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LAW CENTER

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July 8, 2023

Dennis Ferraro
President, Board of Directors
Citizens for Safe & Clean Lake Superior

RE: Powell Township's Legal Authority to Pass Phil Bakken's Petition for a Zoning Text Amendment to Prohibit Rocket Launch Sites

Dear Mr. Ferraro,

You have asked the Conservation Law Center ("CLC")[1] to provide legal analysis and opinion as to whether Powell Township may lawfully exercise its zoning authority to amend the text of its zoning ordinance as petitioned by Phil Bakken and other area residents to prohibit "[t]he construction or addition of rocket launch sites or spaceport facilities, and the use of such sites or facilities to launch rockets or other launch vehicles into space . . . in all existing and future zones within Powell Township" (hereinafter, the "Bakken Petition").

Based on our review of relevant law and available information about the environmental and community impacts of rocket launch sites, it is our professional opinion that the answer to your question is squarely yes. Powell Township may lawfully and constitutionally pass the Bakken Petition as a necessary and legitimate exercise of its zoning power to protect the public health, safety, and welfare of Township residents and stave off the inevitable industrialization, environmental degradation, and transformation of Powell Township's unique character and way of life should a rocket launch site or spaceport facility ("rocket launch sites") be allowed.

Specifically, the Michigan Zoning Enabling Act provides authority to pass the Bakken Petition because a rocket launch site is not an appropriate or lawful use of land anywhere in the Township under the Township's Zoning Ordinance. The Bakken Petition also meets the six criteria for zoning amendments under Section 1302(H) of the Township's Zoning Ordinance. Granting the Petition would also survive constitutional muster under the federal and state equal protection clauses because the Township has a rational, legitimate basis for prohibiting rocket launch sites within its borders to protect the health, safety, and general welfare of its residents. And finally, making clear that rocket launch sites are excluded would avert legal challenges that could be brought against the Township for illegal "spot zoning" and violating the public trust doctrine if such an industrial land use were allowed. Each of these justifications are discussed in turn below.

[1] CLC runs the environmental law clinic at Indiana University's Mauer School of Law where second and third-year law students get hands on experience in the practice of environmental law and policy by working under the supervision of CLC attorneys who represent non-profit organizations in legal matters to protect the environment and conserve natural resources and wildlife habitat throughout the Midwest, including Michigan.

I. Powell Township may exclude rocket launch sites through a zoning text amendment under the Michigan Zoning Enabling Act.

A township may exercise its zoning authority under the Michigan Zoning Enabling Act ("MZEA") to exclude a particular use of land within its borders if: (1) there is no demonstrated need for the land use in the township or surrounding area; and (2) there is no appropriate or lawful location for the land use within the local jurisdiction. Mich. Comp. Laws § 125.3207; *Eveline Twp. v. H & D Trucking Co.*, 448 N.W.2d 727, 730 (Mich. Ct. App. 1989). Each of these criteria are met here.

A. There is no demonstrated need for a rocket launch site in Powell Township

To start, we understand that the Michigan Aerospace Manufacturers Association ("MAMA") *wants* to build a vertical rocket launch site at Loma Farms. However, that does not mean there is a "demonstrated need" for the launch site there or anywhere else in the Township. Michigan courts have squarely concluded that the *private wants* and financial interests of the developer of a proposed land use is not a demonstrated need. Rather, the land use must serve a *public need* of the residents in the community. *See e.g., Houdek v. Centerville Twp.*, 741 N.W.2d 587 (Mich, Ct. App. 2007) (a developer's "self-serving" economic interest in building a waste treatment facility was not a demonstrated public need). This is so, even if the developer presents evidence of market demand for the proposed land use. *See e.g., Adams Outdoor, Inc. v City of Holland*, 600 N.W.2d 339, 347 (Mich. Ct. App. 1999) (upholding a city's exclusionary zoning ban on billboards despite the advertising company's proof of market demand because the evidence was insufficient to demonstrate a public need in the community for more billboard space).

