatures mean less snow and snowboarding will become impossible. Darius suffers from seasonal allergies and has been diagnosed with asthma; his allergies and asthma will get worse due to climate change. Darius witnessed and experienced firsthand the destruction that extreme weather events like Hurricane Sandy can cause. Such extreme weather events will disrupt his life in the future even more. Darius and his family enjoy visiting family and vacationing in Florida, Georgia, New York, and New Jersey, where they like to spend time on beaches. However, rising sea levels that will inundate these, and other places, where Darius likes to recreate, means that he will not be able to visit these places in the future. Sea level rise will also inundate parts of Philadelphia where Darius visits and spends time. Ocean acidification is impacting Darius because he enjoys eating shellfish and other fish that are being adversely impacted by dangerous levels of CO₂ in the atmosphere.
20. Elaine Abrams is the mother and legal guardian of Darius Abrams. Her address is 5405 Oakland St., Philadelphia, PA 19124.
21. Petitioner **Kaia Luna Elinich** is a resident of Coopersburg, Pennsylvania. She is 11-years-old and is already experiencing harm caused by climate change and is very concerned that she will experience more severe climate impacts in the future. Kaia lives on 10 acres in Coopersburg, where she and her family have a garden and grow fruit trees. A natural gas pipeline runs along part of her property and over Cooks Creek, an exceptional value watershed, which has a tributary on her property. The pipeline has a very big impact on Kaia; to her dismay, the pipeline company removed a strand of 20 year-old trees from the property, and the house where Kaia lives is in an impact zone, which is extremely concerning and frightening. Kaia is scared for the future of their property and the impacts the pipeline will have to her water supply and land. As a result of climate change, Kaia is being impacted by more extreme weather events, including hurricanes and tornadoes. Tornadoes were not a concern until the last 2-3 years where Kaia lives, but since then the frequency and severity of tornadoes have been increasing, which is very abnormal. During the summer of 2015, a tornado and extreme weather event interrupted Kaia's softball practice and she and her mom had to flee the field and take shelter in a nearby home for safety. The experience was terrifying for Kaia as she feared for her safety and even her life. Kaia has also been personally impacted by Hurricane Irene and Sandy, which caused damage to trees on her property. Kaia likes to visit Long Beach Island in New Jersey and saw the impacts Hurricane Sandy had on the area. Dunes where Kaia recreated were destroyed. Kaia is concerned that sea level rise will inundate areas along the coast where she likes to visit and recreate. Kaia

also has allergies to pollen and there is significant evidence that climate change is adversely impacting people with pollen allergies. Kaia has been working for the last couple years to raise awareness about the dangers of natural gas pipelines and fracking in Pennsylvania. She has attended Governor Wolf's meetings, has written letters to Governor Wolf and DEP, and helped plan marches and events in Pennsylvania. Kaia is well aware of her constitutional rights in Article I, Section 27 to clean air and water and is determined to hold her government accountable for protecting her rights.

22. Arianne Elinich is the mother and legal guardian of Kaia Luna Elinich. Her address is 2755 Route 412, Coopersburg, PA 18036.
23. Youth Petitioners represent the youngest living generation of Pennsylvania's public trust beneficiaries, and have a substantial, direct, and immediate interest in protecting the environment, their quality of life, and in ensuring that the climate remains stable enough to secure their constitutional rights to a livable future. A livable future includes the opportunity to drink clean water, to grow food that will abate hunger, to be free from direct and imminent property damage caused by extreme weather events, to be able to enjoy and benefit from the use of property, and to enjoy the abundant and rich biodiversity in Pennsylvania. Youth Petitioners are suffering both immediate and threatened injuries as a result of actions and inactions by Respondents and will continue to suffer more injuries to their health, personal safety, bodily integrity, cultural and spiritual practices, economic stability, food security, property, and recreational interests without the relief sought here. The relief requested will redress the Youth Petitioners' injuries by reducing the conditions from climate change that adversely affect the Youth Petitioners.

RESPONDENTS

24. Respondent **Governor of Pennsylvania, Tom Wolf**, in his official capacity, is vested with the supreme executive power of the Commonwealth and must ensure that the laws are faithfully executed pursuant to Article IV, Section 2. As chief executive, The Governor has ultimate responsibility for the actions of all executive branch departments and agencies, including those named Respondents in this Amended Petition, and is subject to the duties and obligations of Article I, Section 27. In addition, the Governor may call to special session the General Assembly "whenever in his opinion the public interest requires," pursuant to Article II, Section 4, and to convene the General Assembly for extraordinary session when proper, pursuant to Article IV, Section 12.

Respondent **Pennsylvania Department of Environmental Protection** ("DEP") is an agency of the Commonwealth established by statute, 71 Pa. Cons. Stat. Ann. § 1340.101. The DEP has been designated, and operates in fact, as a trustee in protecting and preserving the rights and values contained in Article I, Section 27 of the Pennsylvania Constitution. In connection with the Funk Petition for Rulemaking, DEP asserted that "Pennsylvania has developed and will continue to develop statutory and regulatory strategies to reduce Greenhouse Gas ("GHG") emissions. Many of these strategies fall under the purview of statutes implemented by the [DEP]" *Evaluation Report on the Ashley Funk Petition for Rulemaking to Reduce Carbon Dioxide Emissions* submitted to the EQB on April 15, 2014 ("DEP Report")

at p. 5. As an agency of the Commonwealth, the DEP is subject to the duties and obligations of Article I, Section 27.

