

FROM TRASH TO CASH: A PROPOSAL TO COMPEL RECYCLING IN PENNSYLVANIA UNDER THE SOLID WASTE MANAGEMENT ACT

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I. INTRODUCTION

A global emergency that threatens biodiversity, human health, food security, and economic growth continues to escalate each passing day.² On one such day, not even the United States Supreme Court could ignore the severity of this threat: climate change.³ Meanwhile, outside the world of environmental jurisprudence,⁴ the scientific community confirms this threat, suggesting a causal relationship between rising temperatures caused by climate change and thresholds historically linked to extinctions.⁵ While some studies conclude that a worst-case climate change scenario is unlikely, the mere acknowledgement of its possibility may compel action to mitigate this threat.⁶

Designed in 1970 by Gary Anderson, a then senior at the University of Southern California, the green recycling logo was created as a submission for the International Design Conference to commemorate the first Earth Day.⁷ Today, it is

² Kashif Abbass et al., *A review of the global climate change impacts, adaptation, and sustainable mitigation measures*, SPRINGER LINK ENV'T SCIENCE AND POLLUTION RESEARCH VOL. 29, 42545 (2022), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8978769/>.

³ *Mass. v. EPA*, 549 U.S. 497, 526 (2007) (recognizing the considerable significance of the Environmental Protection Agencies' agreement with the President that 'we must address the issues of climate change' and the uncontested affidavit recognizing the rise and real risk of catastrophic harm of global warming).

⁴ *Id.*

⁵ Haijung Song et al., *Thresholds of temperature change for mass extinction*, NATURE COMMUNICATIONS, 5 (2021), <https://www.nature.com/articles/s41467-021-25019-2> (last visited Oct. 9, 2024) (studying marine extinctions and climate thresholds during the end-Ordovician era, which saw cooling and glaciation; the Permian-Triassic era, which experienced extreme warming and ocean anoxia; and the Cretaceous-Paleogene era, which was triggered by an asteroid impact); *see also* Kemp et al., *Climate Endgame: Exploring catastrophic climate change scenarios*, PROC. NAT'L ACAD. SCI., 2-3 (2022), <https://www.pnas.org/doi/10.1073/pnas.2108146119>, (studying worst-case climate change scenarios during the Pleistocene Epoch, which saw sustained warming above 2°C; the Early Eocene, which experienced extreme heat; and past mass extinctions, which were often driven by abrupt climate shifts).

⁶ Kemp et al., *supra* note 5, at 3.

⁷ *The Origin of the Recycling Symbol*, CTR. FOR ENERGY EFFICIENCY, <https://w1.mtsu.edu/cee/3Rs.php>, (last visited Mar. 5, 2024).

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a ubiquitous symbol that encourages individuals to reduce, reuse, and recycle.⁸

Notwithstanding the apparent value of individual action, however, the role of the government surrounding recycling cannot be understated.⁹ Expanding government-led recycling processes, while also increasing incentives, may reduce the threat of climate change by increasing material reuse, reducing raw material use, and decreasing the amount of waste entering landfills.¹⁰

Under Pennsylvania Law, enforced by the Department of Environmental Protection (hereinafter DEP),¹¹ the Solid Waste Management Act (hereinafter SWMA) plays a pivotal role in the regulation of residual, municipal, and hazardous waste.¹² The statute then serves several purposes, including: 1) the establishment and maintenance of a program of planning and technical and financial assistance for waste management; 2) the protection of public health and safety from the dangers of the processing, treatment, and disposal of all waste and; 3) the encouragement of the development of resource recovery.¹³

⁸ *Id.*

⁹ Alex Tabibi, *The Role of Government Policy in Shaping Recycling Habits*, GREEN.ORG, (Jan. 30, 2024), <https://green.org/2024/01/30/the-role-of-government-policy-in-shaping-recycling-habits/>.

¹⁰ Celeste Robinson and Kate Huun, *The impact of recycling on climate change*, UNIV. OF COLO. BOULDER ENV'T CTR. (Dec. 15, 2023), <https://www.colorado.edu/center/2023/12/15/impact-recycling-climate-change>; *see also* *The Role of Government Policy in Shaping Recycling Habits*, GREEN.ORG (Feb. 22, 2024), <https://green.org/2024/01/30/the-role-of-government-policy-in-shaping-recycling-habits/>.

¹¹ Created by the Pennsylvania Legislature in the Act 18 of 1995, 1995 Pa. H.B. 1400 (splitting the 1970 Department of Environmental Resources into two (2) agencies: 1) The Department of Environmental Protection and; 2) The Department of Conservation and Natural Resources); *see also* 71 Pa. Stat. Ann. § 1340.501 (LexisNexis, LEXIS through P.L. 89, § 1) (renaming the Department of Environmental Resources to the Department of Environmental Protection).

¹² Solid Waste Management Act, 35 Pa. Stat. Ann. §§ 6018.101-6018.1003 (LexisNexis, LEXIS through P.L. 380, § 101).

¹³ 35 Pa. Stat. Ann. § 6018.102 (LexisNexis, LEXIS P.L. 380, § 102, approved July 7, 1980); *see also* 35 Pa. Stat. Ann. § 6018.103 (LexisNexis, LEXIS through § 2) (clarifying the distinction between residual, municipal, and hazardous waste).

To further this third purpose, the statutory scheme comes coupled with several regulations, providing exceptions to certain types of *residual waste*, a specific type of waste resulting from industrial mining and agricultural operations,¹⁴ by classifying such waste as recyclable material and thus exempt from the SWMA.¹⁵ However, under the current regulatory scheme and precedent in interpreting the regulation, the residual waste recycling exception is too restrictive in defining which materials qualify for exemption.¹⁶ At the same time, it fails to provide financial incentives that would encourage recycling at all.¹⁷

Additionally, the legislature provides another purpose of the SWMA: that the Act should implement the significant Article I, Section 27 of the Pennsylvania Constitution, which grants a constitutional right of environmental preservation for the benefit of all people.¹⁸ As a formidable tool for environmental rights and protections, there has been no shortage of using the section to challenge the SWMA or other environmental laws.¹⁹ In fact, the Pennsylvania Supreme Court has gone so

¹⁴ See *infra* text accompanying notes 60-63.

¹⁵ 25 Pa. Code § 287.1 (2014) (providing that materials are no longer classified as waste when they can be shown to be recycled by being used or reused as ingredient to make a product or used in manner to be an effective substitute for a commercial product) (emphasis added).

¹⁶ See discussion *infra* accompanying notes 75-93.

¹⁷ See discussion *infra* accompanying notes 94-95.

¹⁸ 35 Pa. Stat. Ann. § 6018.102 (LexisNexis, LEXIS through P.L. 380, § 102); see also PA. CONST. art. I, § 27 (establishing, through the 1971 amendment, a constitutional right to clean air, pure water, and to the preservation of [the] natural environment and a duty of the Commonwealth to conserve and maintain the environment for the benefit of all people).

¹⁹ *Eagle Env't II, L.P. v. Commonwealth*, 884 A.2d 867, 876 (2005) (challenging the SWMA on the ground that the Act unconstitutionally sidesteps Article I, Section 27); see *Robinson Twp. v. Commonwealth*, 83 A.3d 901, 915-916 (2013) (challenging the Act 18, an act which re-codified six new chapters in the Oil and Gas Act, by claiming the act violated the Pennsylvania Constitution under, among other sections, Article I, Section 27).

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far as to recognize Section 27's significance when ruling on the SWMA, emphasizing that an SWMA amendment should, at a minimum, account for it.²⁰

Therefore, in considering the importance of compelling action to reduce the threat of climate change,²¹ the purposes of the SWMA,²² the limited residual waste recycling regulatory scheme,²³ and importance of the government's role in such action,²⁴ this article proposes a statutory and regulatory amendment to the SWMA's handling of residual waste.²⁵

The purpose of the proposed amendment is to: 1) ensure that the SWMA amendments are drafted to align with the purposes and principles of Article I, Section 27;²⁶ 2) broaden the definition of recyclable residual waste materials under the regulations while *ensuring compliance* with the law; and 3) provide clear recycling procedure alongside recycling incentives for residual waste.²⁷ The amendment to the SWMA represents a vital step towards a more sustainable and resilient future.²⁸ By addressing these regulatory shortcomings, this amendment

²⁰ Commonwealth, Dep't of Env't. Res. v. Blosenski Disposal Serv., 566 A.2d 845, 849 (1989) (noting that in evaluating the constitutionality of the Solid Waste Management Act, the court must consider the law was implemented to the will of the people under Article I, Section 27 of the Pennsylvania Constitution).

