#### AGENDA ITEM #: 48



#### **MEMORANDUM**

**TO:** Knoxville-Knox County Planning Commission

FROM: Mike Reynolds, AICP, Principal Planner

**DATE:** Wednesday, April 5, 2023

**SUBJECT:** Similar Use Determination for a metal recycling business in the I (Industrial) zone.

4-B-23-OB

#### STAFF RECOMMENDATION:

Approve the use classification for the metal recycling business, described in the "Description of Operations" (Exhibit A), as a Use Permitted on Review in the I (Industrial) zone.

#### **BACKGROUND:**

NOTE: The applicant's request is for the metal recycling use to be a Permitted use in the I (Industrial) zone as outlined in Exhibits A and B.

Staff is recommending the metal recycling business be considered a Use Permitted on Review in the I (Industrial) zone because it is most similar to the "Automobile wrecking, junk and salvage yards" and "Solid Waste processing facility" use classifications. If approved as recommended, Use on Review approval by the Planning Commission will be required.

This Similar Use Determination application for the metal recycling business, as described in the "Description of Operations" (Exhibit A), is to determine if the use is allowed as a Permitted use or a Use Permitted on Review. The I (Industrial) zone allows the most intensive land uses and is the most appropriate zoning district for the proposed use, but it is unclear how the use should be classified. If the Planning Commission identifies a specific use classification that this business fits under and that use has supplemental regulations in Article 4 of the zoning ordinance, then those standards apply to this business as well.

Three (3) residential properties are on the east side of Asbury Rd within 300 feet of the subject property. The properties are zoned I (Industrial) and are not part of a residential subdivision or restricted to residential uses, such as by covenants. In the I (Industrial) zone, uses listed as a Use Permitted on Review shall not be located nearer than 300 feet to a public park, school, church, hospital, sanitarium, residential zone, or subdivided land restricted to residential uses. The 300-ft setback does not apply in this situation.

Below is a list of similar uses in the I (Industrial) zone identified by the applicant and staff:

PERMITTED -- In the attached document titled "Similarity to Zoning Approved Uses" (Exhibit B), the applicant outlines how these uses are similar to the proposed use.

- 1) Waste handling uses -- [This is a general category that includes: off-site demolition landfills, solid and liquid waste transfer stations, and commercial mulching operations. Some of these uses are subject to supplemental standards in Article 4.]
- 2) Fabricated metal product manufacturing (NAICS 332)
- 3) Mining and mineral extraction [Subject to the standards in Section 4.50, "Standards for Mining and Mineral Extraction"]

#### AGENDA ITEM #: 48



#### **MEMORANDUM**

#### USES PERMITTED ON REVIEW - Identified by staff

- 1) Automobile wrecking, junk and salvage yards [Subject to the standards in Section 4.40, "Standards for Automobile, Wrecking, Junk and Salvage Yards, and Similar Uses"]
- 2) Solid waste processing facility and composting facility [Subject to the standards in Section 4.95, "Standards for the Use-On-Review Approval of Solid Waste Processing Facilities"]

The I (Industrial) zone provides a NAICS (North American Industry Classification System, 1997 edition) code for most of the uses listed as Permitted but not for those listed as Uses Permitted on Review. Any business listed under the NAICS classification for a Permitted use is considered permitted, provided all other zoning code requirements are fulfilled.

The NAICS use classification descriptions for the uses identified by staff as being similar to the proposed metal recycling business (automobile wrecking, junk and salvage yards, and solid waste processing facilities) are below:

- a) Recyclable Material Wholesalers (NAICS 421930): establishments primarily engaged in wholesaling scrap from automotive, industrial, and other recyclable materials. Included in this industry are auto wreckers primarily engaged in dismantling motor vehicles for the purpose of wholesaling scrap.
- --> Automobile wrecking, junk and salvage yards
- b) Materials Recovery Facilities (NAICS 562920): establishments primarily engaged in (1) operating facilities for separating and sorting recyclable materials from nonhazardous waste streams (i.e., garage) and/or (2) operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals, are sorted into distinct categories.
- --> Solid Waste Processing Facilities

The first two numbers of the NAICS code refer to the general industry sector, and each number after refers to a more specific sub-sector. The first two numbers of the Recyclable Material Wholesalers NAICS code (421930) indicate that this use is a sub-sector of the Wholesale Trade industry (NAICS 42). The third number, 1, indicates that the Recyclable Material Wholesalers use is more specifically in the Wholesale Trade, Durable Goods (Durable Goods) sub-sector (NAICS 421).

