Pennsylvania Waste Industries Association
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March 30, 2016

SUBMITTED VIA ECOMMENT SYSTEM
Department of Environmental Protection
Policy Office
Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063

RE: Draft 2015 Climate Change Action Plan Update (Published January 30, 2016)

Dear Sir/Madam:

The Pennsylvania Waste Industries Association (PWIA) submits these comments in response to the Department's request for feedback regarding the second Draft Climate Change Action Plan Update ("draft 2015 Update"[1]) published in the PA Bulletin and the Department's eComment system. It is our understanding that the Department is neither required to solicit nor accept comments on the draft 2015 Update; therefore, PWIA appreciates the Department's efforts to provide as many avenues as possible for participation in development of the final 2015 Update, including this public comment period. PWIA recognizes the hard work that the Department's staff and Climate Change Advisory Committee ("CCAC") members have put into development of the draft 2015 Update, and we offer these comments in the spirit of cooperation and improving an already impressive document.

Comment #1: PWIA Endorses the Department's Use of an Objective, Consistent and Appropriate U.S. EPA Methodology for Preparation of the Annual Emission Inventory

The draft 2015 Update includes the annual greenhouse gas ("GHG") emission inventory that the Department is required to prepare under Act 70 of 2008. The Department's use of the U.S. EPA State Inventory Tool ("SIT") is sound science and provides an objective analysis of statewide emissions. In fact, *according to U.S. EPA*, the SIT is the *best* method of calculating state-level emission estimates, "The SIT and Projection Tool calculate U.S. state-level estimates only, and **is most appropriate [model] for use by state agencies or other groups seeking to develop a State GHG inventory**."[2] [emphasis added]. Use of the SIT in the draft 2015 Update also ensures that previously prepared emission inventories by the Department can be compared to the

[1] The original Climate Change Action Plan was issued in 2009 ("Original Plan"), and the first Climate Change Action Plan Update was issued in December, 2013 ("2013 Update").
[2] U.S. EPA, *State Inventory and Projection Tool*, http://www.epa.gov/statelocalclimate/state-inventory-and-projection-tool (last updated Mar. 25, 2016).

latest inventory on an "apples-to-apples" basis because the same methodology, the SIT, has been used for each.

It is our understanding that in the past, at least one group suggested privately to the Department the use of various inappropriate methodologies for waste industry emission inventory purposes, including life-cycle analysis-type analyses and specific U.S. EPA models that U.S. EPA *explicitly states are not appropriate for emission inventory purposes*.[3] Use of life-cycle analysis is clearly not appropriate for annual emission inventory purposes because its fundamental basis—analyzing the emissions of an activity over its *lifetime*—is incompatible with the purpose of an *annual* emission inventory, which calculates the emissions that occur in a specific year.

Comment #2: The Draft 2015 Update Correctly Identifies Pennsylvania's Landfills as an Overall Carbon Emission Offset and Therefore Part of the Solution to Climate Change

As set forth in Chapter 3.8, Inventory and Projections, Waste Management of the draft 2015 Update, the total contribution to the Commonwealth's GHG emission profile from all waste related activities—disposal of MSW in landfills, combustion of MSW in waste-to-energy incinerators, and emissions from the processing of wastewater from wastewater treatment plants (WWTP)—was less than 1.5% of the statewide inventory of GHG emissions, including forestry sinks. Excluding the WWTP sector, municipal solid waste activities accounted for 0.75% of statewide emissions on the consumption basis, and just 0.66% on the generation basis. MSW disposal, whether landfilling or combustion, accounts for a very small percentage of the Commonwealth's GHG emissions.

However, a closer examination of the data contained in Table 3.8.1, shows that landfills *reduced total statewide GHG emissions* by approximately 415,000 metric tons annually on a CO2 eq. basis. The 1.913 million metric tons CO2 eq. emissions attributed to the solid waste disposal industry are comprised of 2.328 million metric tons CO2 eq. from the state's six waste-to-energy combustion facilities and -0.415 mmtCO2eq from landfills.[4] In fact, the forestry sector and the landfill sub-sector are the *only* source types identified in the entire statewide emission inventory that have the overall effect of reducing GHG emissions statewide.