²¹ See Abbass et al., *supra* note 2, at 42545; *Mass. v. EPA*, 549 U.S. at 526; Song et al., *supra* note 5, at 5; see also Kemp et al., *supra* note 5, at 2–3.

²² See Solid Waste Management Act, 35 Pa. Stat. Ann. § 6018.102, *supra* note 13; see also *id.* § 6018.103.

²³ See *infra* notes 75–95 and accompanying text.

²⁴ Tabibi, *supra* note 9.

²⁵ See discussion *infra* Section IV.

²⁶ See 35 Pa. Stat. Ann. § 6018.102, *supra* note 18; *Eagle Env't II*, 884 A.2d 867 at 21, *supra* note 19; *Blosenski Disposal Serv.*, 566 A.2d 845 at 283, *supra* note 20.

²⁷ See discussion *infra* Section IV.

²⁸ See Robinson & Huun, *supra* note 10; *The Role of Government Policy*, *supra* note 10.

can expand effective waste management recycling practices and contribute to the mitigation of the threat of climate change.²⁹

II. BACKGROUND

a. The History of Pennsylvania's Environmental Regulatory Regime

Anderson's 1970 creation of the recycling symbol is not the only development of the modern environmental movement at the time.³⁰ Meanwhile, policymakers and legislators in Pennsylvania took active steps to develop and implement environmental solutions.³¹ Some suggest that Pennsylvania's modern environmental laws were a response to widespread 1960s fears of irreversible environmental damage.³² To address these fears, Rep. Franklin L. Kury introduced House Bill 958, an amendment to Article I of the Pennsylvania Constitution.³³ Notwithstanding amendments during the legislative process, after finding near unanimous bipartisan approval from the Pennsylvania House and Senate, the proposed amendment was signed by Gov. Milton J. Shapp into law.³⁴ The text of Article I, Section 27 reads as follows:

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

²⁹ See Tabibi, *supra* note 9; Robinson & Huun, *supra* note 10.

³⁰ See *The Origin of the Recycling Symbol*, *supra* note 7.

³¹ John C. Dernbach & Edmund J. Sonnenberg, *A Legislative History of Article I, Section 27 of the Constitution of the Commonwealth of Pennsylvania*, 14-18, WIDNER LAW, 1, 1-2 (2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2474660.

³² Kelly Hanna, *The Intersection of Reason and Risk: How Article I, Section 27 of the Pennsylvania Constitution Can Protect Environmental Justice Communities from State-Sanctioned Pollution and Cumulative Impacts*, 15 DREXEL L. REV. 621, 628 (2023).

³³ Dernbach & Sonnenberg, *supra* note 31 at 1.

³⁴ *Id.*

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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.³⁵

Since the introduction of Article I, Section 27, the promise of environmental sustainability and progress was delivered to the people through a series of laws such as the 1978 Pennsylvania Appalachian Trail Act,³⁶ the 1995 Conservation and Natural Resource Act,³⁷ and among others,³⁸ the Solid Waste Management Act.³⁹

b. History of the SWMA, Legislative Intent, and the Role of the Departments

As stated above, the SWMA, a cornerstone of Pennsylvania's statutory scheme, is a key environmental statute that exerts a pervasive influence on waste management practices throughout the Commonwealth.⁴⁰ Enacted on July 7th,

³⁵ PA. CONST. art. I, § 27.

³⁶ 64 Pa. Stat. Ann. §§ 801-05 (LexisNexis, LEXIS through P.L. 87, § 1); *see also* 64 Pa. Stat. Ann. § 802 (LexisNexis, LEXIS through P.L. 87, § 1) (stating the policy and purpose of the act is to “implement Article I, [S]ection 27 of the Constitution of Pennsylvania with respect to the Appalachian Trail in Pennsylvania as a source of natural, scenic, historic and esthetic values to be preserved”).

³⁷ 71 Pa. Stat. Ann. § 1340.101 (LexisNexis, LEXIS through P.L. 87, § 1) (stating the purpose of the act is to, “conserve and maintain public natural resources ‘for the use and benefit of all [Pennsylvania] citizens as guaranteed by [Article I, Section 27] of the Constitution of Pennsylvania”).

³⁸ *See* The Dam Safety and Encroachment Act of 1978, 32 Pa. Stat. Ann. §§ 693.1–693.27 (LexisNexis, LEXIS through P.L. 204, § 1); *see also* 32 Pa. Stat. Ann. § 693.2(3) (LexisNexis, LEXIS through P.L. 204, § 1); *see also* The Oil and Gas Act of 1984, 71 Pa. Stat. Ann. §§ 1340.101–102 (LexisNexis, LEXIS through P.L. 89, §§ 1–2); *see also* The 1982 Hazardous Sites Clean-Up Act, 35 Pa. Stat. Ann. §§ 6020.101–6020.1305 (LexisNexis, LEXIS through P.L. 756, § 101); 35 Pa. Stat. Ann. § 6020.103 (LexisNexis, LEXIS through P.L. 756, § 103); *see also* The 1982 Wild Resource Conservation Act, 32 Pa. Stat. Ann. § 5301 (LexisNexis, LEXIS through P.L. 597, § 1); with Pa. Stat. Ann. § 5302 (LexisNexis, LEXIS through P.L. 597, § 2).

³⁹ *See* discussion *infra* Section B.III.A.

⁴⁰ 35 Pa. Stat. Ann. §§ 6018.101–6018.1003 (LexisNexis).

1980,⁴¹ the Pennsylvania General Assembly passed the SWMA to combat environmentally harmful inadequate solid waste practices.⁴²

Section 6018.102 of the SWMA provides numerous legislative purposes including: 1) the establishment and maintenance of a cooperative state and local program of planning as well as technical and financial assistance for comprehensive solid waste management;⁴³ 2) the protection of public health, safety and welfare from the dangers of the transportation, processing, treatment, storage, and disposal of all wastes;⁴⁴ 3) the encouragement and development of resource recovery as a means of managing solid waste;⁴⁵ and 4) the implementation of Article I, Section 27 of the Pennsylvania Constitution.⁴⁶

The legislature in passing the SWMA, delegated to the Pennsylvania DEP⁴⁷ the primary responsibility to enforce the Act.⁴⁸ Section 601.104 grants the DEP the power and duty to, “administer the solid waste management program, including resource recovery,” and to “regulate the storage, collection, transportation, processing, treatment and disposal of solid waste.”⁴⁹ The SWMA comports with the DEP’s mission to, “protect Pennsylvania’s air, land, and water resources and to

⁴¹ 35 Pa. Stat. Ann. § 6018.101 (LexisNexis, LEXIS through P.L. 380, § 101).

⁴² 35 Pa. Stat. Ann. § 6018.102 (LexisNexis, LEXIS through P.L. 380, § 102) (establishing the legislative intent of the SWMA).

⁴³ *Id.* at 1.

⁴⁴ *Id.* at 4.

⁴⁵ *Id.* at 2.

⁴⁶ *Id.* at 10.

⁴⁷ 35 Pa. Stat. Ann. § 6018.103 (LexisNexis, LEXIS through § 2) (defining Department as the Department of Environmental Protection of the Commonwealth of Pennsylvania and its authorized representatives); *see also* Act 18 of 1995, *supra* note 10.

⁴⁸ 35 Pa. Stat. Ann. § 6018.104 (LexisNexis, LEXIS through P.L. 331, § 2).

⁴⁹ *Id.*

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provide for the health and safety of its residents and visitors, consistent with the rights and duties established under the Environmental Rights Amendment.”⁵⁰

Likewise, Pennsylvania’s “Environmental Court,” the quasi-judicial agency known as the Environmental Hearing Board (hereinafter EHB) serves as a crucial check on the DEP’s enforcement of the SWMA.⁵¹ The EHB has the discretion and power to hold hearings and issue adjudications on orders, permits, licenses, and decisions of the DEP,⁵² when the actions by the DEP “adversely affect personal or property rights, privileges, immunities, duties, liabilities or obligations or . . . person[s].”⁵³ Appeals from the EHB are then taken to the Commonwealth Court of Pennsylvania.⁵⁴ Additionally, the Environmental Quality Board (hereinafter EQB) as an independent state agency, is responsible for promulgating the rules and regulations under which the DEP operates.⁵⁵ In passing the SWMA, the legislature grants the EQB limited regulatory discretion to adopt rules and regulations *only within* the purposes and provisions of the already established Act.⁵⁶ These

⁵⁰ *Mission Statement*, COMMONWEALTH OF PA., <https://www.dep.pa.gov/About/Pages/default.aspx> (last visited Oct. 16, 2024).