The I (Industrial) zone lists Durable Goods (NAICS 421) as a Permitted use. All sub-sectors of Durable Goods are also Permitted if the use meets all other zoning code requirements. The Automobile wrecking, junk and salvage use is in the Recyclable Material Wholesalers sub-sector (NAICS 421930). It would be permitted if it weren't listed as a Use Permitted on Review in the I (Industrial) zone. Unlike the other Durable Goods business, automobile wrecking, junk and salvage businesses need an additional level of review to determine if the location is appropriate before the use is established.

SUMMARY OF THE PROPOSED USE - See Exhibits A & B for a complete use description.

#### **APPLICANT**

Tompaul Knoxville, LLC is a metal recycling company proposed to locate at 2609 Asbury Road. The recycling operation processes downstream fines obtained from the recycling of various types and grades of ferrous and non-ferrous metals and aluminum, depending on market conditions.

#### DESCRIPTION OF PROCESS – SUMMARY (see attachment for full description)

The process involves proprietary separating technology applications for recovery, and sorting metal from fines by use of specialized industrial equipment and processes for the following applications:

#### AGENDA ITEM #: 48



#### **MEMORANDUM**

- Car Shredder Residue
- Aluminum Shredder Residue
- Waste Electrical and Electronic Equipment (Electronics Recycling)
- Incinerator Ash
- Steel Making Industry (steel mills and ores processing)
- Municipal Recycling Facilities (MRFs)

In-feed material is in an open pile and transported into the reclamation building via front end loaders or similar. The material fed through various separating equipment processes. Once processed, a concentrate is formed, and a Coproduct is formed. Coproduct will be characterized and sent for further processing or to an appropriate landfill for disposal. Coproduct will be stored near the reclamation facility in a covered bunker for daily handling and shipping as required. The business anticipates processing 31,000-61,000 tons of material per month.

#### **STORAGE**

In-feed material is stored in an open pile. The coproduct (byproduct) is stored in a covered bunker.

#### VEHICLES/TRANSPORTATION

Material is transported to and from the facility in covered trucks. Material is transported on site with front end loaders or similar. The applicant estimates there will be 120 trucks coming and going from the facility daily.