One of the reasons driving the positive impact of landfills on climate change is the Commonwealth's historical leadership in the beneficial use of landfill gas. Pennsylvania's landfills were early adopters of technology to use landfill gas to produce renewable energy (a

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[3] For example, U.S. EPA's Waste Reduction Model (WARM) is a powerful life-cycle based tool for determining the GHG benefits from various end-of-life waste scenarios. It is, however, not an appropriate model for calculating annual (or any other) type of emission inventory. U.S. EPA explicitly disclaims use of WARM for emission inventory purposes, "This [WARM] life-cycle approach is not appropriate for use in inventories because of the diffuse nature of the emissions and emission reductions within a single emission factor." U.S. EPA, Subsection Note to *Waste Reduction Model, (WARM)*, https://www3.epa.gov/warm/index.html (last updated Feb. 23, 2016). It is our understanding that this model has been suggested for use to the Department as it relates to emissions from the waste management industry.

[4] *See* draft 2015 Update, tables 3.8.2 and 3.8.4 to *Chapter 3: Inventory and Projections*, 33-34, http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-110839/DRAFT%202015%20Climate%20Change%20Action%20Plan%20Update.pdf.

Tier I resource under the Alternative Energy Portfolio Standards Act ("AEPS Act")) and until recently, Pennsylvania stood alone as second in the country (behind California) in the number of operating landfill gas beneficial use projects. In fact, as the draft 2015 Update notes, the White House's recent *Climate Action Plan, Strategy to Reduce Methane Emissions* cited a Pennsylvania landfill as the national case study on how to reduce GHG emissions from landfills. While PWIA recognizes and appreciates that the emission data in table 3.8.1 of the draft 2015 Update correctly identifies Pennsylvania's landfills as overall carbon emission offset, this is a fact that PWIA believes should be more clearly and explicitly noted in the discussion section of Chapter 3.[5]

Comment #3: The Draft 2015 Update Should Explicitly Discuss the Differences in Work Plan Development from the 2013 Update

It is our understanding that in the draft 2015 Update, the Department took a different approach to the handling of "workplans" from the process used for the 2013 Update. More specifically, the 2013 Update included a review and re-analysis of essentially each and every one of the 58 or so workplans included in the 2009 Plan, with most of them also included in the 2013 Update.[6] In consultation with the CCAC, the Department determined that its efforts for the draft 2015 Update would be focused on a deeper analysis of a small selection of the 40 or so workplans, almost all of which were included in the 2013 Update, which would allow for development of more detailed "implementation steps".

As part of the draft 2015 Update process, the CCAC members re-evaluated the workplans, based on each plan's feasibility (including cost effectiveness), emission reduction potential, and the specificity of the implementation steps set forth in the 2013 Update (if any). Ultimately, the CCAC recommended approximately 10 workplans to the Department for a more in-depth development.[7] Several workplans were subsequently added by the Department after Governor Wolf took office. Most importantly, all of the remaining workplans in the 2013 Update remained endorsed by the CCAC and the Department, and should be considered integral to the draft 2015 Update.

The *Increased Recycling Initiative* Workplan ("Recycling Workplan") is the perfect example as to the importance of the draft 2015 Update re-affirming the importance and continued validity of the other workplans that were included in the 2013 Update. The Recycling Workplan scored very high with the CCAC members for feasibility and emission reductions, and was seriously considered for further analysis as part of the draft 2015 Update. However, the Recycling Workplan already included detailed implementation steps—the specific activity that was to occur

[5] The 2013 Update included a detailed discussion of the GHG emission performance of Pennsylvania's landfills, and PWIA believes the 2013 Update's Appendix, pages 46-53, would be a valuable resource in preparation of the additional discussion we are recommending.
[6] Several 2009 workplans were combined into single workplan; a few 2009 workplans were obsolete due to changes in conditions, including implementation; and several workplans were dropped as being considered infeasible or impractical, such as imposition of a 55 mph statewide speed limit.
[7] See CCAC meeting minutes, dated February 11, 2014; April 8, 2014; and June 24, 2014.

in preparation for the draft 2015 Update, so the CCAC removed it from the list of workplans recommended for more detailed development.

PWIA recommends that the Department include a discussion of the process used to select workplans for inclusion in the draft 2015 Update that were developed in more depth, as well as explicitly reaffirming the importance and validity of the workplans that were not further developed for the draft 2015 Update.