⁵¹ William Hofmann and Steven Horst, *EHB Review: The EHB: DEP's Friend or Foe? Environmental Hearing Board Review*, 15, VILL. ENV'T. L.J. 173, 175 (2004) (describing EHB's standard of review).

⁵² 35 Pa. Stat. Ann. § 7514 (LexisNexis, LEXIS through P.L. 530).

⁵³ *Practice and Procedural Manual*, PA. ENV'T HEARING BD., 6 (Aug. 2023) (citing *Stanley Jake v. DEP and KMP Associates, Inc.*, 2014 EHB 38 (Pa. Env't. Hearing Bd. 2014)).

⁵⁴ *Environmental Hearing Board Welcome*, PA. ENV'T HEARING BD., <https://ehb.pa.gov>, (last visited Oct. 25, 2024).

⁵⁵ *What is the EQB?*, COMMONWEALTH OF PA., <https://www.dep.pa.gov/PublicParticipation/EnvironmentalQuality/Pages/WhatIsEQB.aspx>, (last visited Oct. 14, 2024); *see also* 71 Pa. Stat. Ann. §§ 510-20 (LexisNexis, LEXS through P.L. 1275, § 6) (granting the EQB the power to formulate, adopt, and promulgate rules and regulations for proper performance of the work of the department) (emphasis added).

⁵⁶ 35 Pa. Stat. Ann. § 6018.105 (LexisNexis, LEXIS through § 3).

regulations cover a wide array of environmental statutes and are primarily found under Title 25 of the Pennsylvania Code on environmental protection.⁵⁷

III. THE SOLID WASTE MANAGEMENT ACT'S KEY PROVISIONS

a. Identifying Waste

The term “solid” under the SWMA’s regulation of solid waste, is not to be understood in the ordinary sense as limited to non-liquid or non-gaseous types of waste.⁵⁸ Instead, the SWMA applies itself to, and defines, solid waste as, “[a]ny waste, including, but not limited to, municipal, residual or hazardous wastes, including solid, liquid, semisolid or contained gaseous materials.”⁵⁹ Following this definition, the SWMA defines and establishes three types of solid waste subject to regulation: hazardous waste, municipal waste, and residual waste each subject to their own set of EQB-drafted regulations found in articles VII, VIII, and IX of the regulatory provisions.⁶⁰

Municipal waste is defined as any garbage, refuse, industrial lunchroom or office waste, and other solid, liquid, semisolid, or gaseous material which is generated by residential, municipal, commercial, and institutional establishments.⁶¹ Commercial establishments include retail stores, grocery stores, shopping centers, universities, and non-profit organizations.⁶² Likewise, residual waste is defined as

⁵⁷ Pa. Code tit. 25.

⁵⁸ 35 Pa. Stat. Ann. § 6018.103 (LEXIS).

⁵⁹ *Id.*

⁶⁰ 25 Pa. Code §§ 260.1- 270.214 (regulating hazardous waste); *see also* 25 Pa. Code §§ 271.1-271.933 (regulating municipal waste); *see also* 25 Pa. Code §§ 287.1- 299.232 (regulating residual waste).

⁶¹ 35 Pa. Stat. Ann. § 6018.103 (LEXIS).

⁶² *Id.*

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any garbage, refuse, or other discarded material including solid, liquid, semisolid, or gaseous materials resulting from industrial mining, and agricultural operations.⁶³

Hazardous waste is then defined generally as, whether municipal or residual waste, any garbage, refuse, or sludge from a water treatment plant, air pollution control facility, or other discarded material which may cause or significantly contribute to an increase in mortality in the population or pose a substantial present or potential hazard to human health of the environment when improper treatment, storage, transportation, or disposal occurs.⁶⁴

Within these three categories of solid waste, the SWMA then regulates various activities such as the transportation, operation, generation, storage, treatment, processing, and disposal of such waste.⁶⁵ Of these regulations, a significant provision establishes the importance of DEP-issued permits to manage solid waste.⁶⁶ Section 6018.501 requires that any person who processes, stores, treats, or disposes of solid waste, whether on their own land or another's, must first obtain a permit from the DEP.⁶⁷

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ 35 Pa. Stat. Ann. § 6018.501(a) (LexisNexis, LEXIS through P.L. 380, § 501); *see also* 35 Pa. Stat. Ann. § 6018.104(7) (LexisNexis, LEXIS through P.L. 331, § 2) (granting the DEP the power to issue permits, licenses and orders, and specify the terms and conditions thereof, and conduct inspections and abate public nuisances to implement the purposes and provisions of this act and the rules, regulations and standards adopted pursuant to this act); 35 Pa. Stat. Ann. § 6018.201(a) (LexisNexis, LEXIS through P.L. 380, § 201) (requiring any person who stores, operates, processes, collects, or dispose of municipal waste must first obtain a permit for such facility from the DEP); 35 Pa. Stat. Ann. § 6018.301 (LexisNexis, LEXIS through P.L. 380, § 301) (requiring a person or municipality to obtain a permit to store, operate, transport, or dispose residual waste within the Commonwealth); *cf.* 35 Pa. Stat. Ann. § 6018.401 (LexisNexis, LEXIS through P.L. 380, § 401) (requiring that all persons and municipalities acquire licenses to transport hazardous waste).

⁶⁷ *Id.* § 6018.501(a).

Additionally, the DEP has the discretion to classify waste as non-waste if it finds that the waste has a beneficial use and does not present a threat to the health, safety or welfare of the people or environment of Pennsylvania.⁶⁸ The SWMA also comes coupled with several enforcement and penalty mechanisms including the establishment of a \$25,000 maximum civil penalty, per offense per day provision⁶⁹ and enforcement orders to compel compliance with the SWMA, which may result in the revocation of a permit should the permit holder fail to comply.⁷⁰ The SWMA also regulates the temporary storage of waste for less than one year, the transportation of solid waste upon off-site removal,⁷¹ and the reporting and record-keeping requirements for the design, construction, and maintenance of waste management facilities.⁷²

However, despite the granular scope of the SWMA regulatory regime, the provisions addressing exceptions and incentives surrounding recycling merit special consideration within this article.⁷³

⁶⁸ 35 Pa. Stat. Ann. § 6018.104(18) (LexisNexis, LEXIS through P.L. 331, § 2).

⁶⁹ 35 Pa. Stat. Ann. § 6018.605 (LexisNexis, LEXIS through P.L. 380, § 605) (providing additional considerations that the DEP must undertake in assessing a civil penalty including whether the violation was willful or negligent).

⁷⁰ 35 Pa. Stat. Ann. § 6018.602 (LexisNexis, LEXIS through § 3).

⁷¹ 35 Pa. Stat. Ann. § 6018.103 (LEXIS) (defining transportation as waste which has been removed off-site).

⁷² 35 Pa. Stat. Ann. § 6018.403 (LexisNexis, LEXIS through P.L. 380, § 403) (requiring a person or municipality who transports or stores waste to, among other things, maintain records as necessary to identify the quantities of hazardous waste, label containers for the storage of such waste, submit reports to the DEP listing out the quantities of hazardous waste and the method of disposal for such waste, and to immediately notify the DEP of any spill or accidental discharge of such waste and take immediate steps to contain and clean up the spill or discharge); *see also* 25 Pa. Code § 273.313 (2000) (requiring that an operator or person of municipal waste, among other requirements, submit to the DEP an annual operation report which includes a topographic survey map of the same scale of the contours at the beginning and end of the year, the completed areas of the site as well as areas filled but not active during the previous year, a description of capacity used in the previous year, and certification that the operator has received the analysis required by section 287.54).