#### **DUST**

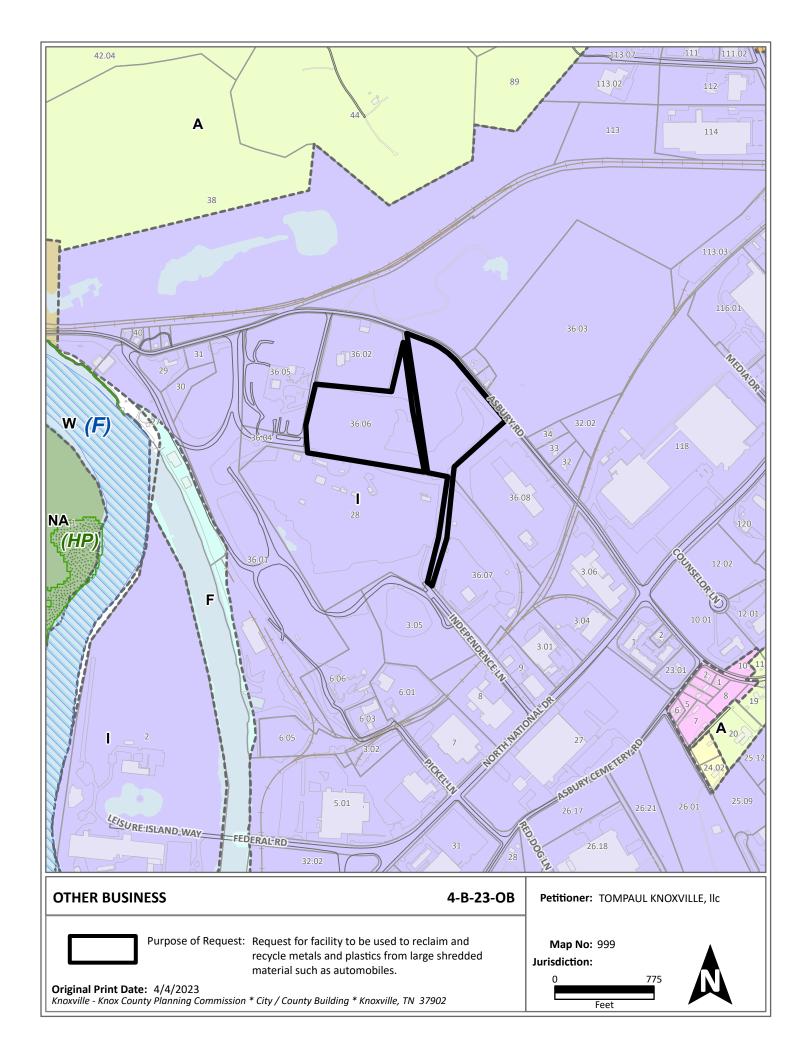
Outdoor equipment and trucks may kick up dust if gravel is used in vehicular use areas, which is not unique to this proposed use. The equipment that sorts material by size and density uses a water-based system to control dust and will be located in an enclosed facility. The water is treated and reused in this system.