25. Respondent **John Quigley**, is the current Secretary of the Pennsylvania Department of Environmental Protection, and in his official capacity, is responsible for all actions of the Department of Environmental Protection. As an agent of the Executive Branch of the Commonwealth, he has ultimate responsibility for the actions of the DEP, and in this capacity is subject to the duties and obligations of Article I, Section 27.
26. Respondent **Environmental Quality Board** (“EQB”) adopts all of the Department of Environmental Protection’s regulations and is chaired by the Secretary of the Department of Environmental Protection. The EQB is charged with developing a “Master Environmental Plan” for the Commonwealth and has the power and duty to formulate, adopt and promulgate such rules and regulations as may be determined by the board for the proper performance of the work of DEP. As an agency of the Commonwealth, the EQB is subject to the duties and obligations of Article I, Section 27.
27. Respondent **John Quigley**, is the current Chairperson of the Environmental Quality Board and, in his official capacity, is ultimately responsible for all actions of the Environmental Quality Board, and in this capacity is subject to the duties and obligations of Article I, Section 27.
28. Respondent **Pennsylvania Public Utility Commission** (“PUC”) has regulatory authority over the electricity generation, transmission, and distribution sector in Pennsylvania, which is the largest source of GHG emissions in Pennsylvania and whose portion of the State’s GHG emissions is expected to increase through 2020. The PUC has the mission of balancing the needs of consumers and utilities, ensuring safe and reliable utility access, protecting the public interest, educating consumers, furthering economic development, and fostering new technologies and competitive markets in an environmentally sound manner.. According to the DEP Report, some of the “statutory and regulatory strategies to reduce” GHG emissions “fall under the jurisdiction of the . . . PUC”, DEP Report at p. 5. DEP identifies these PUC-specific GHG efforts as including The Alternative Energy Portfolio Standards Act of 2004, P.S. §§ 1648.1 – 1648.8, under which “[t]he PUC is responsible for carrying out and enforcing the provisions of the law” and DEP and PUC “are charged with monitoring compliance with the Act, the development of the alternative energy market and the costs of alternative energy, and to conduct an ongoing alternative energy planning assessment . . . [and] report their findings and any recommendations for changes to the Act to the General Assembly via an annual report.” DEP Report at p. 17; and Act 129 of 2008, which requires electricity reduction measures, and for which DEP states “[t]he Pennsylvania PUC has primary implementation responsibility and has established an energy efficiency and conservation program implementation order. This order requires all EDCs to develop and implement cost-effective energy efficiency and conservation plans to reduce consumption and peak load within their service territories.” DEP Report at p. 18. In addition, in its *Recommendation to the Pennsylvania Environmental Quality Board on the Ashley Funk Petition for Rulemaking to Reduce Carbon Dioxide Emissions* submitted to the EQB on July 31, 2014 (“DEP Recommendation”), DEP identified two additional “PUC programs that will

further contribute to the reduction of natural gas leaks and thus decrease fugitive methane emissions in Pennsylvania.” Act 11 of 2012 (or Distribution System Improvement Charge (“DSIC”)) and the PUC’s April 4, 2013, final rulemaking at L-2012-2294746, regarding unaccounted-for-gas (“UFG”). DEP Recommendation at 22. As an agency of the Commonwealth, the PUC is subject to the duties and obligations of Article I, Section 27.

29. Respondent **Gladys M. Brown**, is the current Chairperson of the Pennsylvania Public Utility Commission. As an agent of the Executive Branch of the Commonwealth, she has ultimate responsibility for the actions of the PUC, and in this capacity is subject to the duties and obligations of Article I, Section 27.
30. Respondent **Pennsylvania Department of Conservation and Natural Resources** (“DCNR”) is charged with maintaining, improving, and preserving State parks, managing forest lands for their long-term health, sustainability and economic use and to advocate for protection of other state resources, like rivers and greenways, in the public trust for the benefit of present and future generations. The DCNR also has the authority to make an execute contracts of leases for mining minerals that are found in State forests. Pennsylvania’s forests are important for sequestering carbon but the amount of carbon sequestered has decreased from 2000 to 2020, primarily due to conversion of forest land to developed uses. . According to the DEP Report, some of the “statutory and regulatory strategies to reduce” GHG emissions “fall under the jurisdiction of the . . . DCNR”, DEP Report at p. 5. As an agency of the Commonwealth, the DCNR is subject to the duties and obligations of Article I, Section 27.
31. Respondent **Cindy Adams Dunn**, is the current Secretary of the Pennsylvania Department of Conservation and Natural Resources. As an agent of the Executive Branch of the Commonwealth, she has ultimate responsibility for the actions of the DCNR, and in this capacity is subject to the duties and obligations of Article I, Section 27.
32. Respondent **Pennsylvania Department of Transportation** (“PennDOT”) is responsible for planning, design, construction, and maintenance of Pennsylvania’s transportation system, including roads, roads, aviation, and mass transit. For transportation routes that require the acquisition of new or additional right-of-way, PennDOT must consider the impacts on air and water pollution, wildlife, public health and safety, recreation and parks, among other things. Pennsylvania’s transportation sector is responsible for approximately twenty-five percent of the Commonwealth’s annual GHG emissions. As an agency of the Commonwealth, PennDOT is subject to the duties and obligations of Article I, Section 27.
33. Respondent **Leslie S. Richards**, is the current Secretary of the Pennsylvania Department of Transportation. As an agent of the Executive Branch of the Commonwealth, she has ultimate responsibility for the actions of the DCNR, and in this capacity is subject to the duties and obligations of Article I, Section 27.
34. Respondent **Pennsylvania Department of Agriculture** encourages, protects, and promotes agriculture and related industries throughout the Commonwealth while providing consumer protection. Soil management, manure management, grazing management, the burning of