⁷³ *See discussion infra* Sections III.B–III.C.

b. The Recycling Exception and Judicial Interpretation

i. Residual Waste Recycling

As previously explained, the SWMA categorizes waste into three categories: municipal, residual, and hazardous waste.⁷⁴ Of these three types of waste, both residual and municipal waste regulations include definitional clauses that detail the criteria for classifying waste as recyclable material, thereby either exempting waste from SWMA regulation generally or providing certain recycling incentives.⁷⁵ In clarifying the process by which *residual waste* is to be managed, Section 287.1 of the Pennsylvania residual waste regulations introduces the concept, providing that:

Materials that are not waste *when recycled* include materials when they can be shown to be recycled by being [either] [u]sed or reused as ingredients in an industrial process to make a product or employed in a particular function or application as an effective substitute for a commercial product, provided the materials are not being reclaimed.⁷⁶

The section further restricts this exception, stating that waste remains non-recyclable even if recycled if, when recycled, it falls into specific categories.⁷⁷ These categories include: 1) disposed matter; 2) products applied to the land; 3) materials burned for energy recovery, used to produce fuel, or contained in fuel; 4) speculatively accumulated materials; and 5) materials evaluated under Section 287.7's beneficial use analysis conducted by the DEP.⁷⁸ Additionally, the section

⁷⁴ See *supra* discussion accompanying notes 61–64.

⁷⁵ See discussion *infra* accompanying notes 76–93, 98–103, 128–136.

⁷⁶ 25 Pa. Code § 287.1 (2014) (emphasis added).

⁷⁷ *Id.*

⁷⁸ *Id.*; see also 25 Pa. Code § 287.7 (providing that if the DEP determines the waste is being beneficially used in accordance with a permit and poses no threat to public health or the environment, it may no longer be considered waste).

establishes that a person who claims a coproduct material is exempt from waste must demonstrate: 1) there is a known market or deposition for the market for the material; 2) provide proper documentation and; 3) that they have the necessary equipment to do so.⁷⁹

Thus, while a rule to exclude certain types of residual waste from SWMA regulation through the classification of such waste as recycled certainly exists, the question remains: how have courts interpreted this rule?⁸⁰

The answer can be found under the Pennsylvania Supreme Court case of *Tire Jockey Serv. v. Commonwealth*.⁸¹ In *Tire*, petitioner Tire Jockey Services (hereinafter TJS) intended to operate a tire recycling operation where the company would sell cut and component pieces of non-serviceable tires and manufacture rubber mats and crumb rubber which would be used as playground safety covering.⁸² Upon TJS's failure to comply with DEP's orders in response to violations under the SWMA, the DEP issued an order to cease operations, remove a collection of tires and dispose of them in a lawfully permitted facility and pay a fifty-four-thousand dollar civil penalty.⁸³

On appeal to the EHB, TJS contended that their tires were recyclable and thus exempt from the SWMA and DEP's order.⁸⁴ The EHB rejected this contention,

⁷⁹ 25 Pa. Code § 287.1 (2014) (defining coproduct as a material from manufacturing or production, equivalent in composition to a product or raw material, with no greater risk to health or the environment, and meeting criteria for land application or energy recovery with a minimum BTU value of 5,000 pounds).

⁸⁰ See discussion *infra* accompanying notes 81-93.

⁸¹ See discussion *infra* accompanying notes 82-95.

⁸² *Tire Jockey Serv. v. Commonwealth*, Dep't of Env't. Prot., 915 A.2d 1165, 1171 (Pa. 2007).

⁸³ *Id.* at 1174.

⁸⁴ *Id.*

holding that the use and storage of tires did not fall within the exception of “waste” as, in considering the plain language of the statute, the expectation applies only when the material is recycled or reused.⁸⁵

On appeal to the Pennsylvania Supreme Court, the DEP maintained the position that the used tires obtained and stored by TJS are “waste” as defined by Section 287.1 of the code, thus subjecting TJS to regulatory restriction by the SWMA’s permitting process.⁸⁶ Additionally, the DEP also contended that under the definition of “waste,” material that is “recycled” by being “reclaimed” does not qualify for the exception at issue.⁸⁷ The DEP adverted that under the exception to the definition of “waste,” processes that convert a material that is not *immediately ready* for use as an effective substitute for a commercial product into one that is ready to be used in that fashion is *reclamation*, and a material that is subject to reclamation does *not* qualify for the exception, even though the reclamation may result in a material that does.⁸⁸

In response, TJS argued that the DEP's analysis was fatally flawed given it ignored the fact that a waste material that *may* immediately be employed as an effective substitute for a commercial product is sufficient to meet the definitional exception.⁸⁹ TJS argued that the DEP's assumption that some processing is necessary to convert materials from “waste” to materials that are ready for use as

⁸⁵ *Id.* at 1178.

⁸⁶ *Id.*

⁸⁷ 915 A.2d 1165 at 1183-1184.

⁸⁸ *Id.*

⁸⁹ *Id.* at 1181.

substitutes for commercial products is invalid, noting that approximately 40% of incoming used tires that TJS obtains can immediately be reused as tires without any processing.”⁹⁰

The Pennsylvania Supreme Court relied on an established two-part test to determine whether the agency’s interpretation of Section 278.1 of the code is proper: 1) whether the interpretation of the regulation is erroneous or inconsistent with the regulation and; 2) whether the regulation is consistent with the statute under which it was promulgated.⁹¹

In applying the test, the court held that the plain language of the regulation shows the recycling exception applies only to material *when* recycled and *not* before.⁹² The court further established that the exception to the definition of “waste” applies only to materials that are *presently ready* for use as ingredients in an industrial process or as effective substitutes for commercial products, without any processing.⁹³ Today, the ruling in *Tire* still controls, establishing a narrow application of the regulatory residual waste recycling exception.⁹⁴

Indeed, while the SWMA focuses on municipal waste processing and recycling, it provides little to no financial incentives for the recycling of residual waste, creating a significant barrier to promoting recycling practices for these

⁹⁰ *Id.*

⁹¹ *Id.* at 1185 (*citing* Pelton v. Commonwealth of Pa. Dep’t of Pub. Welfare, 523 A.2d 1104, 1107-08 (Pa. 1987); Commonwealth of Pa. Dep’t of Pub. Welfare v. Forbes Health Sys., 422 A.2d 480, 482 (Pa. 1980).

⁹² 915 A.2d 1165 at 1189. (emphasis added).

⁹³ *Id.*

⁹⁴ *See supra* discussion accompanying notes 92-93.

materials.⁹⁵ By contrast, municipal waste recycling in Pennsylvania benefits from structured programs and incentives, highlighting how the presence of such measures can encourage recycling success, providing useful guidance on how effective oversight, regulations, and incentives may promote residual recycling.⁹⁶

ii. Municipal Waste Recycling under the SWMA and Guidance under the Municipal Waste Planning Act

Compared to the management of residual waste, the SWMA presents a more restricted, yet precisely delineated recycling exception for the management of municipal waste.⁹⁷ And despite this stricter exception, the SWMA, alongside additional law, carries the additional benefit of offering certain financial incentives for the recycling of municipal waste.⁹⁸

Section 271.1 of the SWMA begins by providing, “[recycling municipal waste under this article includes the] collection, separation, recovery and sale or reuse of metals, glass, paper, plastics and other materials which would otherwise be disposed or processed as municipal waste.”⁹⁹ The section continues in defining waste as, “a material whose original purpose has been completed [but] not including source separated recyclable materials.”¹⁰⁰ The section then provides a rather explicit list of source-separated recyclables: 1) clear and colored glass; 2) aluminum; 3) steel and bimetallic cans; 4) high-grade office paper; 5) newsprint; 6) corrugated

⁹⁵ 35 Pa. Stat. Ann. §§ 6018.101-6018.1003.

⁹⁶ See discussion *infra* section (B)(2).

⁹⁷ See *infra* text accompanying notes 99-102.

⁹⁸ See *infra* text accompanying notes 127-135.

⁹⁹ Pa. Code § 271.1 (2014).