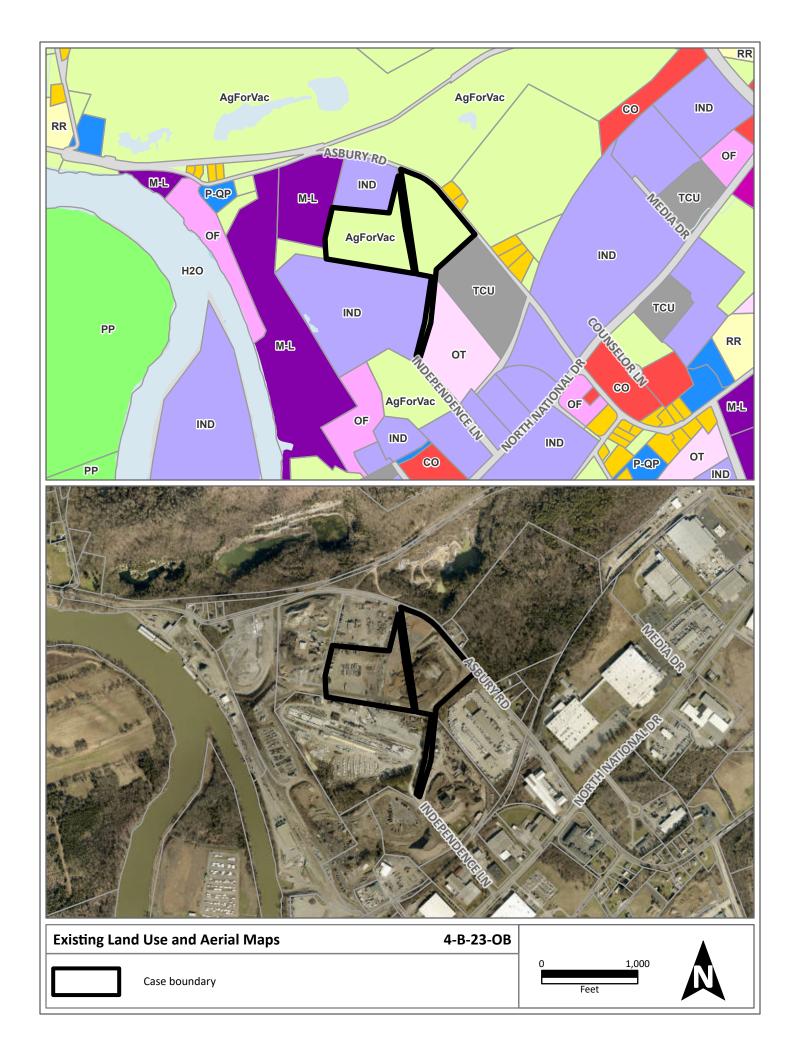
#### NOISE

A ball mill system is planned to grind and flatten materials to make metals recover more efficient. Ball mill operations can have noise levels between 90 to 120 decibels (dBs), however, engineering controls such as neoprene linings and noise screens can reduce noise levels. According to the American Academy of Audiology, decibels over 85 for extended periods can cause permanent hearing loss (see Exhibit C). The ball mill and material sorting equipment will be in an enclosed facility, which will help reduce noise transmission to nearby properties.

#### **OPERATING HOURS**

The facility is anticipated to operate up to 24 hours / 7 days a week and have to up 40 employees.





#### TOMPAUL KNOXVILLE, LLC for Facility at 2609 Asbury Road Knoxville, TN 37914

#### **Description of Operations**

**TOMPAUL KNOXVILLE, LLC** is a metal recycling company proposed to locate at 2609 Asbury Road. The recycling operation processes downstream fines obtained from the recycling of various types and grades of ferrous and non-ferrous metals and aluminum, depending on market conditions. This provides an important service in reclaiming metals both in terms of getting metals back into the consumer product stream and in keeping metals out of area landfills.

**TOMPAUL KNOXVILLE, LLC** is a leading firm in separation technology for different industries, as well as a processing and trading company of non-ferrous metals.

#### **Description of Process**

The process involves proprietary separating technology applications for recovery, and sorting metal from fines by use of specialized industrial equipment and processes for the following applications:

- Car Shredder Residue
- Aluminum Shredder Residue
- Waste Electrical and Electronic Equipment (Electronics Recycling)
- Incinerator Ash
- Steel Making Industry (steel mills and ores processing)
- Municipal Recycling Facilities (MRFs)

The Facility's operation will include a truck scale, a reclamation facility, an office trailer, and an employee break room/locker room trailer. In-feed material is in an open pile that is currently to the south of the reclamation facility. In-feed material will be transported into the reclamation building via front end loaders or similar. Material will be put in process and fed through various separating equipment processes. Once processed a concentrate is formed, and a Coproduct is formed. Coproduct will be characterized and sent for further processing or to an appropriate landfill for disposal. Coproduct will be stored near the reclamation facility in a covered bunker for daily handling and shipping as required.

Systems and equipment used in the Facility's operation will sort material by size and density. These systems are water-based to control dust emissions and do not create a significant impact to environmental noise. Systems currently planned for this Facility's operations include an infeed system with cut screens, a falling velocity system, and a 3-Density sorting system.

A ball mill system is currently planned for use in the Facility's operation to grind and flatten materials to make metals recovery more efficient. Ball mill operations can have noise levels between 90 to 120 decibels (dBs), however engineering controls such as neoprene linings and noise screens can reduce noise levels for employees working near the equipment. Employees working in the immediate area can wear noise reduction personal protection such as ear plugs as

**EXHIBIT A** 

appropriate. The ball mill, as with the above-mentioned systems will be enclosed in the facility and will not create a significant impact to environmental noise or dust.

#### **Facility Operations**

The Facility is anticipated to operate at up to a 24 hours /7 Days schedule working 12-hour shifts with up to approximately 40 employees. The facility is anticipated to process 31,000-61,000 tons of material per month.