Comment #4: The Department Should Take Affirmative Steps to Implement the Recycling Workplan

Over the last several years, recycling operations have been subject to unprecedented economic pressures. The primary cause of this economic pressure is low commodity prices due to decreased demand for feedstocks, including recycled materials, caused by the global economic slowdown. Many recycled materials are selling for 50% or less of their prices just 5 years ago. This trend has been discussed extensively in the popular press, including recent articles in the New York Times,[8] Washington Post,[9] CNBC,[10] and CBS.[11] This topic was discussed extensively at the January 21, 2016 Department's Solid Waste Advisory Committee meeting, including a detailed presentation from Robert E. Anderson, ReCommunity Regional Business Development Manager, entitled, *The Perfect Storm – Economic Impact in the Recycling Industry*.[12]

Recycling reduces GHG emissions. The Recycling Workplan documents several million tons of GHG emission reductions that can be easily achieved through a combination of discrete, specific implementation steps outlined in the workplan. These reductions can be achieved in a cost-effective manner; the workplan documents that the reductions would have a net "negative cost" (i.e. a net savings) because the economic savings exceed the economic costs. Similarly, the macroeconomic analysis included in Chapter 5 of the 2013 Update calculated a net economic benefit of $90 million (net value, 2013 dollars) to the citizens and businesses of the Commonwealth from implementation of this workplan.

Collectively, the implementation steps included in the workplan address all of the various barriers to increasing the recycling rate, including economics, consumer behaviors, existing

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[8] David Gelles, *Skid in Oil Prices Pulls the Recycling Industry Down With It*, N.Y. TIMES (Feb. 12, 2016), www.nytimes.com/2016/02/13/business/energy-environment/skid-in-oil-prices-pulls-the-recycling-industry-down-with-it.html?_r=0.

[9] Aaron C. Davis, *American recycling is stalling, and the big blue bin is one reason why*, WASHINGTON POST (Jun. 20, 2015), https://www.washingtonpost.com/local/dc-politics/american-recyling-is-stalling-and-the-big-blue-bin-is-one-reason-why/2015/06/20/914735e4-1610-11e5-9ddc-e3353542100c_story.html.

[10] Jeff Daniels, *Why recycling business is feeling so discarded these days*, CNBC (Mar. 9, 2016), www.cnbc.com/2016/03/09/why-recycling-business-is-feeling-so-discarded-these-days.html.

[11] Jonathan Berr, *Why recycling economics are in the trash bin*, CBS NEWS MONEYWATCH (Apr. 7, 2015), www.cbsnews.com/news/why-recycling-economics-are-in-the-trash-bin/.

[12] Robert E. Anderson, *The Perfect Storm – Economic Impact in the Recycling Industry* (Jan. 21, 2016) http://files.dep.state.pa.us/PublicParticipation/Advisory%20Committees/AdvCommPortalFiles/SWAC/Pefect%20Storm.pdf.

structural/regulatory impediments, and expansion of recycling availability to underserved areas such as public gathering places.

PWIA urges the Department to:

1. Restate its support for the Recycling Workplan in the draft 2015 Update;
2. Take affirmative steps, as set forth in the workplan, to begin its implementation forthwith; and
3. Communicate directly with other state agencies, legislators, the Governor's Office and other relevant stakeholders regarding specific actions each group can take to implement this workplan.

Comment #5: Beneficial Use of Municipal Solid Waste Work Plan is Important and Should be Implemented.

Municipal waste is a resource which can be used to generate renewable energy. Landfill gas is generated from the biodegradation of waste in landfills, collected, and can be used to produce electricity, processed into a renewable substitute for natural gas, processed into a compressed natural gas substitute for use as a renewable vehicle fuel, or used as a medium-BTU renewable fuel in boilers and similar devices. As discussed as part of our Comment #2 and referenced in the draft 2015 Update, the Commonwealth's landfills are an overall carbon emission sink due to the high utilization rate for beneficial use of landfill gas.

The Beneficial Use of Municipal Solid Waste workplan ("Beneficial Use Workplan") contained in the 2013 Update documented seven existing barriers to increasing the utilization rate of landfill gas. The Beneficial Use Workplan also recommended specific actions and detailed implementation steps to increase the utilization rate of landfill gas. Unfortunately, none of these recommended actions or implementation steps have occurred in the intervening years, and Pennsylvania's national ranking in the number of operating beneficial use projects for landfill gas has slipped.

PWIA urges the Department to:

1. Restate its support for the Beneficial Use Workplan in the draft 2015 Update;
2. Take affirmative steps, as set forth in the workplan, to begin its implementation forthwith; and
3. Communicate directly with other state agencies, legislators, the Governor's Office and other relevant stakeholders regarding specific actions each group can take to implement this workplan.