¹⁰⁰ *Id.*

paper; 7) plastics; and 8) other marketable grades of paper.¹⁰¹ These eight source-separated materials constitute the comprehensive scope of recyclable materials under the SWMA municipal waste management framework.¹⁰²

These eight municipal waste source-separated materials, as well as the municipal waste generally, is concurrently regulated by the Municipal Waste Planning, Recycling, and Waste Reduction Act (hereinafter Municipal Waste Planning Act) alongside the SWMA.¹⁰³ The Municipal Waste Planning Act delegates to the counties and municipalities the duties to develop waste management and recycling plans for the eight source-separated materials.¹⁰⁴ Additionally, similar to the SWMA, the Municipal Waste Planning Act also mandates that individuals must obtain a permit from the DEP to operate municipal waste management facilities.¹⁰⁵ It is through this system of concurrent regulation that the DEP and EQB creates a stringent set of application and planning requirements,¹⁰⁶ alongside economic incentives,¹⁰⁷ for the recycling of municipal waste.¹⁰⁸

Although the Municipal Waste Planning Act is distinct from regulations governing residual waste, its planning and application provisions may offer

¹⁰¹ *Id.*

¹⁰² See *supra* discussion accompanying notes 99-101.

¹⁰³ Municipal Waste Planning, Recycling, and Waste Reduction Act of 1998, 53 Pa. Cons. Stat. §§ 4000.101–4000.1904; see also 53 Pa. Cons. Stat. Ann. § 4000.104 (LexisNexis, LEXIS through P.L. 556, § 104 (2024)) (providing that the act shall be construed in *pari materia* with the Solid Waste Management Act).

¹⁰⁴ 53 Pa. Stat. Ann. § 4000.102 (LexisNexis, LEXIS through P.L. 556, § 102) (declaring that it is necessary to give counties the primary responsibility to plan for the processing and disposal of municipal waste generated within their boundaries and to provide incentives for municipalities to host facilities).

¹⁰⁵ See *supra* discussion accompanying notes 66-67.

¹⁰⁶ See discussion *infra* accompanying notes 110-126.

¹⁰⁷ See discussion *infra* accompanying notes 127-135.

¹⁰⁸ See discussion *infra* accompanying notes 110-126.

analogous guidance for the proposed residual waste recycling amendment(s).¹⁰⁹ For instance, municipalities are required to submit to the DEP a comprehensive set of planning requirements in their municipal waste management plans during the permit approval process.¹¹⁰ Included among these requirements are: 1) a description of waste, such as the origin, content, and weight or volume of the waste;¹¹¹ 2) a description of facilities;¹¹² 3) the estimated future waste capacity of the plan;¹¹³ 4) a description of recyclable materials;¹¹⁴ 5) methods of financing the facilities;¹¹⁵ 6) the

¹⁰⁹ See discussion *infra* accompanying notes 141-151.

¹¹⁰ See discussion *infra* accompanying notes 111-126.

¹¹¹ 53 Pa. Stat. Ann. § 4000.502(b) (LexisNexis, LEXIS through P.L. 556, § 502) (requiring that the plan shall explain the origin, content, weight or volume of municipal waste currently generated within the county's boundaries, and the volume of waste that will be generated within the county's boundaries within the next ten years); see also 25 Pa. Code § 272.223 (2014) (providing additional guidance on how to describe the origin, weight, or volume of waste); 25 Pa. Code § 272.421 (1992) (providing five elements of source separation programs).

¹¹² *Id.* at § 4000.502(c) (requiring that the plan identify current municipal waste facilities, their remaining capacity, potential capacity from reasonable expansion, the impact of recycling, and the use of existing facilities without impairing their capacity, while also considering potential expansion and ensuring complete applications are reviewed within 90 days); see also 25 Pa. Code § 272.228 (2000) (requiring the plan describe the location of the facility).

¹¹³ *Id.* at § 502(d) (requiring the plan shall estimate ten years of municipal waste capacity needs, account for variables like residual waste, and, if additional capacity is needed, provide public notice, solicit proposals, and notify the department for publication in the Pennsylvania Bulletin); see also 25 Pa. Code § 272.225 (2000) (requiring the plan to estimate ten years of municipal waste capacity needs, describe variables affecting the estimate, consider regulatory impacts on residual waste, and, if additional capacity is needed, provide public notice, solicit proposals, and notify the Department for publication in the Pennsylvania Bulletin).

¹¹⁴ *Id.* at § 4000.502(e)(1)(2) (requiring the plan to describe and evaluate recyclable materials, potential recycling benefits, existing recovery operations, collection and processing options, implementation schedules, estimated program costs and revenues, market commitments, municipal cooperation opportunities, and public education programs, while considering mandated municipal recycling requirements and the results of any market development studies); see also 25 Pa Code § 272.226 (2000) (requiring the plan to describe and evaluate recyclable materials, waste reduction benefits, existing recycling operations, collection and processing options, implementation schedules, estimated costs, market commitments, municipal cooperation, and public education programs, while ensuring compatibility with municipal recycling requirements and identifying mandatory or voluntary municipal programs).

¹¹⁵ *Id.* at § 4000.502(f) ((requiring the plan to describe the type, cost, and financing of proposed facilities, recycling, or waste reduction programs for the next ten years; explain the selection of facilities or programs; evaluate alternatives and their environmental, economic, and life cycle costs; demonstrate consideration for future recycling needs; and provide a timeline for planning, design, construction, and operation).

facility location;¹¹⁶ 7) proposed ordinances, contracts, or requirements for the plan;¹¹⁷ and 8) an established process to permit public participation in the development of the facilities.¹¹⁸ Additional requirements stipulated for the waste management plan in the permit application include a chemical waste analysis¹¹⁹ and a justification for the proposed waste management program.¹²⁰

¹¹⁶ 53 Pa. Stat. Ann. § 4000.502(g) (LEXIS) (requiring the plan to identify the general location of municipal waste facilities and recycling programs, specify chosen sites if available, or explain the site selection process, and provide detailed reasons for selecting any facility located outside the county).

¹¹⁷ *Id.* at § 4000.502(j) (requiring the plan to include proposed ordinances, contracts, or requirements to ensure facility operation, and to identify the affected areas, expected effective dates, and implementing mechanisms for each).

¹¹⁸ *Id.* at § 4000.502(p); *see also* 25 Pa. Code § 272.222 (1992); *and with* 53 Pa. Stat. Ann. § 4000.1501 (LexisNexis, LEXIS through § 1) (requiring that a municipalities' source-separation and collecting program include an ordinance or regulation requiring people to separate such materials and is to be documented to prove the total number of tons recycled); *see also* 53 Pa. Stat. Ann. § 4000.1502 (LexisNexis, LEXIS through P.L. 556, § 1502) (providing that no person shall operate a municipal waste landfill or resource recovery facility unless the operator has established at least one drop-off center for the collection and sale of at least three recyclable materials); 53 Pa. Stat. Ann. § 4000.1503 (LexisNexis, LEXIS through P.L. 556, § 1503) (requiring Commonwealth agencies, within two years, to establish and implement recycling programs for materials like aluminum, high-grade office paper, and corrugated paper; develop waste reduction programs to minimize waste from operations; and prioritize the use of composted materials for public land maintenance to the extent practicable); 53 Pa. Stat. Ann. § 4000.501 (LexisNexis, LEXIS through P.L. 556, § 501) (requiring the county to submit an officially adopted municipal waste management plan within two and a half years, ensure plan revisions are submitted when capacity nears exhaustion or as required, and follow procedures for review, including advisory committee input and municipal distribution for substantial revisions).

¹¹⁹ 25 Pa. Code § 271.611(a)(b)(2014) (requiring the application to include generator details, waste analysis, leaching evaluations, hazardous waste determinations, and disposal demonstrations; describe waste generation processes with schematics; use approved analytical methods and quality control procedures; and allow waivers or modifications by the Department under certain conditions); *see also* 25 Pa. Code § 271.613 (2000) (requiring the application to include a waste analysis plan detailing parameters, test methods, sampling methods, and analysis frequency; a plan for screening incoming waste for consistency with the permit; and a description of how rejected waste will be managed, including responsible parties).

¹²⁰ 25 Pa. Code § 272.227 (2000) (requiring the plan to detail the selection and justification of the municipal waste management program by describing evaluated alternatives, advantages and disadvantages, advisory committee involvement, facility or program costs and financing, environmental and economic evaluations, recycling considerations, proposed schedules, and the use of put-or-pay contracts where applicable).

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The regulations also provide alternative requirements for municipal resource recovery facilities.¹²¹ Such requirements include operation requirements,¹²² mandates for recycling facility site planning, construction, and maintenance,¹²³ environmental monitoring requirements,¹²⁴ hazardous waste and emergency

¹²¹ 25 Pa. Code § 283.1 (1997) (establishing the scope of chapter 283, resource recovery and other processing facilities).