Here, Powell Township's most recent Master Plan makes no mention of any public need for a rocket launch site or other similar type of industrial land use in the Township.[2] Instead, the Master Plan focuses on promoting environmental resilience, community services, recreation, transportation planning, and continuing the "small-town, quality-of-life found in Powell Township" with public participation and community involvement in decision making.[3] And on that front, the residents of Powell Township and surrounding areas appear to overwhelmingly oppose the idea of rockets blasting over Lake Superior, their homes, recreational areas, and treasured natural places.[4]

Community opposition aside, a rocket launch site would provide no goods, services, or economic benefit to Powell Township, or even more broadly to Marquette County or the State of Michigan. Indeed, based on the economic impact study commissioned by MAMA itself, the proposed launch site is "not self-sustaining nor economically viable."[5] Rather than bringing jobs and growth as MAMA claims, the study confirmed that even launching as many as one rocket per week would not produce any more annual economic benefit for Michigan than opening two fast-food restaurants, and that a realistic revenue projection for all Michigan spaceports would be below

[2] We note that the Township's Master Plan does identify the "imperative" for "local leaders [to] gain as much information as possible prior to making any decisions" on MAMA's proposal to build a spaceport at Granot Loma. Powell Township Master Plan, Ch. 3, p. 2.
[3] Powell Township Master Plan, Ch. 1, p. 1.
[4] In addition to the Bakken Petition, signed by 130 area residents, there is a citizen petition opposing the rocket launch site on Change.org with 26,230 signatures.
[5] IQM Research Institute, *Michigan Space Launch Report* at 9 (Feb. 2021).

$1 million annually.[6] These facts plainly do not demonstrate a public need for a rocket launch site in Powell Township, even if MAMA (or other proponent) could show an industry demand for one.

B. There is no appropriate or lawful location for a rocket launch site in Powell Township

Putting aside that area residents do not want or need a rocket launch site in their midst, Powell Township has no appropriate or lawful place for one.

Section 306(b) of the Township's Zoning Ordinance prohibits a land use in a designated zone district if it is not *specifically listed* as a permitted use by right or conditionally in that district or is not otherwise similar to an expressly listed land use.[7] This provision unequivocally precludes MAMA's plan to build a rocket launch site at Loma Farms because that land is zoned for Timber Production. The list of permitted and conditional uses in that district include operations like sawmills and wood yards but is silent on any use even remotely resembling a rocket launch site.[8] The same is true for the surrounding parcels at Grant Loma that are zoned Lakeshore-River/2 and for Recreational Structures. Those districts list marinas, resorts, bed & breakfasts, and the like, as permitted uses, but not any sort of industrial use, much less a rocket launch site.[9]

In fact, not one of Powell Township's zoning districts—including the Industrial zone—expressly lists or implies that a rocket launch site, spaceport or anything similar is permitted.[10] Stated differently, there is *no location anywhere* in Powell Township where a rocket launch site is lawfully allowed even if the land were zoned, or rezoned, for an Industrial use.[11] Thus, the Township is well within its authority under the MZEA to pass a zoning text amendment to make that restriction clear.

II. The Bakken Petition meets the six general standards for zoning amendments under Section 1302(H) of the Township's Zoning Ordinance.

Pursuant to Section 1302 of Powell Township's Zoning Ordinance, "only the Township Board may amend [the] Ordinance." However, proposals for zoning amendments "may be initiated by the Township Board on its own motion, the Planning Commission, or by an individual."[12] In turn, subsection 1302(G) charges the Planning Commission with making a recommendation to the Board on such petitions after considering six "general standards."[13]

Collectively, these six standards are aimed at ensuring the zoning amendment is justified and consistent with the planning and development goals and policies of the Township and other government units, will not require government facilities or services that the Township and other agencies are unable to provide, and will not lead to negative environmental impacts, the "loss of

[6] *Id*. at 9,18,19.
[7] Powell Township Zoning Ordinance (2018) at 26.
[8] *Id.* at 38-39
[9] *Id.* at 31-33. Notably, the Granot Loma Lodge is listed on the National Registry of Historic Places.
[10] *Id*. at 28-40.
[11] Of significance, there is no land in the Township that is currently zoned for Industrial use.
[12] Powell Township Zoning Ordinance at 101.
[13] *Id.* at 103.

locally valuable natural resources," or create adverse precedent.[14] Based on our comprehensive assessment of the available evidence and information, there is no question that each of these criteria weigh in favor of prohibiting rocket launch sites in Powell Township.