other agricultural crop waste, and other actions subject to control and regulation by the Department of Agriculture all contribute to Pennsylvania’s annual GHG emissions. . . According to the DEP Report, some of the “statutory and regulatory strategies to reduce” GHG emissions “fall under the jurisdiction of the . . . Department of Agriculture”, DEP Report at p. 5. DEP identifies these Department of Agriculture-specific GHG efforts as including the Biofuel Development and In-State Production Incentive Act, 73 P. S. §§ 1650.1—1650.7, “which is enforced by the Pennsylvania Department of Agriculture, requires minimum volumes of cellulosic ethanol and biodiesel to be blended into gasoline and diesel fuel, commensurate with specified in-state production levels of these biofuels.” DEP Report at p. 21. As an agency of the Commonwealth, the Department of Agriculture is subject to the duties and obligations of Article I, Section 27.

Respondent **Russell C. Redding**, is the current Secretary of the Pennsylvania Department of Agriculture. As an agent of the Executive Branch of the Commonwealth, he has ultimate responsibility for the actions of the Department of Agriculture, and in this capacity is subject to the duties and obligations of Article I, Section 27.

FACTUAL BACKGROUND

The Problem of Climate Change

35. There is an overwhelming scientific consensus that human-caused climate change is occurring. The present rate of global heating is a result of anthropogenic GHG emissions, primarily CO₂ emissions from the combustion of fossil fuels. This release of greenhouse gases into the atmosphere has disrupted Earth’s energy balance, thereby changing Earth’s climate.
36. The 2014 National Climate Assessment acknowledged that “[t]he cumulative weight of the scientific evidence . . . confirms that climate change is affecting the American people now, and that choices we make will affect our future and that of future generations.”
37. Greenhouse gasses in the atmosphere act like a blanket over the Earth to trap the heat that it receives from the sun. More GHGs in the atmosphere means that more heat is being retained on Earth, with less heat radiating back out into space. Without this greenhouse effect, the average surface temperature of our planet would be 0°F (-18°C) instead of 59°F (15°C). Scientists have understood this basic mechanism of global warming since the late-nineteenth century.
38. A substantial portion of every ton of CO₂ emitted by humans persists in the atmosphere for as long as a millennium or more, therefore the impacts associated with CO₂ emissions of today will be mostly borne by our children and future generations. The Earth will continue to warm in reaction to concentrations of CO₂ from past emissions, as well as future emissions.
39. In 2013, the atmospheric CO₂ concentration exceeded 400 parts per million (“ppm”) for the first time in recorded history, compared to the pre-industrial concentration of 280 ppm. The

current atmospheric CO₂ concentration is the highest it has been in the last 800,000 years and is accumulating 100 times faster.

40. Human civilization and the water sources, crops and foods, and coastlines on which people depend have developed within a very narrow set of climatic conditions. It will be nearly impossible to adapt to all of the climate change impacts in the quick time-frame in which they will occur. The survival of humans is significantly threatened by climate destabilization.
41. Because the climate change we are now experiencing is caused largely by human activity, unlike past climate change events, by changing our activities, humans can mitigate or even halt this warming before it causes catastrophic and irreversible effects. Stopping, or at least greatly curtailing, the activities that discharge greenhouse gases into the air, such as the extraction and burning of fossil fuels and deforestation, and encouraging activities that remove CO₂ from the atmosphere (such as reforestation), can greatly reduce and even end climate disruption and ocean acidification and its accompanying consequences within the lifetimes of today's children.