¹²² 25 Pa. Code § 283.102 (2000) (requiring the application to include an operating plan, alternative waste handling procedures, safety and emergency plans, waste consistency measures, operator training, operating hours, and a study on the facility's effects on water supplies); *see also* 25 Pa. Code § 283.121 (2000) (requiring a recycling plan).

¹²³ 25 Pa. Code § 283.103 (2000) (requiring the application to include a topographic map and descriptions showing property boundaries, water bodies, water sources, infrastructure, buildings, monitoring points, floodplains, access roads, barriers, waste storage areas, utilities, erosion controls, bond areas, facility structures, weigh stations, and designated areas for radioactive waste detection); *see also* 25 Pa. Code § 283.104 (1988) (requiring the application to describe waste sources, flow control, facility dimensions, equipment, recovery rates, residue disposal, unmarketable waste handling, storage limits, shutdown plans, utilities, emergency measures, and equipment repair plans); 25 Pa. Code § 283.212 (2000) (requiring a gate or other barrier and fence blocking access when an attendant is not on duty); 25 Pa. Code § 283.213 (2000) (requiring a specific road design ensuring the prevention of erosion and runoff into nearby streams); 25 Pa. Code § 283.217 (2000) (establishing cleaning and maintenance requirements for the facility); 25 Pa. Code § 283.261 (2000) (establishing daily operational record keeping requirements); 25 Pa. Code § 283.262 (2000) (establishing annual report requirements and submission details to the DEP).

¹²⁴ 25 Pa. Code § 283.107 (2000) (requiring the applicant to submit groundwater and soil monitoring plans, if required by the Department, to detect potential degradation or contamination from the facility); *see also* 25 Pa. Code § 283.218 (2000) (requiring facility emissions to comply with the Air Pollution Control Act, ambient air quality standards, and permit conditions; prohibiting open burning; and mandating best available or reasonably available technology standards for air quality control, depending on the type and age of incinerators); 25 Pa. Code § 283.232 (2000) (requiring the operator to manage surface water and control erosion and sedimentation by diverting surface water, comply with Chapters 102 and 105, and prevent erosion to the maximum extent possible, including through revegetation).

response procedures,¹²⁵ and the establishment of an accident prevention plan, including specific provisions relating to the handling of waste.¹²⁶

The Municipal Waste Planning Act then incentivizes municipal recycling efforts by mandating that the DEP award grants to cover the costs associated with the preparation of municipal waste management plans, as well as related studies, surveys, research, analyses, and environmental mediation.¹²⁷ Section 4000.902 of the Municipal Waste Planning Act further clarifies this process by specifying the prerequisites for DEP grant awards to municipalities for the development and implementation of recycling programs.¹²⁸ Said prerequisites include the description

¹²⁵ 25 Pa. Code § 283.110 (1998) (requiring the operator to contain a contingency plan relating to emergency procedures); *see also* 25 Pa. Code § 283.253 (2000) (requiring the operator to immediately implement the approved contingency plan during emergencies, assess hazards, prevent further incidents, notify the Department and county emergency agency with specific details, clean up affected areas, and obtain approval before resuming operations); 25 Pa. Code § 283.113 (2000) (requiring the application to include an action plan for monitoring and responding to radioactive material, with procedures for training, notification, recordkeeping, and reporting, prepared in accordance with Department guidance or an equally protective alternative); 25 Pa. Code § 283.123 (2001) (requiring the application include a plan for removal of hazardous waste); *and with* 25 Pa. Code § 283.283 (1992) (prohibiting operation of a resource recovery facility without a program to remove hazardous materials, such as plastics, batteries, and household hazardous waste, to the greatest extent practicable); 25 Pa. Code § 283.251 (1988) (requiring the facility shall be designed to prevent and minimize the potential for fire, explosion, or a release of solid waste into the air, water, or soil).

¹²⁶ 25 Pa. Code § 283.241 (1998) (requiring the operator to establish and implement an accident prevention and safety plan, distribute safety handbooks and procedures, conduct ongoing safety programs, post emergency information, comply with State and Federal occupational safety laws, and ensure proper ventilation).

¹²⁷ 53 Pa. Stat. Ann. § 4000.901 (LexisNexis, LEXIS through P.L. 556, § 901) (authorizing the Department to award grants to counties for preparing municipal waste management plans, conducting related studies and analyses, environmental mediation, and feasibility studies for waste facilities, excluding non-energy recovery combustion facilities, through an application process on forms provided by the Department).

¹²⁸ 53 Pa. Stat. Ann. § 4000.902(a)(b) (LexisNexis, LEXIS through P.L. 556, § 902) (authorizing the Department to award grants for developing and implementing municipal recycling programs, covering up to 90% of approved costs, with an additional 10% for financially distressed municipalities; requiring applications to detail program structure, avoid duplication, provide information on collection systems, markets, and public education, and justify any equipment purchases as unavailable in the private sector, following a 30-day public notice period).

of a recycling collection system's contracts, markets, ordinances, public information and education, program economics, and other information deemed necessary by the DEP.¹²⁹ The statutes and regulations then provide specified requirements for different types of grants such as general grants,¹³⁰ planning grants,¹³¹ municipal recycling program development grants,¹³² grants for county recycling coordinators,¹³³ performance grants,¹³⁴ and grants for host municipality inspectors.¹³⁵

¹²⁹ *Id.*

¹³⁰ 25 Pa. Code. § 272.313 (2001); *see* 25 Pa. Code § 272.314 (2001) (limiting grants to 10% per county annually; requiring applicants to comply with prior grants, laws, and reporting; prohibiting duplicate reimbursements or cross-grant matches; withholding funds for false information, misuse, or inadequate documentation; lapsing unused grants after one year; and requiring preapplication conferences for certain grants); *see also* Pa. Code § 272.317 (2001) (requiring grant applications to be submitted on Department-provided forms with necessary information, by municipalities or sponsors, not municipal authorities, using postconsumer material paper when feasible, and requiring preapplication development for certain grants).

¹³¹ 25 Pa. Code § 272.321 (2000) (establishing the scope of the grant); *see* 25 Pa. Code § 272.322 (2000) (establishing limits to the use of the grant); *see also* 25 Pa. Code § 272.323 (2000) (requiring the application to include a detailed project description, formation, funding source match, and an explanation of how it supports the Municipal Waste Planning, Recycling and Waste Reduction Act).

¹³² 25 Pa. Code § 272.331 (1992) (allowing the Department to award grants to municipalities for recycling program development and implementation, including market identification, public education, and purchasing equipment for collection and processing recyclable materials, provided such equipment is not available in the private sector); *see also* Pa. Code § 272.333 (2000) (providing grant application description requirements); 25 Pa. Code § 272.334 (1991).

¹³³ 53 Pa. Stat. Ann. § 4000.903 (LexisNexis, LEXIS through P.L. 556, § 903) (authorizing the Department to award grants to counties to reimburse costs for recycling coordinators' salaries and expenses, requiring an application detailing the coordinator's duties, activities, and prior achievements if applicable); *see also* 25 Pa. Code § 272.341 (1991) (establishing the scope of grant usage); 25 Pa. Code § 272.343 (1992).

¹³⁴ 53 Pa. Stat. Ann. § 4000.904 (LexisNexis, LEXIS through P.L. 1347, § 2) (authorizing annual performance grants for municipal recycling programs based on recycled materials and population size, requiring applications to detail programs and compliance with ordinances, education, enforcement, and recycling efforts, with funds restricted to eligible activities unless all requirements are met, subject to Department oversight); *see also* 25 Pa. Code § 272.351 (1992) (establishing a wide scope of grant usage); 25 Pa. Code § 272.352 (1992); 25 Pa. Code § 272.353 (2000) (requiring the application to describe the weight of recycled and marketed materials, adjusted for residue, with supporting documentation retained for four years and available for inspection; and, for multi-municipality recycling operations, to specify total materials collected and the applicant's contribution); 25 Pa. Code § 272.354 (1992).