While we do not provide that analysis here, a copy of this assessment will be provided to the Township at your request. In sum, however, the reports commissioned by MAMA itself make it abundantly clear that the risks of harm associated with a rocket launch site cannot be overstated. Noise pollution, increased threat of wildfires, water contamination, detrimental impacts to wildlife including threatened and endangered species, economic loss, significant human health and safety hazards requiring the provision of emergency services, regular disruption of existing recreational and residential land use, and heavy industrialization of the lakeshore are all known byproducts of allowing a rocket launch site in the Township.

These adverse impacts would thwart the planning and development goals and values expressed in the Township's Master Plan—a Plan that sets a vision for a sustainable economy built around the area's incomparable natural resources and their draw for recreational tourism and residential development. Passing the proposed zoning ban on rocket launch sites in the Township would ensure this never happens so that the Township may achieve its vision.

III. A zoning ban on rocket launch sites in Powell Township would survive constitutional muster under the federal and state equal protection clauses.

Excluding rocket launch sites in Powell Township through a zoning amendment would survive constitutional challenge because the Township has a rational, legitimate basis for doing so to protect the health, safety, and general welfare of Township residents.

In Michigan, "a zoning ordinance that totally excludes an otherwise legitimate use carries with it a 'strong taint' of unlawful discrimination and denial of equal protection of the law with regard to the excluded use." *Int'l Outdoor Inc., v. City of Livonia*, 2016 Mich. App. LEXIS 1145, *17 (Mich. Ct. App. 2016). Nonetheless, the burden is on the challenger to demonstrate that the zoning ordinance totally excludes an otherwise *legitimate* land use, and if successful, the burden shifts to the government to prove that the ordinance is reasonably related to promoting a legitimate government interest that is reasonably related to the health, safety, or general welfare of the community. *Countrywalk Condominiums, Inc. v. Orchard Lake Village*, 561 N.W.2d 405, 407-408 (Mich. Ct. App. 1997); *Manning v. City of E. Tawas*, 2005 Mich. App. LEXIS 539, *9 (Mich. Ct. App. 2005).

Here, equal protection is arguably not implicated because, as discussed above, a rocket launch site is not an appropriate, lawful, or legitimate use of land in Powell Township. But even if it was, Michigan courts have routinely held that local governments have legitimate interests in banning or restricting land uses to preserve the character of a community, prevent overcrowding, protect natural resources and the environment, eliminate blight, reduce traffic hazards, among other public welfare, health, and safety reasons. *See e.g., Frericks v. Highland Twp.*, 579 N.W.2d 441, 451 (Mich. Ct. App. 1998) (concluding that a township had a legitimate government interest in passing a zoning exclusion to "protect environmentally sensitive natural resources . . . from

[14] *Id.*

unnecessary developmental encroachment"); *See Int'l Outdoor Inc., v. City of Livonia*, 2016 Mich. App. LEXIS 1145 at *21-22 (city had a legitimate government interest in banning billboards to promote aesthetic features, prevent visual blight, and reduce traffic hazards for motorists). For that matter, the Michigan Constitution itself makes clear that conservation of the State's natural resources is "of paramount public concern in the interest of the health, safety and general welfare of the people." *See* Art. IV, Sec. 52.

Based on the available evidence, it is apparent that a rocket launch facility will pose health and safety hazards from fire, explosions, and falling rocket debris, contaminate ground and surface water, destroy wetlands and wildlife habitat, accelerate erosion of the Lake Superior shoreline, require evacuation of homes and treasured outdoor recreational areas, and lead to industrialization of the "small-town, quality-of-life found in Powell Township."[15] In fact, a recent expert acoustic study found that rocket launch noise will "disrupt daily activities and interfere with recreational activities and wildlife habits within a roughly fifty (50) mile radius of the launch pad, well beyond the neighboring cities of Big Bay and Marquette."[16]

Therefore, passing a zoning restriction that excludes such a destructive land use for the protection of the environment, the Township and its residents from these harms is plainly a legitimate government interest and a rational basis that is sufficient to survive constitutional challenge.