Impacts of Climate Change Across the Nation and the Globe

42. Global climate change is already damaging human and natural systems, causing loss of life, and pressing species to extinction. Unless arrested by immediate science-based action, climate change will produce calamitous consequences for humanity and nature alike, as tipping points are reached and points of no return are crossed.
43. Two important tipping points pertaining to the stability of the West and East Antarctic ice sheets have in all likelihood already been passed. According to recent scientific reports, both the West Antarctic ice sheet and the East Antarctic ice sheet are in irreversible declines. Their combined melting will raise sea levels by at least 22 feet, impacting millions of Americans and trillions of dollars of property.
44. New scientific evidence demonstrates that non-linear sea level rise could lead to as much as 10 feet of sea level rise by 2065, which would submerge much of the eastern seaboard of the U.S., unless there are immediate reductions in CO₂ emissions.
45. Well-documented and observable impacts from the changes in Earth's climate system highlight that the current level of atmospheric CO₂ concentration has already taken the planet into a danger zone. Increased GHG emissions are already resulting in not only the warming of land surfaces, but also to the warming of oceans, increased atmospheric moisture levels, rises in the global sea level, and changes in rainfall and atmospheric air circulation patterns that affect water and heat distribution.
46. One key observable change is the rapid increase in recorded global surface temperatures. As a result of increased atmospheric GHGs from human activities, based on fundamental scientific principles, the Earth has been warming as scientists have predicted. The increased concentrations of greenhouse gases in our atmosphere have raised global surface temperature by 1.5°F (0.90°C) in the last one hundred to one hundred fifty years. In the last thirty years, the acceleration of change has intensified as the Earth has been warming at a rate three times

faster than that over the previous one hundred years. Last year, 2014, was the hottest year on record, according to National Aeronautics and Space Administration (“NASA”).

47. The United States Environmental Protection Agency (“EPA”) has found that climate change already harms our health and welfare and will only worsen without regulatory action.
48. Human-caused fossil fuel extraction and burning and the resulting climate change are already contributing to an increase in asthma, cancer, cardiovascular disease, stroke, heat-related morbidity and mortality, food-borne diseases, and neurological diseases and disorders. Climate change threatens the basic requirements for maintaining health like clean air and pure water, sufficient food, and adequate shelter. It also increases occurrence of infectious diseases.
49. Similarly, climate change is already causing, and will continue to result in, more frequent, extreme, and costly weather events, such as floods and hurricanes. The annual number of major tropical storms and hurricanes has increased over the past 100 years in North America, coinciding with increasing temperatures in the Atlantic sea surface.
50. Climate change and ocean acidification are threatening the survival and wellbeing of plants, fish and wildlife, and Earth’s biodiversity. As many as one in six species are threatened with extinction due to climate change. Many more species that do not face extinction will face changes in abundance, distributions, and species interactions that cause adverse impacts for ecosystems and humans.
51. Increased CO₂ emissions are having a severe negative impact on our oceans, in addition to our climate systems. The oceans absorb around 25% of global CO₂ emissions, resulting in the acidification of our oceans.
52. Ocean acidity has been rising at a geologically unprecedented rate. Currently, acidity is rising at least 100 times faster than at any other period during the last 100,000 years, threatening marine life, including human food sources.
53. We are already observing impacts of the relatively small amount of warming that has already occurred, and these constitute harbingers of far more dangerous change to come. If unabated, continued GHG emissions will initiate dynamic climate change and effects that spin out of control for the youth and future generations as the planet’s energy imbalance triggers amplifying feedbacks and the climate system and biological system pass critical tipping points. Such changes would be irreversible on any time scale relevant to human beings and threaten human survival.

Impacts of Climate Change in Pennsylvania

54. The effects of climate change are already occurring in Pennsylvania and are projected to significantly impact the Commonwealth in the future. In the past 110 years, the overall temperature in Pennsylvania has increased by 1.3°C (2.4°F) due to anthropogenic greenhouse gas emissions.

55. Climate change is already disrupting the hydrological cycle in Pennsylvania and continued climate change will lead to greater disruptions. Pennsylvania is already experiencing an increase in heavy precipitation events, a decrease in snow cover, a decrease in summer runoff, a decrease in summer and fall soil moisture, and an increase in short- and medium-term soil moisture droughts. Rising stream temperatures could also degrade water quality. Additionally, rising sea levels cause degradation of fresh groundwater supplies due to saltwater intrusion.
56. If the atmospheric concentration of CO₂ rises to 450 ppm sea levels are expected to rise at least 6-8 meters. This would be a major disruption to the Delaware River and Estuary, wetlands and parks along the river, and would inundate significant portions of Philadelphia, including the Philadelphia International Airport, Citizens Bank Park, the Philadelphia Navy Yard, the Philadelphia CSX rail yard, and numerous neighborhoods and other businesses.
57. Rising temperatures are degrading, diminishing, and depleting the water quality and quantity of streams, rivers, and wetlands leading to a decrease in biodiversity. Some wetlands may also disappear due to increased evaporation and transpiration and longer dry periods. Increased water temperatures will degrade, diminish, and deplete cold-water aquatic species like brook trout while leading to an increase in invasive species.
58. Climate change is degrading, diminishing, and depleting Pennsylvania's forests and leading to species composition shifts, greater tree stress, shifts in regeneration rates, more tree mortality, and increases in insect, disease, and invasive species activities.
59. Higher temperatures contribute to heat-related deaths and also leads to increased formation of ground-level ozone. Ozone is linked to adverse health impacts including asthma, respiratory infections, increased mortality, and wheezing. Other health impacts associated with climate change may include an increase in people suffering from allergies as pollen increases.
60. Without immediate science-based reductions in CO₂ and other GHGs, there is an immediate and substantial danger that within Youth Petitioners' lives, higher temperatures, water and food shortages, droughts, floods, extreme weather events, sea level rise, and other climate impacts will make significant portions of Pennsylvania unfit to live in and will threaten the very survival of Pennsylvania citizens. This is not a distant threat but one that will be realized in the coming decades unless the Commonwealth acts with urgency to do its part to reduce CO₂ and GHG emissions and restore the atmosphere.