¹³⁵ 25 Pa. Code § 272.361 (1992) (establishing scope of the grant to host municipality inspectors); *see* 25 Pa. Code § 272.362 (2000) (providing grants for 50% of approved salaries and expenses for up to

Finally, the Municipal Waste Planning Act also provides enforcement and remedy mechanisms to ensure compliance with the Act and SWMA's municipal waste management.¹³⁶ These mechanisms include provisions that establish what constitutes unlawful conduct such as failing to adhere to the conditions of an approved waste management plan,¹³⁷ the ability for the DEP to issue enforcement orders,¹³⁸ restraining violations through a suit in equity in the Commonwealth Court to enjoin any statutory violations,¹³⁹ criminal penalties,¹⁴⁰ and civil penalties.¹⁴¹ The regulatory scheme additionally provides guidance on nearly all aspects of these enforcement and remedy mechanisms including when a penalty

two certified host municipality inspectors, excluding costs unrelated to inspections, administrative tasks, office expenses, clothing, costs covered by other grants, or costs incurred outside the inspector's certification period); *see also* 25 Pa. Code § 272.363 (1992) (providing grant application requirements); 25 Pa. Code § 272.364 (2000) (requiring host municipality inspectors to maintain certification through training and annual inspections, with failure leading to inactive status and prohibition from inspection activities; allowing reactivation through training; listing grounds for decertification, such as violations or misconduct; mandating written notice of decertification, including recertification eligibility; and imposing a two-year recertification wait period).

¹³⁶ *See* discussion *infra* accompanying notes 137-144.

¹³⁷ 53 Pa. Stat. Ann. § 4000.1701 (LexisNexis, LEXIS through P.L. 556, § 1701) (prohibiting violations of the act, approved plans, schedules, or fee payments; obstructing duties; falsifying information; failing to pay landfill funds; and selling non-degradable plastic beverage carriers, all deemed public nuisances).

¹³⁸ 53 Pa. Stat. Ann. § 4000.1702 (LexisNexis, LEXIS through P.L. 556, § 1702) (authorizing the Department to issue orders to enforce the act, including compliance with municipal waste plans and regulations, effective upon notice; requiring recipients to diligently comply, with failure punishable as contempt of court).

¹³⁹ 53 Pa. Stat. Ann. § 4000.1703 (LexisNexis, LEXIS through P.L. 556, § 1703) (allowing the Department to seek injunctions to stop violations or public nuisances, with courts able to issue preliminary injunctions for unlawful conduct or harm without requiring a bond).

¹⁴⁰ 53 Pa. Stat. Ann. § 4000.1705 (LexisNexis, LEXIS through P.L. 556, § 1705) (establishing penalties for violations, including summary offenses with fines of \$100–\$1,000 or up to 30 days' imprisonment; third-degree misdemeanors with fines of \$1,000–\$10,000 per day or up to one year's imprisonment; and second-degree misdemeanors for repeat offenses within two years, with fines of \$2,500–\$25,000 or up to two years' imprisonment, treating each day's violation as a separate offense).

¹⁴¹ 53 Pa. Stat. Ann. § 4000.1704 (LexisNexis, LEXIS through P.L. 556, § 1704) (allowing the Department to impose civil penalties up to \$10,000 per violation, considering factors like willfulness, environmental harm, and deterrence; requiring payment, escrow, or an appeal bond within 30 days to maintain appeal rights; and treating each day's violation as a separate offense).

will be assessed,¹⁴² the procedures for assessing penalties,¹⁴³ and the process by which agencies may inspect the waste management facilities to, among other purposes, inspect and ascertain compliance or noncompliance by the act and regulations.¹⁴⁴

Although the concurrent regulatory scheme of the Municipal Waste Planning Act may not be directly applicable to residual waste, the Act provides significant guidance regarding the potential structure and implementation of the proposed statutory and regulatory amendment.¹⁴⁵

iii. Hazardous Waste Recycling

Given the magnitude and risk that hazardous waste posits towards the citizens of Pennsylvania, neither the statute nor regulations provide an exception or

¹⁴² 25 Pa. Code § 271.411(c)(d) (1988) (assessing penalties based on the seriousness of violations, including harm caused, costs incurred or avoided, willfulness, and prior violations within five years; treating each day of a continuing violation as a separate offense, and capping penalties at the statutory maximum for each violation, including multiple violators or violations on the same day); *see also* Pa. Code § 271.412 (1988) (requiring the DEP to assess civil penalties under this section, alongside Section 271.414, for operating municipal waste facilities without permits, accepting unapproved waste, causing open burning, or polluting water; and for landfills, penalties for failing to maintain erosion controls, apply final cover, install liners or monitoring systems, follow operation plans, or submit bond payments on time); Pa. Code § 271.413 (2000) (setting minimum penalties, including \$5,000 for unpermitted landfill use, \$500 for construction landfill violations, \$1,000 for sewage sludge or notice failures, \$2,000 for obstructing agents, and \$1,000 for training noncompliance).

¹⁴³ 25 Pa. Code § 271.414 (1998) (providing procedures for assessing civil penalties, including serving notice by certified mail or personal service, arranging optional review conferences, conducting informal conferences, terminating unresolved conferences, and clarifying that appeals are not delayed by conference requests).

¹⁴⁴ 25 Pa. Code § 271.421 (2014) (authorizing the Department to access records, facilities, and samples for compliance; requiring routine inspections, twelve times annually for landfills and resource recovery facilities, four times for transfer and composting facilities, and at least twice for sewage sludge and medical waste generators; and allowing additional inspections for violations or public health concerns).

¹⁴⁵ *See supra* notes 110-144 and accompanying text.

process to exempt hazardous waste from regulation.¹⁴⁶ On this basis, the regulation of hazardous waste provides no guidance for the proposed amendment.¹⁴⁷

c. Assessment of the Next Steps

As explained above, a stark contrast exists between the regulatory frameworks governing residual and municipal waste recycling.¹⁴⁸ While residual waste recycling has limited regulatory exceptions and lacks incentives, municipal waste recycling, governed by the Municipal Waste Planning Act, offers a strong incentive structure despite its narrow focus on municipal waste and its delegation to individual municipalities and counties.¹⁴⁹

Therefore, to expand and incentivize residual waste recycling, the EQB has the capacity to enact and implement new regulations that address the shortcomings of each recycling exception by providing clear language, procedures, and incentives, provided the legislature offers its support.¹⁵⁰ For instance, a new regulation may take guidance from the Municipal Waste Planning Act's approach by incorporating comprehensive planning procedures, economic incentives, and regulatory oversight, which are examined in the following proposal, ensuring a robust and adaptable residual waste recycling framework.¹⁵¹

¹⁴⁶ See *supra* discussion accompanying note 64.

¹⁴⁷ See discussion *infra* accompanying section IV.

¹⁴⁸ See *supra* notes 95-96 and accompanying text.

¹⁴⁹ See *supra* notes 97-135 and accompanying text.

¹⁵⁰ See discussion *infra* Section IV.

¹⁵¹ See discussion *infra* Section IV.

IV. PROPOSED AMENDMENTS

a. Legislative Action

Given the EQB's limited regulatory discretion under the current SWMA statutory scheme¹⁵² and the absence of existing recycling planning and economic incentives for residual waste under the SWMA,¹⁵³ a successful expansion of residual waste recycling requires action from both the legislature and the EQB to promote, incentivize, and ensure compliance with proper residual waste recycling practices.

While the legislature could enact numerous new statutory provisions or significant amendments to the existing SWMA scheme, simply expanding the scope of the EQB's authority with legislative guidance may prove to be an equally if not more effective means of implementing the proposals outlined in this article.

To begin effective implementation the proposals previously outlined, the legislature should pass a statutory amendment under Section 6018.105 of the SWMA or create an additional applicable statutory chapter providing either explicitly or implicitly through alternative language that,

“The Environmental Quality Board shall have the power, and its duty shall be to adopt rules and regulations to provide for the development, administration, and enforcement of the recycling of residual waste, as defined in Section 6018.103 of the Act, including: (1) the establishment of residual recycling programs for persons as defined in the Act; (2) the establishment of a permitting process, granting the Department the power to issue permits to persons, pursuant to proper planning, including waste management and capacity, facility planning, financial planning, contractual obligation, public participation, chemical analysis, environmental monitoring, hazardous and emergency

¹⁵² See *supra* text accompanying note 55.