Comment #6: The Public Utility Commission has Ignored the CCAC's Unanimous Recommendation on Preserving Net Metering

Manure digesters create renewable electricity and thereby offset GHG emissions from other sources. The CCAC unanimously adopted the Digester Workplan on January 6, 2015,

implementation of which would ensure that digesters continue to be developed within the state. That workplan identified the single biggest threat to future development of manure digesters—the portion of the then-proposed regulation further restricting the net metering program beyond the explicit limits set forth in the existing statute. This regulation was proposed by the Public Utility Commission (PUC) on July 5, 2014, and would "eliminate any reasonable possibility of future digester installation in Pennsylvania".[13]

The workplan encouraged the PUC to withdraw the net metering rulemaking, noting that it was opposed by a "broad coalition of farmers, renewable energy stakeholders, and environmental advocacy organizations and industry tradegroups". The workplan also "encourage[d] single farms and combination farms to build digesters through outreach training and removal of any existing barriers to joint projects…"

Ultimately, the PUC tweaked its proposed regulations, and exempted only certain farmers located in specific parts of the state. The PUC also added barriers to completely eliminate any possibility of joint digester projects between farmers. Both of these actions are directly contrary to the Department's and CCAC's workplan, and will suppress the generation of renewable electricity, particularly from Tier I sources under the AEPS Act, thereby increasing GHG emissions statewide.

PWIA notes that the PUC did not approve the new regulations until February 11, 2016, a full 13 months after the CCAC's unanimous adoption of the workplan opposing the regulations. At no point did the PUC ever recognize or acknowledge the CCAC's unanimous recommendation, despite it being highlighted in formal comments submitted to the PUC and the PUC's representation on the CCAC and its representatives' attendance, and vote in favor of the workplan, at the January 6, 2015 meeting.

The next step in the regulatory process is for the Independent Regulatory Review Commission (IRRC) to review the PUC rulemaking and determine its fate at their May 19, 2016 meeting. Numerous comments in the PUC docket,[14] *and the PUC's own chairperson*,[15] have stated that the net metering portion of the new regulation exceeds PUC's authority, is contrary to the plain language of the underlying statute, and/or is illegal. Given the importance of encouraging, not suppressing the generation of renewable energy in the Commonwealth, PWIA strongly recommends that the Department and/or Governor's Office submit comments to the IRRC, at least 48 hours before their May 19th meeting, opposing this rulemaking.

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[13] See Appendix B of the draft 2015 Update, *CCAC Work Plan 13: Manure Digesters*, 248-257 http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-110839/DRAFT%202015%20Climate%20Change%20Action%20Plan%20Update.pdf.

[14] PA PUC, *Proposed Rulemaking – Alternative Energy Portfolio Standards (AEPS) Act Regulations*, Docket No. L-2014-2404361 (filed Feb. 6, 2014) http://www.puc.state.pa.us/about_puc/consolidated_case_view.aspx?Docket=L-2014-2404361.

[15] Chairman Gladys M. Brown, Comment to PA PUC, *Proposed Rulemaking – Alternative Energy Portfolio Standards (AEPS) Act Regulations*, Docket No. L-2014-2404361 (filed Feb. 11, 2016) http://www.puc.state.pa.us/pcdocs/1414665.pdf.

Comment #7: Legislative Recommendation

It is PWIA's understanding that several bills have been introduced in the General Assembly that would restore the ability of sources using biologically derived methane gas, including farm digesters and landfills, to participate in the net metering program at the levels established in the AEPS Act if final promulgation of the PUC rulemaking referenced in our comment #6 actually occurs. PWIA encourages the Department to review and evaluate those bills to determine if the Department should be recommending their passage in the draft 2015 Update's Legislation section.

PWIA also recommends that the Department, in consultation with the CCAC, evaluate the first eight years of implementation of Act 70 itself and make recommendations for legislative changes specific to that Act.

PWIA appreciates the opportunity to review and comment on the draft 2015 Update. Pennsylvania's efforts to reduce GHG emission are important, and we believe that this report—which is based on U.S. EPA recommended models and objective criteria, not rhetoric and appeal to emotion and prejudice—is important.

Very truly yours,

/s/ *Tim O'Donnell*

Tim O'Donnell
President