Pennsylvania's Contribution to Climate Change and Ocean Acidification

61. Pennsylvania is a major consumer and producer of fossil fuels. Pennsylvania's historical and current emissions of carbon dioxide have been, and continue to be, a contributor to global climate change and ocean acidification.
62. In 2012, Pennsylvania's carbon dioxide emissions from fossil fuel consumption were 233.7 million metric tons, third highest in the nation after Texas and California. Between 1990 and

2012, the Commonwealth allowed 8,682.1 million metric tons of carbon dioxide from fossil fuel consumption to be emitted from within Pennsylvania. In 2011, Pennsylvania's per capita energy-related carbon dioxide emissions were 19.2 metric tons of CO₂ per person, higher than the national average of 17.3 metric tons of CO₂ per person. Importantly, Pennsylvania's emissions data do not include embedded emissions (also known as consumption emissions) in imported goods and materials that are consumed in Pennsylvania but manufactured or produced out of state.

63. According to the U.S. Energy Information Administration, in 2013, Pennsylvania was the fifth largest coal-producing state in the nation and the second largest natural gas-producing state. In 2013, only five states consumed more natural gas than Pennsylvania and only four states consumed more coal.
64. According to emissions data from the U.S. Energy Information Administration, if Pennsylvania were a country, it would be the 26th largest emitter of GHGs in the world.

The Current Science

65. To protect Earth's climate for present and future generations, and to prevent the degradation, diminution, and depletion of Pennsylvania's public trust assets, Earth's energy balance must be restored. The best available science shows that if the planet once again sends as much energy into space as it absorbs from the sun, this will restore the planet's climate equilibrium. Scientists have accurately calculated how Earth's energy balance will change if we reduce long-lived greenhouse gases such as carbon dioxide. Humans have altered Earth's energy balance and are currently causing a planetary energy imbalance of approximately one-half watt. The atmosphere contains at least 50 ppm more CO₂ than it should. This excess CO₂ needs to be eliminated in order to increase Earth's heat radiation into space by one-half watt, if other long-lived gases stay the same as today.
66. The best available current science shows that we must reduce atmospheric carbon dioxide concentrations to below 350 ppm in order to avoid significant disturbance of physical and biological systems as a result of global climate change and to achieve stabilization of the GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.
67. The current science also shows that to protect Earth's natural systems, long-term average global surface heating should not exceed 1°C this century. According to the current climate science, to prevent global heating greater than 1°C, concentrations of atmospheric CO₂ must decline to 350 ppm or less by the end of this century. However, today's atmospheric CO₂ levels are about 400 ppm and are rising.
68. A target of keeping global surface heating to 2°C above pre-industrial temperatures, which approximately equates to an atmospheric CO₂ concentration of 450 ppm, cannot be considered a safe target for present or future generations, and is not supported by current science of climate stabilization. Earth's paleoclimate history demonstrates that climate impacts accompanying global warming of 2°C or more would be irreversible and

catastrophic for humanity. The warming of the past few decades has brought global temperature close to if not slightly above the prior maximum of the Holocene epoch. Human society must keep global temperature at a level within or close to the Holocene range to prevent dangerous climate change. Global warming of 2°C would be well above Holocene levels and far into the dangerous range.

69. A global average atmospheric concentration of CO₂e 450 and 550 ppm would result in dangerous anthropogenic interference with the climate system and would threaten all public natural resources in Pennsylvania.
70. It is imperative that Pennsylvania set GHG emission limits targeted at 1°C temperature change, or a maximum of 350 ppm in global CO₂ levels, in order to avoid the cascading impacts that will occur with a 2°C or 450 ppm target. To reduce global atmospheric CO₂ to 350 ppm by the end of this century, this target would require that if global CO₂ emissions had peaked in 2012, they be reduced by 6% per year beginning in 2013, alongside 100 GtC of global reforestation throughout the century. If emissions peaked and reductions began in 2005, only a 3.5% per year reduction would have been necessary to reach 350 ppm by 2100. However, if emission reductions do not begin until 2020, a 15% per year reduction rate will be required to reach 350 ppm by 2100. If reductions are delayed beyond 2020, it might not be possible to return to 350 ppm until well after 2500.
71. Continued delay makes it harder and harder for Youth Petitioners and future generations to protect a livable world. It is imperative that Respondents calibrate state emission limits to put Pennsylvania on a trajectory aimed for 350 ppm and then establish a plan that will put Pennsylvania on a track towards ensure that Pennsylvania does its part to meet these limits.
72. Oceans have the same scientific standard of protection. Humans, marine organisms, and ecosystems are already harmed and will increasingly continue to be harmed by the effects of ocean acidification. To prevent the degradation, diminution, or depletion of the oceans and oceanic resources, it is imperative that atmospheric CO₂ concentrations be returned to below 350 ppm by the end of this century.
73. Previous projections based on maintaining atmospheric carbon concentrations at or below 450 ppm are not sufficient to avoid severe, irreversible damage as a result of ocean acidification and ocean warming. According to current science, 450 ppm represents a tipping point for coral reefs worldwide. If atmospheric CO₂ levels reach this tipping point, coral reefs as we know them will be extremely rare, if not extinct, and at least half of coral-associated wildlife will become rare or extinct. As a result, coral reef ecosystems will likely be reduced to crumbling frameworks with few calcareous corals remaining.
74. Current climate change legislation, policy, and rules in Pennsylvania are not in line with the trajectory of achieving atmospheric CO₂ levels of 350 ppm by the end of the century, nor do they appear to be based on any scientific standard of preventing and remedying the degradation, diminution, or depletion of Pennsylvania's public trust resources.