#### **Special Equipment and Controls**

The Facility planners, designers, and engineers have taken care and consideration to identify potential environmental and health and safety concerns to implement mitigating and controlling factors preemptively. Special equipment and controls currently include but are not limited to:

- Material is transported to and from the Facility in covered trucks. The material being transported to and from the Facility does not pose a dust risk while on site or in process. Material is transported in covered vehicles, typically tarped coverings, to control dust emissions during transportation on public roadways to and from the Facility.
- A process water treatment and recirculation system will be used to collect, treat, and reusing process water at the Facility. This system will allow for the facility to draw less water from the public utility by treating and recirculating water through the Facility process systems, and will prevent discharge of untreated process water.
- Coproduct material that has been processed will be stored in covered bunkers until it is either reprocessed or characterized and shipped to an appropriate landfill.
- The ball mill system, if used, will be located inside the building and will include a neoprene or similar lining to reduce noise. Locating the ball mill inside the building will mitigate environmental noise impact. Further noise controls including engineering controls such as noise screens and noise reduction personal protective equipment such as ear plugs will be implemented as appropriate for employee protection.
- The Facility will implement and maintain appropriate environmental and health and safety programs.

#### TOMPAUL KNOXVILLE, LLC for Facility at 2609 Asbury Road Knoxville, TN 37914

#### **Similarity to Zoning Approved Uses**

The Facility's operation is similar to those on the approved industrial zone list including waste handling uses, fabricated metal production manufacturing, and the mining industry. The sorting systems used in the Facility's operation are similar to those used in the solid waste industry to sort out recyclable materials. The ball mill system is similar to those used in metallurgy and the metal manufacturing industry as well as the mining industry. Operations at the Facility will likely have less environmental impact than that of the solid waste, metal production manufacturing, and mining industries. Solid waste and mining operations typically involve large haul equipment and soil or ground intrusive activities that this facility operations will not employ. Similarly, this facility will not use lathes or milling equipment common in metal fabrication that would require heavy use of coolants and/or lubricants. Solid waste and mining operations can also involve heavy truck traffic on public roads. This facility will have trucks delivering material and transferring product and coproduct; however, the truck traffic is anticipated to be approximately 120 trucks daily which is well below the average 750 trucks per day that would trigger a traffic study.

### LEVELS OF NOISE In decibels (dB)

	in accide (ab)			
PAINFUL & DANGEROUS				
Use hearing protection or avoid	<ul><li>140 · Fireworks</li><li>· Gun shots</li><li>· Custom car stereos (at full volume)</li></ul>			
	130 · Jackhammers · Ambulances			
UNCOMFORTABLE				
Dangerous over 30 seconds	120 · Jet planes (during take off)			
VERY LOUD				
Dangerous over 30 minutes	<ul><li>Concerts (any genre of music)</li><li>110</li><li>Car horns</li><li>Sporting events</li></ul>			
	100 · Snowmobiles · MP3 players (at full volume)			
	90 · Lawnmowers			
Over 85 dB for extended periods can cause permanent hearing loss.				
LOUD				
	80 · Alarm clocks			
	70 • Traffic • Vacuums			
MODERATE				
	60 · Normal conversation · Dishwashers			
	50 · Moderate rainfall			
SOFT				
	40 · Quiet library			
	30 · Whisper			
FAINT				
	20 · Leaves rustling			

# OCTOBER IS NATIONAL AUDIOLOGY AWARENESS MONTH AND NATIONAL PROTECT YOUR HEARING MONTH

Visit www.HowsYourHearing.org to learn more about audiology and hearing loss.





## Similar Use Determination

**Knox County Only** 

Name of Applicant:	_TOMPAUL	. KNOXVILLE, LLC
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Mike Reynolds Date Filed: 2/27/2023 Application Accepted by:

Fee Amount: \$250 \_\_\_ File Number: <u>4-B-23-OB</u>

Paid 2/27/23

PROPERTY INFORMATION	
Address: 2609 Asbury Road, Knoxville, TN 37914	
General Location: Property right of way is to the sou	ıth-
west of Asbury Rd located north of Independence La	ne.
Tract Size: 25.35 acres No. of Units: 0	
Zoning District: S8	
Existing Land Use: 491 - Unused Land	
Planning Sector: East County	
Sector Plan Proposed Land Use Classification:  I - Industrial	

Growth Policy Plan Designation: Planned Growth Area Census Tract: 54.01

Traffic Zone: \_\_\_\_\_

Parcel ID Number(s): 096 03606

Jurisdiction: ☑ County Commission \_9 \_\_\_ District

#### **USE REQUESTED**

Facility will be used to reclaim and recycle metals and plastics from large product shredded material (i.e., automobiles).