IV. A zoning exclusion on rocket launch sites would avert legal challenges that could be brought against the Township for illegal "spot zoning" and violating the public trust doctrine if such an industrial land use were allowed.

Notably, prohibiting rocket launch sites through a zoning restriction would not only survive legal and constitutional challenges in our view, but it would also ward off legal challenges for illegal "spot zoning" and violating the public trust doctrine that could be pursued if a rocket launch site is allowed in the Township. In that regard, Michigan law provides protection for the constitutional rights of existing property owners against the impacts of illegal "spot zoning," defined as "[a] zoning ordinance or amendment . . . creating a small zone of inconsistent use within a larger zone." *Whitman v. Galien Twp.*, 288 Mich. App. 672, 683 (Mich. Ct. App. 2010). Such an ordinance must be closely scrutinized by a reviewing court and sustained only when the facts and circumstances indicate a valid exercise of the zoning power." *Id.* at 683, fn 5.

Although Michigan courts have not outlined a bright-line rule to determine when illegal spot zoning has occurred, Michigan State University Extension has developed guidance, which helpfully distills four factors frequently considered by Michigan courts in deciding whether a rezoning decision constitutes illegal spot zoning including whether: (1) the area is small compared to districts surrounding the parcel in question; (2) the new district allows land uses inconsistent with those allowed in the vicinity; (3) the spot zone would confer a special benefit on the individual property owner not commonly enjoyed by the owners of similar property; and (4) the existence of

[15] A quality and character that Powell Township wants to protect. Powell Township Master Plan, Ch. 1, p. 1 (2021).
[16] Acentech Acoustics & Vibration Consulting Services, *Rocket Launch Noise Report: Community and Environmental Impacts* at ii (June 2023).

the spot zone conflicts with the policies in the text of the master plan and the future land use map.[17] The more closely a rezoning aligns with these criteria, the more likely it would be found to be illegal spot zoning under Michigan law.[18]

That is certainly the conclusion to be drawn when applying these factors to the rezoning of land in Powell Township to allow for a rocket launch site. As discussed above, there is currently no zoning district in the Township where such a rocket launch site—or anything like it—is listed as a permitted or conditional use, even in the Industrial zone. Thus, allowing such an industrial use that is not contemplated by the Zoning Ordinance itself would necessarily be incompatible with existing land uses for the special benefit of the launch site owner. It would also conflict with the Township's Master Plan that does not envision transforming Powell Township into a heavy industrial zone for aerospace developers.

In addition to illegal spot zoning, Michigan's public trust doctrine would likely be violated if the Township were to allow a rocket launch site within its boundaries. The public trust doctrine holds that the State is responsible, as trustee, for the protection and preservation of our water resources for the benefit of current and future generations to use and enjoy. *Glass v. Goeckel*, 262 Mich. App. 29, 42-44 (Mich. 2004). In turn, Michigan's courts have long recognized the State's public trust in the Great Lakes shores and bottomlands. *Id.*

For these reasons, when the public trust is violated, citizens may step in. For instance, the citizen suit provision of the Michigan Environmental Protection Act (MEPA), allows any person to sue the State *or any other actor*, "for the protection of the air, water, and other natural resources and *the public trust* in these resources from pollution, impairment, or destruction." MCLS § 324.1701. In other words, if the Township were to allow a rocket launch site, the decision would be vulnerable to legal challenge for impairing or destroying the public trust in Lake Superior and other natural resources.

In sum, Powell Township is well within its zoning authority to pass the Bakken Petition. There is no demonstrated need for an aeronautic launch site in Powell Township. Nor is there an appropriate or lawful location for such a destructive land use. Indeed, allowing an aeronautic launch site would lead to industrialization of the area, pose significant fire, health and safety risks to the community, would degrade the environment, and destroy the natural and public trust resources of the State. Thus, passing the ban is justified, legal, and constitutional because the Township has a legitimate government interest in doing so to protect its citizens and the public trust.

We thank you for trusting CLC to assist with this critically important effort and look forward to answering any questions that you or the Township may have.

[17] MSU Extension, Public Policy Brief, *Removing Spot Zoning from the Fabric of Zoning Practice* (2004).
[18] *Id.*

Very truly yours,

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