LEGAL BACKGROUND

The Rights and Public Trust Secured by Pennsylvania's Constitution

75. Article I, Section 1 of the Pennsylvania Constitution states:

All men are born equally free and independent, and have certain inherent and indefeasible rights, among which are those of enjoying and defending life and liberty, of acquiring, possessing and protecting property and reputation, and of pursuing their own happiness.

76. Article I, Section 25 of the Pennsylvania Constitution states:

To guard against the transgressions of the high powers which we have delegated, we declare that everything in this article is excepted out of the general powers of government and shall forever remain inviolate.

77. Article I of the Pennsylvania Constitution, Declaration of Rights, delineates the terms of a social contract between government and the people. The rights declared in Article I are fundamental and inviolate rights that act as a restriction on the general powers of government. These rights are secured, not bestowed, by the Constitution.

78. Article I, Section 27 of the Pennsylvania Constitution states:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

79. The first sentence of Article I, Section 27 secures two rights in the people which bind state and local governments:

- a. a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment.
- b. a limitation on the state's power to act contrary to this right.

80. The Commonwealth has an obligation to refrain from acting in a manner that unduly infringes upon or violates the rights protected in the first sentence of Article I, Section 27, including by legislative enactment or executive action. Respondents, as agencies or agents of the Commonwealth, have this obligation as well.

81. The second and third sentences of Article I, Section 27 secure a public trust designed to benefit all of the people and establishes duties, both prohibitory and affirmative, on the Commonwealth. Public natural resources are owned in common by the people, including future generations. The Commonwealth, as trustee, has a fiduciary duty to "conserve and

maintain” public natural resources. Respondents, as agencies or agents of the Commonwealth, have this obligation as well.

82. Public natural resources include state-owned lands, forests, waterways, and mineral reserves, as well as the air, the atmosphere, surface and ground water, and wild flora and fauna, including fish.
83. As trustee, the Commonwealth has a duty to refrain from permitting or encouraging the degradation, diminution, or depletion of public natural resources, as well as a duty to act affirmatively to protect the environment, via legislative and regulatory action. Respondents, as agencies or agents of the Commonwealth, have these trustee obligations as well.
84. Respondents, as trustees, have the duty of loyalty to administer the trust solely in the interest of the trust beneficiaries. Respondents, as trustees, have the duty of prudence to exercise ordinary skill, prudence, and caution in managing the public trust assets. Respondents, as trustees, have the duty of impartiality to not favor one beneficiary over another.
85. Present and future generations of Pennsylvania citizens are equal classes of beneficiaries of the public trust under Article I, Section 27. Thus, when carrying out its public trustee obligations, the Commonwealth and its representatives must treat present and future generations equally. In this way, the cross-generational dimension of Section 27 reinforces the conservation imperative: future generations are among the beneficiaries entitled to equal access and distribution of the resources, thus, the trustee cannot be shortsighted.
86. Minor children (who cannot vote) and future generations (not yet born) have no political representation in the Commonwealth, but do hold these constitutional rights and may seek, in a court of law, to protect them.

CAUSE OF ACTION

87. Petitioners hereby re-allege and incorporate by reference herein all the preceding paragraphs.
88. Pursuant to Article I, Section 27 of the Pennsylvania Constitution, Youth Petitioners each possess three clear and fundamental legal rights. First, pursuant to the first sentence of that section, they each have fundamental and inviolate rights to clean air, pure water, and to the preservation of natural, historic, and esthetic values of the environment. Second, also under the first sentence of Article I, Section 27, Youth Petitioners have the right to be protected from actions by Respondents that unreasonably cause actual or likely degradation of these resources. Third, as citizens of the Commonwealth, the Youth Petitioners are each beneficiaries of the public trust created by the second and third sentences of Article I, Section 27, and thus are entitled to the proper performance of the fiduciary duty of the public trustee—in this case, the conservation and maintenance of clean air and safe levels of CO₂ and GHGs in accordance with current climate science.
89. Respondents have two distinct mandatory duties arising from Article I, Section 27. First, with respect to the fundamental right to clean air, pure water, and to the preservation of natural,

historic, and esthetic values of the environment recognized in the first sentence of Article I, Section 27, Respondents have a duty to not act contrary to that right. Second, with respect to the public trust created by the second and third sentences of Article I, Section 27, Respondents have a mandatory fiduciary duty as the public trustee to conserve and maintain the public natural resources that that includes a duty to refrain from permitting or encouraging the degradation, diminution, or depletion of public natural resources, and the duty to act affirmatively to protect the environment—in this case, the conservation and maintenance of clean air and safe levels of CO₂ and GHGs in accordance with current science.