ATTACH AS A SEPARATE DOCUMENT:

- A detailed description of the proposed specific use. Including: number of employees, hours of operation, products made or sold, services performed, special equipment used.
- A statement indicating how the various permitted uses listed in the zoning regulations are similar in nature, operations, and character to the proposed use in this application and how they would be compatible.
- Floor/site plan factors. Details regarding limitations (such as maximum floor area or site area) on building and site development for the following: office areas, warehousing areas, manufacturing areas, showroom/retail areas.

#### PROPERTY OWNER/OPTION HOLDER

Name: \_Tom Valerio

Company: TomPaul Knoxville, LLC

Address: 2001 Kenilworth Ave

City: Capital Heights State: MD Zip: 20743-6711

Telephone: <u>(301)</u> 773-1266

Fax:

E-mail: metalkekd@yahoo.com

#### APPLICATION CORRESPONDENCE

All correspondence relating to this application should be sent to:

PLEASE PRINT

Name: Lydia Crabtree

Company: Industrial Environmental Consultants

Address: 2603 Fessy Park Rd #102

City: Nashville State: TN Zip: 37204

**Telephone:** Mobile (615) 202-1311 Office (615) 730-5059

Fax:

E-mail: \_lcrabtree@inde\_vconsultants.com

#### APPLICATION AUTHORIZATION

I hereby certify that I am the authorized applicant, representing ALL property owners involved in this request or colders of option on same, whose aignatures are included or the back of this form.

Signature: PLEASE PRINT

Name: Tom McDougall

Company: TomPaul Knoxville, LLC

Address: 2001 Kenilworth Ave

City: Capital Heights State: MD Zip: 20743-6711

Telephone: (301) 773-6711

E-mail: tmcdougall@jsmith-sons.com

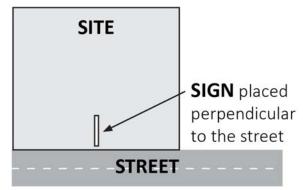
SIGNATURES OF ALL PROPERTY OWNERS INVOLVED OR HOLDERS OF OPTION ON SAME MUST BE LISTED BELOW:									
Please Sign in Black Ink:	(If more spa								
Name	Address	•	City	•	State	•	Zip	Owner	Option
Tom Valerio on one	2001 Keni	lworth A	ve, Capi	tal Heig	ghts, MD	20743-6	5771		X
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# Sign Posting & Removal Requirement

Revised April 2021

The Administrative Rules and Procedures of the Knoxville-Knox County Planning Commission require a sign to be posted on the property for each application subject to consideration by the Planning Commission, including the following applications: rezoning, plan amendment, concept plan, use on review/special use, planned development, right-ofway closure, and name change.



The required public notice sign(s) will be provided by Planning to the applicant when an application is submitted. If an application is submitted electronically, Planning staff will post the required sign. If a replacement sign(s) is needed, the applicant is responsible for picking up the new sign(s) from Planning and will be charged \$10 for each replacement.

#### **LOCATION AND VISIBILITY**

The sign must be posted on the nearest adjacent/frontage street and in a location clearly visible to vehicles traveling in either direction. If the property has more than one street frontage, the sign should be placed along the street that carries more traffic. Planning staff may recommend a preferred location for the sign to be posted at the time of application.

#### TIMING

The sign(s) must be posted **not less than 12 days prior to the scheduled Planning Commission public hearing** and must remain in place until the day after the meeting. In the case of a postponement, the sign can either remain in place or be removed and reposted not less than 12 days prior to the next Planning Commission meeting. The applicant is responsible for removing the sign after the application has been acted upon by the Planning Commission.

The individual below is responsible for posting and removing the sign(s) provided consistent with the above guidelines and between the dates of:

3/31/2023	and	4/14/2023				
(applicant or staff to post sign)		(applicant to remove sign)				
Applicant Name:TOMPAUL KNOXVILI	LE, LLC					
Date: 2/27/23		X Sign posted by Staff				
File Number: 4-B-23-OB		Sign posted by Applicant				