¹⁵³ See *supra* text accompanying note 95.

response procedures, and accident prevention plans; (3) the establishment of inspection and enforcement procedures that impose a duty on, and empower, the Department to inspect and monitor violations of the Act resulting from negligence, and to enforce compliance through the issuance of civil penalties as outlined in Section 6018.605 of the Act, or through other applicable penalties; (4) the establishment of economic incentives conditioned on comporting with the rules and regulations pursuant to the Act; and (5) the establishment of recycling goals and environmental sustainability pursuant to the environmental rights amendment.”¹⁵⁴

In providing the EQB with the authority under the proposed amendment, the legislature delegates regulatory authority to the EQB pursuant to an expansive residual waste recycling program ensuring efficiency and flexibility in this new recycling era.

b. Expanding the definition

Following legislative authorization, before the EQB passes new regulations under Title 25 of the Pennsylvania Code on environmental protection, it should amend Section 287.1, resulting in a conclusive effect to overcome, in part, the ruling in *Tire*.¹⁵⁵ In light of *Tire*'s interpretation of Section 287.1, which restricts the residual waste recycling exception to material post-recycling, the amendment to Section 287.1 is necessary to preempt this interpretation and authorize the classification of residual waste material pre-recycling.¹⁵⁶ Thus, following the preceding language of Section 287.1, “materials are not waste when,”¹⁵⁷ the section will be amended to include the following provision under subsection III,

¹⁵⁴ See *supra* text accompanying notes 18-20; see also *Eagle Env't II, L.P.* 884 A.2d 867 at 876; *Robinson Twp.*, 83 A.3d 901 at 915-916; *Blosenski Disposal Serv.*, 566 A.2d 845 at 849.

¹⁵⁵ *Tire Jockey Serv.*, 915 A.2d 1165 at 1171.

¹⁵⁶ *Id.* at 1189.

¹⁵⁷ See *supra* note 76.

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“(D) the Department grants the person the authorization through the issuance of a permit to recycle such residual waste in compliance with subchapter I: Recycling under this chapter.”

This ensures that if the person seeking to recycle residual waste fails to comport with the regulations, the narrow recycling exception under *Tire* still controls. And although the EQB may modify the exact language or location of *Subchapter I: Recycling*, under Chapter 287: Residual Waste Management within Article IX of the relevant regulations, it is the proposed new location for the following regulations.¹⁵⁸

c. Ensuring Compliance

Given the possibility of nonfeasance by persons under the amendment whether by intentionally or negligently failing to comply and to ensure compliance with Article I, Section 27,¹⁵⁹ the EQB should pass a stringent set of regulations that begin with requiring any person seeking to recycle residual waste must first obtain a permit from the DEP.¹⁶⁰ By modeling the Municipal Waste Planning Act statutory and regulatory framework,¹⁶¹ the EQB should require submission of a *detailed* planning application to the DEP before issuing a permit.¹⁶²

The plan should generally include details such as: 1) the justification of the plan;¹⁶³ 2) a description of waste, such as the origin, content weight, volume, the

¹⁵⁸ See *supra* text accompanying note 60.

¹⁵⁹ See *supra* text accompanying note 19.

¹⁶⁰ See *supra* discussion accompanying notes 67; 70; 119.

¹⁶¹ See *supra* discussion accompanying notes 97-145.

¹⁶² See *supra* discussion accompanying notes 111-126.

¹⁶³ See *supra* note 120.

amount of estimated processed residual waste over the next year;¹⁶⁴ 3) a description of the operational capacities of the facilities including: the location of the facility,¹⁶⁵ the facilities recycling processes,¹⁶⁶ mandates for recycling facility site planning, construction, and maintenance;¹⁶⁷ 4) the effect that the recycling process will have on the environment and an environmental monitoring process;¹⁶⁸ 5) proposed contracts and business operations of the plan;¹⁶⁹ 6) the method of financing such operation;¹⁷⁰ 7) hazardous waste and emergency response procedures;¹⁷¹ 8) accident prevention plans with specific provisions on handling waste;¹⁷² and 9) any other requirements the DEP deems necessary to comport with the SWMA and the environmental rights amendment.¹⁷³

Furthermore, should a person under the SWMA receive a DEP permit to recycle residual waste, to ensure compliance with the permit, the EQB should enact regulations which generally, in line with Section 6018.501(a) of the SWMA and Section 271.421 of the regulations, shall grant the DEP the power to: 1) enter a building to ascertain the compliance or noncompliance by the person or with the act and regulations; 2) requiring such person to establish and maintain records and reports to be furnished to the DEP as prescribed and; 3) establishing a routine

¹⁶⁴ See *supra* note 111.

¹⁶⁵ See *supra* note 112.

¹⁶⁶ See *supra* note 112.

¹⁶⁷ See *supra* note 123.

¹⁶⁸ See *supra* notes 119; 124.

¹⁶⁹ See *supra* note 117.

¹⁷⁰ See *supra* note 115.

¹⁷¹ See *supra* note 125.

¹⁷² See *supra* note 126.

¹⁷³ See 35 Pa. Stat. Ann. § 6018.102; *see also* PA. CONST. art. I, § 27.

inspection by the DEP of twelve times a year, or at their own discretion, deemed necessary to ensure compliance.¹⁷⁴

Finally, given the proposed legislative amendment and already existing civil penalties, the EQB should create a regulatory framework in assessing civil penalties which explicitly include a factor as to whether the person acted willfully or negligently¹⁷⁵ in forestalling the residual waste recycling process through excessive waste storage or inaction, resulting in a fine of no more than \$25,000 per day per violation,¹⁷⁶ a revocation of the permit,¹⁷⁷ or other penalties found within the SWMA statutory or regulatory scheme.¹⁷⁸

d. Increasing Incentives

The EQB should base its creation of financial incentives for recycling residual waste, as outlined in the Section 6018.105 amendment, primarily on the existing grant system established by the Municipal Waste Planning Act.¹⁷⁹ Therefore, the EQB ought to empower the DEP to award grants to incentivize residual waste recycling, provided that such grants do not exceed available funding, as determined by the DEP, and are explicitly allocated to the preparation of residual waste recycling plans and recycling operations, as well as studies, surveys, research, analyses, and environmental remediation.¹⁸⁰ Moreover, like Municipal Waste

¹⁷⁴ See *supra* notes 67; 144.

¹⁷⁵ See *supra* notes 69; 140.

¹⁷⁶ See *supra* note 140.

¹⁷⁷ See *supra* note 138.

¹⁷⁸ See *supra* notes 136-144.

¹⁷⁹ See *supra* notes 127-135.

¹⁸⁰ See *supra* discussion accompanying notes 127-129.

Planning Act's regulatory clarification on different requirements for different types of grants for municipal waste recycling,¹⁸¹ the EQB should take a wait-and-see approach prior to passing more stringent and specific grant regulations based on public policy following the passage of the statutory and regulatory amendment.

V. CONCLUSION

Increasing recycling incentives in response to climate change remains a pressing issue today.¹⁸² While individual actions like reducing, reusing, and recycling hold significant value, they are, by themselves, insufficient, thereby highlighting the importance of government intervention.¹⁸³ This is demonstrated by the fact that the SWMA, as currently implemented, fails to incentivize or facilitate recycling practices for residual waste.¹⁸⁴

This inadequacy is further compounded by restrictive judicial precedent, such as the *Tire* decision, which limits the materials eligible for residual waste recycling.¹⁸⁵ Furthermore, the absence of a clear incentive structure and oversight system exacerbates this issue, leaving residual waste recycling underdeveloped and underutilized.¹⁸⁶ The proposed statutory and regulatory amendments to the SWMA offer a necessary and practical solution to these shortcomings.¹⁸⁷

¹⁸¹ See *supra* discussion accompanying notes 130-135.

¹⁸² See *supra* discussion accompanying notes 2-10.

¹⁸³ See *supra* text accompanying notes 7-10.

¹⁸⁴ See *supra* discussion accompanying notes 95-96.

¹⁸⁵ *Tire Jockey Serv.*, 915 A.2d 1165 at 1189; see *supra* discussion accompanying notes 92-94.

¹⁸⁶ See *supra* discussion accompanying notes 95-145.

¹⁸⁷ See *supra* Part IV.

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These amendments, by expanding the definition of recyclable residual waste, introducing comprehensive permitting, ensuring compliance, and establishing economic incentives,¹⁸⁸ would modernize Pennsylvania's residual waste management regime while aligning with the purposes and principles of with Article I, Section 27 by advancing the Commonwealth's duty to conserve and maintain public natural resources for the benefit of current and future generations.¹⁸⁹

¹⁸⁸ *See supra* Part IV.

¹⁸⁹ PA. CONST. art. I, § 27.