90. Respondents have failed to carry out their mandatory legal duties under Article I, Section 27 by, among other things:

a. upon information and belief, Respondents—either individually or in combination with one or more other Respondents—have not conducted any study, investigation, or other analysis to determine how the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27 have been, are being, or in the future may be impacted by climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere;

b. upon information and belief, Respondents—either individually or in combination with one or more other Respondents—have not conducted any study, investigation, or other analysis to determine what actions are necessary to protect the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27 in light of climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere;

c. upon information and belief, Respondents—either individually or in combination with one or more other Respondents—have not conducted any study, investigation, or other analysis to determine whether any actions that the Respondents have taken or will take are contrary to the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27 in light of climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere;

d. each Respondent has not proposed, promulgated or issued any executive order or regulation governing how the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27 are to be considered, accounted for, or applied in decisions being made by the Respondent;

e. upon information and belief, Respondents—either individually or in combination with one or more other Respondents—have not conducted any study, investigation, or other analysis to determine what actions are necessary to conserve and maintain public natural resources, including the atmosphere, in light of climate change and/or increasing

concentrations of CO₂ and GHGs in the atmosphere in order to satisfy their obligations as trustees of the public trust created in the second and third sentences of Article I, Section 27;

f. upon information and belief, Respondents—either individually or in combination with one or more other Respondents—have not conducted any study, investigation, or other analysis to determine what actions are necessary, in light of climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere, to satisfy their fiduciary duties of loyalty, impartiality, and/or to exercise ordinary skill, prudence, and caution in managing the public trust assets as trustees of the public trust created in the second and third sentences of Article I, Section 27;

g. upon information and belief, Respondents—either individually or in combination with one or more other Respondents—have not conducted any study, investigation, or other analysis to determine what actions that the Respondents can take to conserve and maintain public natural resources, including the atmosphere, in light of climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere in order to satisfy their obligations as trustees of the public trust created in the second and third sentences of Article I, Section 27;

h. each Respondent has not proposed, promulgated or issued any executive order or regulation governing how the obligations to conserve and maintain public natural resources, the duties of loyalty, impartiality, and/or to exercise ordinary skill, prudence, and caution in managing the public trust assets as trustee of the public trust created in the second and third sentences of Article I, Section 27 are to be considered, accounted for, or applied in decisions being made by the Respondent;

i. each Respondent—either individually or in combination with one or more other Respondents—has not proposed, promulgated or issued any executive order or regulation to limit emissions of CO₂ and GHGs into the atmosphere in a comprehensive manner that would achieve safe levels in accordance with current climate science so as to protect the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27; and

j. each Respondent—either individually or in combination with one or more other Respondents—has not proposed, promulgated or issued any executive order or regulation to limit emissions of CO₂ and GHGs into the atmosphere in a comprehensive fashion that would achieve safe levels in accordance with current climate science so as to conserve and maintain public natural resources, including the atmosphere, and to satisfy their duties of loyalty, impartiality, and/or to exercise ordinary skill, prudence, and caution in managing the public trust assets as trustees of the public trust created in the second and third sentences of Article I, Section 27.

91. Because of their failures to carry out these actions required by Article I, Section 27, Respondents—both individually and collectively—have no principled means of determining

whether their actions or failures to act are consistent with or in violation of the duties imposed on them by Article I, Section 27.

92. Because of Respondents' failures to carry out their mandatory duties under Article I, Section 27, dangerous levels of CO₂ and GHGs are occurring which have unreasonably contributed to the actual degradation of the air, water, and natural, historic, and esthetic values of the environment. As a result:

a. The Youth Petitioners' constitutional rights to a healthy atmosphere, clean air, pure water, and to the preservation of natural, historic, and esthetic values of the environment have been infringed upon, and continue to be further infringed upon, by Respondents' actions, and the Youth Petitioners have been injured as a result of Respondents' actions; and

b. Youth Petitioners' rights as beneficiaries of the public trust created by the second and third sentences of Article I, Section 27 have been infringed upon, and continue to be further infringed upon, by Respondents' failure to conserve and maintain these public natural resources, and the Youth Petitioners have been injured as a result of Respondents' actions.

93. The Youth Petitioners have no appropriate and adequate remedy to force the Respondents to fulfill their mandatory duties under Article I, Section 27 other than to seek declaratory relief and a writ of mandamus in this Court. There are no statutory or regulatory remedies available for challenging the Respondents' failures to act. The Funk Petition for Rulemaking was opposed by DEP and denied by the EQB, and the EQB denied an effort by EQB members to allow Funk to revise and submit an amended Petition for Rulemaking.

REQUEST FOR RELIEF

WHEREFORE Youth Petitioners pray for judgment against Respondents, and respectfully request that this Court:

1. Declare that an atmosphere with safe levels of CO₂ and GHGs is part of the right to clean air recognized in the first sentence of Article I, Section 27 of the Pennsylvania Constitution;

2. Declare that the atmosphere is a public natural resource falling within the public trust established by second and third sentences of Article I, Section 27 of the Pennsylvania Constitution;

3. Declare each Respondent, as an agency or agent of the Commonwealth, has a duty to not act contrary to the fundamental right to clean air, pure water, and to the preservation of natural, historic, and esthetic values of the environment recognized in the first sentence of Article I, Section 27;

4. Declare that each named Respondent, as an agency or agent of the Commonwealth, have public trustee duties to protect the atmosphere and other public natural

resources pursuant to the public trust established by second and third sentences of Article I, Section 27 of the Pennsylvania Constitution;

5. Declare each Respondent, as an agency or agent of the Commonwealth, has failed to meet Respondent's duty to not act contrary to the fundamental right to clean air, pure water, and to the preservation of natural, historic, and esthetic values of the environment recognized in the first sentence of Article I, Section 27 of the Pennsylvania Constitution with respect to carbon dioxide and other greenhouse gas emissions;

6. Declare that each named Defendant, as an agency or agent of the Commonwealth, has failed to meet the public trustee duties established by the second and third sentences of Article I, Section 27 of the Pennsylvania Constitution with respect to carbon dioxide and other greenhouse gas emissions;

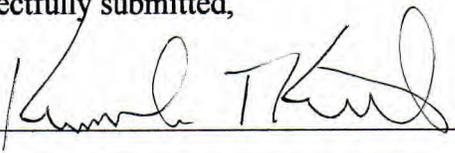
7. Issue a writ of mandamus ordering Respondents to:

- a. conduct—either individually or in combination with one or more other Respondents—a study, investigation, or other analysis to determine how the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27 have been, are being, or in the future may be impacted by climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere;
- b. conduct—either individually or in combination with one or more other Respondents—a study, investigation, or other analysis to determine what actions that the Respondents can take to protect the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27 in light of climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere;
- c. conduct—either individually or in combination with one or more other Respondents—a study, investigation, or other analysis to determine whether any actions that the Respondents have taken or will take are contrary to the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27 in light of climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere;
- d. promulgate by regulation, executive order, or other official action setting forth a process for the rights to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment secured by the first sentence of Article I, Section 27 are to be considered, accounted for, or applied in decisions being made by the Respondent;

- e. conduct—either individually or in combination with one or more other Respondents—a study, investigation, or other analysis to determine what actions are necessary to conserve and maintain public natural resources, including the atmosphere, in light of climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere in order to satisfy their obligations as trustees of the public trust created in the second and third sentences of Article I, Section 27;
 - f. conduct—either individually or in combination with one or more other Respondents—a study, investigation, or other analysis to determine what actions that the Respondents can take to conserve and maintain public natural resources, including the atmosphere, in light of climate change and/or increasing concentrations of CO₂ and GHGs in the atmosphere in order to satisfy their obligations as trustees of the public trust created in the second and third sentences of Article I, Section 27;
 - g. promulgate by regulation, executive order, or other official action setting forth a process for the obligations to conserve and maintain public natural resources, the duties of loyalty, impartiality, and/or to exercise ordinary skill, prudence, and caution in managing the public trust assets as trustee of the public trust created in the second and third sentences of Article I, Section 27 are to be considered, accounted for, or applied in decisions being made by the Respondent;
 - h. prepare comprehensive regulations, in accordance with the current science, designed to account for embedded emissions and reduce carbon dioxide and other greenhouse gas emissions to safe levels and thereby reach the concentrations that must be achieved to satisfy their constitutional obligations as public trustees of the air and atmosphere;
 - i. implement regulations that will in fact reduce carbon dioxide and other greenhouse gas emissions to safe levels and thereby reach the concentrations that must be achieved to satisfy their constitutional obligations as public trustees of the air and atmosphere;
8. Award Petitioners their costs and reasonable attorney’s fees as provided by law;
- and

9. Such other and further relief as the court may deem just and proper.

Respectfully submitted,

By: 

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VERIFICATION

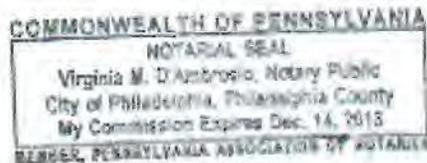
I, Jennifer McIntyre, as parent and guardian of Lillian McIntyre, a minor, having first been duly sworn, do hereby depose and say that the factual allegations in the foregoing Amended Petition for Review Seeking Declaratory and Mandamus Relief are true, accurate, and can be proved in the trial of this cause to the best of my personal knowledge, information, and/or belief.

Date: 12/2/15, 2015

Jennifer McIntyre
Jennifer McIntyre, as parent and guardian of Lillian McIntyre, a minor

Subscribed and sworn to before me
on this 2 day of December, 2015

Virginia M. D'Ambrosio
Notary Public



CERTIFICATE OF SERVICE

The undersigned, an attorney, hereby certifies that he caused a copy of the foregoing Amended Petition for Review Seeking Declaratory and Mandamus Relief to be served upon:

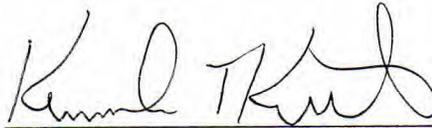
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via electronic service via the PACFile system and by first class mail, postage prepaid, sent on December 4, 2015.



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